

MARYLAND AVIATION ADMINISTRATION

2014 Design Standards

Volume III of III





OFFICE OF DESIGN & CONSTRUCTION

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APPENDIX F

RESTROOM DESIGN CUT SHEETS



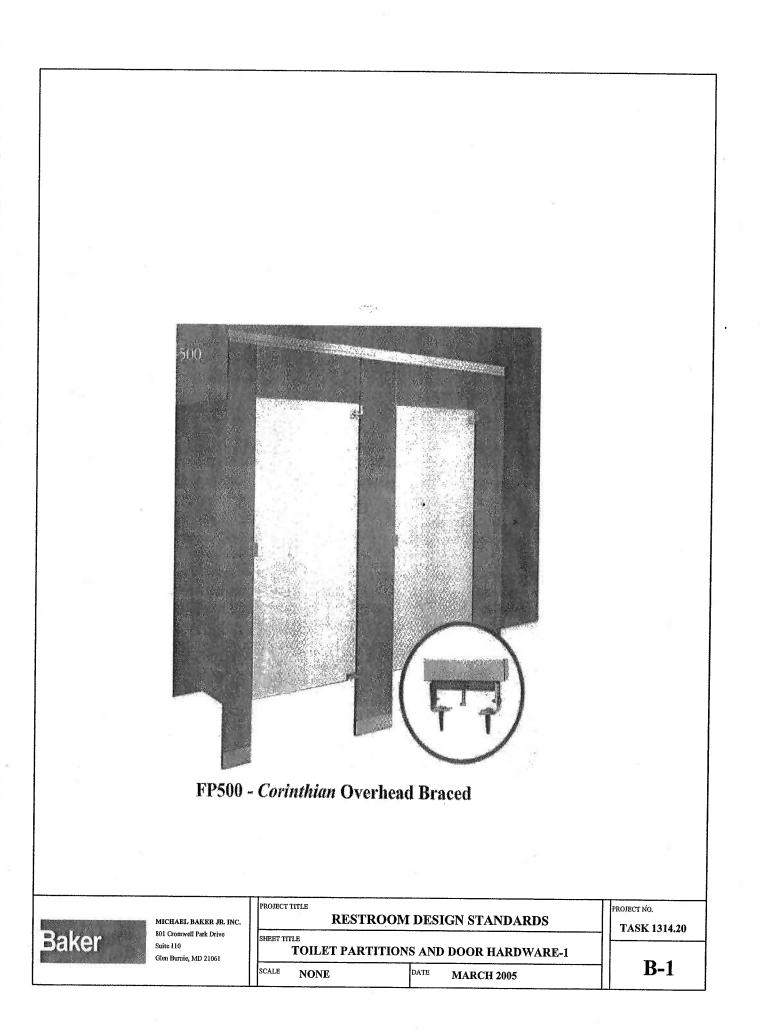


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STAINLESS STEEL TOILET ENCLOSURES

THE CORINTHIAN METPAR TYPE: FP-500

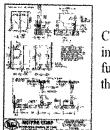
PE: FP-500 Overhead Braced

MATERIALS: Stainless Steel Type 304

THICKNESS: Doors...... 22 Gauge, Finished to 1" (25.4mm)

Panels...... 20 Gauge, Finished to 1" (25.4mm)

Pilasters...... 20 Gauge, Finished to 1 1/4" (31.75mm)



Click on image to full size y the detail

CONSTRUCTION:

Doors:

Finished to 1" (25.4) thick, constructed of two sheets of 22-gauge, type 304 stainless steel formed and cemented under press honeycomb core. Door face sheets are welded at intervals around the entire perimeter. All edges to be finished with a 20-ga stainless steel interlocking molding. Corners are finished with pre-formed stainless steel (type 304) reinforcements. Doors s internal steel reinforcements to secure hardware items.

Panels:

Finished to 1" (25.4) thick, constructed of 2 sheets of 20-gauge type 304 stainless steel, formed and cemented under pressure honeycomb core. All partition edges are finished with a 20-gauge stainless steel interlocking molding. Corners will be finish pre-formed stainless steel (type 304) reinforcements.

Pilasters:

Finished to $1\frac{1}{4}$ " (31.75) thick, constructed of two sheets of 20-gauge, type 304 stainless steel, formed and assembled with a honeycomb core. Face sheets are electrically welded at intervals around the entire perimeter. All pilasters will have a 3" (7, #4 finish stainless steel plinth (18-8 type 304) and have straight, flat sides profile with rounded edges to match the pilaster pr Pilasters will have leveling bolts threaded to the pilaster support bracket. Floor mounting will be with #12 x $2\frac{1}{2}$ " (63.5) scre shields. Headrail is anodized aluminum .050" (1.27) wall thickness with anti-grip profile. The headrail is set into a 16ga. chr reinforcement which occupies the full width of the pilaster and is electrically welded in place for maximum strength.

FITTINGS:

Wall fittings are die cast chrome plated.

HARDWARE:

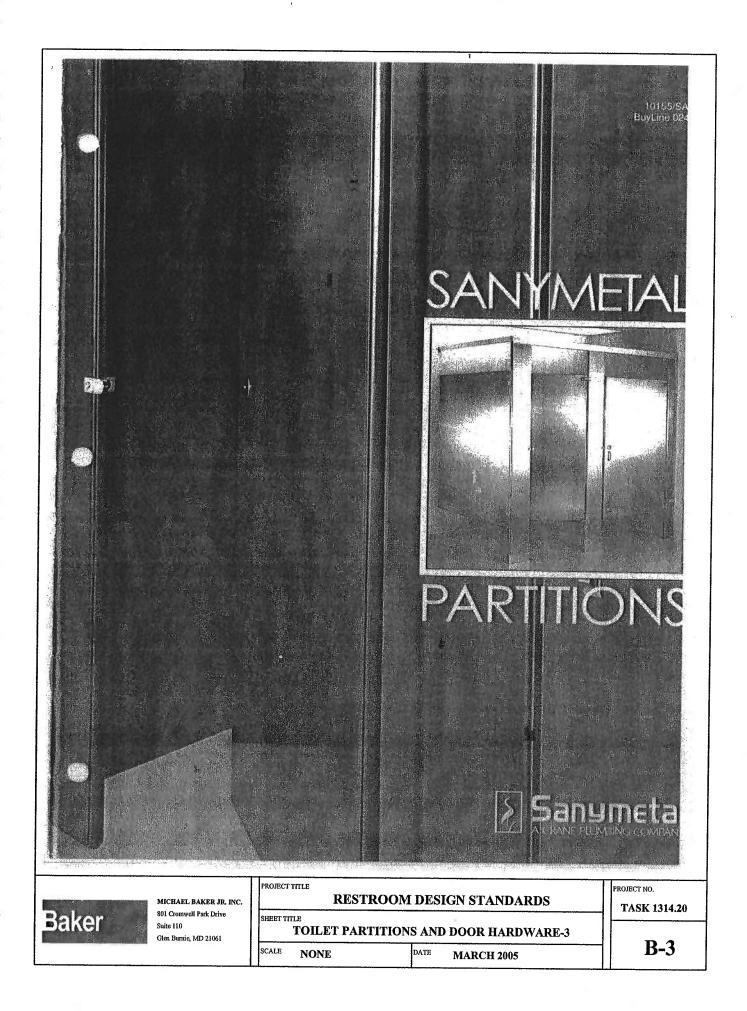
Each compartment will be complete with all hardware, door hinges, latch, stop and keeper, coat hook, as well as all necessar and fastenings for a complete installation. Hinges and door strikes are fastened by means of tamper- proof Torx-Pin Head t

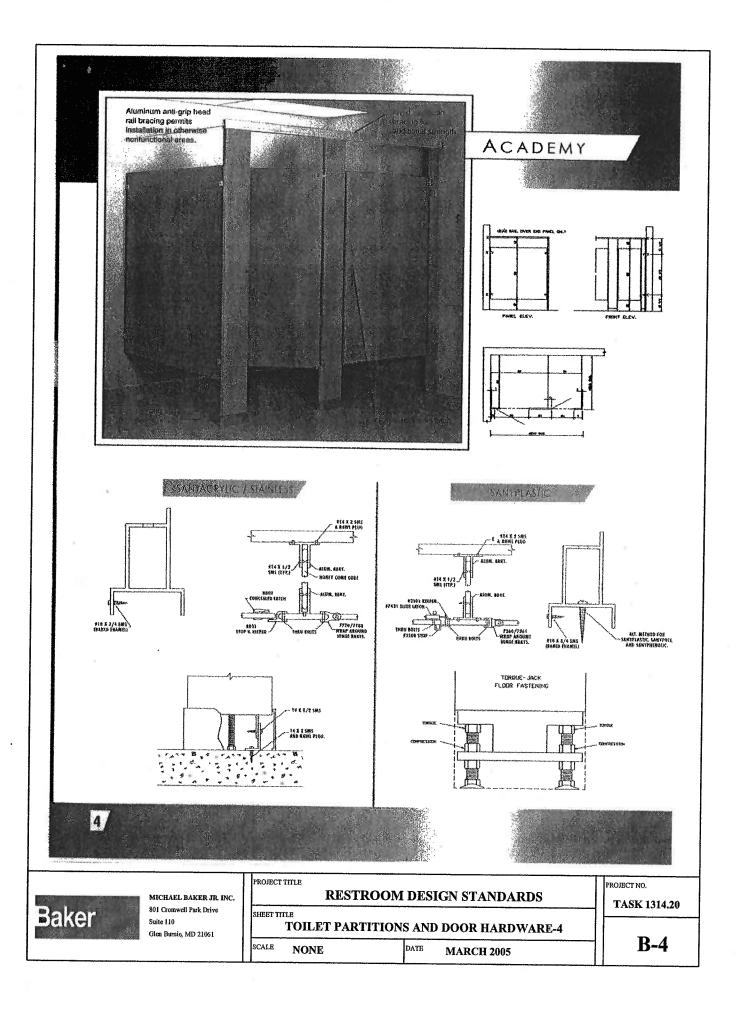
bolts, which are polished chrome plated. All other screws to be tamper-proof Torx-PinHead chrome plated. Doors are to be concealed, "stay-set", fully adjustable, non-rising door mechanism. Upper hinge pin shall be 3/8" (9.525) diameter steel. All will have wrap-around flanges with a minimum of 5/8" (15.875) wrap onto pilaster. All doors will have a concealed ADA as slide latch with external "in-use" indicator.

FINISH:

All stainless steel material will have a #4 satin finish.

Pakor	MICHAEL BAKER JR. INC. 801 Cromwell Park Drive	PROJECT TITLE RESTROOM	DESIGN STANDARDS	FROJECT NO. TASK 1314.20
Dakei	Suite 110 Glea Burnie, MD 21061	TOILET PARTITION	S AND DOOR HARDWARE-2 DATE MARCH 2005	B-2





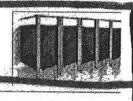
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The Mills company offer 3 styles of toilet partitions and 2 styles of urinal screens

Sentinel Overhead Braced

Provides the most economical solution for heavy traffic or vandalism prone areas.

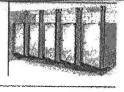


Floor Braced

The floor based compliments design with functional performance. This model is recommended with areas with high ceilings.

Ceiling Hung

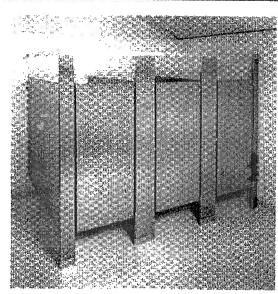
The ceiling hung system is ideal for areas with low ceilings. This models fast and easy maintenance .



Urinal Screens

These two styles available are wall mount. Available in baked enamel or stainless steel.

Delven	MICHAEL BAKER JR. INC. 801 Cromwell Park Drive	PROJECT TITLE REST	ROOM DESIGN STANDARDS	PROJECT NO. TASK 1314.20
Daker	Suite 110 Glen Burnie, MD 21061		TITIONS AND DOOR HARDWARE-7	B-7
001		SCALE NONE	DATE MARCH 2005	D -/



FAST TRACK 48 Hour Shipping In #4 Satin Finish. Floor Anchored/Overhead Braced, Floor Anchored, and Celling Hung. Call for details

Global Stainless Steel

GLOBAL stainlees steel toilet partitions are virtually indestructible and retain their gleaming beauty indefinitely. These units combine the strength of #304 stainless steel with a #4 stain finish or textured finish, formed and bonded to a honeycomb core. The face sheets are held rigid and permanently in place by an interlocking strip welded at each corner.

GLOBAL stainless steel compontents are impervious to just about any substance. Even scratches caused by deliberate vandalism can be removed by buffing. The elegance of GLOBAL stainless steel compontents complements any design scheme, either in new construction or for renovations.

View Specifications/Drawings Care and Maintenance Instructions



Honeycomb Core is made of cellular honeycomb. This type of core provides strong construction, maximum adhesion, and prevents delamination.



Welded Corners Corners of panels, pilasters and doors are welded to each other and to the adjacent face sheets



Construction Features

Theft - Resistant Fasteners Special driver installs fasteners which virtually eliminates unauthorized removal and ensure easy installation.





Options:

Plywood Core

No Sight Line

Eastern Style Height

Full Height Aluminum Brackets

Full Height Stainless Steel Brackets

Home | Materials & Colors | Specifications | Care & Maintenance | Contact Us

Baker	MICHAEL BAKER JR. INC. 801 Cromwell Park Drive Suite 110 Gen Burnie, MD 21061	PROJECT TITLE SHEET TITLE T	RESTROOM		GN STANDARDS D DOOR HARDWARE-8	PROJECT NO. TASK 1314.20
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Concealed Latch With emergency access and ADA lever handle.



Pilaster Mounting Pilaster adjustments, with floor-mounted jack-leveling device, are used on Embassy pilasters.

Gravity-positioning hinge provides safe, durable and maintenance-free support.

Bottom Door

Hinge



Alternate Pilaster Mounting This type of mounting is furnished on all Imperial and Regal pilasaters.

Upper Door Bracket

attached to the pilaster.

Bracket is an internal part of the door. A pin goes through the door and bracket

for three point bearing and operates in a nylon bushing in upper hinge bracket

One-piece stainless steel, type304, with #4 satin finish trim shoes are hemmed top and bottom for rigidity and sleek

Shee Construction appearance.

FLOOR ANCHORED/OVERHEAD BRACED TOILET COMPARTMENTS STAINLESS STEEL - TEXTURED LEATHER GRAIN



PART-1 GENERAL 1.01 DESCRIPTION

8.

- Textured leather grain stainless steel compartment work includes the following: A.
- Floor anchored/overhead braced partitions.
- Furnish all labor and materials necessary for the completion of work in this section as shown on the contract
- drawings and specified herein
- c. Work in this section shall include but is not limited to:
 - **Toilet** compartments
 - Ź. Hardware for toilet compartments
 - З, Shop drawings and working drawings Manufacturer's guarantee
- Related work specified elsewhere shall include accessories and anchorage/blocking for attachment of D.
- compartments 1.02 PRODUCTS
 - Submittel of shop drawings and details, for architects approval.
 - A sample of textured leather grain finish stainless steel and hardware samples shall be submitted for approval to the architect upon request. В.

PART-2 PRODUCTS

2.01 MANUFACTURER

Toilet compartments to be supplied by Global Steel Products Corp., Deer Park, New York 11729.

- 2.02 MATERIALS A.
 - Doors and panels shall be 1* thick, constructed of two sheets of 22-gauge, textured leather grain, stretcherleveled quality stainless steel formed and bonded under pressure with a non-foxic adhesive to a full-face honeycomb core.
- Pilasters shall be 1-1/4", constructed of two sheets of 22-gauge, textured leather grain finish stainless steet, 8. formed and bonded under pressure with a non-toxic adhesive to a full-face honeycomb core 2.03 CONSTRUCTION

C.

- Doors and panels shall be 1° thick. Panels over 48° shall be menufactured with four (4) face sheets (2) sheets aach side, seamed and spot weided together. The edges shall be sealed with a 22-geuge, stainless steel interlocking molding. Molding corners shall be welded to each other and to face sheets, and ground smooth to form a night frame around the component. A.
- Pilasters shall be 1-1/4" thick. Edges shall be sealed with 22-gauge stainless steel interlocking molding. An B. Inverted stirup with a jack bott for leveling during installation and permanent height adjustment shall be welded within the base of each pliaster. "L" brackets shall be coupled to the stirup bracket and floor for full range adjustment. A shoe shall conceal each mounting, having an internal cross section conforming to the plaster.
 - Headrail shall be provided to bridge all compartments and brace the end freestanding pllasters to the wall; the

headrail to comprise anodized eluminum with satin finish, contoured to provide anti-grip features. 2.04 HARDWARE (NOTE: Refer to the ORDER INFORMATION CONTRACT for specific hardware to be supplied on your

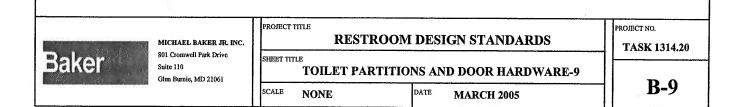
- A. All exposed door hardware shall be of chromium-plated discast Zamao and shall be as noted;
 1. Upper door hinge is recessed and interlocked in door and includes a nylon pin within the plane of the door.
 - Lower door hinge is recessed in door and includes mating box and pintle nylon cams, which provide the bearing surface. The cams are adjusted to allow the door to rest at any position within a 270-degree range. Door hardware shall include a coat hook, bumper, a stop, keeper, and a concested latch with emergency $\mathbf{2}$ access.
 - Fasteners shall be of chrome-plated steel; door hinges will be mounted with theft-proof barrel nuts and 3.
 - machine screws; hooks and handles will be mounted with helt-proof, full-thread screws. Wall brackets shall be secured to walls with anchoring and/or expansion shields.
- Β. Pilaster shoes shall be of type 304 stainless steel having a #4 finish.

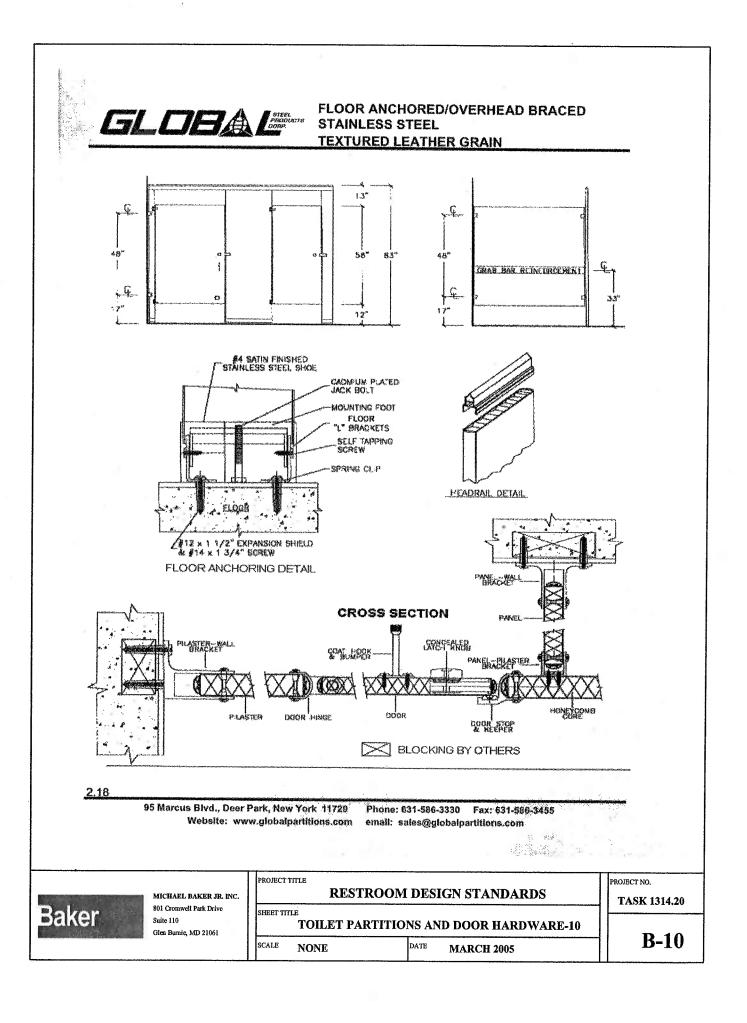
PART-3 EXECUTION

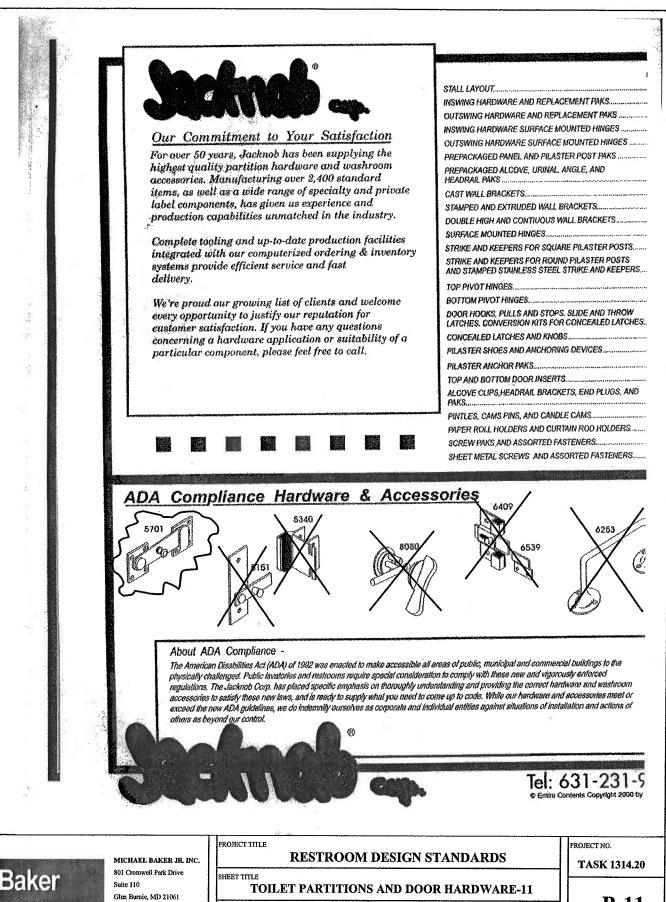
- 3.01 PREPARATION
 - A. Examine areas to receive toget compariments for correct height and spacing of anchorage/blocking and
 - plumbing fixtures that may affect installation of comparison results and grazing any discrepancies to the architect. Take complete and accurate measurements of complete toilet comparison tocations.
 - ₿.
 - Start of work constitutes acceptance of job.
 - 3.02 INSTALLATION
 - Install compartments in a rigid, straight, plumb and level manner as shown on the shop drawings and manufacturer's installation instructions. A.
 - All doors and panels to be mounted at 12" above the finished floor unless otherwise specified. R

 - Clearance at vertical edges of door shall be uniform top to boltom. No evidence of cutting, drilling and/or patching shall be visible on the finished work F:
 - P Finished surfaces shall be cleaned after installation and be left free of all imperfections
- 3.03 WARRANTY
 - Global Steel Products Corp. guarantees its textured leather grain stainless steel units, property maintained, against corrosion or discoloration for 5 years from the date of receipt by the customer. If materials are found defective during that period for the reasons listed above, the material will be replaced free of charge. No credits Α. or allowances will be issued for any labor or expenses relating to the replacement of components covered under the warranty plan. All such expenses are to be borne by the buyer.

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TP HINGES

- Continuous Partition Hinges are Durable Add years of maintenance-free operation to any partition system.
- Support Partition Doors Along Their Entire Length -Markar TP Hinges run the complete length of the door to distribute weight evenly.
- Add Rigidity to Ceiling Hung Partitions Projects that require this type of mounting procedure need the added support given by the TP Hinge.
- Eliminate Open "Sight-Lines" Continuous hinge surfaces maximize privacy by eliminating visual intrusion. There are no openings along the hinge.
- □ Ideal for Damp or Corrosive Environments -Fabricated from heavy-duty 14 gauge 304 stainless steel or 6463-T5 anodized atuminum.
- Adjustable Spring-Loaded Hinges Torx Tip Cap adjusts the internal mechanism to close the partition door tightly, or to keep the door open to show vacancy.
- Left or Right-Handed All partition hinges can be used on either side of the door.

Continuous Pin and Barrel type hinges have been engineered to withstand the extraordinary abuse and heavy traffic associated with toilet partition doors. Various models, designed to be function-specific, are constructed from heavy gauge stainless steel or aluminum. Markar Continuous Hinges distribute door weight and stress along the entire length of the door, so partition doors operate dependably year after year. Maintenance expense is dramatically reduced.

In addition to their strength and durability, TP Hinges provide important benefits. When less expensive multi-part hinge systems are used on partitions, they leave a gap along the door "sight-line", thus exposing the occupant. Markar's Continuous Hinge alternatives have twenty-eight bearing surfaces which eliminate the gap or sight-line completely.

To comply with ADA requirements many TP Hinge models are available with internal spring mechanisms. The adjustable Torx Tip Cap included with spring-loaded hinges permits the door to swing either fully closed or to a predetermined position.

To help prevent vandalism, certain models include a tamper-resistant Finishing Cover Cap that conceals all mounting hardware. TP Hinges provide safety and security while giving the toilet partition a clean appearance. For data on specific models, please request Data Sheet Series TP Hinge.

Torx Tip Cap shown with adjus ting tools and setting pins.

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Scranton, PA

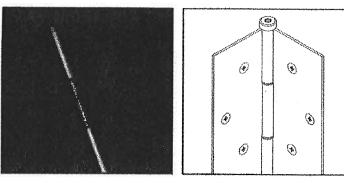
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Baker	Suite 110 Glea Burnie, MD 21061	SHEET TIT		NS AN	D DOOR HARDWARE-12		B-12
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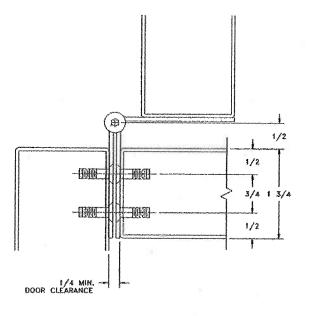


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Edge Mount



Ideal for use in damp or corrosive environments, this hinge was designed for 1-3/4" stainless steel doors and frames. The addition of optional tamper proof security screws make this an excellent hinge for abusive traffic.



FM-900-TP Spring-Loaded FM-500-TP Edge Mount

Standard Features

Material

Heavy-duty 14 gauge 304 stainless steel.

Finishes

US 32D satin stainless steel (630).

Pin and Barrel Type Hinge

- · 1/4" diameter stainless steel pin.
- · Long-life split nyton bearings. · 28 bearing surfaces.

Torx Adjusting Screw

- (with Spring Loaded hinges only) · Torx tip cap.
- · Internal stainless steel spring mechanism.
- · Adjust tension on door to close tightly for out-swinging ADA compliance. • Allows door to stay open in predeter-
- mined position.

Mounting Hardware

- · 10-24 flat head stainless steel
- machine screws.
- · No exposed mounting hardware.

Capacity

Supports weights up to 80 lbs.

Sizes

54" and 57"

Non-Handed

Use the same hinge for right or left handed doors.

Optional Features

- · US 32 bright polished staintess steel (629).
- 84 powder coated paint colors. Custom lengths (in Inches). Custom hole pattern.

- · Tamper-proof security screws.

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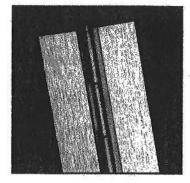
68 Ward Road + Lançaster, NY 14086 + 716-685-4104 + Toll Free: 1-800-866-1685 + Fax: 716-685-3919

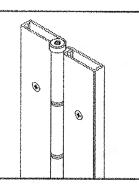
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Suite 110 Glean Burnie, MD 21061		IONS AND DOOR HARDWARE-13	B-13	
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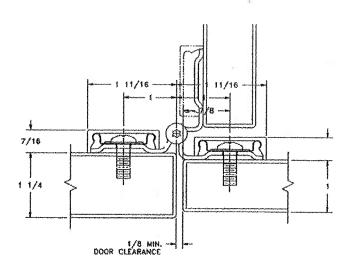
FS-901-TP 1/8" Offset Spring-Loaded FS-501-TP 1/8" Offset

Full Surface





This hinge is to be used with a 1-1/4" pilaster and 1" door assembly. Stainless steel continuous toilet partitions are excellent for retrofit or constructing a new facility, where a high volume of abusive traffic can be found.



Standard Features

Material

Heavy-duty 14 gauge 304 stainless steet.

Finishes

US 32D brushed stainless steel (630).

Pin and Barrel Type Hinge

- · 1/4" diameter stainless steet pin.
- · Long-life split nylon bearings.
- · 28 bearing surfaces.

Torx Adjusting Screw

- (with Spring-Loaded hinges only)

- Adjust tension on door to close tightly
- for out-swinging ADA compliance, Allows door to stay open in predetermined position.

Mounting Hardware

- 1/4 20 pan head machine screws.
- -Cover caps conceal all mounting hardware.

Capacity

Supports weights up to 80 lbs.

Sizes

54" and 57"

Non-Handed Use the same hinge for right or left handed doors.

Optional Features

84 powder coated paint colors
Custom lengths (in inches).
Custom hole pattern.

- · Tamper-proof security screws.

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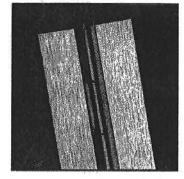
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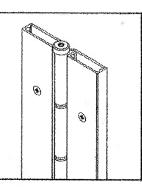
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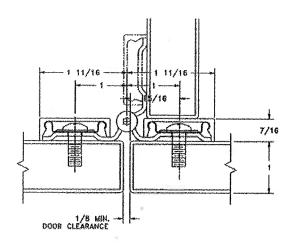
FS-902-TP Flush Spring-Loaded FS-502-TP Flush

Full Surface





For pilasters and doors that are flush with each other, this style of hinge is excellent. Stainless steel continuous tollet partition hinges are just right for retrofit or constructing a new facility, where a high volume of abusive traffic can be found.



Standard Features

Material

Heavy-duty 14 gauge 304 stainless steel.

Finishes

US 32D brushed stainless steel (630).

Pin and Barrel Type Hinge

· 1/4" diameter stainless steel pin. · Long-life split nylon bearings. · 28 bearing surfaces.

Torx Adjusting Screw

(with Spring-Loaded hinges only)

- Torx tip cap.
 Internal stainless steel spring mechanism.
 Adjust tension on door to close tightly for out-swinging ADA compliance. •Allows door to stay open in predeter-
- mined position.

Mounting Hardware

1/4 20 pan head machine screws.
Cover caps conceat all mounting hardware.

Capacity

Supports weights up to 80 fbs.

Sizes

54" and 57"

Non-Handed Use the same hinge for right or left handed doors.

Optional Features

84 powder coated paint colors
Custom lengths (in inches).
Custom hole pattern.

- · Tamper-proof security screws.

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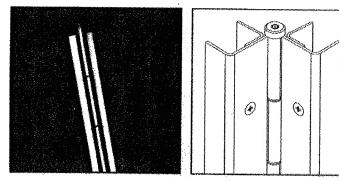
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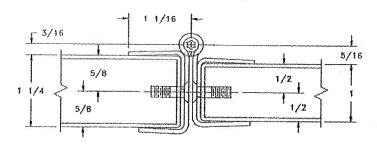


HG-906-TP 1/8" Offset Spring-Loaded HG-506-TP 1/8" Offset

Hinge Guard



Ideal for use with corrian or marble type partitions with 1-1/4" pilaster and 1" door. This hinge provides door and pilaster edge protection and is adjustable with optional AdjustaScrew fasteners for 1/2" width correction.



Standard Features

Material

Heavy-duty 14 gauge 304 stainless steel.

Finishes

US 32D satin stainless steel (630).

Pin and Barrel Type Hinge

- 1/4" diameter stainless steel pin.
 Long-life split nylon bearings.
 28 bearing surfaces.

Torx Adjusting Screw

- (with Spring-Loaded hinges only) Torx tip cap. Internal stainless steel spring mechanism.
- Adjust tension on door to close tightly for out-swinging ADA compliance.
- · Allows door to stay open in predetermined position.

Mounting Hardware

No exposed mounting hardware.

Capacity

Supports weights up to 80 lbs.

Sizes

54" and 57"

Non-Handed

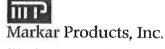
Use the same hinge for right or left handed doors.

Optional Features

· US 32 bright polished stainless steel

- (629).
- 84 powder coated paint colors
 Custom lengths (in inches).
 Custom hole pattern.

- Tamper-proof security screws.
 AdjustaScrew for corrections of door fit problems up to 1/2".

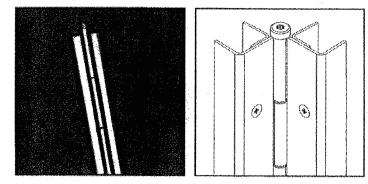


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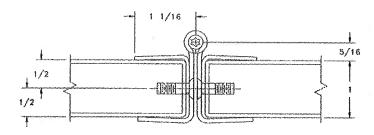
MICHAEL BAI	rk Drive	RESTROOM DESIGN STANDARDS	
Baker Suite 110 Glen Burnie, M	21061 TOILET PARTITIONS	TOILET PARTITIONS AND DOOR HARDWARE-16 SCALE NONE DATE MARCH 2005	



Hinge Guard



Ideal for use with corrian or marble type partitions, the slim, clean design provides door and pilaster edge protection. This hinge is also adjustable with optional AdjustaScrew fasteners for 1/2" width correction.



HG-907-TP Flush Spring-Loaded HG-507-TP Flush

Standard Features

Material

Heavy-duty 14 gauge 304 stainless steel.

Finishes

US 32D satin stainless steel (630).

Pin and Barrel Type Hinge

- 1/4" diameter stainless steel pin.
- -Long-life split nylon bearings.
- ·28 bearing surfaces.

Torx Adjusting Screw

- (with Spring-Loaded hinges only)
- · Torx tip cap.
- Internal stainless steel spring mechanism.
 Adjust tension on door to close tightly for out-swinging ADA compliance.
 Allows door to stay open in predeter-
- mined position.

Mounting Hardware

No exposed mounting hardware.

Capacity

Supports weights up to 80 lbs.

Sizes

54" and 57"

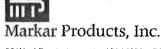
Non-Handed

Use the same hinge for right or left handed doors.

Optional Features

US 32 bright polished stainless steel (629).

- (629). 84 powder coated paint colors Custom lengths (in inches). Custom hole pattern. Tamper-proof security screws. AdjustaScrew for corrections of door fit problems up to 1/2"

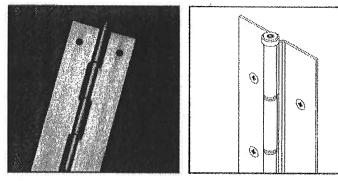


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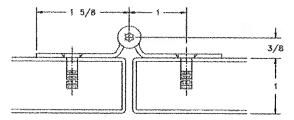
Baker Suite 1	MICHAEL BAKER JR. INC. 801 Cromwell Park Drive	PROJECT TITLE RESTROOM DESIGN STANDARDS		рголест NO. ТАЅК 1314.20
	Suite 110 Glen Burnie, MD 21061	SHEET TITLE TOILET PARTITIONS AND DOOR HARDWARE-17		D 17
		SCALE NONE DAT	TE MARCH 2005	B-17



Full Surface



This hinge was designed for detention facilities or areas where vandalism is common. The hinge can be mechanically fastened or welded in place for optimum security.



FS-910-TP Flush Spring-Loaded FS-510-TP Flush

Standard Features

Material

Heavy-duty 14 gauge 304 stainless steel.

Finishes

US 32D brushed stainless steel (630).

Pin and Barrel Type Hinge

- 1/4" diameter stainless steel pin.
- Long-life split nylon bearings.
 28 bearing surfaces.

Torx Adjusting Screw

(with Spring-Loaded hinges only)

- · Torx tip cap.
- · Internal stainless steel spring mechanism.
- · Adjust tension on door to close tightly
- for out-swinging ADA compliance.
- · Allows door to stay open in predetermined position.

Mounting Hardware

10-24 flat head stainless steel machine screws.

Capacity

Supports weights up to 80 lbs.

Sizes

54" and 57"

handed doors.

Non-Handed Use the same hinge for right or left

Optional Features

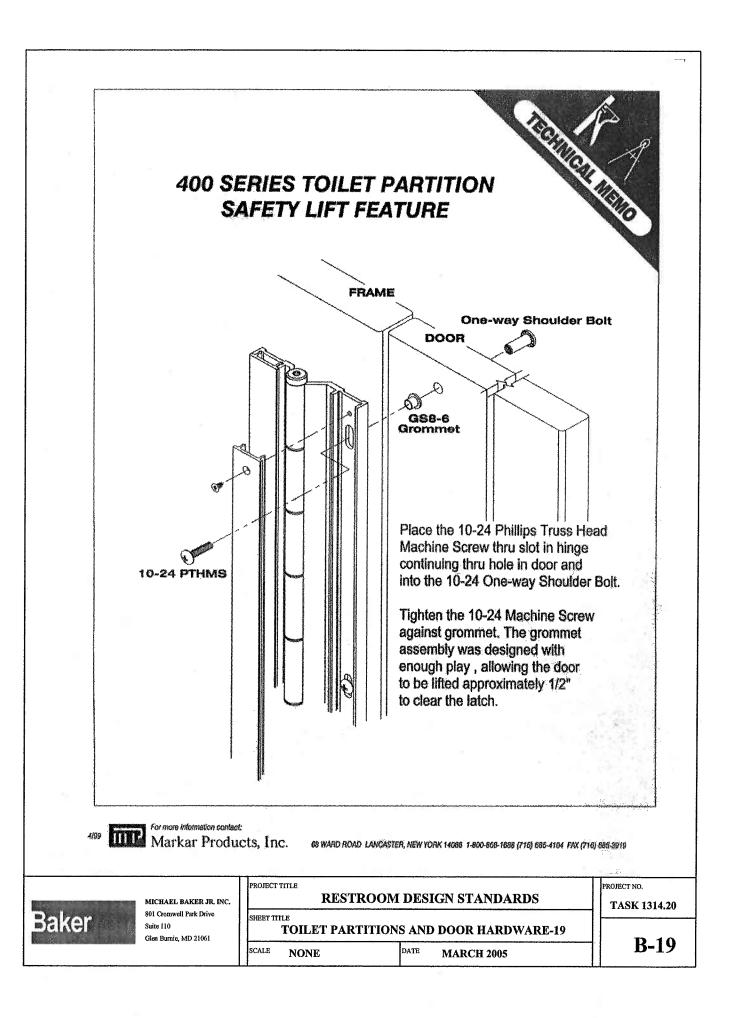
US 32 bright polished stainless steel (629).
 84 powder coated paint colors
 Custom lengths (in inches).

- · Custom hole pattern.
- · Tamper-proof security screws. · One way shoulder bolt and screws.

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Baker	Suite 110 Glea Burnie, MD 21061	TOILE	· · · · · · · · · · · · · · · · · · ·	D DOOR HARDWARE-18	B-18
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STRENGTH OF COMPONENTS

12 GAUGE STAINLESS STEEL CONTINUOUS HINGES

Leaves

Material: 12gauge 304 stainless steel Tension: 85,000 P.S.I. Shear: 35,000 P.S.I.

Stress Analysis

The center of gravity of a door of uniform construction is located half-way between the top and bottom and half-way from edge to edge. The forces acting on the hinge are tensile and shear in the top half of the door and compression and shear in the bottom half. The leaf is 0.109 inches thick, so the cross-sectional area resisting tensile stresses is 4.5 in² for a 7-foot hinge and 6.5 in² for a 10-foot hinge.

Tensile Limite

- 7' door 4.5 in2
 - x 85,000 P.S.I. = 385,075 lbs + 12 (safety factor) = 32,100 lbs
- 8' door 5.0 in² x 85,000 P.S.I. = 440,675 lbs + 12 (safety factor) = 36,725 lbs
- 10' door 6.5 in² x 85,000 P.S.I. = 651,850 lbs + 12 (safety factor) = 46,000 lbs

Shear Limits

7' door 9.0 in² x 35,000 P.S.I. = 317,125 lbs + 12 (safety factor) = 26,425 lbs

8' door 10.25 in2 x 35,000 P.S.I. = 551,850 lbs

+ 12 (safety factor) = 46,000 lbs

10° door 13.0 in*

- x 35,000 P.S.I. = 454,450 lbs
- + 12 (safety factor) = 37,875 lbs

Fasteners

10-24 machine screw Type: Material: 1035 cold rolled steel Tension: 83,000 P.S.I. Area: 0.0145 in* 7' hinge 16 fasteners

x 0.0145 in² = 0.232 in² x 83,000 P.S.I. = 19,256 lbs + 12 (safety factor)= 1,604 lbs

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- 8' hinge 18 fasteners x 0.0145 in² = 0.261 in² x 83.000 P.S.I. = 21,663 lbs + 12 (safety factor)= 1,805 lbs
- 10' hinge 20 fasteners x 0.0145 in² = 0.290 in² x 83,000 P.S.I. = 24,070 lbs + 12 (safety factor)= 2,005 lbs

1/4-20 machine screw Type: 1035 cold rolled steel Material: Tension: 83,000 P.S.I. Area: 0.0269 in²

- 7' hinge 16 fasteners x 0.0269 in² = 0.430 in² x 83,000 P.S.I. = 35,723 lbs + 12 (safety factor)= 2,977 lbs
- 8' hinge 18 fasteners x 0.0269 in* = 0.484 in* x 83,000 P.S.I. = 40,189 lbs + 12 (safety factor)= 3,349 lbs
- 10' hinge 20 fasteners x 0.0269 in² = 0.538 in² x 83,000 P.S.L = 44,654 lbs + 12 (safety factor)= 3,721 lbs

4/59	For more information cont Markar Prod		FAX (716) 685-3919
	MICHAEL BAKER JR. INC. RESTROOM DESIGN S	PROJECT TITLE RESTROOM DESIGN STANDARDS	PROJECT NO. TASK 1314.20
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PRODUCT DETAIL

Refill Info Shipping Info

VuAll Cormatic® (P15) **High-Capacity Roll Towel** Dispenser

High capacity, key-locking towel dispensing system solution provides an attractive, hygienic, hands-free, portion-control solution.



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Item Description:

Our most popular, attractive, smokecapacity Cormatic® VuAll® roll towel you control costs with style. Our comi free roll towel dispensers feature no t or cranks that can serve as germ rese helps you meet higher public health s in pollution prevention and control yo costs through waste and maintenance self-locking dispenser is designed to c pilferage while making towel dispensi Choose our VuAll® dispenser for a co system solution that is suitable for an

search gp.com >>

Features & Benefits:

- Attractive Design Attractive smoke-tinted dispensers washroom
- High Capacity Reduced maintenance intervals an of run-out

Portion-Control Mechanism Reduces solid waste by 25 to 35 plimiting the amount of product disi time

It∈	em #	Product Family	Pack	Inner Pa Count	ck
HV	200K	Hygiene		6 Count	t
Color	Dispenser	Dimensions Paper Grade Pl	y Core Size	SCC	UPC # Reta Scanner Co
Smoke	Shipping Info	•		6500049706	

Case Shipping Layer Floor HI Floor Pallet HI Pallet Gross Shipping C

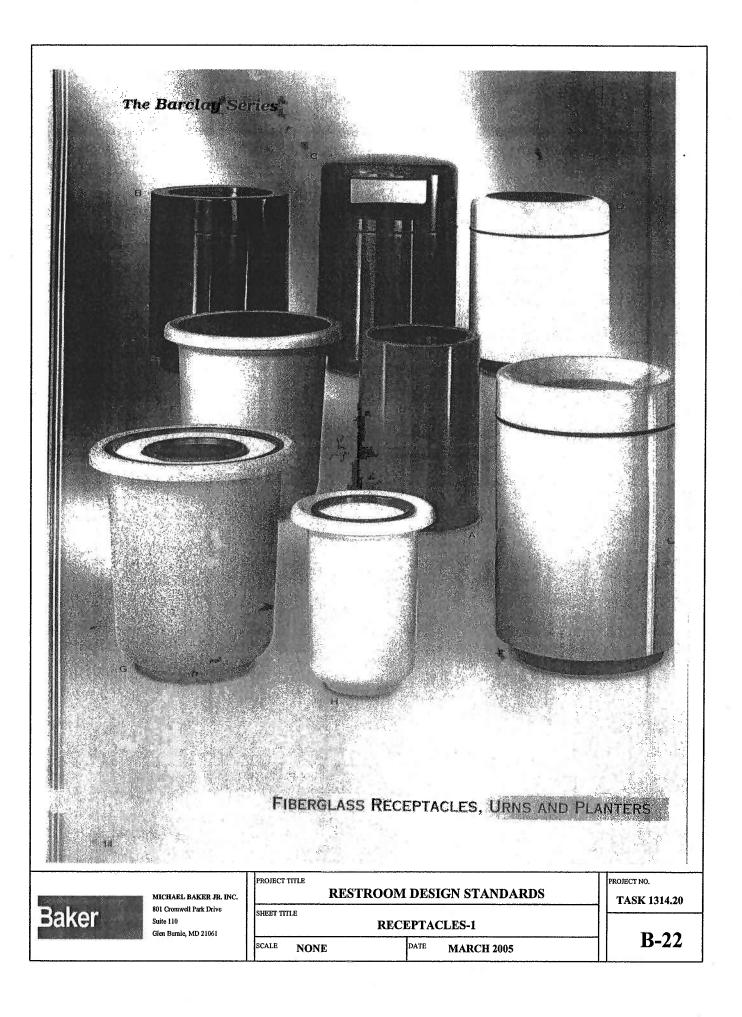
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GP Suggested

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THE BARCLAY SERIES

The Barclay Series of fiberglass receptacles offers a variety of styles from classic to contemporary that complement and enhance their surroundings.

 \bigcirc

- Over 30 different colors in solid, matte, and Sand-xTM finishes are offered. Rose Gran-xTM and Gray Gran-xTM finishes are also available, see page 21.
- Units can be used indoors and outdoors.
- Seamless construction with molded gel-coat finish will not stain or tarnish and is scratch resistant.
- Ultra violet stabilizer is added to all models, torretard fading due to sunlight.
- Vinyl trim on edges prevents chipping and damage during maintenance.
- All models with two openings are available with a single opening as a custom order.
- Custom color matching and designs available.
- Optional Fire Retardant treated - Compliance with NFPA (National Fire Protection Agency) Life Safety Code #101
- Class I Fire Retardant Flame Spread 0-25
- Class II Fire Retardant Flame Spread 26-75 Optional anchoring kits available, see page 49 for details.
- ADA Compliant.



Folding retainer bands hold poly bags securely inside the receptacte.

FIRE SAFE / SELF-EXTINGUISHING FIBERGLASS RECEPTACLES



See page 20.



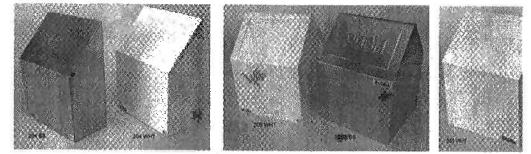
Description Model Number		Liner	Ga	Gallon Capacity			Disposal Opening		
A	Waste Receptacle	FG1830ARLO		HB	PL.	GL	Olmensions	University Sectors	Colar Shown
		FG24321	PL/GL		21	21	18° Dia. x 30° H	Ø" Dia.	Blackberry
C	Waste Receptacle	FG24391	RB/PL/GL	57	40	31	24° Dia. x 32* H	18" Dia.	Black
D	Wasie Recentacia	F02432ARI	R8/PL/GL	57	40	31	24° Dia. x 39" H	1wo 13° W x 6.5° H	Pluin
E	Waste Receptacia		RB/PL/GL	87	40	31	24° Dia. x 32° H	8° Día.	Almond
F	Waste Receptacie	FGL27300T1	887 PL. Pl	62	50	••••••	24° Dha. x 39° H	13' Dia.	Warm Grav
G	Ash / fresh	FOL2730GSUT1	<u>.</u> г. Рі	Sine .	22		27" Dia. x 30" H	12° Dia,	Tap
ы	Um	FGI.1824GSU	£2.	- 4600 	22	**************************************	27" Dia. x 30" H	12* Dia.	Rose Gran-x
E loss on	das. DB Only flys Contain	and the second s			••••••		18" Dia. x 24" H		Mauvo
N. 40 M	ides: RB - Poly Bog Relain 61 Galvanized Steel	ar Honda, 191 Geem-Fig Linez.	Nor® Rigid Flastic Lines,		tra	2432, F02430,	FG2432AR, FG2438,		

FG2432, F62439, FG2432AR, FG2438, FGL273001, FGL273005UT conext ship UPS

MICHAEL BAKER JR. INC. 801 Cromwell Park Drive		PROJECT THILE RESTROOM DESIGN STANDARDS		PROJECT NO. TASK 1314.20
Saker Suite 110		SHEET TITLE REC	EPTACLES-2	D 22
		SCALE NONE	DATE MARCH 2005	B-23

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Sanitary Napkin Receptacles / Disposal Units



Model 203: Economy wall mount sanitary napkin receptacle. Hinged top lifts to empty. White Enar only.

Model 204: Deluxe wall mount. Spring closing door with full length hinge. Easy lift out galvanized for emptying. White or Stainless Steel finish.

Model 205: The Standard of the Industry! Deluxe floor model fits under divider and serves 2 stalls closing door with full length hinge. Inner galvanized liner with dimpled bottom keeps it off the floor in white or stainless steel.

r	Model Number	Finish	Product Name	
•	203 WHT	White Gloss	Sanitary Napkin Receptacle - Wall	
•	<u>204 S/S</u>	Satin Stainless Steel	Sanitary Napkin Receptacle - Wall	
٠	204 WHT	White Gloss	Sanitary Napkin Receptacle - Wall	
•	<u>205 S/S</u>	Satin Stainless Steel	Sanitary Napkin Receptacle - Floo	
٠	<u>205 WHT</u>	White Gloss	Sanitary Napkin Receptacle - Floo.	
•	206 WHT	White Gloss	Individual Sanitary Napkin Bag D	
•	225	Liner	Individual Sanitary Napkin Bag	

R.	MICHAEL BAKER JR. INC, 801 Cromwell Park Drive	RESTROOM DESIGN STANDARDS		_	PROJECT NO. TASK 1314.20
Baker	Suite 110 Glen Burnie, MD 21061	SHEET TITLE	RECEPTACLES-3		D 0 (
		SCALE NO	NE DATE MARCH 2005		B-24

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4d x 11h.

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Home Office Maintenance, Janitorial & Lunchroom Bathroom Supplies Baby Station Dispensers Feminine Hygiene Paper Goods Soap & Soap Dispensers Toilet Seat Covers

Trash Receptacies

COLLEGENERADO.

Convertible Sanitary Napkin Receptacle



Deluxe Sanitary Napkin Receptacle

Price \$74.10 Save up to 7%

OSHA compliant. Floor model services two stalls. Sanitary—foot pedal opens lid. Antimicrobial Germ-Fighter® leakproof rigid plastic liner controls germs and odors. Easy-empty side opening design. Heavy-duty steel, contains 30% recycled steel content. Powder coated finish. Uses plastic liner bags (EXCLB1718) sold separately. 9-1/4w x 9-3/4d x 11h. Shpg. wt. 9 lbs.

Hinged Ild. Stays open for disposals, then closes tightly. Empties from the bottom; hands never touch the contents. Wall mountable

(screws not included). Uses Liners (HOS260) sold separately. 8w x



Napkin Receptacle Liners

Price \$25,75 Save up to 21%

Kraft waxed paper liners for Convertible Sanitary Napkin Receptacle (HOSND1E) sold separately, Sanisac, and all standard wall units. 500 liners per carton. Shpg. wt. 12 lbs.



Sanitary Napkin Receptacle, Plastic Liner Bags

Priced from \$40.73 to \$50.54 Save up to 11%

Floor model fits under stall divider. Serves two stalls with double swinging spring-closing push-doors on full-length plano hinges. Galvanized inner liners. Plastic Liner Bags (EXCLB1718) sold separately. 9w x 9d x 11-1/2h.

4 pages

Contact us by phone 1-877-677-7015 or email guestions@cleansweepsupply.com

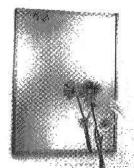
5 items

Company Information | Delivery Information | Return Policy | Suggestions Copyright © 2003 CleanSweepSupply.com



1 (E				
	MICHAEL BAKER JR. INC. 801 Cromwell Park Drive	PROJECT TITLE RESTROOM DESIGN STANDARDS		PROJECT NO. TASK 1314.20
Baker	Suite 110 Glen Burnie, MD 21061	SHEET TILE	RECEPTACLES-4	D 05
f		SCALE NONE	DATE MARCH 2005	B-25

Channel Frame



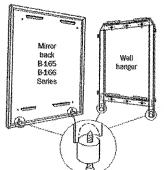
8-165 SERIES

B-165 SERIES FRAMED MIRRORS One-piece B-165 SERIES FRAMED MIRRORS Chepiece channel frame is ½2' x ½3' x ½3' x 13 x 13 mn) with bright polished finish and mitered corners. Phillips-head frame screw permits easy replacement of rattor. No. 1 quality, ¼4' (Sonn) glass mirror electrolytically copperplated; guaranteed against silver-spollage for 10 years. Mirror contents and back profiled by shock absorbing material. Back is galvanized steel. Secured to concealed will hanger with twn thefraecitant locking returned. with two theft-resistent locking screws.

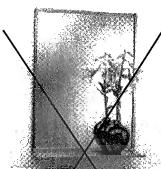
STANDARD STOCK SIZES B-165 SERIES MIRROR

Model No.	Width	Height	
B-165 1624	16*	24	(41 x 61cm)
#B-165 1824	18"	24*	(46 x 61cm)
Ø8-165 1830	18*	30"	(46 x 76cm)
Ø8-165 1836	18"	36"	(46 x 91cm)
Ø8-165 2430	24°	30*	(61 x 76cm)
ØB-165 2436	24"	36*	(61 x 91cm)
8-165 2448	24*	48 [×]	(61 x 122cm)
ØB-165 2460	24"	60*	(61 x 152cm)
8-165 3636	36″	36″	(91 x 91cm)
8-165 4836	48"	36°	(122 x 91cm)
B-165 6036	60°	36*	(152x 91cm)

SPECIAL-ORDER CUSTOM SIZE MIBRORS Maximum size mirror: 72° x 60° (183 x 152cm). To specify special sizes, use Series Number followed by width and height.



Channel Frame/Shelf



166 SEF 8-166 SERIES MURROR/SHELF COMBINATION Theft resistant chemical frame mirror with one place type 304, eathy inish stainless steel oneif, project dth one place elf: projects 5" (127mm). and has He" (10mm) retu dges on front and si les. Front return edge hemmi for maxi mum rigidity. Concealed 16 gauge (1.6mm) less style brackets attach shelf to minor fra

STANDARD STOCK SIZES

Model No.	Width	Height	
B-166 1824	18*	24	(46 x 61cm)
B-166 1830	187	307	(46 x 76cm)
B-166 1836	18°	36″	(46 x 91cm)
Ø8-166 2436	24*	36*	(61 x 91cm)

SPECIAL-ORDER CUSTOM SIZE MIRRORS Maximum size mirror: 24° x 60° (61 x 152am). Maximum shelf length: 24° (61 cm). To specify speciel sizes, uso Series Number followed by width and height.

Frameless, stainless steel

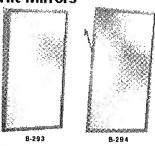
8-1556 SERIES FRAMELESS MIRRORS Bight polished stainless steel. Mirror has 14" (6mm) return concealing 14" (6mm) tempored masonite backing. Furnished with four mounting screws.

13

STANDARD STOCK SIZES B-1556 SERIES

Medel	No.	Width	Height	
8-1556	1620	15 1/2"	19 1%	(39 x 50cm)
ØB-1566	1824	17 狡	23 1/2"	(44 x 60cm)
8-1556	1830	17 1/2"	29 12"	(44 x 75cm)
ØB-1556	2436	23 42	35 3/2"	(60 x 90cm)

Tilt Mirrors



B-203 SERIES THT MIRRORS Provide \mathbf{t} visibility for wheelchair patients. Frame is type-304 stabilities steel, solin finish. Special bevel design lugs mirror. No. 1 quality, ¹/₄² (Smm) glass mirror electrolytically copper plated. Mirror extends 4^e (10cm) from wall at top and tapers to 1^e (25mm) at botto

STANDARD STOCK SIZES B-293 SERIES

B-293 1630	16*	30″	(41 x 76cm
8-293 1830	18″	30*	(46 x 76cm
/8-293 1836	18'	36*	(46 x 91cm
78-293 2436	24*	36'	(61 x 91cm

8-294 SERIES TILTING MIRRORS TH forward to provide full visibility for wheelchair patients or return to unplut position, name is 3st x 3st (19 x 19mm), type-304 stainless steel angle, satis finish, Special bavel design hugs miror. No. 1 quality, 3st (6mm) glass miror electrolytically copper-plated. Top of miror tills 7st (13km) mon wall with self-locking meshanisms; bottom of miror mounts to wall with full length stainless steel hinge.

S IRRORS

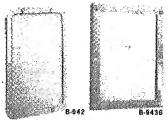
19

STANDARD STOCK SIZES B-284 SERIES MIRROR

Model No.		Width	Height	
₽ 8-294 1624	*****	16'	24*	(41 x 61cm)
# 8-294 1630		16*	301	(41 x 76cm)

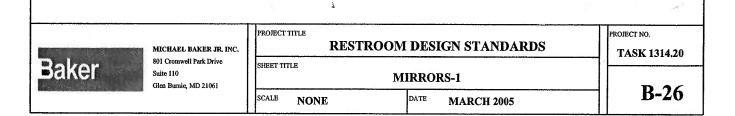
SPECIAL-ORDER CUSTOM SIZE MIRRORS um size mirror: 30° x 36° (762 x 914mm).

Vandal-Resistant



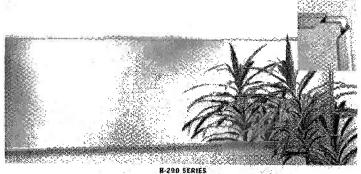
8-942 FRAMELESS MIGROR (Secured From Front) Million is 11 %'' x 17 %'' (285 x 440mm) overall, %'' (6mm) deep, 18 gauge (1.2mm), type 430 stainless steel with bright polisbed finish.

B-9436 FRAMED MIRROR (Secured From Front) Reflective surface; type-304 bright polisited stripters steel. Frame: 14 guage (2mm), type-304 stabless steel with satia finish; %* (16mm) deep; conters heliser war and and polisied amouth, and the strength amount, infiner protected by ½" (13mm) thick fiberboard backing. Overall mirmir size: 1.2" x 1.6" (305 x 405mm).



Angle Frame

Angle Frame/Shelf



B-290 SERIES FRAMED MIRRORS One plece roll formed frame is 147 x 141 (19 x 10mm), type 304 atchiness steel angle with settin finish. Special bevel design hugs mirror. Corners are heliate welded, ground and polished smooth. No. 1 quelity, W² (form) glass mirror electrolylically copper shaked; guaranteeld against silvor spoilage for 15 years. Mirror edges protected with plastic filler strips to prevent chipping; back is protected by 3x² (form) thick, water-resistant, polyethylene padding. Galvanized steel back attached to frame with concealed screws. Secured to concealed wail hanger (shown below) with two theft-resistant locking acrews.

SPECIAL-ORDER CLISTOM SIZE 8-290 AND 8-292 SERIES MIRRORS Maximum size of one-piece mirror; 144⁴ x 72^o (366 x 183cm). Maximum frame size available: 186⁵ x 72^o (472 x 183cm) with two pieces of glass in one-piece frame furnished with 4-section motifing with polished statiless steel exposed finish covering seam where two pieces of glass but together. Shelves longer than 120^o (305cm) will be further to two sheares than ta0^o (305cm) will be

MIRRORS

timisited as two pieces butlen together. To specify special sizes, use Series Number followed by width and height in inches. For example, B.280 70 x 30 (178 x 76cm) or B-292 132 x 48 (335 x 122cm).

DESIGNER'S NOTES To socially mitrors, use Series Number desired followed by width and height in Inches. Width dimension music reverse be stated first following Series Number.

B165, B166, B290, B292, B293, and B294 Series mirrors must be installed with width and height dimensions as ordered. Mirror back and wall height calinot be installed slide ways to reverse width and height dimensions.

SPECIAL-ORDER REFLECTIVE SURFACES

Polished Stainless Steel, Tempered and Laminated Glass Mirrors resist breakage and provide a measure of safety from broken glass, but differ in color and reflective quality from standard glass mirrors. Available on special order.

Deatde.

includes shelf.

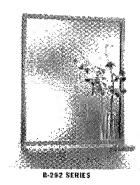
STANDARD STOCK SIZES 8-290 SERIES MIRROR Model Ro. Width Helgh B-290 1824 19 24 (46 x 81.cm) #8-290 1830 18 30" (46 x 76cm) 18 24' (78-290 1836 (48 x 91cm) 39 30* 8-290 2430 (61 x 76cm) 24 24 \$8-290 2436 (61 x 91cm) 8-290 2448 48 (61 x 122cm) 24" 60" 72" 8-290 2460 (61 x 152cm) 8-290 2472 (61 x 183cm) 36' 36 B-290 3638 (91 x 91cm) (122 x 91cm) (163 x 91cm) 48" 36* 8-200 4836 8-290 7236

BARRIER-FREE WASHROOM GUIDELINES

MIRRORS. Bottom edge of reflective surface should be mounted no higher than 40" (1015mm) above

bits finish floor. A single full length mimor is recommended in each washroom because it is universally

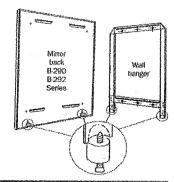
IMPORTANT NOTE All Botatick framed initrois are manufactured to careful dimensions, as shown in all mirror tables on pages 18 and 19, Overall height of mirror/shelt models



B-282 SERIES MIRROR/SHELF COMBINATION Theft-resistant angle-frame mirror furnished with one-picec, types-304 satisf-finish stainless steel shell; projects 5° (127mm) and has ¾" (19mm) return edges on front and sides. Front return edge hermmed for maximum rigidity and satety. Comers are hellaro welded, ground and polished smooth. Concesied 18-gauge (1.6mm) stainless steel breakets antich shell to mirror frame.

STANDARD STOCK SIZES B-292 SERIES MIRROR/SHELF

Model No.	Width	Height	
8-292 1824	18*	24*	(46 x 61cm)
8-292 1830	181	30'	(46 x 76cm)
8-292 1836	38*	36*	(46 x 91cm)
8-292 2436	24″	36*	(61.x 91cm)



B-290, B-292, B-165 AND B-166 SERIES MIRRORS, CONCEALED WALL HANGER FOR THEFT-RESISTANT MOUNTING Simplifies Installation.

Mirror is held flush to wall by integral brackets at top and bottom of mirror back locked by two concealed thathresistant screws on bottom of mirror back. Back is constructed of galvanized steel. Note: Pravide minimum ¼" (19mm) clearance at top of mirror for mounting on wall hanger, minimum 1" (25mm) clearance at bottom for angaging locking screws, and 1" (25mm) clearance on each side.

PRICE B-290 Series 1.7 B-292 Series 1.8 INDEX B-165 Series 1.0 B-166 Series 1.0

18 / USA & Canada QuickShip model. // USA QuickShip model.

	MICHAEL BAKER JR. INC. 801 Cromwell Park Drive	PROJECT TITLE RESTROOM DESIGN STANDARDS SHEET TITLE		PROJECT NO. TASK 1314.20
Baker	soi Cromwell Park Drive Suite 110 Glen Burnie, MD 21061	SCALE NONE	MIRRORS-2	B-27

Grab Bars Comply With Barrier-Free Design Codes



 Constructed of settinifinish stainless steel tubing in 1 ¼" and 1 ¼" (30 and 40mm) diameters; concealed or exposed inxvinting.

- Peened nonslip gripping surface available on all Series. Add suffix .99 to model number.
- Bar 18 gauge (1.2mm), type 304 steinless steel.
- Bar passes through linge and is heliarc welded to
 form single structural unit.

EXPOSED MOUNTING

 Flange 38" (3mm) thick, type-304 stainless steel plate, 3" (75mm) diameter.

 Exposed mounting screw holes; vandal/resistant screws available as an optional accessory.



Series	Disineter	*Finish
*8-6106	1 1/2" (40mm)	Satin Finish
*B-490	1.¼4" (30mm)	Setin Finish

- Comply with structural strength requisements: grab bors that provide 1.4° (40mm) clearance from the wall can support loads in excess of 900 pounds (408kg) when properly installed, meeting ADA Accessibility Guidelines in U.S.A.
- Mandrel bending process ensures uniform bar diameter around curves.
- All joints and supports are contour cut and welded.
 Concealed anchors and fasteners available as an optional accessory.

DESIGNER'S NOTE

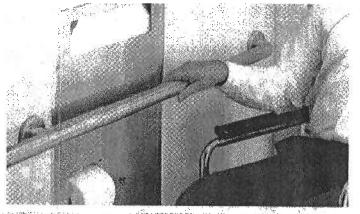
Any grab bar configuration not included within a Series row in the Grab Bar Configuration Chart is available on special order.

CONCEALED MOUNTING WITH SHAP FLANGE

- Cover snaps over mounting flange to conceal screws.
- Concealed mounting flange ½° (3mm) thick, type-304 stainloss steel plate, 2° W x 3 Ű H (50 x 80mm), with screw holes for concealed anchois.

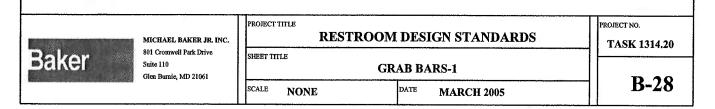
 Cover is 22 gauge (0.8mm), type-304 stalnless steel with satin finish, 3 ¼⁴ (85mm) diameter.

72° (40mm)	Satin Philsh
³ /4" (30mm)	Setin Finish

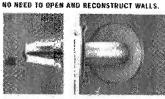


BARRIER-FREE MASHROUM CUIDELINES GPAP GARS. Districted of grab bars should be 1, 44 to 1, 54 (30-40min) with 3, 49⁴ (40mm) clearance from De wall. GPAP bars should not totate in that fittings. The required mounting begint is universally 33⁴ to 36⁶ (840–815mm) from the contentime of the grab bar to the finish two. The structural strength of all grab bars and their mounting devices should withstand mote than 250 points of tone (1112 N). For all barrier the Dist contrainenable, individual toilet rooms and guest bettrooms, it is recommended that a 36⁶ (915mm) mit, hoursoning two he installed on the back wall ever the toilet. This cart also be accompliabled with a sing the installed on the state well of pathtion nearest the toilet. This cart also be accompliabled with a single borgonital twowall grab bar.

36 🥤 USA & Canada QuickShip model. 🖉 USA QuickShip model.



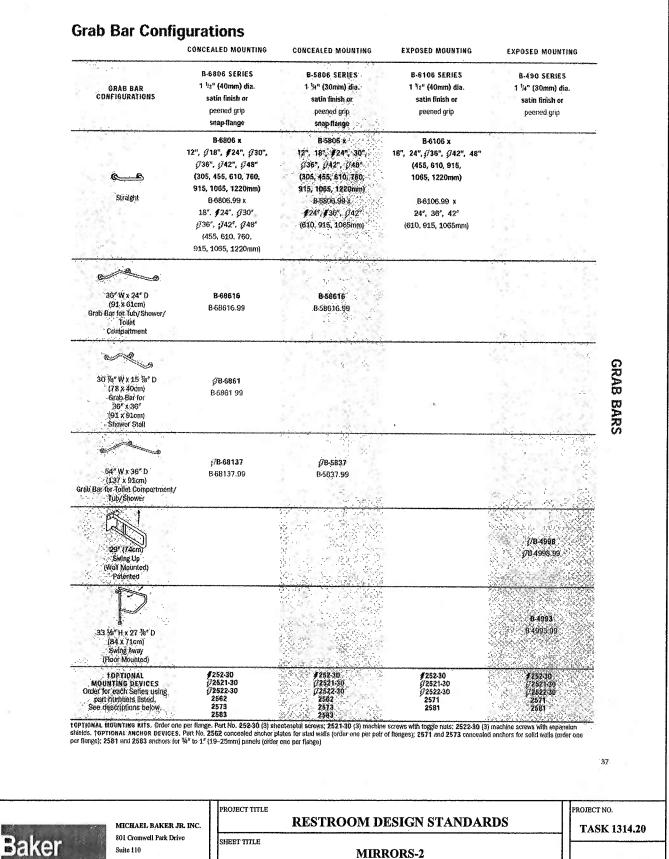
INSTALL GRAB BARS WITHOUT BACKING.



WingBTM Grab Bar Fastening System secures all Bobrick Grab Bar Sories. For walls with a minimum of ⁵/8" (16mm) thick painted or tiled drywall, Can olso be used on ⁵/4" (13mm) thick drywall with added finished wait material. The fastener will support 300 ib. toad exceeding all building code and governmental agency guidelines including ADAAS in the United States.

✓251-4 WINGIT™ GRAB BAR FASTENER For 2 ³/₂³ and 3 ³/₂⁴ (65 and 90mm) or deeper hollow wells with finished wall surfaces ³/₂⁴ to 1 ³/₂⁴ (6 to 39mm) thick. One fastener required for each flange. Corrosion-resistant stainless steel. Patented.

Wingst¹⁴⁴ Is a trademark of Wingli funovations, LLC.



Suite 110

Glen Burnie, MD 21061

SCALE

NONE

DATE

MARCH 2005



MICHAEL BAKER JR, INC. 801 Cromwell Park Drive		PROJECT TI	RESTROOM	DESI	IGN STANDARDS	PROJECT NO. TASK 1314.20
Baker	Suite 110 Glea Burnie, MD 21061	SHEET TITL	DIAPER CH		ING STATIONS-1	B-30
		SCALE	NONE	DATE	MARCH 2005	D 50

Recessed and Surface Mounted

8-223x24

FB-223 MOP AND BROOM HOLDER Type-304 stainless steel, satin finish. Anti-silp mop holders have spring-loaded rubbler cam that grips handles ½* to 144 (20-30nm) diameter. Holds mops 3 ¼* (85mm) from wall. Height 5* (125mm).

Madel No.	No. Holders	Length
\$8-223x24	з	24" (610mm)
Ø8-223x36	4	36" (915mm)



B-224 SHELF WITH MOP AND BROOM HOLDERS AND RAG HOOKS Shell's L8gauge (1.2mm), type-304 stainless steel, satin finish; 6" H, 8" D (150 x 205mm), Artilslip mop holders have springloaded rubber cam that grips handles %" to 1 ¼" (20-30mm) diameter. Holds mops 8" (205mm) from wali. Stainless steel rag hooks. Rod for wet rags below shelf.

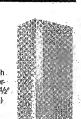
Model No.	No. Holders	No. Hoc	iks	Length
#B-224x30	3	2	30	(760mm)
Ø8-224x36	4	3		(915mm)

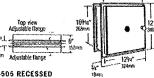


#B-239 CLASSIC SERIES SHELF WITH MOP AND BROOM HOLDERS AND HOOKS Shelf is 18-gauge (1.2mm), type-304 stainless steel, satin flinsh; 13" H, 8" D (330 x 205mm). Anti-slip mop holders have sping-loaded rubber cam that grips handles "k" to 1 ¼" (20–30mm) dia. Stainless steel hooks,

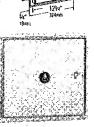
Model No.	No. Holders	No. Hooks	Length
ØB-239x34	3	4	34" (865mm)
B-239×44	4		44" (1120mm)

GB-633 STAINLESS STEEL CORNER GUARDS Eliminate expensive maintenance work. 18 gauge (1.2mm), type-304 stainless steel, safin finish. No sharp edges: Fumished with adhesive inounting for easy permanent installation: 3 ½% x 3 ½°. (90 x 90mm); £48° (1220mm) forg.





SPECIMEN PASS-THRU CABINET. Provides convenient passage for specimen from patient area to laboratory. Mounts in walls 3° to 5.34° (75-145mm) block. Type-304 stainless steet, safur finish

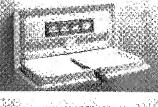


Self-closing doors. Interlocking mechanism prevents both doors from being open at the same time; provides sight barrier. Removable stainless steel twa, Rough Walt Opening; 11 ½/ W, 10 % / H (290 x 275mm); 3* to 5 %! (75-145mm) thick.

8-235 SURFACE MOUNTED PAPER CUP **DISPENSER** Satin finities statiness steel. **Dispenses** 150-302 (0,14); cups. Also adjusts to dispense up to 6-02 (0,24) cups. Tumbler lock on top and statiliess steel planohinge on bytom. Cabinet swings down for easy filling. Slot on front indicates refill time. 3 44" W, 14 42" H, 3 44" D (85 x 370 x 85mm).

15055

B-2230 CLASSIC SERIES SURFACE-MOUNTED DIAPER CHANGING STATION Provides safe, convenient location for parent and child in public wastinooms at a budget price. Unit features a smooth concave changing area with rylon safety strap, two hooks for bags, purses and instruction graphics. Durable, high-impact polyethylene body resists odors and bacterial growth. Pneumatic cylinder provides controlled, slow opening and closing of bed. No hinge structure aposed on Interior or exterior surfaces. Bed secured to backplate with concealed full-length stalnless steel hinge rod with steel bushings embedded in the plastic. Unit supports loads up to 250 ib. (113kg) when properly installed. Equipped with liner disperiore that accommodates many commercially available folded lines. Unit measures 34 ½ W, 16 ½ H (B70m x 430 mm). When closed, surfacemounted unit projects 187 (455mm). Patented.



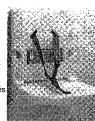


B-2210 SURFACE-MOUNTED DIAPER CHANGING STATION Provides safe, convenient location for parent and child in public washroom. Bed features smooth concave changing area with safety strap, hooks for bags and purses, and universal instruction graphics. Pneumatic cylinder provides controlled, slow opening and closing. Nonporous polyathylene resists odors and bacterial growth; matches Bobrick color #899 Grey. Unit has foam core for added durability. No hings structure exposed on Interfor or exterior surfaces. Bed secured to back plate with concealed full-length stainless steel hinge rod with steel bushings inhedded in plastic. Supports up to 250 lb (113kg) when properly installed. Equipped with multi-size liner dispenser that accommodates many commercially available folded liners and dental bibs, as well as Cfold or multifold paper towels measuring 6 ½* to 10 ½* long by 2 ½* to 4 ½* wide (165-270mm; x65-125mm). Unique design allows unit to be semi-recessed into wall opening 4* (102mm) deep. Unit measures 32* W, 20* H (815 x 510mm). When closed, surface-mounted unit projects 4* (102mm) from wall; semi-recessed bed projects 16 ½* (420mm). For semi-recessed bed projects 16 ½* (420mm). For semi-recessed bed projects 16 ½* (420mm). Patented.

78-2200 Similar to B-2210, but without multi-size liner dispenser. Patented.

2210-40 LINERS FOR DIAPER CHANGING STATION Optional accessory for multi-size liner dispenser in Model B-2210, Case of 500 absorbent paper liners with soil-resistant plastic backing.

B-2220 PÁRTITION-MOUNTED CHILDSEAT Provides safe location off of filoor for child with parent inside tollet compartment or fitting room. Featuré safety strap and inocks for bag or purse. Polyetilylene matches Bobrick

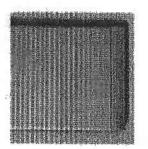


color #889 Grey. Supports up to 80 b (36kg) when properly installed. Closed unit measures 13° W, 18° H, 4^{-} V2 D (330 x 455 x 115mm). Seat projects 13 44° (335mm) from partition when open.

OOM DESIGN STANDARDS	PROJECT NO. TASK 1314.20
ER CHANGING STATIONS-2 DATE MARCH 2005	B-31
RESTR SHEET TITLE DIAP	RESTROOM DESIGN STANDARDS SHEET TITLE DIAPER CHANGING STATIONS-2

HEALTHCARE ACCESSORIES/CHILDCARE PRODUCTS

43



C800-Series Crash Rail

#8" rail with continuous aluminum retainer (except C860)#Exclusive connector plates and variety of mounting options

Continuous vinyl cushion to protect profile cover (except C860)

Economy models (C860 & C870) available for light- to medium-impact situations

Available in 21 standard colors with no minimums

Custom colors available with low minimum quantities required

Iowa Paint Manufacturing Company, Inc. 17th & Grand Avenue Des Moines, Iowa 50309 1-800-659-4455

Baker	MICHAEL BAKER JR. INC. 801 Cromwell Park Drive Suite 110 Glen Burnie, MD 21061	PROJECT 1 SHEET TIT	RES			GN STANDARDS		PROJECT NO. TASK 1314.20
	Cital Danie, with 21001	SCALE	NONE	DA	ATE	MARCH 2005	1	B-32

KOROSEAL WALL PROTECTION SYSTEMS KOROGARD^(r) C800-Series Crash Rails

KOROGARD C800-Series Crash Rails are 8" (203.2mm) high with a full-length vinyl bumper and continuous aluminum retainer. C800-Series Crash Rails combine a wide area of protection and a variety of mounting options to meet every impact need. KOROGARD rugged durability makes C800-

Series Crash Rails best suited for high impact areas.

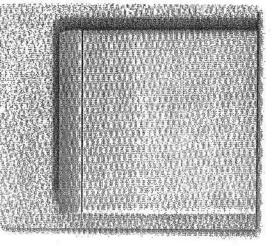
KOROGARD C800-Series Crash Rails are backed by a limited five-year warranty. All crash rails are Class I/A fire rated and meet national building code standards. All KOROGARD linear profiles color coordinate with a multitude of KOROSEAL^(r) Wallcoverings for a systems approach to wall protection.

For more information on KOROGARD Crash Rails or the KOROSEAL Wall Protection System, please call your local KOROGARD distributor or 1-800-628-0449.

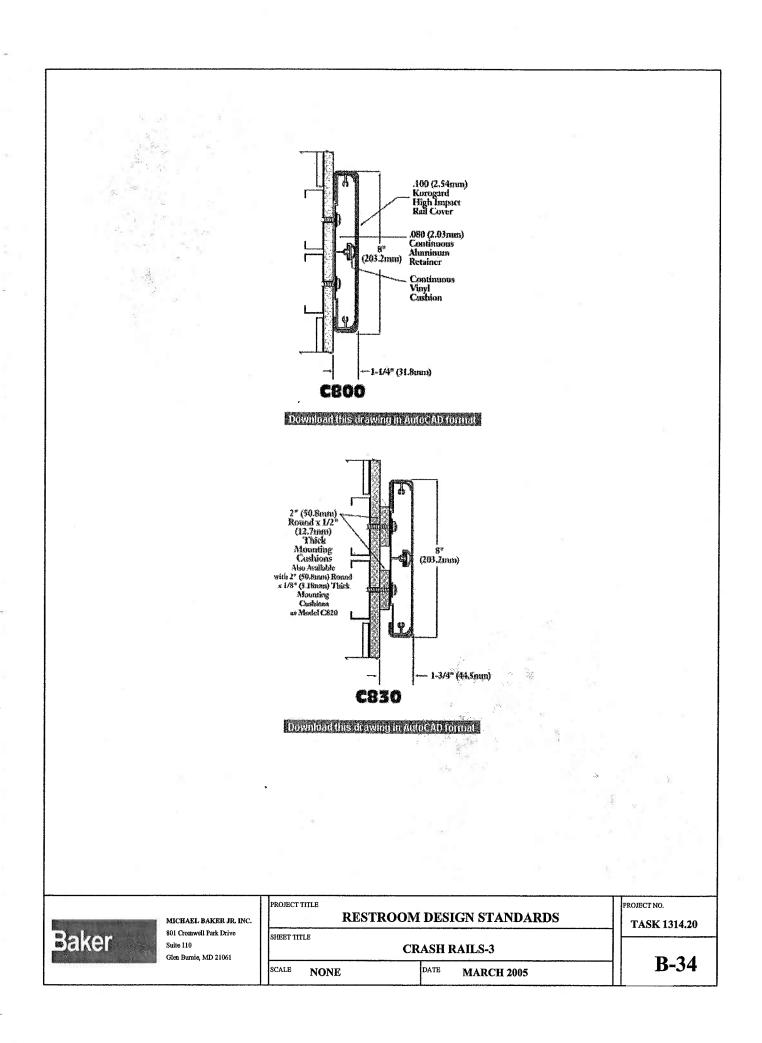
- Product Guide Specification
- Color Chart
- Installation Instructions
- Cleaning Instructions
- Warranty

HC800 SERIES ACCESSORY ITEMS

C801	Standard End Cap
C803	90° Comer Cap
C804	135° Corner Cap
C805	Splice Kil
C841	Extended End Cap



Baker	MICHAEL BAKER JR. INC. 801 Cromwell Park Drive Suite 110 Glen Burnie, MD 21061		PROJECT TITLE RESTROOM DESIGN STANDARDS SHEET TITLE				PROJECT NO. TASK 1314.20
		SHEETTII	ILE	CRASH RAILS-2			D 00
		SCALE	NONE	DATE	MARCH 2005		B-33



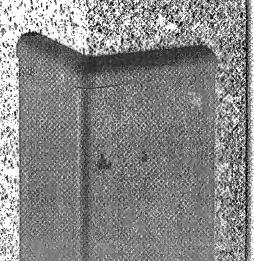
KOROSEAL WALL PROTECTION SYSTEMS KOROGARD^(r) G200-Series Surface-Mounted Corner Guards

KOROGARD G200-Series Corner Guards consist of a formidable 3" (76.2mm) vinyl 1/4" (6.35mm) radius cover mounted over a continuous aluminum retainer. KOROGARD Corner Guards are an attractive and durable solution to unsightly.

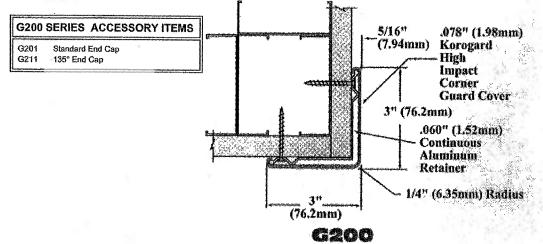
damaged corners. G200-Series Surface-Mounted Corner Guards provide support in medium to high impact areas. The G210 Model is available for 135° angle corners.

KOROGARD G200-Series Corner Guards are backed by a limited five-year warranty. All corner guards are Class I/A fire rated and meet national building code standards. All KOROGARD linear profiles color coordinate with a multitude of KOROSEAL^(r) Wallcoverings for a systems approach to wall protection.

For more information on KOROGARD Corner Guards or the KOROSEAL Wall Protection System, please call your local KOROGARD distributor or 1-800-628-0449.

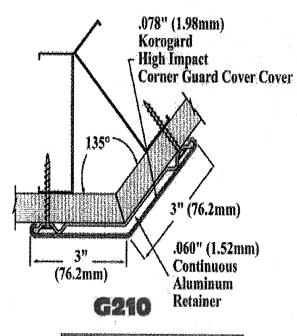


- Product Guide Specification
- Color Chart
- Installation Instructions
- Cleaning Instructions
- Warranty



Baker	MICHAEL BAKER JR. INC. 801 Cromwell Park Drive	PROJECT TITLE REST	PROJECT NO. TASK 1314.20	
	Suite 110 Glen Burnie, MD 21061	SHEET TITLE	CORNER GUARDS-1	B-35
		SCALE NONE	DATE MARCH 2005	D- 33

Download this drawing in AutoCAD format

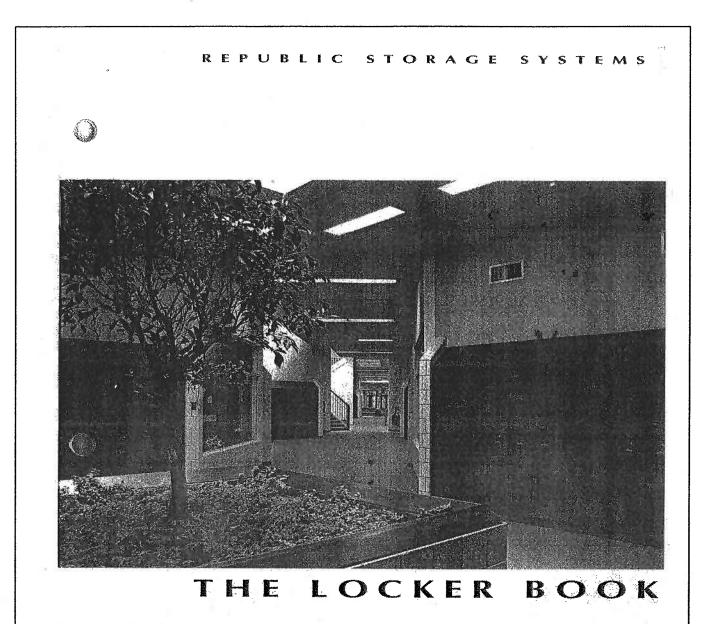


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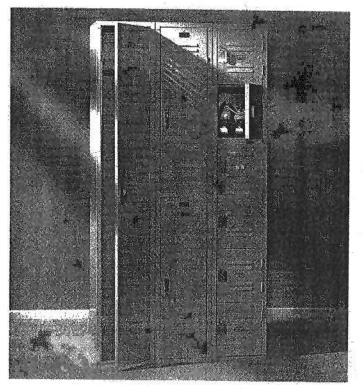


Baker	MICHAEL BAKER JR. INC. 801 Cromwell Park Drivé Suite 110 Glen Burnie, MD 21061	PROJECT TITLE RESTROOM DESIGN STANDARDS						PROJECT NO. TASK 1314.20
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		SCALE	NONE	Υ.	DATE	MARCH 2005		B-36



Baker	MICHAEL BAKER JR. INC. 801 Cromwell Park Drive	PROJECT TITLE RESTROOM DESIGN STANDARDS					ROJECT NO. TASK 1314.20
	Suite 110 Glen Burnie, MD 21061	SHEET TIT		LOCKERS-1			D 27
ne salahanakanaka di dana salahan salahan s		SCALE	NONE	DATE	MARCH 2005		B-37

. 10-1		STAND/	RD LO	CKERS			È.			
				1	離 職: 1: 購					
	Wx D Inches	Single Tier Heights	Double Tier Heights	Triple Tier	Four tier	3-High Box	4-High Box	5-High Box Heights	6-High Box	
and the second second	9 x 12	48,54,60,72	30, 36	Heights	Heights	20, 24	15, 18	Heights	Heights	
	9 x 15 9 x 18	48,54,60, 72	30, 36 30, 36			20, 24 20, 24				
	9 x21 9 x24		30, 36 30, 36	a strastar					en la la la	
	12x12 12x15	36,48,54,60,72 36,48,54,60,72	24,30,36,42 24,30,36,42	20, 24 20, 24	18	20, 24 20, 24	15, 18 15, 18	12, 14,4	12 12	
	12x18 12x21	36,48,60,72 60, 72	24,30,36,42	20, 24	Control of the second	20, 24	15, 18	12, 14.4	12	
	12x24 15x12	60, 72	30, 36			20, 24		12, 14,4	12 12	
	15x15 15x18	60, 72 60, 72	30, 36 30, 36			20, 24 20, 24	15, 18 15, 18	12, 14,4 12, 14,4	12 12	
	15x21 15x24	60, 72 60, 72	30, 36 30, 36	ter and the second second			1.52, 110			
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	24x24	60, 72	30, 36							
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	Wx D Inches	Two Person Heights	Duplex Heights	Double Door Heights				2823		
	15x12 15x15	60, 72	60, 72		Actu	ual height of th	ie 36" single i	ier locker is 3	6'//	AB COLOR
	15x18 15x21	60, 72 60, 72	60.72		Jean	ve: Standard Lo neste McKee El nette, Pennsylva	ementary/Midd	le School		
	18x15 18x18	60, 72 60, 72	60, 72		Arch	itect: Kaclik an	d Graves, Pittsl	ourgh, Pennsylv elving, Pittsburg	anla gh, Peonsylvania	
\bigcirc	18x21 24x18		60, 72	60, 72					511	
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aker		HAEL BAKER JR. INC. Notwell Park Drive	SHEET TITLE							SK 1314.2
anor		Burnie, MD 21061			L(OCKERS-	2			B-3 8

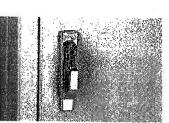


Republic's Standard Locker is recognized as the industry standard r durability, reliability and value. Year after year, generation after gentation, this sturdy locker has been meeting the most demanding expectations r quality, design and performance.

Republic® offers you a broad range of options, features and accessories a customize your lockers to meet any specific need or application.

- · Continuous vertical door strikes
- Heavy gauge frame hooks
- · Full-flanged, channel edged doors
- · Heavy duty guarded door handle
- Double-channel lock bar
- Full loop, 2", 5-knuckle hinges welded to frames, double-riveted to doors
- Double-lapped rear vertical corners in body
- · Overlapped upright/frame assembly connection

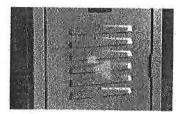
or fast delivery, many Standard Lockers are also available from epublic's Qwik Ship stock. Check with your local Republic distributor.



Lift handle is made of attractive, durable chrome plated die cast zinc. The rugged handle case protects the lift trigger from kicking and other abuse, and also serves as a padlock strike. Handle equipped with two rubber silencers to reduce mechanism noise.



Frame Hooks are made from heavy gauge steel for security and are set-in for minimum opening protrusion. Rubber silencers are attached to soften door slam.



Louvers are provided on all Standard Lockers. Single tier and double tier lockers have a block of six louvers located neur the top and bottom of each door.

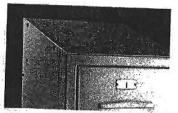
2		- 12 COLOR				
	MICHAEL BAKER JR. INC. 801 Cromwell Park Drive	PROJECT TITL	—	DESI	GN STANDARDS	PROJECT NO. TASK 1314.20
Baker	Suite 110 Glen Burnie, MD 21061	SHEET TITLE	L	OCKI	ERS-3	D 20
		scale N	NONE	DATE	MARCH 2005	B-39

200

300

Cost Index Relative to Republic's Standard Locker at 100

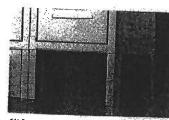
100



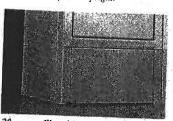
Individual Sloping Tops provide a finished appearance, prevent trash accumulation on locker tops and discourage using locker tops as storage areas. The rise of the slope is % the locker depth. Standard flat tops are omitted.



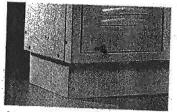
Continuous Sloping Tops provide a smooth, finished appearance for lockers mauned along walls or in island groups. The rise of the slope is % the locker depth. Customize your installation with sloping top splices, valley convers and hip ends - all without exposed fasteners.



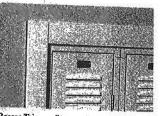
6" Legs may be furnished with all lockers. Front legs are an extension of vertical frames. Adjustable rear angle legs are provided for every third upright.



20 gauge Closed Front and End Bases, give a finished appearance to lockers with legs. Closed Bases also cover the hard to clean area under the lockers.



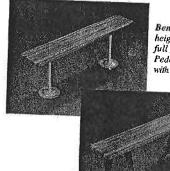
16gauge Zee Bases offer an attractive and economical way to raise lockers above the floor and create an overhang or "toe space". Available in 3", 4" and 6" heights.



Recess Trin really sets off your necessed lock er installations. The trim has a 3" face an a ¼" top return. Integral corner caps an hairline joints reinforced with welded-on splic. fingers leave a clean appearance. When used with Mondrian® or Designer lockers the trim can be set in a sculptured design (locker projects 1" beyond wall) or a flust design (locker projects ¼" beyond wall).



Standard Box Locker Pull provides a convenient finger pull and serves as a padlock strike and lock hole cover. Made from 20 gauge stainless steel.



Benches and Pedestals have an overall height of 17%". Benches are 9%" wide x 1%" full finished thickness laminated maple. Pedestals consist of sturdy 1%" O.D. tubing with 10 gauge steel flanges welded to each end.

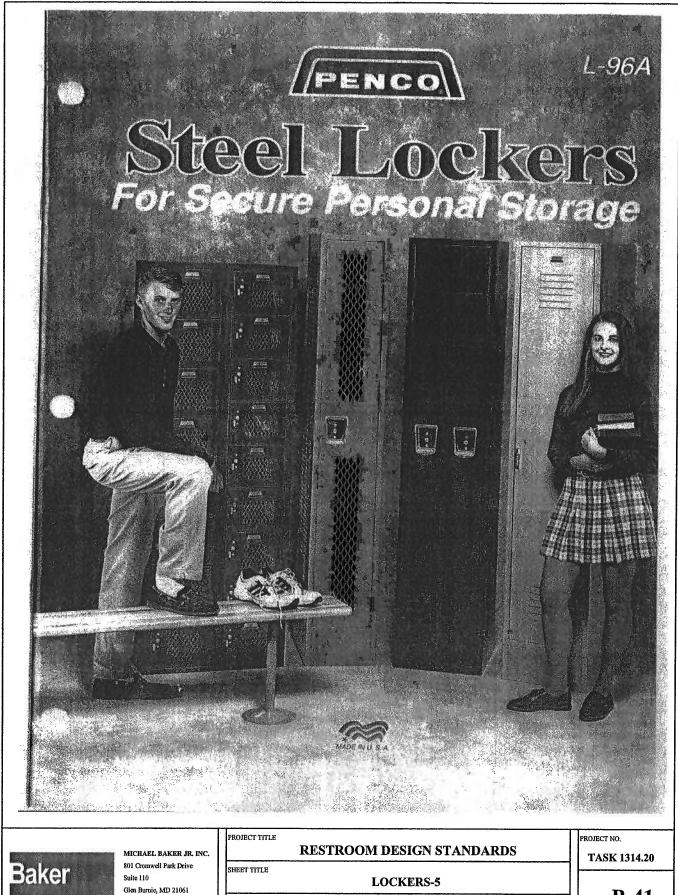


each end. Number plates feature & high black numerals on brushed aluminum to permit easy locker identification.

Moveable Banches consist of maple bench tops mounted to free-standing trapezoidalshaped pedestals. Pedestals made from 4"x3" aluminum bar stock, with black anodized finish.

9

			2	
Baker	MICHAEL BAKER JR. INC.	PROJECT TITLE RESTR	PROJECT NO. TASK 1314,20	
	801 Cromwell Park Drive Suite 110 Glea Burnie, MD 21061	SHEET TITLE	LOCKERS-4	D 40
		SCALE NONE	DATE MARCH 2005	B-40



SCALE	NONE

DATE MARCH 2005

Vanguard Lockers PENCO



Penco has been building lockers for decades that last for decades, and the Vanguard line is the embodiment of what it takes to withstand

the daily use and abuse typically given to a locker. What you see first is the baked enamel finish, which is applied over a phos-

phalized smooth steel surface. There are 17 standard colors from which to choose, and the body parts are the same color as the doors.

Single and double lier lockers have multi-point latching that makes opening



and closing a door, an effortless task. The

patented die-cast Vanguard handle pulls out with a simple motion for opening. When you are ready to close the door, you may do so with one motion of one hand, since the springloaded latch clips will secure the door even while the door is locked, either with a built-in lock or padlock. The latch hooks have noise-reducing rubber bumpers.

Box locker doors have a functional friction catch latch that permits the use of built-in locks or padlocks.

The door frames have mortise and tenon construction and

are securely spot welded for lifetime rigidity. Every door frame has a vertical flange which creates a continuous door strike. All hinges are full loop, 5knuckle design, welded to the frame, and riveted to the door.

These features, available across the broad range of models and sizes, make Vanguard the first choice for many locker users. Most Vanguard lockers are available on a Quick Ship basis, unit-packaged with flat tops and 6" legs in the 028 Gray finish. Contact your Penco representative for details.

NOTE: 1, 2, 3, 4, 5 & 6 tier lockers are NUTE: 1, 2, 3, 4, 5 or 0 ser ruchers are ordered by the <u>opening</u>, 2 Person, Duplex, Dual and Box Over are ordered by the frame. 7, 8, 16 Person and Wall Mounted are ordered by the entire unit. Overall height does not include legs.



Vanguard Handle

Vanouard

Louvers

space for full hanging of clothing and other belongings. Each locker has a convenient shell for storage of books, hats or other small articles. Lockers 18" deep or more come with a coat rod in addition to coat hooks.

Single Tier

Single Tier - The most popular and

widely used locker offers maximum



Double Tier

Double Tier - Accommodates twice as many people as single tier lockers

in the same floor space, while still providing enough room for light outer wear and personal belonginas.

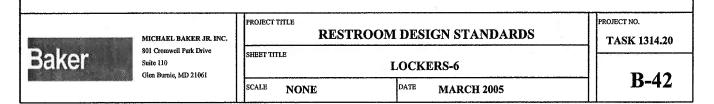


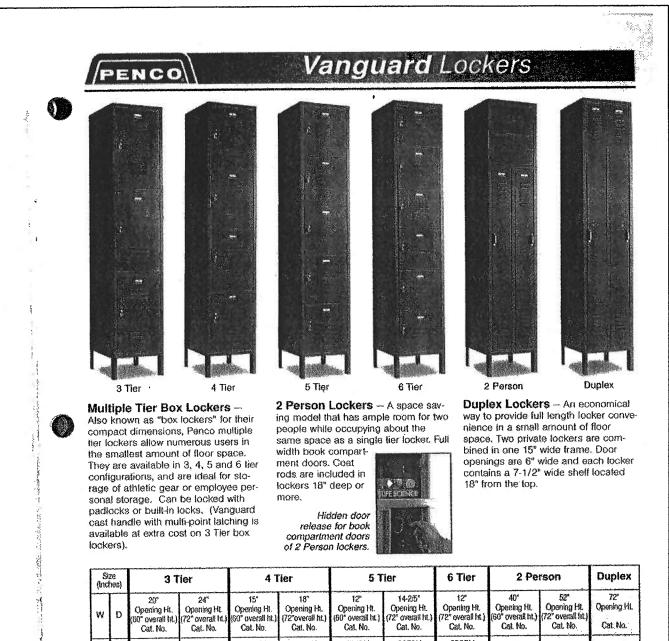
	ize hes)	Singl	e Tier		Double Tier	*****
w	D	60" Opening Ht.	72* Opening Ht.	30" Opening Ht. (60" overall ht.)	36" Opening Ht.	42" Opening Ht.
		Cat. No.	Cat. No.	Cal. No.	(72" overal ht.) Cat. No.	(84° overall ht.) Cet. No.
9	12	6101V	6151V	6201V	622'IV	
9	15	6103V	6153V	6203V	6223V	
9	18	6105V	6155V	6205V	6225V	
12	12	6111V	6161V	6211V	623 IV	000414
12	15	6113V	6163V	6213V	6233V	6251V
12	18	6115V	6165V	6215V	6235V	6253V
12	21	6117V	6167V	6217V	6218V	6255V
15	12	6119V	6169V		000001	
15	15	6121V	6171V	*	6239V	
15	18	6123V	6173V		6241V	6261V
15	21	6125V	6175V		6243V	6263V
				22	6245V	*
18	18	6131V	6181V		004701	
18	21	6133V	6183V	5 m 1	6247V	
18	24	6135V	6185V		6249V	•
*24	18	6149V	6196V		1.00	~
*24	21	8158V	6198V			1. St. 1.
*24	24	6160V	6199V	5	226	di e j



* 24" wide lockers are also available with double doors. Contact your representative.

FOR SAFETY PURPOSES WE STRONGLY RECOMMEND THAT ALL LOCKERS BE EITHER FLOOR OR WALL ANCHORED.





1											
w	D	20" Opening Ht. (60" overall ht.) Cat. No.	24" Opening Ht. (72" overall ht.) Cat. No.	15* Opening Ht. (60" overall ht.) Cat. No.	18° Opening Ht. (72°overall ht.) Cat. No.	12" Opening Ht. (60" overall ht.) Cat. No.	14-2/5° Opening Ht. (72° overall ht.) Cat. No.	12" Opening Ht (72" overall ht.) Cat. No.	40° Opening Ht. (60° overal ht.) Cat. No.	52* Opening Ht. (72* overall fit.) Cat. No.	72" Opening HL Cat. No.
12	12	6307V	6319V	6325V	6331V	6343V	6353V	6365V	-		
12	15	6309V	6321V	6327V	6337V	6345V	6355V	6367V	~ .		
12	18	6311V	6323V	6329V	6339V	6347V	6357V	6369V	~ .	•	
12	21	6349V	6399V	6393V	6395V		6435V	6371V	•	· • ·	*
15	12			2			*		6510V	6500V	й. 1
15	16		- I		6431V	6351V	6359V	6373V	6506V	6501V	6591V
15	18			_	6433V	6397V	6361V	6375V	6437∨	6503V	6533V
15	21		· ·		ĸ	•		6377V		6605V	6535V
18	18	l	-		-			6379V			
18	21						~	6378V	÷ 1		

Additional sizes are available for most locker types. Consult your Penco representative.

FOR SAFETY PURPOSES WE STRONGLY RECOMMEND THAT ALL LOCKERS BE EITHER FLOOR OR WALL ANCHORED.

Baker June MD 21061
MICHAEL BAKER JR. INC. 801 Cromwell Park Drive Suite 110 Gien Burnie, MD 21061
PROJECT TITLE
RESTROOM DESIGN STANDARDS
SHEET TITLE
LOCKERS-7
SCALE NONE
DATE MARCH 2005

PROJECT NO. TASK 1314.20

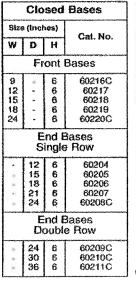


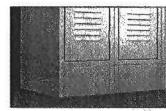
Locker Accessories

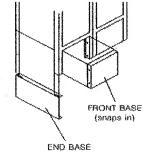
Individual Closed Bases

PENCO

Front and end bases are designed to fit beween standard Penco 6" legs. They present a clean flush appearance and prevent the accumulation of dust and dirt under the lockers. (Not for use on All-Welded lockers.)



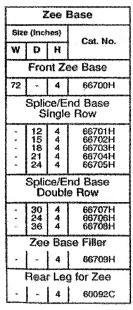




(slips over legs during locker assembly)

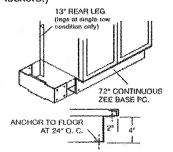
Zee Bases

Zee bases raise lockers without legs 4" off the floor when there is no concrete or wood base. They provide a toe



space in the front and a concealed flange for floor anchoring at the rear. A special 4" high rear leg can be ordered to simplify installation.

Zee Bases are available only in 72" lengths, and may need to be cut to fit at the time of Installation. Splices/End Bases are used at ends of rows, and where the front sections join. (Not for use on All-Welded lockers.)

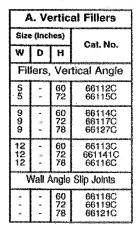


Fillers

Penco provides standard fillers to adapt lockers to a wide range of field conditions and provide a protessional, finished appearance. They can be used to cover columns, pipes or other obstacles in a row of lockers, or fill the gap between the lockers and a wall.

A. Vertical Fillers

These come in three widths and are designed to be used in conjunction with Wall Angle Slip Joints for a solid fit and smooth linish. The slip joint conceals any raw edges caused by field cutting,



B. Top Fillers

Flat Top Fillers

Slope Top Fillers

Flat Top Corner Fillers

Slope Top Corner Fillers

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Cat. No.

661321C 661322C 661323C

661371C 661372C 661373C

66138C

66139C 66140C

66100C

66101C

66102C

Size (Inches)

12 15

18

12 15 18 15 15 15

12

15 18 15

DH

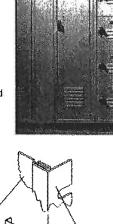
w

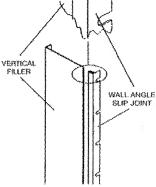
15 15 15

15 18 15 18

12 12

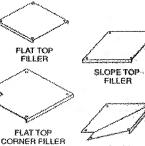
18





B. Top Fillers

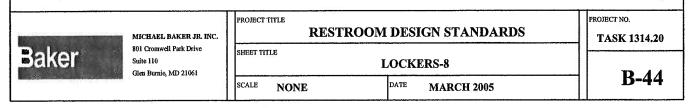
Top Fillers cover gaps between tops of lockers. They overlap the locker tops and can be field cut to allow for pipes, etc. There are separate designs for flat top vs. slope top, and in-line vs. corner applications.



SLOPE TOP CORNER FILLER

23

FOR SAFETY PURPOSES WE STRONGLY RECOMMEND THAT ALL LOCKERS BE EITHER FLOOR OR WALL ANCHORED.



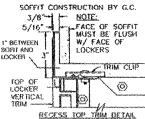
PENCO

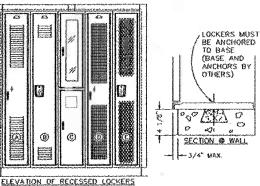
Recess Trim

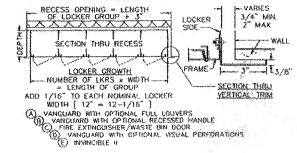
Recess Trim - 3⁴ Recess trim bridges the gap between tockers and wall and/or soffits when the lockers are recessed into a wall.

Size (Inches) Cat. No. W D H Side Trim, LH 3 - 63 60465C Side Trim, RH 3 - 63 60466C 3 - 75 60420C Top Trim Top Trim Top Trim	Recess Trim								
W D H Side Trim, LH 3 - 63 60465C Side 75 60469C Side Trim, RH 3 - 63 60466C 3 - 63 60466C 3 - 75 60470C Top Trim	Size (Inches)								
3 - 63 60465C 3 - 75 60469C Side Trim, RH 3 - 63 60466C 3 - 75 60460C 3 - 75 60460C - 75 60470C Top Trim - -	V D	W							
Side Trim, RH 3 - 63 60466C 3 - 75 60470C Top Trim	Side Trim, LH								
3 - 63 60466C 3 - 75 60470C Top Trim	3 -	3							
3 - 75 60470C Top Trim	Side Trim, RH								
	3 3	3 3							
74 - 3 60456H	4 -	74							
Splice									
2 - 3 60105C	2 -	2							
Outside Corner Splice									
2 2 3 66108C	2 2	2							





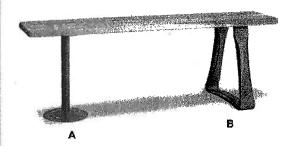




24

Locker Room Benches and Pedestals

A natural accessory for any locker room. Benches add permanent comfort and order to the floor plan arrangement.



Bench Tops

Exceptionally strong. Made from selected hardwood and finished with clear lacquer. 9-1/2^e deep x 1-1/4^e thick. (Order Pedestals separately.)

Bench Pedestals

Penco offers a choice in bench pedestal styles, as shown below. Order two pedestals for benches 96" long or less; order three pedestals for benches over 96" long.

Bench Tops							
Size (Inches)	Cat. No.						
W	vat. 190.						
36 48 60 72 84	09611 09600 09601 09602 09603						
96 108 120 132 144	09604 09605 09606 09607 09608						

A. Heavy Duty Bench Pedestal-16-1/4" High

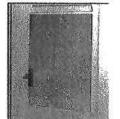
Pedestal consists of a heavy duty steel tube welded to top and bottom flanges. Hardware for fastening to the bench only is included. Pedestal <u>must</u> be anchored to the floor. Order two or more per bench (see above). Available for quick shipment in 028 Gray; available in all 17 colors. Cat. No. 60822H

B. Stainless Steel Free Standing Pedestal-16-1/4" High

This pedestal has a 14" wide base which allows for moveable free standing use. Holes in the bottom are provided for optional floor anchoring. Hardware supplied for fastening to the bench top. Cat. No. 60827H

Mirror

Made of acrylic plastic that will not break in normal usage. Mirror has an adhesive backing for easy installation. Size is 6" wide x 8" high. Cat. No. 096370.

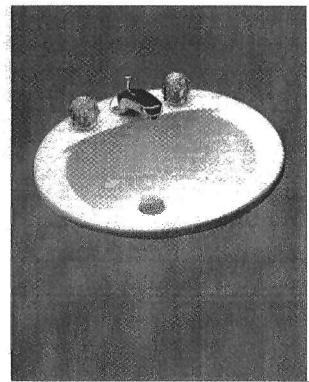


FOR SAFETY PURPOSES WE STRONGLY RECOMMEND THAT ALL LOCKERS BE EITHER FLOOR OR WALL ANCHORED.

Baker	MICHAEL BAKER JR. INC. 801 Cromwell Park Drive Suite 110 Glen Burnie, MD 21061	PROJECT TITLE	project no. TASK 1314.20	
		SHEET TITLE	LOCKERS-9	B-45
		SCALE NONE	DATE MARCH 2005	



LT501 Self-Rimming Lavatory



L1501.8

⅔ 20" x 17"ℜ Attractive design in

- vitreous china
- Spacious oval basinConceated front overflow

Vitreous china self-rimming lavatory. Complete with installation template and sealing compound.

LT501 Lavatory only with single hole faucet center

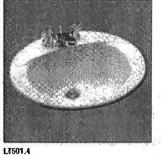
LT501.4
Lavatory only with 4" faucet
centers

LT501.8 Lavatory only with 8" faucet centers

Colors: Standard #81 Cotton Optional See price baok for additional volors

Funces Not Included

B



Reliance Commercial Line

Baker	MICHAEL BAKER JR. INC. 801 Cromwell Park Drive Suite 110 Glea Burnie, MD 21061	PROJECT TITLE RESTROOM DESIGN STANDARDS					рголест NO. ТАЅК 1314.20	
		SHEET TIT		LAVATORIES-1			D 46	
		SCALE	NONE	DATE	MARCH 2005		B-46	

LT501 Self-Rimming Lavatory

DESIGN

Distinctive oval designed drop-in lavatory for easy installation on narrow counterlops.

B FUNCTION

Durable vitreous china offers years of quality use.

SPECIFICATIONS

Waste: Size: Basin: Materiak: Warranty: Shipping Weight: 1¹/4ⁿ O.D. 20ⁿW x 17ⁿD (5¹/4ⁿW x 11¹/4ⁿD Vitreous china One Year Limited Warranty LT501 / LT501.4 / LT501.8 20.5 lbs.

Shipping Dimensions: LT501/LT501.4/LT591.8 21%"L x 19%"W x 10%"H

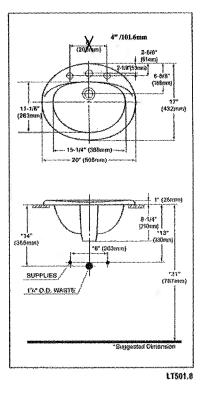
Fixture dimensions meet ANSUASME standard A112.19.2M and CAN/CSA B 45 requirements.

Listing / Approvals: IAPMO/UPC, CSA, City of Los Angeles, State of Massachusetts, and others.

B

Meets the American Disabilities Act Guideliues and ANSI A117.1 requirements when countertop installed 864mm (34") from finished floor and lavatory installed 51mm (2") minimum from front edge.

These dimensions and specifications are subject to change without notice.





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Printed on recycled paper S

Baker	MICHAEL BAKER JR. INC.	PROJECT TITLE RESTROOM DESIGN STANDARDS			PROJECT NO. TASK 1314.20
	801 Cromwell Park Drive Suite 110 Glen Burnie, MD 21061	SHEET TITLE	LAVATORIES-2		D 47
	,	SCALE NONE	DATE MARCH 2005	Ť	B-47

SONNET[™]

SELF-RIMMING COUNTERTOP LAVATORY **VITREOUS CHINA**

FEATURES

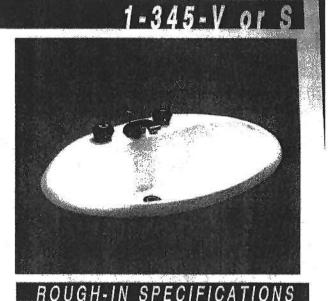
- Lavatory: Sonnet " 1-345-V or S vitreous china self-rimming countertop lavatory with oval basin and front overflow. (Countertop is not included.)
- Trim: Specify C-1003-G (4") or C-1113-G (8") Dial-ese supply and indirect lift waste fitting with aerator and indexed acrylic handles or select an alternate choice as shown in the plumbing brass section.
- Supplies:* Angle supplies 3/8* I.P.S. with wheel handle stops and flexible risers.
- Trap: Specify 8-5260 chrome plated cast brass adjustable "P" trap (1 1/4") with cleanout and waste to wall.

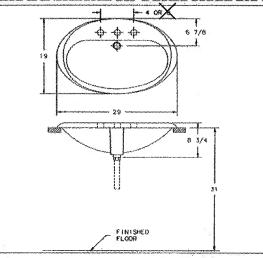
NOTES

- Size: Lavatory, 29" x 19"; Basin, 25 3/4" x 12 1/4"
 - Fixture dimensions conform to ANSI/ASME A112.19.2M standard.

Not hardshed by Crass Physician Description for specification paragress only.

Sealant and installation instructions included.

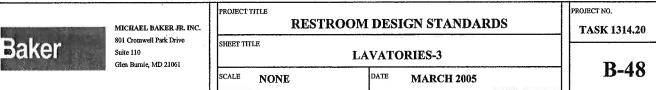




Continuous product Improvement is a Crase P etiangia miliate polor natica. Due to variations shown bere Plumbing policy. Then a lat the printing prov taliant are subject to vary slightly from those



PROJECT TITLE



CRAFER \$1/05 Pended in LLS.A.

American Standard

ELLISSE[™] **COUNTERTOP LAVATORY**

ELLISSE COUNTERTOP LAVATORY

- Vitreous china.
- Self-rimming
- + Rear overflow
- · Supplied with template and color-matched sealant
- · Faucet ledge. Shown with 2000.101 Ceramix faucet (not included)
- 0076.013 Faucet holes on 203mm (8*) centers
- **0076.027** (Illustrated) Faucet holes on 102mm (4*) centers

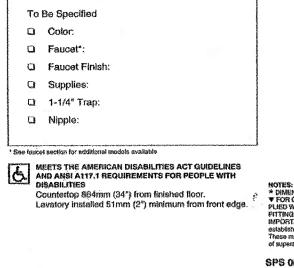
0076.033

Center hole only

Nominal Dimensions: 610 x 508mm (24" x 20")

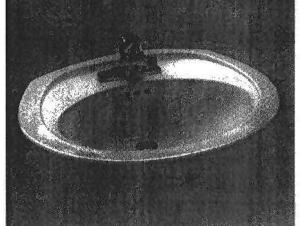
Bowl sizes: 457mm (18") wide, 324mm (12-3/4") front to back, 159mm (6-1/4") deep

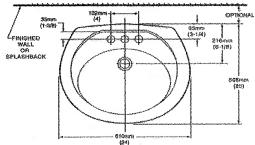
Fixture Dimensions conform to ANSI Standard A112.19.2

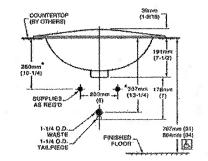


LAV-017 ...

VITREOUS CHINA







NOTES: * DIMENSIONIS SHOWN FOR LOCATION OF SUPPLIES AND 'P' TRAP ARE SUGGESTED * FOR COUNTERTOP CUTCUT AND INSTALLATION INSTRUCTIONS USE TEMPLATE SUP-PLIED WITH LAVATORY. FITTINGS NOT INCLUDED AND MUST BE OPDERED SEFARATELY. HMPORTANT: Dimensions at Butures are nominal and may vary within the tange of toleraboes established by ANSI Standard A152.19.2. These measurements are subject to change or cancellation. No responsibility is assumed for use of superseded or vokied pages.

SPS 0076

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Revised 6/95

Baker	MICHAEL BAKER JR. INC. 801 Cromwell Park Drive Suite 110 Glen Burnie, MD 21061	PROJECT TIT	PROJECT TITLE RESTROOM DESIGN STANDARDS				PROJECT NO. TASK 1314.20
			LAVATORIES-4		RIES-4		B-49
		SCALE	NONE	DATE	MARCH 2005		D-49





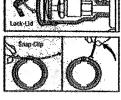
General Description

The LAV GUARD undersink protective pipe cover is the "original" high-quality ADA piping protection system, proven at thousands of facilities across the USA. The designer-style, highly-durable LAV GUARD is soft and flexible, universally adaptable to any 1-1/4" or 1-1/2" P-trap/tailplece assembly and 3/4" or 1/2" angle stop valve assembly.

'The LAV GUARD will not fit Schedule 40 plastic P-traps.

Features and Benefits

- ADA-conforming design protects wheelchair users from scalding and sharp, abrasive surfaces. LAV GUARD protective covers have excellent insulation properties while maintaining a smooth, non-abrasive surface.
- Rotalable, flexible design makes on-site adjustment and installation easy. The LAV GUARD allows for on-site fitting to meet unexpected jobsite conditions and unusual piping configurations (see diagram). The LAV GUARD is easy to install. No trap disassembly is required.
- Patented Lock-Lid "covers angle stop valves while allowing for convenient servicing. The hinged Lock-Lid is molded into the angle stop valve cover, and latches shut-minimizing tampering.
- Unique, patented Snap-Clip" reusable tasteners simplify installation and servicing. New flush, non-abrasive fasteners install in seconds, are selftrimming leaving no sharp edges, and are tamper-resistant.



Internal rib design maximizes safely. Compared to other pipe covers on the market, the LAV GUARD internal rib design increases thermal resistance and provides soft, resilient cushioning (see diagram).

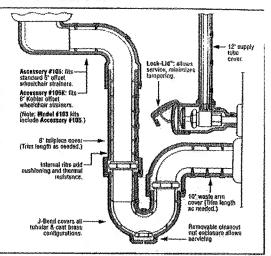
- Easy-to-clean, antimicrobial vinyl minimizes maintenance. The LAV GUARD is molded from impact-resistant, stain-resistant, antimicrobial vinyl. Its smooth surface makes the LAV GUARD exceptionally easy to clean and maintain
- Variety of models, colors, and accessories assure the right product for your needs. The LAV GUARD is available in six different models, in gray or white, with optional accessories to assure proper installation (see ordering chartí
- Strict code compliance minimizes risk. The LAV GUARD complies with ADA article 4.19.4, California P 1504B, ANSI A117.1, BOCA P 1203.4, New York and other state and local regulations.

Specifications

Material	Molded closed cell vinyl
Morana Wall	INTING.
Durometer	60-70 Shore A
Finish	Stocketh laugh globs
UV Protection	Will not fade or discolor
Ducabildy	which windestructible as a set
Fasteners	Reusable snap clips included
Calo	Light user or chow white
Compatibility*	Fits all 1 - 1/4" or 1 - 1/2" cast brass or tubular P-trap assemblies and 3/8" or 1/2" angle stop assemblies
Paintability ,	Apply duryin entired a
Flame Characteristics	(ATB), O sec
ASTM D 635	(AEB), 0 mm
Thereas Conductivity	Walk of Popla and an an
Bacteria Resistance	Antimicrobial vinyl formula

* The LAV GUARD will not fit Schedule 40 plastic P-traps.

Cross-Section View



Gray and White Models Available

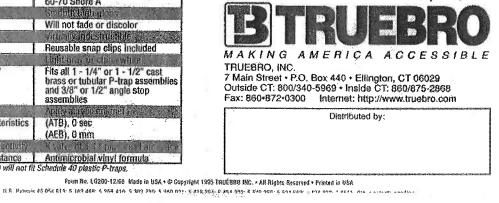
# 99	one angle valve and one supply tube cover
#100	one P-trap cover
#101	one P-trap cover, one angle valve, and one supply tube cover
#102	One P-trap cover, two angle valve covers, and two supply tube covers
#103	one P-trap cover, two angle valve covers, two supply tube covers, one 5' offset tailpiece wheelchair strainer cover
#103K	same as #103 with one 6' Kohler offset tallpiece wheelchair strainer cover
#105	Accessories one 5' offset tallpiece wheelchair strainer assembly
#105K	one 6' Kohler offset tailpiece wheelchair strainer assembly
#EX99	Extensions one 16° extension for supply
#EX100	one 16" extension for waste arm or tailpiece

Suggested Specification

ADA-conforming, wheelchair accessible lavatory P-trap and angle valve assemblies shall be covered with the molded, antimicrobial TRUEBRO, INC. LAV GUARD undersink protective pipe cover Model____ , Accessory Color

(while or gray). Cover shall be secured with Snap-Clip flush reusable fasteners, angle stop shall have Lock-Lid locking access cover.

For additional information on this and other time TRUEBRO products, contact:



Baker	MICHAEL BAKER JR. INC, 801 Cronwell Park Drive Suite 110 Glen Burnie, MD 21061	PROJECT TITLE RESTROOM DESIGN STANDARDS				PROJECT NO. TASK 1314.20	
		SHEET TIT		AVATORY	GUARD-2		D #1
		SCALE	NONE	DATE	MARCH 2005		B-51

American Standard

TRIMBROOKTM 1.0 URINAL VITREOUS CHINA

TRIMBROOK 1.0 URINAL

- Vitreous china
- · Low-consumption (3.8 Lpf/1.0 gpf)
- Flushing rim
- Siphon jet flush action
- · Extended sides for privacy
- · 3/4° inlet spud
- · Outlet connection threaded 2" inside (NPTF)
- 2 wall hangers
- Fixture only
- Meets ANSI flush requirements of 0.7 to 1.0 GPF
- G561.017 Top spud

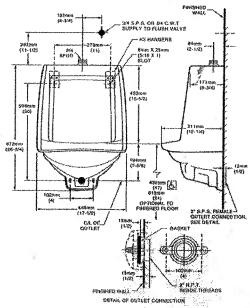
Nominal Dimensions: 445 x 311 x 679mm (17-1/2" x 12-1/4" x 26-3/4")

Fixture Dimensions conform to ANSI Standard A112.19.2

To Be Specified

- Color: C White C Bone C Silver
- G Flush Valve: Sloan Royal 186-1
- O Alternative Flush Valve:





 When installed so top of rim is 432mm (17") from finished floor. MEETS THE AMERICAN DISABILITIES ACT GUIDELINES AND ANSI A117.1 REQUIREMENTS FOR PEOPLE WITH DISABILITIES

> NOTES: FLUSH VALVE NOT INCLUDED AND MUST BE ORDERED SERVARTELY. PROVIDE SUITABLE REINFORCEMENT FOR ALL WALL SUPPORTS. MPORTANT: Demonstone of Rouses are nominal and may vary within the range of therances established by ANSI Standard A12 18.2. These measuremones are subject to change or cancellation. No responsibility is assumed for use of superseded or volted pages.

> > TBU-065

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6

PROJECT TITLE PROJECT NO. **RESTROOM DESIGN STANDARDS** MICHAEL BAKER JR. INC. TASK 1314.20 Baker 801 Cromwell Park Drive SHEET TITLE Suite 110 URINALS Glea Burnie, MD 21061 **B-52** SCALE DATE NONE **MARCH 2005**



CT 708 Wall Hung Flushometer Toilet, 1.6 GPF



CT 708 - Wall Hung Flushometer Toilet SC534 - Commercial Toilet Seat TMT1HNC - 32 - Manual Toilet Flushometer Valve Powerful siphon jer flush
 Elongated rim
 Low consumption (6Lpf/ 1.6 Gpf)

Available with performance matched TOTO Flushometer Valve.

Vitreous china wall hung flushometer toilet with elongated rim. Low consumption (6Lpf/1.6 Gpf) siphon jet flush.

CT708
1~1/2" top spud inlet, less seat.

@ CT708V
I~1/2" back spud inlet, less seat.

© SS114 SoftClose: Seat and lid gently close with a touch of a band, Elongated, closed front seat with lid.

C SC134 Elongated, open front seat with cover.

© SC534 Elongated, open front seat less cover.

TOTO wall hung toilets require a supporting carrier (supplied by others). Follow carrier manufacturers' installation instructions.

Calors; Standard 801 Cotton Optional See price back for additional culors

Recommended fluctumeter volvo: ROTO Manual and Electronic Fluck Valvas are highly recommended for maximum performance:

B

Reliance Commercial Line

Baker	MICHAEL BAKER JR. INC. 801 Cromwell Park Drive Suite 110 Glen Burnie, MD 21061	PROJECT TITLE RESTROOM DESIGN STANDARDS			PROJECT NO. TASK 1314.20	
		SHEET TITLE		ER C	LOSET-1	D 53
		SCALE	NONE	DATE	MARCH 2005	B-53

CT 708 Wall Hung Flushometer Toilet, 1.6 GPF

PERFORMANCE

The TOTO low consumption flushometer toilet received high ratings during ANSI/ASME testing at independent laboratorics. Designed with a powerful siphon jet flush, the bowl offers a large water surface and a 100% glazed trapway.

SPECIFICATIONS

Water Use: 1.6 Gpf/6.0Lpf Flush System: Siphon jet Min. Water Pressure:

15 psi (Flowing) Water surface: 12-5/8" x 10-1/4" 2-1/8" Trap dia: Trap seal: 2-5/8" One Year Limited Warranty Warranty: Material: Vitreous china

Shipping Weight: CT708-Bowl

49 lbs. CT708V-Bowl 53.5 lbs.

Shipping Dimensions: CT708-Bowl 15-1/2"L x 15-1/2"W x 26-3/8"H CT708V-Bowl 17-1/8°L x 16"W x 26°H

Recommended carrier: Any Jay R. Smith siphon jet support (Four-bolt).

Fixture dimensions and hydraulic performance meet or exceed ANSI/ASME standard A112.19.2M and CAN/CSA B 45 requirements,

Listing / Approvals: IAPMO/UPC, CSA, City of Los Angeles, State of Massachusetts, and others.

6

Meets the American Disabilities Act Guidelines and ANSI A117.1 requirements where installed so top of rim is 17" from the finished floor.

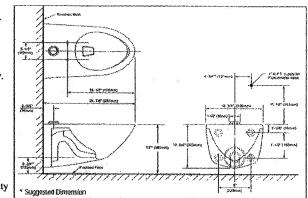
These dimensions and specifications are subject to change without notice.

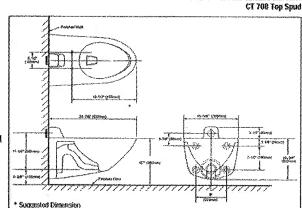


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	MICHAEL BAKER JR. INC.	PROJECT TT	RESTROOM	DESI	GN STANDARDS	PROJECT NO. TASK 1314.20
Baker	Suite 110 Glen Burnie, MD 21061	SHEET TITL		TER C	LOSET-2	D 54
		SCALE	NONE	DATE	MARCH 2005	B-54





Standard Installation **Retrofit Installation** 45mm (1%*) 000000 M Note: If carrier bolt doesn't extend/is flush with china, use retrofit caps (#TMOS7)

CT 708V Back Spud

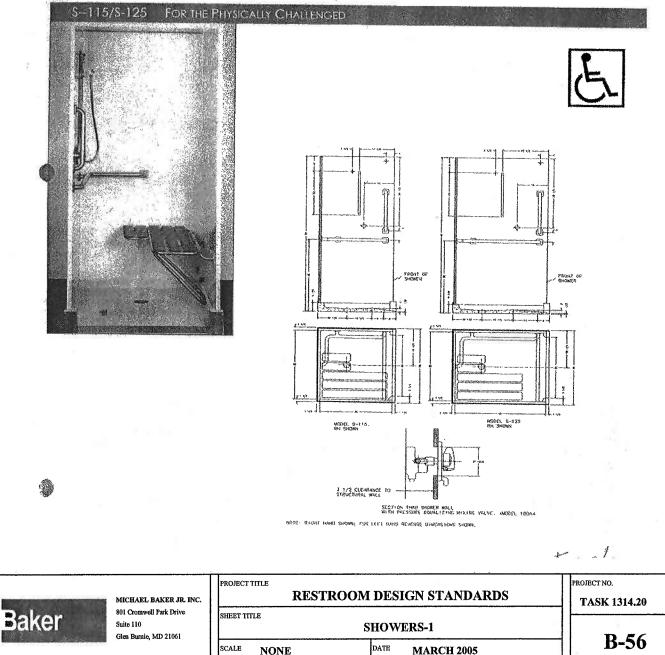
MOLTEX® HEAVY DUTY SOLID PLASTIC **HIGH IMPACT** Extra heavy duty 9500C ROUND Moltex comfort seat, solid (5320.114) **Duraloy plastic** 16" to 17 elongated, open front toilet seat, built-in bumpers, rugged unbreakable external 5%" check with stainless ELONGATED steel posts. 18** 10 19 White 5% Black 9700 Round 9500 Elongated 9900C Elongated © Copyright Church, Inc. All rights reserved. Click for Page Home Back Page **Guided** Tour ConNet/CAPS@ 0t.Avr. 14 PROJECT TITLE PROJECT NO. **RESTROOM DESIGN STANDARDS** MICHAEL BAKER JR. INC. TASK 1314.20 Baker 801 Cromwell Park Drive SHEET TITLE Suite 110 WATER CLOSET-3 Glen Burnie, MD 21061 **B-55** DATE SCALE NONE **MARCH 2005**

Designed for demanding institutional applications. Available in six models, all made with easy to clean Wonder-Wall sandwich panels. Models S-115 and S-125 made for the physically challenged.

Commander models S-115 and S-125 are designed and built for Ì people who are physically challenged. Both models are available in finishes (1), (2) and (3). S-115 is ADA compliable. S-115 and S-125 have the same high quality features as the standard Commander series.

Standard equipment includes a model 180AA pressure balanced mixing valve with stops, in-line vacuum breaker with wall and hand held shower head with 69" flexible stainless steel hose and a supply elbow with flange. A 24" slide guide with hanger hook, one wrap around 11/2" grab bar (horizontal) and one straight

 $1^{1/_{2}^{w}}$ grab bar (vertical) are also included. Shower walls are reinforced to securely anchor all accessories. The folding wheelchair transfer shower seat is phenolic; the seat frame and supports are made of stainless steel tubing. The 1" stainless stee curtain rod is hung on brass chromium-plated brackets. A 10 oz. GSA approved curtain, pins and brass chromium-plated soap dist are standard features, grab bars, seat and other accessories are in accordance with ANSI standard A-117.1-1980. Commander models S-115 and S-125 are available in alternate sizes and finishes.



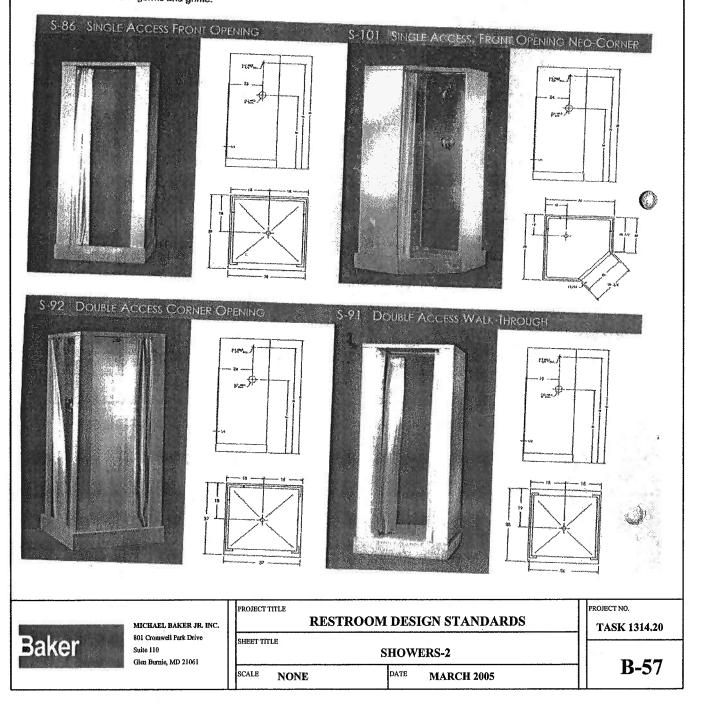
14

COMMANDER® SHOWER CABINETS

Commander shower cabinets are made for demanding institutional use. Special Wonder-Wall panels and top frame are made of galvanized-bonderized steel finished in (1) baked enamel inside and out, (2) stainless steel inside and out or, (3) stainless steel inside, baked enamel outside. Wonder-Wall panels with a 1" core and water impervious insulation significantly reduces noise and vibration. Floors are durable, one-piece pre-cast terrazzo. Cove corner interior walls are formed with 1" radii at all four corners for easy cleaning. There are no corner joints, cracks or crevices to leak or to harbor germs and grime.

On Commander models with back and side walls, panels are joined with anodized aluminum extruded molding.

Standard equipment includes a model 190AA pressure-equalizing valve with stops, shower head, arm and flange. Also included are a stainless steel curtain rod, chromium-plated brass brackets, curtain and chromium-plated brass soap dish.



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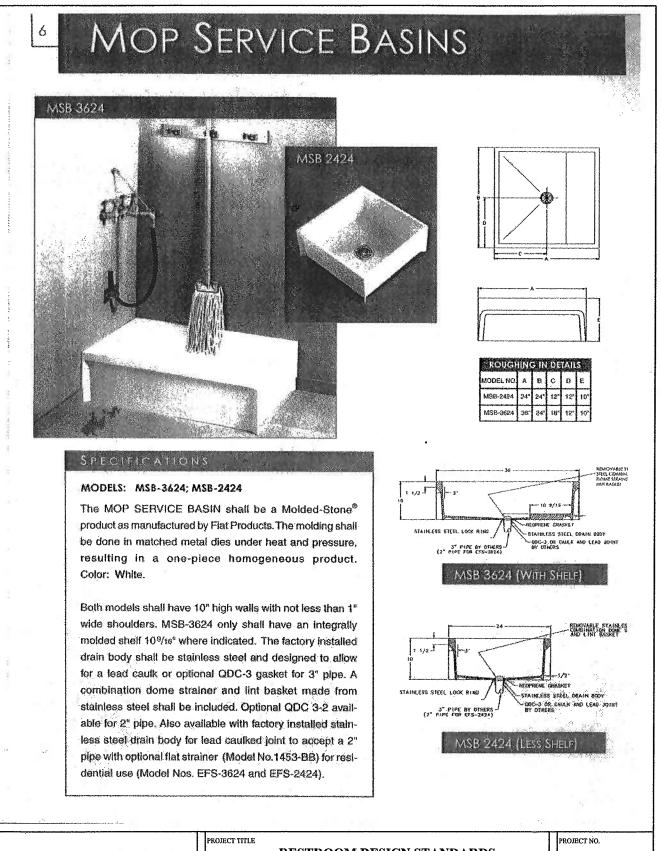
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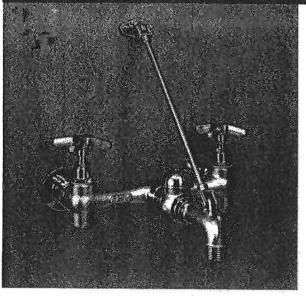
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Baker Michael Baker Jr. INC. 801 Cromwell Park Drive Suite 110 Gien Burnie, MD 21061 BCALE NONE DATE MARCH 2005 PROJECT TITLE BRESTROOM DESIGN STANDARDS SHEET TITLE DATE MARCH 2005 FIAT mop service receptors of Molded-Stone® set the industry standard for quality and reliability. In addition, our complete line of MSB accessories provide the plumbing professional, engineer, and specifier with a complete package; designed, engineered and backed by FIAT's commitment to the best in mop service basins.



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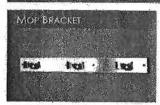
Wall mounted fitting. Chrome plated with vacuum breaker, integral stops, adjustable wall brace, pail hook and 3/4" hose thread an spaut. Body inlets 8" center to center, four arm handles. Center of center, jour ann handres. Center of spout outlet from back of wall flange 8°. The 830-AA Faucet meets or exceeds all of the regularments of ANSI A-112.16.1-1975, "Finished and Rough Face filtered" effects of the set Brass Plumbing Fixture Fittings", as tested by U.S. Testing Laboratories (copy of report available upon request). The 830-AA Faucet Is CSA approved per file number LM 57412-1, Class 6811 01.

ACCESSORIES



Model 832-AA 30" Iona flexible h duly 5/8" rubber hose, cloth reink with 3/4" chrome coupling of one Bracket is 5" long x 3" wide, staintes with rubber glp.

ACCESSORIES



Model 889-CC 24" long x 3" wide, stainless steel with three (3) rubber log! grips.



Model E-88-AA For Molded-Stone Mop Basins.



Model 1239-88 For Terrazzo Mop Basins,



Model E-77-AA For Molded-Stone Mop Basins.



Madel 1453-88 Flat type stainless

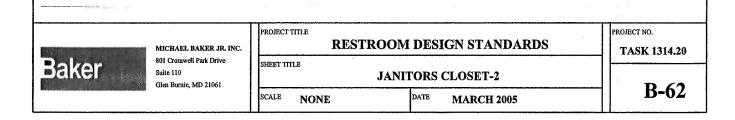


Model No. 833-AA



For use with sither Molded-Stone or precast Terrazzo Mop Basins, made of heavy gauge statuless steet and is used to protect wails adjacent to the receptor. Two ponels are supplied for corner installations, a third panel is required for a recessed installation. The wall guard models are identified as follows:

MSG 2424; MSG 3232; MSG 3624; MSG 3636





Trim Designs

Mortise Locksets ML2000 Series



Lustra

G

Complies with codes requiring lever to return to within 1/2" (13mm) of door face. Brass, bronze or stainless steel

LWA

Lever: Wrought Rose: Wrought Door thickness: 1⁵/s" (35mm), 1⁵/4" (44mm), 2¹/4" (57mm)

LWB

Lever: Wrought Rose: Cast Door thickness: 1⁵/s" (35mm), 1³/4" (44mm), 2¹/4" (57mm)

LSA

Lever: Cast Rose: Wrought Door thickness: 1⁵/s" (35mm), 1³/4" (44mm), 2¹/4" (57mm)

LSB

Lever: Cast Rose: Cast Door thickness: 1³/s" (35mm), 1³/4" (44mm), 2¹/4" (57mm)

Dimensions: <u>inches</u> millimeters

ML2000.8

Baker	MICHAEL BAKER JR. INC. 801 Cromwell Park Drive Suite 110 Glen Burnie, MD 21061	PROJECT TITLE RESTR	PROJECT NO. TASK 1314.20	
		SHEET TITLE MORT	MORTISE LOCKSET DOOR LEVER	
		SCALE NONE	DATE MARCH 2005	B-63





APPENDIX G

CODES AND STANDARDS





CODES AND STANDARDS

ENFORCEMENT OF FIRE RELATED CODES AND STANDARDS BY THE MAA OFFICE OF THE FIRE MARSHAL (OFM) AS THE AUTHORITY HAVING JURISDICTION (AHJ)

The OFM is the AHJ for the enforcement of the Maryland State Fire Prevention Code, the fire safety aspects of the adopted Building Codes, and all other adopted fire related Codes and Standards for the BWI Marshall and MTN Airports.

The following Codes and Standards are applicable to all new project designs, specifications, construction, and occupancy. As such, the OFM enforces them during plan review and inspections as authorized representatives of the Maryland State Fire Marshal. Failure to comply with the fire and life safety related requirements of the Codes and Standards listed herein would result in the withholding of project design approvals, inspection approvals, or occupancy approvals by the OFM. Additionally, violations of these codes are subject to the penalties set forth in the Public Safety Article of the Annotated Code of Maryland.

Questions regarding interpretations and application of the referenced codes should be referred to the BWI Marshall OFM. If there are any discrepancies in this list, the latest editions adopted by the State of Maryland take precedence. Whenever a newer Edition of the NFPA Codes or Standards becomes available, it may be accepted for use by the OFM. Please contact the OFM in advance concerning the use of newer Standards than are listed below.

Whenever a newer Edition of the Codes listed herein becomes adopted under COMAR Regulations or the State Fire Code, they supersede the Editions listed herein. It is recommended that the following resources be used to determine the latest adopted Editions of these Codes and Standards.

For State of Maryland Fire Codes: <u>http://www.firemarshal.state.md.us</u>

FOR FIRE RELATED ASPECTS OF BUILDING CODES: <u>HTTP://MDCODES.UMBC.EDU</u>

ADOPTED CODES AND STANDARDS

The following Codes and Standards are applicable to all new project designs, specifications, construction, and occupancy at BWI Marshall and MTN airports.

- Maryland State Fire Prevention Code, Revised January 1, 2013
- Maryland Aviation Administration Design Standards (DST)
- International Building Code (IBC), 2009 Edition
- International Plumbing Code (IBC), 2009Edition
- o International Mechanical Code (IMC), 2009 Edition
- International Existing Building Code, 2009 Edition

Applicable COMAR (Code of Maryland) Regulations:

COMAR 05.02.01 Maryland Model Performance Code 01 January 2010. COMAR 05.02.02 Maryland Accessibility Code 18 March 2002. COMAR 05.02.07 Maryland Building Performance Standards (MBPS) 01 January 2010. COMAR 09.20.01 Maryland State Plumbing Regulations 23 July 2001. COMAR 29.06.01.07 State Fire Prevention Code 01 August 2004.

Applicable COMAR Regulations above incorporate by reference, and contain amendments to the following Model Codes:

International Building Code, 2009. International Existing Building Code, 2006 International Energy Conservation Code (IECC) 2009 International Plumbing Code 2009 (Maryland Model Performance Code for industrialized buildings). International Mechanical Code 2009 Edition NFPA 1, Uniform Fire Code, 2009 Edition NFPA 70, National Electrical Code, 2008 Edition NFPA 101, Life Safety Code, 2009 Edition with modifications Americans with Disabilities Act Accessibility Guidelines 23 July 2004 and amended 05 August 2005. National Standard Plumbing Code Illustrated 2006, and 2007 Supplement (Maryland Building Performance Standards)

NFPA CODES AND STANDARDS

In addition to the above, the Codes and Standards below, as published by the National Fire Protection Association (NFPA), are also applicable. While those listed below comprise the most widely used regulations concerning new construction, please refer to Chapter 2 of NFPA 1, Fire Prevention Code, for a complete list of other reference Standards that may also apply to particular projects or unusual hazards.

NFPA Code or Standard	Title	Edition	Notes (see below)
1	Uniform Fire Code	2009	1
10	Portable Fire Extinguishers	2010	2
11	Low, Medium, and High Expansion Foam	2010	2
12	Carbon Dioxide Extinguishing Systems	2008	2
12A	Halon 1301 Fire Extinguishing Systems	2009	2
13	Installation of Sprinkler Systems	2010	2
14	Standpipe and Hose Systems	2010	2
15	Water Spray Fixed Systems for Fire Protection	2007	2
16	Foam-Water Sprinkler and Foam-Water Spray Systems	2007	2
17	Dry Chemical Extinguishing Systems	2009	2
17A	Wet Chemical Extinguishing Systems	2009	2
20	Installation of Stationary Fire Pumps	2010	2
22	Water Tanks for Private Fire Protection	2008	2
24	Private Fire Service Mains and their Appurtenances	2010	2
25	Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems	2011	2
30	Flammable and Combustible Liquids Code	2008	2
30A	Code for Motor Fuel Dispensing Facilities and Repair Garages	2008	2
31	Standard for the Installation of Oil-Burning Equipment	2006	2
33	Spray Application Using Flammable or Combustible Materials	2011	2
37	Installation and Use of Stationary Combustion Engines and Gas Turbines	2010	2
51B	Fire Prevention During Welding, Cutting, and Other Hot Work	2009	2
52	Vehicular Fuel Systems Code	2010	2
54	National Fuel Gas Code	2009	2
55	Compressed Gases	2010	2
58	Liquefied Petroleum Gas Code	2011	2
70	National Electrical Code	2011	2
72	National Fire Alarm Code	2010	2
75	Standard for the Protection of Information Technology Equipment	2009	3
76	Standard for the Fire Protection of Telecommunications Facilities	2009	3
80	Fire Doors and Fire Windows	2010	2
80A	Recommended Practice for Protection of Buildings from Exterior Fire Exposures	2007	3
88A	Parking Structures	2011	2
90A	Installation of Air-Conditioning and Ventilating	2009	2

NFPA Code or Standard	Title	Edition	Notes (see below)
	Systems		
90B	Installation of Warm Air Heating and Air-Conditioning Systems		2
92A	Standard for Smoke-Control Systems Utilizing Barriers and Pressure Differences	2009	3
92B	Standard for Smoke Management Systems in Malls, Atria, and Large Spaces	2009	3
96	Ventilation Control and Fire Protection of Commercial Cooking Operations	2011	2
101	Life Safety Code	2009	1
105	Installation of Smoke Door Assemblies	2010	3
110	Emergency and Standby Power Systems	2010	2
170	Fire Safety Symbols	2009	3
204	Smoke and Heat Venting	2007	2
220	Types of Building Construction	2009	2
221	Fire Walls and Fire Barrier Walls	2009	2
241	Safeguarding Construction, Alteration, and Demolition Operations		2
407	Aircraft Fuel Servicing	2007	2
408	Standard for Aircraft Hand Portable Fire Extinguishers	2010	3
409	Aircraft Hangars	2011	2
410	Aircraft Maintenance	2010	2
415	Airport Terminal Buildings, Fueling Ramp Drainage, and Loading Walkways	2008	2
418	Heliports	2006	2
502	Road Tunnels, Bridges, and Other Limited Access Highways	2011	3
505	Powered Industrial Trucks	2011	2
703	Standard for Fire Retardant–Treated Wood and Fire- Retardant Coatings for Building Materials	2009	2
704	Standard System for the Identification of the Hazards of Materials for Emergency Response	2007	2
780	Standard for the Installation of Lightning Protection Systems	2011	3
2001	Clean Agent Fire Extinguishing Systems	2008	2
5000	Building Construction and Safety Code	2009	4

NOTES TO NFPA STANDARDS AND CODES TABLE

1. Direct Adoption By State Fire Prevention Code – the Maryland State Fire Code directly adopts this Code or Standard (*Reference: TITLE 29. DEPARTMENT OF STATE POLICE, SUBTITLE 06, FIRE PREVENTION COMMISSION, CHAPTER 01, FIRE PREVENTION CODE, Amended Effective August 1, 2004*). Check the State Fire Prevention Code for possible amendments to the adopted Code or Standard.

2. Mandatory Requirements by Referenced Publication - Although not directly adopted by the State Fire Prevention Code of Maryland, this Code or Standard is referenced by other adopted Standards or Codes and are therefore applicable. See NPFA 1, Chapter 2, for a complete listing of Referenced Publications, which are mandatory requirements.

3. Recommended Practice - Although not directly adopted by the State Fire Prevention Code, and not adopted by reference, this may be considered recommended practice by the OFM for certain projects. Check with the OFM for guidance regarding application of this Standard to particular projects.

4. NFPA 5000 is listed as a "Referenced Publication" by NFPA 1. However, the Maryland Fire Prevention Code specifically deleted it from adoption and substituted the IBC.

STATE OF MARYLAND FIRE PREVENTION CODE







State of Maryland Fire Prevention Code

Martin O'Malley Governor

Anthony G. Brown Lt. Governor

Colonel Marcus L. Brown Secretary Department of State Police

William E. Barnard, CFPS State Fire Marshal

Promulgated by: State Fire Prevention Commission Timothy F. Dayton, Chairman

http://www.mdsp.org/sfpc

(Revised January 1, 2013)

Chapter 1: Fire Prevention Code

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TITLE 29 DEPARTMENT OF STATE POLICE SUBTITLE 06 FIRE PREVENTION COMMISSION CHAPTER 01 FIRE PREVENTION CODE Authority: Public Safety Article §6-206 and 6-501 (Amended effective January 1, 2013)

.01 Title.

This chapter shall be known and may be cited as the State Fire Prevention Code.

.02 Purpose.

A. The purpose of this chapter is to establish minimum requirements that will provide a reasonable degree of fire prevention and control to safeguard life, property, or public welfare from:

(1) The hazards of fire and explosion arising from the storage, handling, or use of substances, materials, or devices; and

(2) Conditions hazardous to life, property, or public welfare in the use or occupancy of buildings, structures, sheds, tents, lots, or premises.

B. This chapter incorporates by reference NFPA 1 Fire Code (2012 Edition), except as amended in Regulations .08 and .09 of this chapter, and NFPA 101 Life Safety Code (2012 Edition), except as amended in Regulation .07 of this chapter. Certain requirements of the International Building Code as incorporated by reference by the Maryland Building Performance Standards are also adopted by incorporation by reference in Regulations .06—.16 of this chapter and are considered minimum standards.

C. The State Fire Prevention Commission recommends the use of the NFPA National Fire Codes or other nationally recognized standards in technical matters not specifically addressed by this chapter.

.03 Application and Scope.

A. This chapter applies to both new and existing buildings and conditions. In various sections there are specific provisions for existing buildings that may differ from those for new buildings. Unless otherwise noted, this chapter does not apply to facilities, equipment, structures, or installations that were existing or approved for construction or installation before the effective date of this chapter, except in those cases in which it is determined by the authority having jurisdiction (AHJ) that the existing situation constitutes a hazard so inimical to the public welfare and safety as to require correction. The requirements for existing buildings and conditions may be modified if their application clearly would be impractical in the judgment of the AHJ, but only if it is clearly evident that a reasonable degree of safety is provided. The State Fire Marshal or the legally appointed designee has the authority to make a determination of the applicability of this chapter to any building or condition in it, subject to the right of appeal to the State Fire Prevention Commission as prescribed in COMAR 29.06.02.

B. (Repealed)

C. The provisions of this chapter do not apply in Baltimore City except to those buildings and conditions specifically prescribed in Public Safety Article, Title 6, Subtitle 4, Annotated Code of Maryland.

D. The provisions of this chapter do not apply to buildings used solely as dwelling houses for not more than two families as prescribed in Public Safety Article, Title 6, Subtitle 3, Annotated Code of Maryland.

.04 Enforcement.

A. Enforcement of this chapter is the responsibility of:

(1) The State Fire Marshal;

(2) A legally designated fire official of a county or municipal corporation of the State; or

(3) Other persons legally appointed by the State Fire Marshal under Public Safety Article, Title 6, Subtitle 3, Annotated Code of Maryland.

B. The State Fire Marshal or the legally appointed designee may accept alternate methods of satisfying the intent of this chapter if the material, method, or work is at least the equivalent of that required by this chapter in quality, effectiveness, durability, and safety, and meets or exceeds the intent of the chapter.

C. If there are differing or conflicting requirements between this chapter and codes or standards adopted by incorporation by reference by this chapter, the State Fire Marshal or the legally appointed designee shall determine which requirements apply, subject to the right of appeal to the State Fire Prevention Commission.

D. If Public Safety Article, Annotated Code of Maryland, or this chapter requires that a permit, license, or certificate of approval be obtained from the State Fire Marshal, it shall be obtained from the State Fire Marshal, or other appropriate authority, of the county, city, or incorporated town where the activity or equipment for which the permit, license, or certificate required is located.

E. A violation of this chapter is subject to the penalties set forth in the Public Safety Article, Annotated Code of Maryland.

.05 Definitions.

A. In this chapter, the following terms have the meanings indicated.

B. Terms Defined.

(1) "Authority having jurisdiction (AHJ)" means the State Fire Marshal or the legally appointed designee as prescribed in this chapter.

(2) "International Code Council (ICC)" means International Code Council, Inc., 500 New Jersey Avenue N.W., 6th Floor, Washington, DC 20001-2070.

(3) "Legally appointed designee" means those local or county officials specifically authorized under the Public Safety Article, Annotated Code of Maryland, to enforce the provisions of the State Fire Laws and State Fire Prevention Code.

(4) "New building or condition" means a building, structure, installation, plant, equipment, renovation, or condition:

(a) For which a building permit is issued on or after the effective date of this chapter;

(b) On which actual construction is started on or after the effective date of this chapter in a jurisdiction where a building permit is not required;

(c) Which represents a change from one occupancy classification to another on or after the effective date of this chapter; or

(d) Which represents a situation, circumstance, or physical makeup of any structure, premise, or process that was commenced on or after the effective date of this chapter.

(5) "NFPA" means National Fire Protection Association, 1 Batterymarch Park, P.O. Box 9101, Quincy, MA 02269-9101.

.06 Incorporation by Reference.

A. In this chapter, the following documents are incorporated by reference, with the amendments specified in this chapter. Tentative interim amendments and supplements to these documents and to the codes and standards referenced in these documents are not included as part of this chapter unless specifically adopted by this chapter.

B. Documents Incorporated.

(1) NFPA 1 Fire Code (2012 Edition).

(2) NFPA 101 Life Safety Code (2012 Edition).

(3) International Building Code as incorporated by reference by the Maryland Building Performance Standards, which can be found under COMAR 05.02.01.02-1 in depository libraries and in the depositories described in §C of this regulation.

C. Incorporation by Reference Locations. The documents incorporated by reference in §B of this regulation are available for inspection at the following depositories:

(1) Office of the State Fire Marshal, Headquarters, 1201 Reisterstown Road, Building C, Pikesville, MD 21208, (410) 653-8980, 1-800-525-3124;

(2) Office of the State Fire Marshal, Northeast Regional Office, 2 South Bond Street, Suite 401, Bel Air, MD 21014, (410) 836-4844;

(3) Office of the State Fire Marshal, Upper Eastern Regional Office, 301 Bay Street, Lower Level, Easton, MD 21601, (410) 822-7609;

(4) Office of the State Fire Marshal, Western Regional Office, 18345 Colonel Henry K. Douglas Drive, Suite 240, Hagerstown, MD 21740, (301) 766-3888;

(5) Office of the State Fire Marshal, Southern Regional Office, 200 Duke Street, Prince Frederick, MD 20678, (443) 550-6820;

(6) Office of the State Fire Marshal, Metro Regional Office, 15 East Main Street, Westminster, MD 21157, (410) 871-3050;

(7) Office of the State Fire Marshal, Maryland State Police Barracks "C", 1125 National Highway, Cumberland, MD 21502, (301) 729-5021;

(8) Office of the State Fire Marshal, 170 East Main Street, Elkton, MD 21921, (410) 996-2790;

(9) Office of the State Fire Marshal, Lower Eastern Regional Office, 201 Baptist Street, Suite 17, Salisbury, MD 21801, (410) 713-3780;

(10) Office of the State Fire Marshal, Garrett County Public Safety Center, 67 Friendsville Road, McHenry, MD 21541, (301) 387-0437;

(11) Department of Legislative Services Library, 90 State Circle, Annapolis, MD 21401, (410) 946-5400;

(12) Maryland State Law Library, Courts of Appeal Building, 361 Rowe Boulevard, Annapolis, MD 21401, (410) 260-1430;

(13) Thurgood Marshall Law Library, University of Maryland School of Law, 501 West Fayette Street, Baltimore, MD 21201, (410) 706-0784;

(14) Hornbake Library, University of Maryland, Marylandia and Rare Book Department, College Park, MD 20742, (301) 405-9210; and

(15) State Library Resource Center, Enoch Pratt Free Library, Maryland Department, 400 Cathedral Street, Baltimore, MD 21201, (410) 396-1789.

.07 National Fire Protection Association 101 Life Safety Code.

The NFPA 101 Life Safety Code (2012 Edition) is incorporated by reference, except for the following amendments:

A. Amend Subsection 3.3.62 to add the following Paragraph: 3.3.62.3 Bulkhead Door. A type of door assembly covering an opening in the ground providing direct access to a basement, the floor of which is not more than 8 feet below ground level. The door consists of a single rigid leaf or two overlapping rigid leaves or covers which need to be pushed or lifted upwards in order to be opened. A person, after opening the door, can walk up a series of steps to escape to the outside.

B. Amend Paragraph 3.3.140.1 and Subparagraphs 16.6.1.1.2 and 17.6.1.1.2 to delete "more than 3, but".

C. Amend Paragraphs 3.3.188.4 and 6.1.4.1 to delete "four or more".

D. Amend Paragraphs 3.3.188.12 and 6.1.9.1 to replace "four" with "six".

E. Amend Subsection 4.5.8 and Paragraph 4.6.12.1 to delete "for compliance with the provisions of this Code".

F. Amend Paragraph 4.6.12.3 to delete "by the Code".

G. Amend Subsection 4.8.2 to add the following Paragraph: 4.8.2.4 Emergency plans shall be maintained in a location approved by the AHJ.

H. Amend Subparagraph 7.2.1.5.12 to replace "required" with "provided".

I. Amend Subparagraph 7.2.1.6.3 to replace "in Chapters 11 through 43" with "by the AHJ and Chapters 11 through 43".

J. Amend Subparagraph 7.2.1.7.1 to delete "required to be".

K. Amend Subparagraph 7.2.1.7.3 to delete "Required".

L. Amend Paragraph 7.9.1.2 to replace "only" in the first sentence with ", but not be limited to,".

M. Amend Paragraph 9.6.2.6 to add the following: This paragraph does not permit the omission of manual fire alarm boxes in accordance with other provisions of this Subsection unless specifically permitted by Chapters 11 through 43.

N. Amend Paragraph 9.7.1.1 to add the following Subparagraph: 9.7.1.1.1 For new ceiling installations, drop-out ceilings as referenced in NFPA 13, Subsection 8.15.14, shall be prohibited.

O. Amend Subsection 9.7.5 to delete "required by this Code".

P. Amend Paragraph 11.8.3.1 to add "High-rise buildings do not include a structure or building used exclusively for open-air parking."

Q. Amend Paragraph 11.11.2.1 to add "or other approved testing standard approved by the State Fire Marshal".

R. Amend Paragraphs 12.2.4.1 and 13.2.4.1 to add the following:

(1) Not less than two separate exits shall be provided on every story.

(2) Not less than two separate exits shall be accessible from every part of every story.

S. Amend Subsections 16.1.1 and 17.1.1 to add the following Paragraphs:

16.1.1.8 and 17.1.1.8 Day-care centers providing day care for school-age children before or after school hours in a building which is in use as a public or private school are not required to meet the provisions of this chapter, but shall meet the provisions for educational occupancies.

T. Amend Subparagraphs 16.2.11.1.1 and 17.2.11.1.1 to add the following item:(4) For windows at grade the minimum net clear opening shall be permitted to be 5.0 ft2.

U. Amend Sub-subparagraphs 16.6.1.4.1.1 and 17.6.1.4.1.1 to delete "more than three, but" and replace "seven" with "nine".

V. Amend Sub-subparagraphs 16.6.1.4.1.2 and 17.6.1.4.1.2 to replace "7" with "9".

W. Amend Subparagraphs 16.6.1.7.1 and 17.6.1.7.1 to replace "both" with "all" and Items (1) and (2) with the following Items:

(1) The minimum staff-to-client ratio shall be not less than one staff member for up to eight clients, including the caretaker's own children incapable of self-preservation.

(2) There shall be not more than four clients incapable of self-preservation, including the caretaker's own children incapable of self-preservation.

(3) A staff-to-client ratio of at least one staff member to every two clients incapable of self-preservation shall be maintained at all times.

. (4) The staff-to-client ratio shall be permitted to be modified by the authority having jurisdiction where safeguards in addition to those specified in this section are provided.

X. Amend Paragraphs 16.6.2.1 and 17.6.2.1 and Subparagraphs 16.6.2.4.5 and 17.6.2.4.5 to add the following: Bulkhead doors may not serve as a primary means of escape.

Y. Amend Paragraphs 16.6.2.2 (Reserved) and 17.6.2.2 (Reserved) to add the following: SLIDING DOOR: For family day-care homes, a sliding door used as a required means of escape shall comply with the following conditions:

(1) The sliding door shall have not more than one, easily operated, locking device that does not require special knowledge, effort, or tools to operate;

(2) There may not be draperies, screens, or storm doors that could impede egress;

(3) The sill or track height may not exceed 1/2 inch above the interior finish floor;

(4) The surface onto which exit is made shall be an all weather surface such as a deck, patio, or sidewalk;

(5) The floor level outside the door may be one step lower than the inside, but not more than 8 inches lower;

(6) The sliding door shall open to a clear open width of at least 28 inches;

(7) Before day-care use each day, the sliding door shall be unlocked and tested to the full required width to be sure it is operating properly, and the door shall be nonbinding and slide easily; and

(8) During periods of snow or freezing rain, door tracks shall be cleared out and the door opened periodically throughout the day in order to ensure proper operation.

Z. Amend Paragraphs 16.6.2.3 (Reserved) and 17.6.2.3 (Reserved) to add the following: SPECIAL MEANS OF ESCAPE REQUIREMENTS: For family day-care homes, deadbolt locks shall be provided with approved interior latches, or these locks shall be of a captured key design from which the key cannot be removed from the interior side of the lock when the lock is in the locked position.

AA. Amend Subsections 16.7.5 and 17.7.5 to add the following exception: Exception: Day-care homes with no more than three clients for overnight lodging.

BB. Amend Subparagraph 17.6.3.4.4 to delete "existing".

CC. Amend Subparagraph 22.4.5.1.3 to delete "or 22.4.5.1.5".

DD. Amend Subparagraphs 22.4.5.1.4(1) and 23.4.5.1.4(1) to replace "2 minutes" with "30 seconds".

EE. Amend Subparagraphs 22.4.5.1.4(2) and 23.4.5.1.4(2) to replace "2-minute" with "30-second".

FF. Delete Subparagraphs 22.4.5.1.5 and 23.4.5.1.5.

GG. Delete Paragraphs 22.4.5.2 and 23.4.5.2.

HH. Amend Subparagraph 23.4.5.1.3 to delete "or 23.4.5.1.5".

II. Amend Paragraph 24.1.1.1 to replace "three" with "five" and delete ", if any, accommodated in rented rooms".

JJ. Amend Subparagraphs 24.2.2.3.3, 32.2.2.3.1(3), and 33.2.2.3.1(3) to insert ", or not less than 5.0 ft2 when at grade" after "5.7 ft2".

KK. Amend Paragraph 26.1.1.1 to replace "buildings" with "buildings that do not qualify as oneand two-family dwellings".

LL. Amend Sub-subparagraph 33.3.3.4.8.1 to delete "33.3.3.4.8.2 and".

MM. Delete Sub-subparagraph 33.3.3.4.8.2.

NN. Amend Sub-subparagraph 36.4.4.3.2 to add "where approved alternative visible means of occupant notification is provided".

OO. Amend Paragraph 38.2.4.4(3)(a) to replace "stories." with "stories, with no other openings therein."

PP. Amend Subparagraphs 42.3.4.1.2 and 42.3.4.1.3 to replace "Storage occupancies" with "Storage occupancies less than three stories".

.08 National Fire Protection Association 1 Fire Code.

The NFPA 1 Fire Code (2012 Edition) is incorporated by reference, except for the amendments in Regulation .09 of this chapter and the following amendments:

A. Delete Section 1.9.

B. Delete Section 1.10. (See COMAR 29.06.02)

C. Delete Subsection 1.11.3.

D. Amend Subsection 1.12.1 to add the following Paragraph: 1.12.1.1 Permits, certificates, notices, approvals, or orders required by this code shall be governed by the policies and procedures of the AHJ.

E. Amend Paragraph 1.12.6.13 to replace "Permits shall" with "Permits may".

F. Amend Subsection 1.12.8 to replace "shall" with "may".

G. Amend Subsection 1.13.2 to delete "Mandatory." and replace "shall" with "may".

H. Delete Paragraphs 1.13.12.4 and 1.16.4.2.

I. Amend Section 2.2 to delete the referenced publication NFPA 5000 Building Construction and Safety Code, 2012 edition. Wherever NFPA 5000 is referenced, other than for extracted text, substitute the building code adopted by the AHJ. Delete the referenced publication NFPA 150 Standard on Fire and Life Safety in Animal Housing Facilities, 2009 edition.

J. Amend Paragraph 3.3.127 to add "and as referenced in Public Safety Article, §10-101, Annotated Code of Maryland".

K. Amend Paragraph 3.3.182.6 to delete "more than 3 but".

L. Amend Paragraphs 3.3.182.7 and 6.1.4.1 to delete "four or more".

M. Amend Paragraph 3.3.182.22 to replace "three" with "five" and delete ", if any, accommodated in rented rooms".

N. Amend Subparagraph 3.3.182.23.3 to replace "of 30.8.1.3" with "for open parking structures" and "NFPA 5000. (5000, 2012)" with "NFPA 88A".

O. Amend Paragraphs 3.3.182.25 and 6.1.9.1 to replace "four" with "six".

P. Amend Paragraph 4.5.8.1 and Subsection 10.4.1 to delete "for compliance with the provisions of this Code".

Q. Amend Paragraph 4.5.8.3 and Subsection 10.4.3 to delete "by the Code".

R. Amend Subsection 10.1.2 to add "except as amended by COMAR 29.06.01.07, COMAR 29.06.01.08, and COMAR 29.06.01.09".

S. Amend Subsections 10.5.1 and 10.5.2 to replace "AHJ" with "AHJ or incident commander".

T. Amend Subsection 10.11.2 to replace "candles," with "candles, sky lanterns,".

U. Amend Subsection 10.11.6.1 to replace "grill" with "gas-fired grill, charcoal grill" and "10 ft (3 m)" with "15 ft (4.6 m)".

V. Amend Subsection 10.11.6.2 to replace "grill" with "gas-fired grill, charcoal grill".

W. Delete Paragraph 10.11.6.3.

X. Amend Subsection 10.12.1 to add the following Subparagraph and Paragraph:
10.12.1.1.1 Subject to the approval of the AHJ, individual suites within structures and rear exterior entrances and/or access from service corridors shall be clearly identified.
10.12.1.4 Where required by the AHJ, symbols in compliance with NFPA 170 Standard for Fire Safety and Emergency Symbols shall be used.

Y. Amend Paragraphs 10.12.1.2 and 10.12.1.3 to replace "Address numbers" with "Premises identification".

Z. Amend Paragraph 10.14.1.1 to replace "Christmas" with "Unless otherwise approved by the AHJ, Christmas".

AA. Amend Paragraph 10.14.3.1 to replace "by the manufacturer as being fire retardant" with "by a testing laboratory recognized by the Office of the State Fire Marshal".

BB. Amend Paragraph 10.14.9.1 to replace " $\frac{1}{2}$ in. (13 mm)" with "2 in. (50 mm)" and add the following sentence: "A natural cut tree shall not exceed 10 ft. (3 m) in height, excluding the tree stand."

CC. Amend Subsection 10.14.1 to add the following new Paragraph: 10.14.1.2 The AHJ shall:

- (1) Approve the placement of a natural cut or balled tree;
- (2) Limit the number of natural cut or balled trees displayed; and
- (3) Order the removal of any tree if the tree poses a hazard to life or safety.

DD. Amend Subsection 10.15.2 to insert ", but not limited to," after "such as".

EE. Amend Subparagraph 10.15.11.2.6 to replace "any vehicles" with "any vehicles, buildings,".

FF. Amend Section 10.16 to add the following Subsection: 10.16.6 The AHJ shall have the authority to require that outdoor storage of any combustible material be enclosed by an approved fence or other protective enclosure to prevent unauthorized access.

GG. Amend Subsection 10.16.1 to replace "10 ft (3m)" with "15 ft (4.6m)" and "property line" with "property line, building, or adjacent pile of combustible material"; and add the following: The separation distance shall be allowed to be increased where the AHJ determines that a higher hazard to the adjoining property exists.

HH. Amend Subsection 10.16.5 to add "and 10,000 ft2 in area".

II. Amend Subsection 10.19.7 to replace "repaired" with "repaired on any balcony, under any overhanging portion, or".

JJ. Amend Section 11.1 to add the following Subsection: 11.1.11 Clearance. A clear space of not less than 30 inches (762 mm) in width, 36 inches (914 mm) in depth, and 78 inches (1981 mm) in height shall be provided in front of electrical service equipment. Where the electrical service equipment is wider than 30 inches (762 mm), the clear space shall not be less than the width of the equipment. No storage of any materials shall be located within the designated clear space. Exception: Where other specialized dimensions are required or permitted by NFPA 70.

KK. Amend Paragraph 11.1.9.3 to add the following Subparagraph: 11.1.9.3.2 Doors to electrical control panel rooms shall be marked with a plainly visible and legible sign stating ELECTRICAL ROOM or similar approved wording in contrasting letters not less than 1 in. (25 mm) high and not less than 1⁴ in. (6.4 mm) in stroke width.

LL. Amend Paragraph 11.3.6.1.1 to delete the second sentence and replace with the following: All new keys shall be cut to a uniform key code to comply with the Maryland State Elevator Code.

MM. Amend Subsection 11.9.1 to replace "approved by the fire department" with "approved by the AHJ".

NN. Amend Subsection 11.12.1 to add the following Paragraph: 11.12.1.1 The provisions of this Section shall not apply to detached parking shade structures, carports, solar trellises, and similar structures.

OO. Amend Paragraph 13.3.1.2 to add the following Subparagraph: 13.3.1.2.1 For new ceiling installations, drop-out ceilings as referenced in NFPA 13, Subsection 8.15.14, shall be prohibited.

PP. Amend Paragraph 13.3.2.1 to add the following Subparagraph: 13.3.2.1.1 All new buildings shall be equipped with an automatic sprinkler system or other automatic fire suppression system where required by Section 903 of the International Building Code as incorporated by reference by the Maryland Building Performance Standards.

QQ. Amend Paragraphs 13.3.3.1 and 13.3.3.2 to delete "installed in accordance with this Code".

RR. Amend Subsection 13.4.1 to add the following Subparagraph: 13.4.1.1.1 No fire pump component, including the pump, driver, or controller, shall be permitted to be installed in below-ground vaults or pits unless otherwise approved by the AHJ.

SS. Amend Subsection 13.6.2 to add ", unless otherwise permitted by the AHJ."

TT. Amend Sub-subparagraph 13.6.9.1.2.1 to replace "certified" with "certified or licensed as required by the AHJ".

UU. Delete Sub-subparagraphs 13.6.9.1.2.1.1, 13.6.9.1.2.1.2, 13.6.9.1.2.1.3, 13.6.9.1.2.1.4, 13.6.9.1.2.1.5, 13.6.9.1.2.1.6, and 13.6.9.1.2.2.

VV. Amend Sub-subparagraphs 13.7.2.22.1.2 and 13.7.2.22.1.3 to replace "Storage occupancies" with "Storage occupancies less than three stories".

WW. Amend Sub-subparagraph 13.7.2.24.4.4 to delete "existing".

XX. Amend Paragraph 14.13.1.2 to replace "only" in the first sentence with ", but not be limited to,".

YY. Amend Paragraphs 18.1.3.1 and 18.1.3.2 to replace "fire department" with "AHJ".

ZZ. Amend Subparagraph 18.2.3.2.1 to replace "exterior door" with "exterior door acceptable to the AHJ".

AAA. Amend Paragraph 18.4.5.2 to add the following Subparagraph: 18.4.5.2.3 Required fire flow shall be reduced by 75 percent for open parking structures of Type I or Type II construction that are not protected throughout by an automatic sprinkler system. The resulting fire flow shall not be less than 1,000 gpm (3,785 L/min.)

BBB. Amend Subparagraph 20.3.4.1.1 to delete "more than 3, but" and the "," after "12".

CCC. Amend Sub-subparagraph 20.3.4.2.3.5.4 to add the following exception: Exception: Daycare homes with not more than three clients for overnight lodging.

DDD. Amend Paragraph 25.2.2.1 to add "or other approved testing standard approved by the State Fire Marshal".

EEE. Amend Subparagraph 31.3.6.2.2 to add the following item:(9) Piles containing leaves and other extraneous or hogged material, such as whole tree chip piles, shall be turned or reclaimed at least every 3 months.

FFF. Amend Subparagraph 31.3.6.3.1 to delete existing wording and replace with the following: Piles may not exceed 18 feet in height, 50 feet in width, and 350 feet in length. Piles shall be subdivided by fire lanes having at least 25 feet of clear space at the base of piles.

GGG. Delete Subparagraph 31.3.6.3.2 and Sub-subparagraphs 31.3.6.3.2.1, 31.3.6.3.2.2, and 31.3.6.3.2.3.

HHH. Delete Chapter 35.

III. Amend Subsection 42.7.5 to add the following Paragraphs:

42.7.5.7 Management/owner officials or employees shall conduct daily site visits to ensure that all equipment is operating properly.

42.7.5.8 Regular equipment inspection and maintenance at the unattended self-service facility shall be conducted.

42.7.5.9 Fuel dispensing equipment shall comply with one of the following:

(1) The amount of fuel being dispensed is limited in quantity by preprogrammed card; or

(2) Dispensing devices shall be programmed or set to limit uninterrupted fuel delivery of not more than 25 gallons and shall require a manual action to resume continued delivery.

JJJ. Amend Paragraph 42.7.5.5 to add the following: The following information shall be conspicuously posted in this area:

(1) The exact address of the unattended self-service facility.

(2) The telephone number of the owner or operator of the unattended self-service facility.

KKK. Amend Subsection 50.2.1 to add the following Paragraphs, Subparagraphs, and Subsubparagraphs:

50.2.1.10 Commercial Outdoor Cooking Operations. These requirements apply to commercial outdoor cooking operations such as those that typically take place under a canopy or tent-type structure at fairs, festivals, and carnivals. This includes, but is not limited to, deep frying, sautéing, and grilling operations.

50.2.1.10.1 Tent and Canopy Requirements.

50.2.1.10.1.1 Tents or canopies where cooking equipment not protected in accordance with NFPA 96 is located shall not be occupied by the public and shall be separated from other tents, canopies, structures, or vehicles by a minimum of 10 ft. (3050 mm) unless otherwise approved by the AHJ.

50.2.1.10.1.2 All tent and canopy material shall comply with the flame resistance requirements of Subsection 25.2.2.

50.2.1.10.2 LP Gas Fuel Requirements.

50.2.1.10.2.1 LP gas tank size shall be limited to 60 pounds. The total amount of LP gas on site shall not exceed 60 pounds for each appliance that is rated not more than 80,000 btu/hr. and 120 pounds for each appliance rated more than 80,000 btu/hr.

50.2.1.10.2.2 Tanks shall be maintained in good physical condition and shall have a valid hydrostatic date stamp.

50.2.1.10.2.3 Tanks shall be secured in their upright position with a chain, strap, or other approved method that prevents the tank from tipping over.

50.2.1.10.2.4 Tanks shall be located so that they are not accessible to the public. LP gas tanks shall be located at least 5 feet from any cooking or heating equipment or any open flame device. 50.2.1.10.2.5 All LP gas equipment shall be properly maintained and comply with the requirements of NFPA 58.

50.2.1.10.2.6 Regulators. Single-stage regulators may not supply equipment that is rated more than 100,000 btu/hr. rating. Two-stage regulators shall be used with equipment that is rated more than 100,000 btu/hr.

50.2.1.10.3 General Safety Requirements.

50.2.1.10.3.1 All electrical cords shall be maintained in a safe condition and shall be secured to prevent damage.

50.2.1.10.3.2 Movable cooking equipment shall have wheels removed or shall be placed on blocks or otherwise secured to prevent movement of the appliance during operation.

50.2.1.10.3.3 Portable fire extinguishers shall be provided in accordance with NFPA 1, Section 13.6 and shall be specifically listed for such use.

.09 Fireworks and Explosive Materials.

The NFPA 1 Fire Code (2012 Edition) is incorporated by reference, except for the amendments in Regulation .08 of this chapter and the following amendments:

A. Permits shall be required for the following:

- (1) Fireworks displays;
- (2) Pyrotechnics before a proximate audience; and
- (3) Flame effects before an audience.

B. Amend Sections 65.2, 65.3, and 65.4 to add the following:

(1) All applications for permits for display shall be filed at least 10 business days before the display is to be held.

(2) Under Public Safety Article, Title 10, Annotated Code of Maryland, the following requirements apply to public liability and property damage insurance:

(a) In order to meet the requirement of the statute, the State shall be named as an insured in the contract of insurance;

(b) Because the policy shall cover all damages to persons or property, a deductible form of coverage may not be accepted;

(c) The minimum amount of coverage that the State can accept on any display is \$25,000 for the injury of one person, \$50,000 for more than one person, and \$10,000 for property damage; and

(d) A duplicate policy of a certificate of insurance shall be attached to the application.(3) The policy or certificate shall provide that:

(a) The coverage may not be canceled without at least 30 days notice to the State Fire Marshal;

(b) The duplicate policy or certificate shall set forth all of the terms, conditions, endorsements, and riders which are or which will become part of the policy when issued;
(c) It is understood and agreed that limitations cannot be included in the policy which are not set forth in the duplicate policy or certificate of insurance which has been filed;
(d) If the policy is issued by an insurer authorized to do business in the State, it shall be validated by the signature of an agent licensed by the Maryland Insurance Administration to represent the insurer;

(e) If coverage is provided by an insurer who is not authorized to do business in the State, the duplicate policy or certificate of insurance shall be accompanied by a power of attorney or other satisfactory evidence that the person, firm, or corporation acting as agent in accepting the risk has authority to bind risks and issue policies for the insurer; (f) The State Fire Marshal's Office specifically reserves the right to disapprove contracts issued by any authorized insurer if the Fire Marshal's Office determines the insurer is unsatisfactory; and

(g) If the policy issued by the unauthorized company is acceptable to the Fire Marshal's Office, it shall be registered and the registration fee and tax paid.

C. Amend Section 65.5 to add the following regarding the manufacture of fireworks:

(1) A building containing hazardous mixes or items may not be located closer than 20 feet to the property line.

(2) In SC(3) of this regulation, the following terms have the meanings indicated:

(a) "Trainees" means employees undergoing initial training in a specific process for a period not to exceed 24 consecutive work hours.

(b) "Transients" means:

(i) Supervisors not regularly assigned to the area;

(ii) Bona fide government agency personnel engaged in official business; and

(iii) Material-handling personnel actively engaged in the transfer of materials into or out of the area.

(3) The maximum number of workers, excluding one trainee and three transients, permitted in a building at one time shall be limited to one person per 100 square feet gross floor area or one person in buildings of less than 100 square feet gross floor area.
 (4) The total empirication of explanations or purchase the provided of the state of explanation.

(4) The total amount of explosives or pyrotechnic composition including raw materials, material being processed, and finished products, that may be safely permitted in any

building at a given time, shall be determined by the enforcement agency based upon the American Table of Distances for Storage of Explosives, without recognition for barricades. However, distances may not be less than those required by Public Safety Article, §10-204(a), Annotated Code of Maryland. The amount of explosives or other pyrotechnic composition may not exceed the amount necessary for production for 4 hours.
(5) Before beginning work, all fireworks plants shall submit for approval accurate scale plot

(5) Before beginning work, all fireworks plants shall submit for approval accurate scale plot plans of their premises to the State Fire Marshal of all proposed changes of location of any of the structures, fences, and gates.

D. Amend Section 65.5 to add the following Subsection: 65.5.3 Sale or use of sparklers shall comply with the following:

 Before the sale, offering for sale, or use within the State, of any sparkler, every manufacturer of sparklers shall submit sufficient samples for inspection to the State Fire Marshal, with a laboratory report from a certified testing laboratory affirming that the analysis of these sparklers showed that they contain no chlorates or perchlorates.
 All sparklers sold in the State shall be sold in boxes, and each box shall be clearly marked that the sparklers contain no chlorates or perchlorates.

(3) The manufacturer shall furnish the State Fire Marshal with a current list of wholesalers, jobbers, retailers, or retail outlets, who handle or supply sparklers, or maintain a list of wholesalers, jobbers, retailers, or retail outlets, subject to inspection by the State Fire Marshal.

E. Amend Subsection 65.9.1 reference to NFPA 495 as follows:

(1) Delete Sections 11.1 and 11.2.

(2) Amend Section 3.3 to add the following definition: Demolition. The explosive razing of any manmade structure or any part thereof that cannot be covered with overburden or blasting mats.

(3) Amend Section 4.4 to add the following new Subsection: 4.4.7 Each applicant for a Demolition Class D permit shall possess 5 years of experience in the field of demolition and shall pass the demolition examination as approved by the Office of the State Fire Marshal.

F. Delete Subparagraph 65.10.6.4.5.

G. Amend Section 74.1 reference to NFPA 400 to delete Subsection 11.1.3.

.10 Control of Air Overpressure and Ground Vibration for Blasting Operations.

A. Control of Air Overpressure for Blasting Operations.

(1) This section applies to air overpressure effects as recorded at the location of a private dwelling, public building, school, church, and community or institutional building not owned or leased by the person conducting or contracting for the blasting operation.
 (2) Written notification by e-mail or facsimile shall be provided to the Office of the State Fire Marshal Bomb Squad at least 24 hours prior to each blast. The name of company or contractor performing the blasting and the location date, and approximate time shall be identified. The geographical coordinates (longitude and latitude) shall be provided.
 (3) Air overpressure from blasting shall be controlled so that the maximum allowable air overpressure at:

(a) An inhabited building, resulting from blasting operations, may not exceed 130 decibels peak when measured by an instrument having a flat frequency response, +/- 3 decibels, over a range of at least 6—200 hertz;

(b) A building not inhabited, resulting from blasting operations, may not exceed 140 decibels peak when measured by an instrument having a flat frequency response, +/- 3 decibels, over a range of at least 6—200 hertz;

(4) If requested by a property owner registering a complaint and considered necessary by the State Fire Marshal, measurements on three consecutive blasts, using approved instrumentation, shall be made near to the structure in question.

B. Control of Ground Vibration for Blasting Operations.

(1) This section provides for limiting ground vibrations at structures that are not owned or leased by the person conducting or contracting for the blasting operation. The requirements and monitoring methods of this section are intended to protect low rise structures including dwellings. Engineered structures may safely withstand higher vibration levels and, based on an approved engineering study, the State Fire Marshal may allow higher levels for engineered structures.

(2) When blasting operations, other than those conducted at a fixed site such as a quarry, are to be conducted within 200 feet of a pipe line or high voltage transmission line, the contractor shall take additional precautionary measures and shall notify the owner of the line, or the owner's agent, that blasting operations are intended.

(3) Methods. Each method described in B(4)—(6) of this regulation, progressing from B(4)—B(6), has an increasing degree of sophistication and each can be implemented either by direction of the State Fire Marshal as a result of complaints or by the contractor to determine site specific vibration limits.

(4) Charge Weight Per Delay Dependent on Distance Method.

(a) When a seismograph is not used to record vibration effects, the explosive charge weight per delay, 8 milliseconds or greater, may not exceed the limits shown in Table A of this regulation. If charge weights per delay on any single delay period exceed 520 pounds, then ground vibration limits for structures shall comply with §B(5) or (6) of this regulation.

Distance V	ersus Weight of Expl	osives Method
Distance to	a Building	Weight of Explosive per Delay
Feet Over	Feet Not Over	Pounds
0 to 5		1/4
5 to 10		1/2
10 to 15		3/4
15 to 60		**
60 to 70		6
70 to 80		7-1/4
80 to 90		9
90 to 100		10-1/2
100 to 110		12

(b) Table A.

110 to 120	13-3/4
120 to 130	15-1/2
130 to 140	17-1/2
140 to 150	19-1/2
150 to 160	21-1/2
160 to 170	23-1/4
170 to 180	25
180 to 190	28
190 to 200	30-1/2
200 to 220	34
220 to 240	39
240 to 250	42
250 to 260	45
260 to 280	49
280 to 300	55
300 to 325	61
325 to 350	69
350 to 375	79
375 to 400	85
00 to 450	98
450 to 500	115
500 to 550	135
550 to 600	155
600 to 650	175
650 to 700	195
700 to 750	220
750 to 800	240
800 to 850	263
850 to 900	288
900 to 950	313
950 to 1,000	340
1,000 to 1,100	375
1,100 to 1,200	435
1,200 to 1,300	493
This table over 60 feet is based upon the formula: $W = D1$	F/00

This table over 60 feet is based upon the formula: W = D1.5/90** 1/10 of a pound of explosive per foot of distance to a building.

(5) Monitoring Method. If a blaster determines that the charge weights per delay given in Table A are too conservative, the blaster may choose to monitor at the closest conventional structure each blast with an approved seismograph and meet the standard in C(6) of this regulation. When starting to monitor at a new blasting operation with instrumentation, the initial blasts shall contain explosive charge weights per delay close to the limits established in Table A. From this point onwards the explosive charge weight per delay may be increased but the vibration levels detailed in C(6) may not be exceeded.

(6) Peak Particle Velocity Dependent on Distance Method.

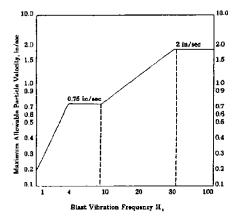
(a) In this subsection, "peak particle velocity" means the maximum component of the three mutually perpendicular components of motion as recorded at the closest structure not owned or leased by the person conducting the blasting.
(b) Table B.

Distance Versus Peak Particle Velocity Method			
Distance		Peak Particle Velocity of Any One Component*	
Feet Over Feet Not Over		Inches Per Second	
0	to 100	2.00	
100) to 500	1.50	
500 to 1,000		1.00	
over 1,000		0.75	

* The instrument's transducer shall be firmly coupled to the ground.

(7) Particle Velocity Criteria Dependent on Frequency Content. The following chart provides continuously variable particle velocity criteria dependent on the frequency content of the ground motion. The method of analysis shall be approved by the State Fire Marshal and provide an analysis showing all the frequencies present within the 1— 50 hertz range:

Blast Vibration Frequency Hz, Maximum Allowable Particle Velocity, in/sec.



C. Instrumentation.

(1) A direct velocity recording seismograph capable of recording the continuous wave form of the three mutually perpendicular components of motions, in terms of particle velocity, shall be used. Each seismograph shall have a frequency response from 2 to 150 hertz or greater, and a velocity range from 0.0 to 2.0 inches per second or greater.

(2) All field seismographs shall be capable of internal dynamic calibration and shall be calibrated according to the manufacturers' specifications at least once per year.

(3) All seismographs shall be operated by competent individuals trained in the correct use of seismographs. Seismograph records shall be analyzed and interpreted by an independent third party approved by the State Fire Marshal.

D. Records.

(1) A record of each blast shall be kept. All records, including seismograph reports, shall

be retained for at least 3 years, be available for inspection, and include the following items: (a) Name of company or contractor;

(b) Location, date, and time of blast. The geographical coordinates (longitude and latitude) shall be identified;

(c) Name, signature, and Social Security number of blaster in charge;

(d) Type of material blasted;

(e) Number of holes, burden, and spacing;

(f) Diameter and depth of holes;

(g) Type of explosives used;

(h) Total amount of explosives used;

(i) Maximum amount of explosives per delay period of 8 milliseconds or greater;

(j) Method of firing and type of circuit;

(k) Direction and distance in feet to nearest dwelling house, public building, school, church, and commercial or institutional building not owned or leased by the person conducting the blasting;

(I) Weather conditions including such factors as wind direction, etc.;

(m) Height or length of stemming;

(n) If mats or other protection to prevent fly rock were used;

(o) Type of detonators used and delay period used;

(p) Seismograph records including seismograph readings when required containing:

(i) Name and signature of the individual operating the seismograph,

- (ii) Name of the individual analyzing the seismograph records, and
- (iii) Seismograph reading; and

(q) The maximum number of holes per delay period of 8 milliseconds or greater.

(2) The person taking the seismograph reading shall accurately indicate the exact location of the seismograph, if used, and shall also show the distance of the seismograph from the blast.

E. Liability Insurance for Explosives Handlers.

(1) As provided in Public Safety Article, Title 11, Annotated Code of Maryland, proof of liability insurance shall be provided by an applicant for a license to:

(a) Manufacture explosives;

(b) Engage in the business of dealing in explosives; or

(c) Possess any explosives other than for use in firearms.

(2) The minimum amount of liability insurance required for licensing for the activities specified in §E(1) of this regulation is \$1,000,000.

.11 Portable Fire Extinguishers.

A. License to Service or Repair Portable Fire Extinguishers. A license shall be obtained from the State Fire Marshal's Office by every individual, firm, or corporation commercially servicing, repairing, filling, or refilling portable fire extinguishers, except fire departments.

B. Sale of Portable Fire Extinguishers.

(1) It is unlawful for a person, directly or through an agent, to sell or offer for sale in the State any make, type, or model of portable fire extinguisher, either new or used, unless the make, type, or model of extinguisher has been tested and listed by a testing laboratory accepted by the State Fire Marshal.

(2) An extinguisher is not approved even if it bears the label of an accepted testing laboratory if it contains any of the following liquids:

(a) Carbon tetrachloride, chlorobromomethane, azeotrophic chloromethane,

dibromodifluoromethane, 1,2-dibromo-2-chloro-1,2-trifluoroethane;

(b) 1,2-dibromo-2,2-difluoroethane, methyl bromide, ethylene dibromide;

(c) 1,2-dibromotetrafluoroethane, hydrogen bromide, methylene bromide,

bromodifluoromethane, dichlorodifluoromethane; or

(d) Any other toxic or poisonous liquid.

.11-1 Nonwater-based Fixed Fire Extinguishing Systems.

A license shall be obtained from the State Fire Marshal's Office by every individual, firm, or corporation commercially installing, servicing, or repairing nonwater-based fixed fire extinguishing systems.

.12 (Repealed)

.13 Smoke Detectors for the Deaf or Hearing Impaired—Signs.

A sign required under Public Safety Article, §9-102(c), Annotated Code of Maryland, shall:

A. Be conspicuously posted in such a manner that it is readily visible and legible to the public;

B. Be printed or typed in contrasting colors with respect to the background color of the sign or surface on which it is mounted; and

C. State "Smoke Detectors for the Deaf or Hearing Impaired are Available Upon Request", or other appropriate wording as may be specifically approved by the Fire Marshal, or by the Chief of the Baltimore City Fire Department if the building is located in Baltimore City.

.14 Sale and Use of Heaters and Stoves.

A. Gasoline Stoves. The sale or use of gasoline stoves or other similar fuel-burning cooking or heating appliances using Class I flammable liquids as defined in NFPA 1 Fire Code (2012 Edition) and NFPA 30 Flammable and Combustible Liquids Code (2012 Edition), is prohibited unless the appliance has been tested and listed by a testing laboratory accepted by the State Fire Marshal. The appliance shall be installed, operated, and maintained in a safe manner in accordance with the prescribed recommendation of the manufacturer and the conditions stated in the listing by the respective testing laboratory.

B. Unvented Portable Kerosene-Fired Heaters.

(1) The sale or use of unvented portable kerosene-fired heaters is permitted only if the heater or appliance meets the U.L. Subject 647 and bears the label of a testing laboratory accepted by the State Fire Marshal.

(2) The heaters shall only be used as permitted under Commercial Law Article, §14-1310, Annotated Code of Maryland.

(3) Each heater shall contain a warning label stating: "This device must not be operated while unattended". In addition, the heater shall contain the manufacturer's warning label required by Commercial Law Article, §14-1310, Annotated Code of Maryland.

.15 Sale or Use of Flame Retardant Chemicals.

An individual, firm, or corporation may not sell or offer for sale in the State any type of flameretardant or flame-proofing compound, powder, or liquid, for fire-retardant purposes unless the product has been tested, listed, and bears the mark of a recognized testing laboratory accepted by the State Fire Marshal

.16 Visual Obscuration Systems.

Visual obscuration systems associated with security or burglar alarm systems may not be permitted.

TITLE 29 DEPARTMENT OF STATE POLICE SUBTITLE 06 FIRE PREVENTION COMMISSION CHAPTER 02 PROCEDURAL REGULATIONS Authority: Public Safety Article §6-206 and Title 6, Subtitle 5 Annotated Code of Maryland (Amended Effective May 6, 1985)

.01 Hearings—Contested Cases Before the State Fire Prevention Commission. A. Appeals.

(1) When a person is aggrieved by an order or decision of the State Fire Marshal, made in the course of the administration or enforcement of the State Fire Prevention Code and Public Safety Article, Title 6, Annotated Code of Maryland, the person shall file within 20 days a written petition of appeal with the State Fire Prevention Commission, setting forth the reason for the appeal.

(2) The 20-day period during which an appeal may be taken begins on the date the notice of the Fire Marshal's order or decision was received by the person or agent in accordance with Public Safety Article §6-319, Annotated Code of Maryland.

(3) The original petition for appeal and nine copies of it shall be filed with the State Fire Prevention Commission, 18345 Colonel Henry K. Douglas Drive, Suite 240, Hagerstown, MD 21740.

B. Upon receipt of the petition for appeal, the secretary to the State Fire Prevention Commission shall mail a copy of the petition for appeal to each member of the Commission. The appellant shall be notified of the time and date of the hearing before the Commission at least 10 days before the hearing. At the hearing, there shall be at least five members of the Commission present, one of which shall be either the chairman or the vice-chairman.

C. Before the hearing and upon specific written request of any party or counsel, in accordance with Public Safety Article, §6-502, Annotated Code of Maryland, the State Fire Marshal may furnish for copying at the State Fire Marshal's office documents or other material in the State Fire Marshal's files relating to the matter at issue. Upon written request, the State Fire Marshal shall furnish the names of witnesses who have personal knowledge of matters material to the matter at issue.

D. The Commission shall provide for transcription of the hearing by electronic recording device or by a stenographer.

E. At the hearing, the State Fire Marshal, or the State Fire Marshal's agent or attorney, shall present to the Commission the evidence upon which the decision or order was based. The other party or counsel may cross-examine witnesses. The party aggrieved shall then present witnesses to testify, subject to cross-examination, and other evidence relative to the matter at issue. The State Fire Marshal and the party aggrieved shall be permitted to present:

- (1) Additional evidence at any time during the hearing; and
- (2) Oral arguments at the close of all of the evidence.

F. Upon request of a party, a party's counsel, or State Fire Marshal personnel, the Commission may postpone the hearing for any reason.

G. Unless the hearing is postponed, failure to appear at the time and place designated in the notice shall be deemed a default on the part of a party.

H. A decision shall be rendered by the Commission within 30 days of the hearing. Within that time the Commission shall notify all parties in writing of the decision. The decision shall be mailed to the last known address of each party. The mailing of the decision by the Commission is prima facie evidence of notification to a party of the Commission's decision.

.02 Administrative Procedure Act.

In addition to this chapter, State Government Article, Title 10, Subtitle 2, Annotated Code of Maryland, governs practice and procedure in a hearing before the Commission and an appeal from a hearing.

TITLE 29 DEPARTMENT OF STATE POLICE SUBTITLE 06 FIRE PREVENTION COMMISSION CHAPTER 03 APPROVAL OF TESTING LABORATORIES Authority: Public Safety Article §6-206 and Title 6, Subtitle 5 Annotated Code of Maryland (Repealed Effective January 1, 2013)

COMAR 29.06.04 TITLE 29 DEPARTMENT OF STATE POLICE SUBTITLE 06 FIRE PREVENTION COMMISSION CHAPTER 04 FEES FOR FIRE PREVENTION SERVICES Authority: Public Safety Article, §§6-206, 6-308, 9-701, and 9-702 Annotated Code of Maryland (Amended Effective April 1, 2012)

.01 Scope.

A. This chapter establishes a schedule of fees to be used by the State Fire Marshal to at least cover the administrative costs associated with the review of building plans, inspection of new and existing buildings, and fire suppression, detection, and alarm systems to ensure compliance with applicable fire prevention codes.

B. This chapter does not apply to any municipal corporation or county that has adopted, before the effective date of this chapter, an ordinance or regulation that establishes a fee schedule for building inspections or plans review. The fee schedule established by the State Fire Prevention Commission may be used, amended, or referenced by a municipal or county corporation that chooses to establish its own fee schedule.

C. A municipal or county corporation establishing its own fee schedule shall be responsible for administering its own:

- (a) Inspections;
- (b) Fee Processing; and
- (c) Payment collection.

.02 Incorporation by Reference.

A. Occupancies are defined and classified as required by the National Fire Protection Association (NFPA) 101 "Life Safety Code" as incorporated by reference in COMAR 29.06.01. In the case of mixed occupancies when it is impractical to distinguish individual occupancy classifications, the occupancy classification is based on the predominant use and occupancy of the building or structure.

B. Terminology and reference standards are defined and classified by the appropriate code or standard of the National Fire Protection Association as referenced in COMAR 29.06.01.

.03 Definitions.

A. In this chapter, the following terms have the meanings indicated.

B. Terms Defined.

(1) "Code" means the State Fire Laws, Public Safety Article, Titles 6 and 9, Annotated Code of Maryland, and the State Fire Prevention Code under COMAR 29.06.01.

- (2) "Fire protection system" means:
 - (a) Fire alarm and detection systems with a fire alarm control panel;
 - (b) Sprinkler, water spray, and combined sprinkler and standpipe systems;
 - (c) Standpipe systems and hose systems;

(d) Fire pumps and associated valves, piping, controllers, driver, and related equipment;

(e) Gaseous and chemical extinguishing systems that use gases such as halon or carbon dioxide, or dry or wet chemical compounds as the primary extinguishing agent;

(f) Foam systems that use a foaming agent to control or extinguish a fire in a flammable liquid installation, aircraft hangar, and other recognized applications; and

(g) Smoke control systems that include smoke exhaust, stair pressurization, and other recognized air-handling systems specifically designed to exhaust or control smoke, or create pressure zones to minimize the hazard of smoke spread caused by fire.

(3) "Initial inspection" means an inspection conducted for fire code compliance not generated by a previously identified fire code violation.

(4) "Local fire authority" means those municipal or county fire officials specifically authorized under the Public Safety Article, Annotated Code of Maryland, to enforce the provisions of the State Fire Laws and Fire Prevention Code.

(5) "New building or condition" means a building, structure, installation, plant, equipment, renovation, or condition:

(a) For which a building permit is issued on or after the effective date of this chapter;

(b) On which actual construction is started on or after the effective date of this chapter in a jurisdiction where a building permit is not required;

(c) That represents a change from one occupancy classification to another on or after the effective date of this chapter; or

(d) That represents a situation, circumstance, or physical makeup of any structure, premise, or process that was commenced on or after the effective date of this chapter.

(6) "Reinspection" means an inspection conducted for fire code compliance generated by a previously identified fire code violation.

(7) "State fire authority" means the State Fire Marshal or legally appointed designee.

.04 Fees in General.

A. Fee Computation. The amount of the fee for the following services shall be computed in accordance with Regulations .05--.07 of this chapter:

- (1) Plan review, and use and occupancy inspection;
- (2) Fire protection system plan review and inspection; and
- (3) Fire safety inspection.

B. Fee Payment for Plan Review and Use and Occupancy Inspections.

(1) Fees for plan review and use and occupancy inspections are payable upon receipt of an invoice from the State fire authority of:

(a) Preliminary or construction plans for the construction of a new building, addition,

expansion, or renovation of an existing building or facility; and

(b) Plans for a fire protection system.

(2) Fee payments shall be reviewed by the State fire authority to ensure that they are in the proper amount. If a fee payment is incorrect, an invoice requesting the balance of the fee shall be sent to the person identified on the original invoice.

(3) Failure to pay the fee within the required time shall result in appropriate administrative or legal action. Further plan review or inspection action may not take place until the fee is paid in full. This may result in delay of the issuance of a building permit, or use and occupancy permit for the building or facility.

C. Fee Payment for Fire Safety Inspections.

(1) Fees for fire safety inspections are payable upon receipt of an invoice from the State fire authority upon completion of the inspection. Failure to pay this fee within the specified time may result in:

(a) Administrative or legal action;

(b) No further inspection activity;

(c) Denial of the issuance or renewal of a permit or license held by the facility being inspected; and

(d) Violation of Public Safety Article, §§6-601, 6-317, 9-109, 9-206, 9-905, Annotated Code of Maryland.

(2) The fire safety inspection fee may not be charged if the initial inspection is conducted in response to a specific complaint regarding an alleged violation of the Code. Any reinspection based on the initial inspection is subject to the fees outlined in Regulation .07C of this chapter.

(3) The fire safety inspection fee may not be charged if the initial inspection is initiated by the State fire authority. Any reinspection based on the initial inspection is subject to the fees outlined in Regulation .07C of this chapter.

D. Payment Method.

(1) Fee payments shall be made payable to the Office of the State Fire Marshal.

(2) Cash payment is not acceptable.

(3) Fee payment shall be in the form of a check, money order, or other approved means.

E. Disputes Over Fees.

(1) Disputes regarding the amount of the fee charged and any other matter related to the charging of a fee shall be resolved in accordance with administrative procedures adopted by the State fire authority.

(2) An appeal of an administrative finding by the State Fire Marshal may be made to the State Fire Prevention Commission in accordance with procedures in COMAR 29.06.02.

F. Technical Assistance, Unclassified Inspections, and Special Events.

Fees for technical assistance, unclassified inspections, and special events shall be based upon criteria required in Regulation .08 of this chapter.

.05 Fees for Plan Review and Use and Occupancy Inspection.

A. Fee Schedule.

(1) The fee schedule in this section is to be used to calculate the fee to be paid for the review of plans for and inspection of all new and existing buildings, including a change in use or occupancy.

(2) The review and inspection is required to obtain a building permit, or a use and occupancy permit from a State or local government agency or licensing authority in order to construct, renovate, or occupy a building or facility, or install a fire protection system.(3) Fees are as follows:

(a) Assembly occupancy-8 cents per square foot;

(b) Educational occupancy-10 cents per square foot;

(c) Health care occupancy-10 cents per square foot;

(d) Detention or correctional occupancy—10 cents per square foot;

(e) Residential occupancy—8 cents per square foot;

(f) Mercantile occupancy—8 cents per square foot;

(g) Business occupancy—8 cents per square foot;

(h) Industrial occupancy—6 cents per square foot;

(i) Storage occupancy—6 cents per square foot; or

(j) \$100 per plan review or use and occupancy inspection, whichever is greater;

(k) Flammable or combustible liquid storage tank—1 cent per gallon of maximum tank capacity or \$200 per tank, whichever is greater, although tanks less than 660 gallons used to provide heating fuel or other utility service to a building or facility are exempt from the fee;

(I) Marina or pier—\$120 plus \$1.50 per slip; and

(m) Outside storage of flammable and combustible materials such as scrap tire, lumber, mulch, tree stumps, drums of flammable or combustible liquids, etc.—\$120 per acre or fraction of an acre.

- B. The fee due shall be calculated using the appropriate rate in §A of this regulation applied to:
 (1) The gross square feet per floor for a new building or tenant space or a change in its use or occupancy;
 - (2) The gross square feet of an area being renovated or altered; or

(3) The gross square feet per floor for a storage occupancy when a shell building without a specific occupancy or tenancy is to be built.

C. When a shell building is built without a specific occupancy or tenancy, the appropriate occupancy fee applies when use or occupancy is determined as prescribed by a separate building permit or use and occupancy permit.

D. The fee for a mixed occupancy shall:

- (1) Be based upon the fee schedule in §A of this regulation for each occupancy;
- (2) Be the cumulative total of the fee for each occupancy; and

(3) Reflect the predominant classification of the building or structure when a separate fee for each occupancy cannot be determined.

E. A change in use or occupancy of a building or tenant space shall be calculated at the same rate as a new building.

F. The fee for a building or tenant space occupied without completion of a plan review shall be based upon the fee schedule in §A of this regulation.

G. A 50 percent refund of the fees in §§A—F of this regulation may be refunded if a permit to construct is denied by a permit or licensing authority, or if the applicant abandons the project before construction, for whatever reason. The applicant may request a refund within 6 months of official notification of the denial of the permit, license, or issuance of a building permit by the respective authority. A renewal of the permit or resumption of construction requires a new submittal of plans for the remaining work and payment of the full fee.

.06 Fees for Fire Protection System Plan Review and Inspection.

A. The fee schedule that follows in this section is to be used to calculate the fee to be paid for plan review and inspection of the fire protection systems specified:

(1) Fire alarm and detection system—\$150 per fire alarm control panel, plus \$2 per fire alarm initiating and indicating device;

(2) Sprinkler, water spray, and combined sprinkler and standpipe system

(a)\$2 per sprinkler head and \$3 per extended coverage sprinkler head or \$150 per system, whichever is greater; and

- (b) \$100 for each additional hydrostatic test; or
- (c) \$75 per dwelling unit for one- and two-family dwellings;

(3) Standpipe and hose system—\$50 per 100 linear feet of piping or fraction of 100 linear feet, or \$150 per system, whichever is greater;

(4) Fire pump—50 cents per gallon per minute (gpm) of rated pump capacity or \$300 per pump, whichever is greater, although this fee does not apply to limited service pumps for residential sprinkler systems as permitted for NFPA 13D systems;

(5) Water storage tanks – \$100 per tank, although this fee does not apply to residential sprinkler system tanks as permitted for NFPA 13D systems;

(6) Gaseous and chemical extinguishing system—The greater of:

(a) \$1 per pound of gaseous or dry chemical extinguishing agent, although this fee does not apply to a reserve supply of extinguishing agent;

- (b) \$100 per 30,000 cubic feet of volume of the portion of protected space; or
- (c) \$150 per system; and
- (d) \$150 per wet chemical extinguishing system;

(7) Foam system—\$100 per nozzle or local applicator device plus \$2 per sprinkler head for a combined sprinkler and foam system, or \$150 per system, whichever is greater;
(8) Smoke control system—\$100 per 50,000 cubic feet of volume or the portion of the protected or controlled space, up to a maximum of \$1,500 per system, or \$300 per system, whichever is greater.

B. The fees also include, for a:

- (1) Fire alarm and detection system:
 - (a) Plan review and inspection of a complete system of:
 - (i) Wiring,
 - (ii) Controls,
 - (iii) Alarm and detection equipment, and
 - (iv) Related appurtenances; and
 - (b) One final acceptance test of the installed system;
- (2) Sprinkler, water spray, and combined sprinkler and standpipe system:
 - (a) Plan review and inspection of:
 - (i) Shop drawings,
 - (ii) Hydraulic calculations,
 - (iii) Piping,
 - (iv) Control valves, and
 - (v) Connections and other related equipment and appurtenances;
 - (b) One underground flush test;
 - (c) One hydrostatic test;
 - (d) One forward flow test of the backflow preventer; and
 - (e) One final acceptance test;
- (3) Standpipe and hose system:
 - (a) Plan review and inspection of a complete system of:
 - (i) Shop drawings,
 - (ii) Control valves,
 - (iii) Piping, and
 - (iv) Connections and other related equipment and appurtenances;
 - (b) One flush test;
 - (c) One hydrostatic test; and
 - (d) One final acceptance test ;

- (4) Fire pump:
 - (a) Plan review and inspection of a complete system of:
 - (i) Pumps and all associated valves,
 - (ii) Piping,
 - (iii) Controllers,
 - (iv) Driver and other related equipment and appurtenances; and
 - (b) One pump acceptance test per pump;
- (5) Gaseous or chemical extinguishing system:
 - (a) Plan review and inspection of a complete system of:
 - (i) Piping,
 - (ii) Controls, and
 - (iii) Equipment and other appurtenances; and
 - (b) One performance or acceptance test;
- (6) Foam system:
 - (a) Plan review and inspection of a complete system of:
 - (i) Piping,
 - (ii) Controls,
 - (iii) Nozzles, and
 - (iv) Equipment and related appurtenances; and
 - (b) One flush test;
 - (c) One hydrostatic test; and
 - (d) One final acceptance test;
- (7) Smoke control system:
 - (a) Plan review and inspection of system components; and
 - (b) One performance or acceptance test.

C. Final acceptance tests are to be witnessed by a State fire authority in accordance with administrative procedures established by that authority.

D. A fee applies if the tests outlined in §B of this regulation reveal that the system being inspected or tested does not meet applicable standards as follows:

- (1) First reinspection or retest-\$200; and
- (2) Each additional reinspection or retest—\$250.

.07 Fees for Fire Safety Inspections.

A. The fee schedule in this regulation is to be used to calculate the fee to be paid for a general fire safety inspection. Specific testing of certain specialized fire protection systems and equipment may be required by qualified maintenance personnel or a contractor at the owner's expense.

B. The following fees are to be applied based upon the occupancy classification for the building:

- (1) Assembly occupancy:
 - (a) 1,001 or more individuals—\$360;
 - (b) 301 to 1,000 individuals—\$240;
 - (c) 50 to 300 individuals—\$120;
 - (d) Fairgrounds for properties with:
 - (i) Nine buildings or less—\$240;
 - (ii) Ten buildings or more—\$480.

- (2) Educational occupancy:
 - (a) Elementary school, which includes kindergarten and prekindergarten facilities—\$120;
 - (b) Middle or junior high school—\$180;
 - (c) Senior high school—\$180;
 - (d) Family or group day care homes:
 - (i) Initial inspection—\$75;
 - (ii) Renewal inspection—\$50;
 - (e) Nursery or day care centers—\$100;
- (3) Health care occupancy:

(a) Ambulatory health care center—\$180 per 3,000 square feet or fraction of 3,000 square feet;

(b) Hospital, nursing home and limited care facility—\$120 per building plus \$2.50 per patient bed;

(4) Detention and correctional occupancy—\$120 per building plus \$2.50 per rated bed capacity;

- (5) Residential occupancy:
 - (a) Hotel and motel—\$120 per building plus \$2.50 per guest room or suite;
 - (b) Dormitory—\$120 per building plus \$2.50 per bed;
 - (c) Apartment—\$120 per building plus \$2.50 per apartment;
 - (d) Lodging or rooming house—\$120 per building plus \$2.50 per bed;
 - (e) One and two family dwelling, including alternate living units and foster care homes—\$75;
 - (f) Board and care home—\$120 per building plus \$2.50 per bed;
- (6) Mercantile occupancy:
 - (a) Class A—over 30,000 square feet—\$300;
 - (b) Class B—3,000 to 30,000 square feet—\$150;
 - (c) Class C—less than 3,000 square feet—\$100;
- (7) Business occupancy—\$120 per 3,000 square feet or fraction of 3,000 square feet;
- (8) Industrial or storage occupancy:
 - (a) Low or ordinary hazard—\$120 per 5,000 square feet or fraction of 5,000 square feet;
 - (b) High hazard—\$200 per 5,000 square feet or fraction of 5,000 square feet;
- (9) Manufactured home sites and communities—\$120 per facility plus \$2.50 per site;
- (10) Campgrounds:
 - (a) Vehicular campgrounds—\$120 per facility plus \$2.50 per campsite;
 - (b) Campgrounds with sleeping accommodations—\$180 per facility plus \$2.50 per bed;
 - (c) Campgrounds without sleeping accommodations—\$120 per facility;
- (11) Outside storage of combustible materials, for example, scrap tire, lumber, mulch, tree stumps, etc.—\$60 per acre or fraction of an acre.
- (12) Outside storage of flammable or combustible liquids/gases (drums or tanks)—\$120 per 5,000 square feet or fraction of 5,000 square feet.
- (13) Marinas and piers—\$120 plus \$1.50 per slip.

C. A fee applies if more than one reinspection outlined in §B of this regulation is required to correct a previously identified fire code violation as follows:

- (1) Second reinspection-\$200; and
- (2) Each additional reinspection—\$250.

.08 Fees for Technical Assistance, Unclassified Inspections, and Special Events.

A. The fee schedule in this regulation is used to calculate the fee to provide technical assistance or unclassified inspections, to include special events, in the form of plan review or on-sites inspections.

B. A separate technical assistance fee shall be charged at the following rate and prorated to the nearest 1/2 hour:

- (1) Deputy fire marshal or fire safety inspector—\$75 per hour; and
- (2) Fire protection engineer—\$100 per hour.

C. Travel time to and from the meeting or inspection site shall be included when computing the fee.

D. When requested, a reasonable time to prepare written reports or research subsequent Code-related issues shall be included when computing the fee.

E. The fee shall be charged to the person officially requesting assistance and is payable upon receipt of an itemized invoice submitted in accordance with administrative procedures established by State fire authorities.

F. Failure to pay the fee within the required time shall result in appropriate administrative or legal action. Further plan review or inspection action may not take place until the fee is paid in full. This may result in delay of the issuance of a building permit, or use and occupancy permit for the building or facility.

.09 Disposition of Fees.

A. Fees collected by the State shall be deposited in the general fund of the State for the services provided.

B. Fees shall be collected and processed in accordance with fiscal procedures established by the State for the collection, disbursement, and accounting of funds.

TITLE 29 DEPARTMENT OF STATE POLICE SUBTITLE 06 FIRE PREVENTION COMMISSION CHAPTER 05 FIRE SPRINKLER CONTRACTOR LICENSING REGULATIONS Authority: Public Safety Article §6-206 and §§9-901 to 9-905 Annotated Code of Maryland (Amended Effective August 11, 2008)

.01 Purpose.

This chapter establishes licensing requirements for persons who inspect, test, perform maintenance on, install, repair, modify, or lay out fire sprinkler systems in any residential or commercial building in Maryland.

.02 Scope.

A. Except as provided in §B of this regulation, a person who inspects, tests, performs maintenance on, installs, repairs, modifies, or lays out fire sprinkler systems in any residential or commercial building in the State shall apply to, and obtain from, the State Fire Marshal, a Fire Sprinkler Contractor License, as provided for in Regulation .04 of this chapter.

B. A license is not required for the following activities:

(1) Inspections and tests by insurance representatives acting in the performance of their assigned duty;

(2) Inspections, tests, and repairs by a full-time maintenance employee of the property owner, knowledgeable about fire sprinkler systems, acting in the performance of the employee's assigned duty for the property owner;

(3) Inspections, tests, plan review, and ensuring the maintenance of, and any emergency maintenance activity on, a fire sprinkler system, or restoration of an operating, or recently operated, fire sprinkler system to active service by an individual acting in the individual's capacity as a member of a state, county, municipal, career, or volunteer fire department, or authority having jurisdiction;

(4) Installation of a limited area fire sprinkler system or emergency temporary repairs performed by a licensed master plumber in accordance with COMAR 29.06.01; or
(5) Inspections, tests, preparation of design and specification documents, hydraulic calculations, layout, and plan review of fire sprinkler systems by a Maryland-registered professional engineer knowledgeable about fire sprinkler systems.

C. These regulations are minimum statewide requirements which are not intended to prohibit any jurisdiction from adopting a more stringent local law or ordinance which establishes standards or qualifications for fire sprinkler contractors.

.03 Definitions.

A. In this chapter, the following terms have the meanings indicated.

B. Terms Defined.

"Designated Qualified Individual" means an owner or employee of a fire sprinkler contractor who is responsible for overseeing work performed by other persons employed by the contractor and who possesses the required NICET qualification or professional engineer qualifications in accordance with the appropriate class of license as listed in this chapter.
 "Fire Sprinkler Contractor" means a person that inspects, tests, performs maintenance on, installs, repairs, modifies, or lays out a fire sprinkler system in accordance with standards adopted by reference in COMAR 29.06.01.

(3) "Fire Sprinkler System" means a sprinkler system for fire protection purposes which:
(a) Is an integrated system of piping laid out in accordance with standards adopted in COMAR 29.06.01;

(b) Includes, as the portion of the fire sprinkler system above ground, a network of specially sized or hydraulically designed piping and associated equipment installed in a building, structure, or area, generally overhead, and to which fire sprinklers are connected in a systematic pattern;

(c) Is activated by a device capable of detecting heat or combustion by-products produced by a fire, and which discharges water over the fire area; and
(d) Does not include the first connection to a potable water supply that is downstream of a backflow preventer, and the final connection that discharges indirectly into a public or private disposal system, sanitary drainage facility, or storm drainage facility.

(e) Includes potable water multipurpose piping systems as defined in NFPA 13D.
(4) "International Building Code" means the edition of the *International Building Code*, with amendments, which is currently adopted by reference in COMAR 29.06.01.

- (5) "Layout" means the preparation of shop drawings implementing engineering contract documents and applicable codes and standards.
- (6) "Limited Area Fire Sprinkler System" means a:

(a) Fire sprinkler system, except a system installed in a townhouse or other single family dwelling, which is laid out within one fire area, and which is enclosed within approved separation assemblies, with no more than 20 sprinklers based on the spacing limitations of NFPA 13, and laid out in accordance with the *International Building Code*, and which has a water supply that consists of one of the following:

(i) A standpipe system capable of supplying a 500 gallon/minute (1890 liters/minute) minimum flow and which has an automatic water supply, or

(ii) A connection in compliance with the Maryland State Plumbing Code to a domestic water system laid out to adequately support the design flow of the largest number of sprinklers required to be hydraulically calculated by NFPA 13 in any fire area plus the domestic demand; or

(b) Fire sprinkler system consisting of not more than six sprinklers for any isolated hazardous area connected to a domestic water supply having a capacity sufficient to provide 0.15 gallon/minute/square foot (6.1 liter/minute/square meter) of floor area throughout the entire enclosed area installed in accordance with NFPA 101.

(7) "NFPA" refers to standards produced by the National Fire Protection Association, Batterymarch Park, Quincy, MA 02269, which are currently adopted by reference in COMAR 29.06.01.

(8) "NICET" means the National Institute for the Certification in Engineering Technologies.
(9) "Person" means an individual, receiver, trustee, guardian, personal representative, fiduciary, representative of any kind, partnership, firm, association, corporation, or other entity.

(10) "State Fire Marshal" means the Fire Marshal for the State of Maryland or, in the Fire Marshal's absence, an individual who has been specially designated by the State Fire Marshal to enforce the provisions of this chapter.

(11) "Workmanlike Manner" means a quality of work typical of the standard recognized within the industry and befitting a skilled workman or craftsman.

.04 Licensure.

A. Each fire sprinkler contractor who performs work in Maryland shall possess a valid license of the appropriate class as listed in this regulation. A fire sprinkler contractor, except a person exempt under this chapter or Public Safety Article §9-903(b), Annotated Code of Maryland, who

inspects, tests, performs maintenance on, installs, repairs, modifies, or lays out a fire sprinkler system in a residential or commercial building in the State shall possess a valid license under this regulation. The following table illustrates the capabilities of each class of the sprinkler contractor license:

Function	Class I	Class IIa	Class IIb	Class IIc	Class IId	Class IIIa	Class IIIb	Class IIIc
Inspect	All							
Test	All							
Maintain	All							
Install		Res		Res	13D	All		All
Repair		Res		Res	13D	All		All
Modify		Res		Res	13D	All		All
Layout			Res	Res			All	All

Where: "All" indicates that the function may be performed on commercial or residential systems in accordance with NFPA 13, 13D, and 13R; "Res" indicates that the function may be performed on residential systems in accordance with NFPA 13D and 13R only; and "13D" indicates that the function may be performed on residential systems in accordance with NFPA 13D only.

B. Class I Fire Sprinkler Contractor License.

(1) A fire sprinkler contractor engaged in the inspection, testing, and performance of maintenance of residential or commercial fire sprinkler systems that are in accordance with NFPA 13, NFPA 13D, or NFPA 13R shall possess a class I fire sprinkler contractor license.
(2) To obtain a class I fire sprinkler contractor license, a person shall:

(a) Have not less than 3 years experience in the inspection, testing, and performance of maintenance of residential and commercial fire sprinkler systems as determined by the State Fire Marshal; and

(b) Employ at least one designated qualified individual who possesses and maintains a NICET Engineering Technician Level II or higher certification or equivalent in the field of fire protection, inspection, and testing of water-based systems.

C. Class IIa Fire Sprinkler Contractor License.

(1) A fire sprinkler contractor engaged in the installation, repair, or modification of residential fire sprinkler systems that are in accordance with NFPA 13D or NFPA 13R shall possess a class IIa fire sprinkler contractor license.

- (2) To obtain a class IIa fire sprinkler contractor license, a person shall:
 (a) Have not less than 3 years experience in the installation, repair, or modification of residential fire sprinkler systems as determined by the State Fire Marshal; and
 (b) Employ at least one designated qualified individual who possesses and maintains a NICET Engineering Technician Level II or higher certification or equivalent in the field of fire protection, automatic sprinkler system layout.
- (3) For potable water multipurpose piping systems, contractors shall also possess a Maryland master plumber license and shall comply with all applicable provisions of Business Occupations and Professions Article, Title 12, Annotated Code of Maryland.
- D. Class IIb Fire Sprinkler Contractor License.

(1) A fire sprinkler contractor engaged in the layout of residential fire sprinkler systems that are in accordance with NFPA 13D or NFPA 13R shall possess a class IIb fire sprinkler contractor license.

- (2) To obtain a class IIb fire sprinkler contractor license, a person shall:
 (a) Have not less than 3 years experience in the layout of residential fire sprinkler systems as determined by the State Fire Marshal; and
 (b) Employ at least one designated qualified individual who possesses and maintains a NICET Engineering Technician Level II or higher certification or equivalent in the field of fire protection, automatic sprinkler system layout.
- E. Class IIc Fire Sprinkler Contractor License.

(1) A fire sprinkler contractor engaged in the installation, repair, modification and layout of residential fire sprinkler systems that are in accordance with NFPA 13D or NFPA 13R shall possess a class IIc fire sprinkler contractor license.

- (2) To obtain a class IIc fire sprinkler contractor license, a person shall:
 - (a) Have not less than 3 years experience in the installation, repair, modification and layout of residential fire sprinkler systems as determined by the State Fire Marshal; and
 (b) Employ at least one designated qualified individual who possesses and maintains a NICET Engineering Technician Level II or higher certification or equivalent in the field of fire protection, automatic sprinkler system layout.
- (3) For potable water multipurpose piping systems, contractors shall also possess a Maryland master plumber license and shall comply with all applicable provisions of Business Occupations and Professions Article, Title 12, Annotated Code of Maryland.
- F. Class IId Fire Sprinkler Contractor License.

(1) A fire sprinkler contractor engaged in the installation, repair, or modification of residential fire sprinkler systems that are in accordance with NFPA 13D shall possess a class IId fire sprinkler contractor license.

(2) To obtain a class IId fire sprinkler contractor license, a person shall:

(a) Possess a Maryland master plumber license and comply with all applicable provisions of Business Occupations and Professions Article, Title 12, Annotated Code of Maryland; and

(b) Employ at least one designated qualified individual who possesses and maintains a NICET Engineering Technician Level II or higher certification or equivalent in the field of fire protection, automatic sprinkler system layout.

G. Class IIIa Fire Sprinkler Contractor License.

(1) A fire sprinkler contractor engaged in the installation, repair, or modification of commercial and residential fire sprinkler systems that are in accordance with NFPA 13, 13D, or 13R shall possess a class IIIa fire sprinkler contractor license.

(2) To obtain a class IIIa fire sprinkler contractor license, a person shall:
 (a) Have not less than 5 years experience in the installation, repair or modification of commercial and residential fire sprinkler systems as determined by the State Fire Marshal; and

(b) Employ at least one designated qualified individual who possesses and maintains a NICET Engineering Technician Level II or higher certification or equivalent in the field of fire protection, automatic sprinkler system layout.

(3) For potable water multipurpose piping systems, contractors shall also possess a Maryland master plumber license and shall comply with all applicable provisions of Business Occupations and Professions Article, Title 12, Annotated Code of Maryland. H. Class IIIb Fire Sprinkler Contractor License.

(1) A fire sprinkler contractor engaged in the layout of commercial or residential fire sprinkler systems that are in accordance with NFPA 13, 13D, or 13R shall possess a class IIIb fire sprinkler contractor license.

(2) To obtain a class IIIb fire sprinkler contractor license, a person shall:

(a) Have not less than 5 years experience in the layout of commercial and residential fire sprinkler systems as determined by the State Fire Marshal; and

(b) Employ at least one designated qualified individual who possesses and maintains a NICET Engineering Technician Level III or higher certification or equivalent in the field of fire protection, automatic sprinkler system layout.

I. Class IIIc Fire Sprinkler Contractor License.

(1) A fire sprinkler contractor engaged in the installation, repair, modification, and layout of commercial or residential fire sprinkler systems that are in accordance with NFPA 13, 13D or 13R shall possess a class IIIc fire sprinkler contractor license.

(2) To obtain a class IIIc fire sprinkler contractor license, a person shall:

(a) Have not less than 5 years experience in the installation, repair, modification and layout of commercial and residential fire sprinkler systems as determined by the State Fire Marshal; and

(b) Employ at least one designated qualified individual who possesses and maintains a NICET Engineering Technician Level III or higher certification or equivalent in the field of fire protection, automatic sprinkler system layout.

(3) For potable water multipurpose piping systems, contractors shall also possess a Maryland master plumber license and shall comply with all applicable provisions of Business Occupations and Professions Article, Title 12, Annotated Code of Maryland.

J. A person may not be permitted to serve as a designated qualified individual for more than three licensed fire sprinkler contractors.

K. Additional Authorized Work.

(1) A fire sprinkler contractor in possession of a class IIIa fire sprinkler contractor license may engage in any fire sprinkler system work covered by a class IIa or class IId fire sprinkler contractor license.

(2) A fire sprinkler contractor in possession of a class IIIb fire sprinkler contractor license may engage in any fire sprinkler system work covered by a class IIb fire sprinkler contractor license.

(3) A fire sprinkler contractor in possession of a class IIIc fire sprinkler contractor license may engage in any fire sprinkler system work covered by all other classes of fire sprinkler contractor licenses except class I.

(4) A fire sprinkler contractor in possession of a class IIa fire sprinkler contractor license may engage in any fire sprinkler system work covered by a class IId fire sprinkler contractor license only on residential fire sprinkler systems that are in accordance with NFPA 13D or NFPA 13R.

(5) A fire sprinkler contractor in possession of a class IIc fire sprinkler contractor license may engage in fire sprinkler system work covered by a class IIa, class IIb, or class IId fire sprinkler contractor license only on residential fire sprinkler systems that are in accordance with NFPA 13D or NFPA 13R.

L. Fire Sprinkler System Layout.

(1) Layout of plans and preparation for automatic fire sprinkler systems shall be prepared under the supervision of one of the following:

(a) The designated qualified individual employed by a fire sprinkler contractor who meets the qualification listed for the appropriate license classification under §D, E, H, or I of this regulation; or

(b) A Maryland registered professional engineer, knowledgeable in areas about fire sprinkler systems.

(2) Plans shall be marked with the fire sprinkler contractor license number and one of the following:

(a) The designated qualified individual's original signature, NICET level, number, and expiration date; or
 (b) The original signature and seal of a professional engineer who is Maryland.

M. Notification Requirements.

(1) Within 14 days of any change of address, the fire sprinkler contractor shall:

- (a) Notify the Office of the State Fire Marshal in writing of the change;
- (b) Return the license certificate requiring the revision; and
- (c) Submit the fee as specified in §Q of this regulation for a revised license certificate.

(2) Within 5 business days from the termination of a designated qualified individual, the fire sprinkler contractor shall notify the Office of the State Fire Marshal in writing of the termination.

(3) Within 30 days of termination of the designated qualified individual, or prior to the expiration of a current license, whichever occurs first, the fire sprinkler contractor shall submit a new application to the Office of the State Fire Marshal identifying the new designated qualified individual as defined in Regulation .03 of this chapter.

(4) Within 14 days of any change to information submitted on the license application, the fire sprinkler contractor shall notify the Office of the State Fire Marshal in writing of the change.

N. License Expiration.

All fire sprinkler contractor licenses expire 2 years after the date issued.

O. Liability Insurance Requirements.

(1) To hold any class fire sprinkler contractor license, a person shall maintain continuous comprehensive general liability insurance coverage and provide proof of this coverage in the form of a certificate of insurance with a 30-day cancellation notification provision. The Office of the State Fire Marshal shall be named as the certificate holder. Coverage under this subsection shall include:

(a) A minimum of \$1,000,000 combined single limit bodily injury or death and property damage liability insurance; and

(b) Products and completed operations insurance.

(2) Failure to maintain the required coverage is considered sufficient grounds for suspension or revocation of the license.

P. Application.

(1) An application for an initial fire sprinkler contractor license shall be made to the State Fire Marshal on a form designated by the State Fire Marshal.

(2) An application for renewal of a fire sprinkler contractor license shall be submitted to the Office of the State Fire Marshal at least 30 days before the expiration date of the license on a form designated by the State Fire Marshal.

(3) The application shall be signed by the sole proprietor, by each partner of a partnership, or by an officer of the corporation or organization.

(4) Proof of the required insurance coverage, in the form of a certificate of insurance with a 30-day cancellation notification provision shall be submitted with the application. The Office of the State Fire Marshal shall be named as the certificate holder.

(5) Proof of current NICET qualification or professional engineer registration status shall be submitted with the application.

(6) The appropriate nonrefundable fee as specified in §Q of this regulation shall be submitted with the application.

Q. Fees.

(1) A nonrefundable fee set by the State Fire Prevention Commission shall be paid to the Office of the State Fire Marshal to obtain or renew a fire sprinkler contractor license or for services as follows:

- (a) Initial application \$300;
- (b) Renewal application \$200;
- (c) Duplicate or revised license certificate \$25.

(2) A fire sprinkler contractor who does not submit a renewal application on or prior to the expiration date of the license shall pay a late fee of \$300 in addition to the license renewal fee.

(3) The State Fire Marshal shall collect the fees, keep all records of fees paid, and pay all fees collected to the General Fund of the State.

.05 Denial, Suspension, and Revocation of Applications and Licenses.

A. The State Fire Marshal may deny a license to an applicant, reprimand a licensee, or suspend or revoke a fire sprinkler contractor license if the applicant or licensee:

(1) Willfully makes any false statement or misrepresentation in an initial or renewal license application;

(2) Assists a person in fraudulently or deceptively obtaining, or attempting to obtain, a license;

(3) Fails to satisfy or maintain any of the requirements set forth in Regulation .04 of this chapter;

(4) While unlicensed, performs fire sprinkler work that requires a license under this chapter;(5) Signs or affixes the licensee's seal to any plan, print, specification, or report that has not been prepared by the licensee, either personally or under the licensee's immediate supervision;

(6) Violates COMAR 29.06.01 or any other regulation adopted by the State Fire Prevention Commission (by the fire sprinkler contractor or any employee of the fire sprinkler contractor); or

(7) Is convicted of any felony or misdemeanor violation of the State Fire Code or the fire code of any other state or the District of Columbia (by the fire sprinkler contractor or applicant, or any employee of the fire sprinkler contractor or applicant).

B. In determining whether the criminal conviction may serve as the basis for denial, suspension, revocation, or the issuance of a reprimand, the State Fire Marshal shall consider the following factors:

(1) The nature of the crime;

(2) The relationship of the crime to the activities authorized by the license;

(3) The relevance of the conviction to the fitness and qualification of the applicant or licensee to perform work authorized by the license;

(4) Any other crimes of which the applicant or licensee has been convicted;

(5) The length of time since the conviction; and

(6) The conduct of the applicant or licensee before and after the conviction.

.06 Hearings for Denied, Suspended, and Revoked Applications and Licenses.

A. Except as provided in Regulation .07 of this chapter, and before any action is taken under Regulation .05 of this chapter, the State Fire Marshal shall mail to the applicant or fire sprinkler contractor at the last known address of the applicant or fire sprinkler contractor written notice stating:

(1) The basis for the contemplated action; and

(2) That the applicant or fire sprinkler contractor may request a hearing before the State Fire Prevention Commission by mailing or delivering a written request to the Commission within 20 days of the date of the written notice.

B. If an applicant or fire sprinkler contractor requests a hearing, the hearing shall be conducted by the State Fire Prevention Commission in accordance with COMAR 29.06.02.

C. Except as provided in Regulation .07 of this chapter, the State Fire Marshal may not act to deny, suspend, revoke, or reprimand until after the decision of the State Fire Prevention Commission or until after the time for requesting a hearing has expired.

.07 Summary Suspension.

A. The State Fire Marshal may order summarily the suspension of a license if the State Fire Marshal finds that the public health, safety, or welfare imperatively requires emergency action.

B. The State Fire Marshal shall promptly give the fire sprinkler contractor/licensee:

(1) Written notice of the suspension, the finding, and the reasons that support the finding; and

(2) An opportunity for a hearing before the State Fire Marshal.

.08 Appellate Procedure.

A person aggrieved by a final decision of the State Fire Prevention Commission is entitled to judicial review, as provided in State Government Article, Title 10, Subtitle 2, Annotated Code of Maryland.

.09 Penalties.

A. Unless otherwise exempt, a person may not inspect, test, perform maintenance on, install, repair, modify, or lay out any fire sprinkler system in a residential or commercial building in the State without first obtaining the appropriate license required under this chapter.

B. A person who violates any provision of this chapter is guilty of a misdemeanor and, upon conviction, is subject to a fine of \$1,000 or imprisonment for not more than 10 days, or both.

TITLE 29 DEPARTMENT OF STATE POLICE SUBTITLE 06 FIRE PREVENTION COMMISSION CHAPTER 06 FRESH CUT AND LIVE TREE FIRE SAFETY REGULATIONS Authority: Public Safety Article §6-206 Annotated Code of Maryland REPEALED - JANUARY 1, 2010

TITLE 29 DEPARTMENT OF STATE POLICE SUBTITLE 06 FIRE PREVENTION COMMISSION CHAPTER 07 GROUND BASED SPARKLING DEVICES Authority: Public Safety Article, §§6-206 and 10-109 Annotated Code of Maryland (Amended Effective January 1, 2013)

.01 Purpose.

This chapter establishes minimum requirements for the wholesale, retail sale, and distribution of ground-based sparkling devices.

.02 Application and Scope.

A. This chapter applies to the wholesale, retail sale, and distribution of ground-based sparkling devices.

B. This chapter does not apply to a municipal corporation or county which has adopted more stringent regulations.

.03 Definitions.

A. In this chapter, the following terms have the meanings indicated.

B. Terms Defined.

(1) "Class C mercantile occupancy" means a mercantile occupancy of not more than 3,000 square feet gross area used for sales purposes on one story only, excluding mezzanines.

(2) "Ground-based sparkling device" means a device that is:

(a) Nonaerial;

(b) Nonexplosive;

(c) Labeled in accordance with the requirements of the U.S. Consumer Products Safety Commission; and

(d) Considered consumer fireworks as defined in NFPA 1 Fire Code as incorporated by reference in COMAR 29.06.01.

(3) "Open-air mercantile operation" means an operation conducted outside of all structures, with the operations area devoid of all walls and roofs except for small, individual, weather canopies.

(4) "Prepackaged ground-based sparkling device merchandise" means ground-based sparkling device items or groups of ground-based sparkling device items that have been packaged by the manufacturer or distributor before they are offered for sale to the consumer.

.04 Registration of Distributors and Wholesalers.

A. A distributor or wholesaler of sparklers or sparkling devices that intends to conduct business in the State, or sells, ships, or assigns for sale in the State the products of the distributor or wholesaler, shall register annually with the Office of the State Fire Marshal on forms prescribed by the State Fire Marshal.

B. Registration forms may be obtained at the Office of the State Fire Marshal Headquarters, 1201 Reisterstown Road, Building C, Pikesville, MD 21208 and at State Fire Marshal installations throughout the State.

C. Completed registration forms and a nonrefundable annual fee of \$750 shall be forwarded to the Office of the State Fire Marshal Headquarters.

D. Upon confirmation of registration, the registrant shall submit to the Office of the State Fire Marshal a list of all retail sales facilities located in the State receiving ground-based sparkling devices for sale to the general public and the locations of the facilities.

.05 Sales and Storage of Ground-Based Sparkling Devices.

A. Wholesalers and distributors of ground-based sparkling devices shall comply with the permits and approvals requirements and Chapter 65 "Explosives, Fireworks, and Model Rocketry" of NFPA 1 Fire Code as incorporated by reference in COMAR 29.06.01, unless otherwise modified by this chapter.

B. Ground-based sparkling devices may be sold or distributed in any of the following buildings or structures:

(1) Permanent buildings or structures constructed in accordance with the codes enforced by the authority having jurisdiction;

(2) Tents, canopies, or temporary membrane structures complying with NFPA 1 Fire Code as incorporated by reference in COMAR 29.06.01;

(3) Temporary structures measuring 800 square feet or less, constructed in accordance with this chapter; and

(4) Temporary ground-based sparkling device sales or distribution stands greater than 800 square feet in area which meet the requirements for a permanent structure.

C. All storage of ground-based sparkling devices:

(1) Shall be secured to prevent unauthorized access by the public;

(2) May not be located in direct sunlight; and

(3) May not exceed 5 percent of the basement floor area if located in a basement.

D. Ground-based sparkling devices sales and distribution facilities may not be located in basements.

.06 Quantities.

A. Except for permanent buildings and structures used exclusively for sale and distribution of ground-based sparkling devices, permanent buildings and structures may not have more than 5 percent of their gross sales or distribution floor area for ground-based sparkling devices display.

B. Open-air mercantile operations may not exceed:

(1) 200 pounds pyrotechnic composition; or

(2) If the pyrotechnic composition weight is not known, 800 pounds gross weight.

.07 Displays.

A. All ground-based sparkling devices merchandise offered for sale or distribution shall be prepackaged with a packaging arrangement which completely encapsulates the ground-based sparkling device item or items with paperboard, cardboard, plastic wrap, or similar materials or combinations of materials. The encapsulation shall ensure that an individual must puncture, tear, unseal, or break open the package, or otherwise damage or destroy the packaging materials in order to gain access to, and directly handle, each individual ground-based sparkling

device item to expose its fuse. Exceptions allowed in Chapter 65 "Explosives, Fireworks, and Model Rocketry" of NFPA 1 Fire Code as incorporated by reference in COMAR 29.06.01 are not permitted.

B. A display may not exceed 3,000 square feet unless the building or structure in which it is located is protected throughout by an approved automatic sprinkler system.

C. Height and Clearance. Ground-based sparkling devices on display or located on shelves, counters, or other fixtures may only be displayed with at least an 18-inch clearance from the ceiling and in temporary sales or distribution stands where the interior is not accessible to the general public, not higher than 8 feet from the floor surface.

.08 Fire Protection.

Portable fire extinguishers shall be installed as required for extra-hazard occupancy protection and shall comply with NFPA 1 Fire Code as incorporated by reference in COMAR 29.06.01.

.09 Means of Egress.

A. Means of egress in ground-based sparkling devices sales or distribution facilities shall comply with the requirements of NFPA 101 Life Safety Code as incorporated by reference in COMAR 29.06.01, unless otherwise modified by this regulation.

B. Means of egress in tents and membrane structures used for the sales or distribution of ground-based sparkling devices shall comply with NFPA 101 Life Safety Code as incorporated by reference in COMAR 29.06.01 and NFPA 102 Standard for Grandstands, Folding and Telescopic Seating, Tents, and Membrane Structures, unless otherwise modified by this regulation.

C. An approved fire safety and evacuation plan shall:

- (1) Be in writing;
- (2) Be maintained current; and

(3) Be posted in a conspicuous location that is accessible to the public as well as to persons employed or otherwise working in the facility.

D. Exit openings from tents shall have a clear opening width of at least 44 inches.

.10 Sources of Ignition.

Electrical wiring shall be in accordance with NFPA 1 Fire Code as incorporated by reference in COMAR 29.06.01.

.11 (Repealed)

.12 Temporary Heating Sources.

Temporary heating units shall be listed by a testing laboratory approved by the Office of the State Fire Marshal and used in accordance with their listing.

.13 Generators.

A. Scope. This regulation does not limit the type and quantity of fuel for generators and their fuel storage located not less than 50 feet from the exterior of the sales or distribution facility.

B. Generators using flammable or combustible liquid or gas fuels supplying power to groundbased sparkling devices sales or distribution facilities may not be located less than 20 feet from the exterior of the sales or distribution facility.

C. Combustible and flammable liquid generator fuel may not:

- (1) Exceed 5 gallons; or
- (2) Be stored less than 20 feet from the exterior of a sales or distribution facility.
- D. Flammable gas generator fuel may not:
 - (1) Exceed 20 pounds; or
 - (2) Be stored less than 20 feet from the exterior of a sales or distribution facility.

.14 Personnel.

A. At least one individual 18 years old or older shall be:

- (1) Present at all times in sales and distribution facilities during the hours of sale and distribution to the public; and
- (2) Responsible for supervision of the facility and its operation.

B. All personnel handling ground-based sparkling devices shall be 16 years old or older.

C. All personnel handling ground-based sparkling devices shall receive safety training related to the performance of their duties. Training shall include, but not be limited to, safe handling instructions, emergency procedures, and the use of portable fire extinguishers.

D. The distributor shall provide detailed safe handling instruction guidelines for sales and distribution personnel with all packing information for ground-based sparkling devices.

E. The distributor shall provide the retailer with a list of ground-based sparkling devices approved for sale by the Office of the State Fire Marshal.

F. Personnel may not sell ground-based sparkling devices to a person younger than 16 years old as set forth in Public Safety Article, §10-112, Annotated Code of Maryland.

.15 Signs.

A. In facilities used exclusively for the sale or distribution of ground-based sparkling devices, a sign reading "PERSONS UNDER 16 MUST BE ACCOMPANIED BY, AND UNDER THE SUPERVISION OF, A RESPONSIBLE PERSON AT LEAST 18 YEARS OLD" shall be conspicuously posted in letters not less than 1 inch high, on a contrasting background, at each entrance to the sales or distribution facility to which the general public has access to the interior.

B. Where not otherwise required by local or state laws, ordinances, or regulations, a sign reading "NO GROUND-BASED SPARKLING DEVICE SALES OR DISTRIBUTION TO PERSONS UNDER 16 YEARS OLD. PHOTO I.D. REQUIRED" shall be conspicuously posted in letters not less than 1 inch high at:

(1) Each entrance of the sales or distribution facility or in the vicinity of the ground-based sparkling device sales or distribution display; and

(2) The point of sale or distribution.

C. At least one sign reading "NO SMOKING OR OPEN FLAME DEVICES WITHIN 50 FEET", in letters at least 2-inches high on a contrasting background, shall be conspicuously posted at each entrance or within 10 feet of every aisle directly serving the ground-based sparkling device sale or distribution display area in the facility.

D. At least one sign reading "NO GROUND-BASED SPARKLING DEVICE DISCHARGE WITHIN 300 FEET", in letters at least 2-inches high on a contrasting background, shall be conspicuously posted in the vicinity of the ground-based sparkling device sales or distribution display, or as otherwise required by the authority having jurisdiction.

.16 (Repealed)

.17 Penalties.

A person who violates any provision of this chapter is guilty of a misdemeanor and, upon conviction, is subject to a fine of \$1,000, imprisonment for not more than 10 days, or both, as set forth in Public Safety Article, §6-601, Annotated Code of Maryland.

APPENDIX H

CADD STANDARDS MANUAL







Maryland Aviation Administration

Office of Design & Construction

CADD STANDARDS MANUAL

Version 2014.0

January 2014





PREFACE

This standard is updated and maintained by the Maryland Aviation Administration (MAA), Office of Design and Construction, Division of Engineering. It is based on the U. S. National CAD Standard with adjustments necessary to meet MAA needs. These standards are intended to assist in the production of uniform engineering documents, and provide efficient and effective means for management and technical data control.

This standard provides:

- a) Drawing practices for the preparation of architectural, engineering and space allocation drawings.
- b) Definitions and examples of the types of facility drawings to be prepared by and for the MAA.
- c) Guidelines for the creation of title and index sheets for drawings.
- d) Numbering, coding and identification procedures for drawings, associated lists and documents referenced.
- e) Practices applicable to Computer Aided Design and Drafting (CADD).

Changes from the previous version of this standard focus on:

- a) Additional layer definitions required to support the needs of MAA's Runway Safety Area (RSA) Program.
- b) Synchronization with updates to MAA's GIS Data Standard.
- c) Adherence with FAA Airports GIS Program requirements.
- d) Reference to MAA's policy with regard to the handling of Sensitive Security Information (SSI).
- e) Updated file and drawing naming conventions.
- f) Adding attribute information to features.
- g) Topological considerations for CADD data development.

This manual is a living document and MAA will update it to incorporate future engineering drawing practices. The users of this manual are encouraged to suggest revisions or additions to the manual.

Send your comments and suggestions to:

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CADD Standards Manual for the Maryland Aviation Administration Version 2014.0, January 2014

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1.0 SCOPE

This manual outlines the requirements for the delivery of Computer Aided Design and Drafting (CADD) data files and associated drawings files to the Maryland Aviation Administration (MAA) by its consultants. This manual establishes standard layers, title blocks, file names, line types and other conventions to be applied to all CADD files delivered to, used by, or developed by MAA. This manual does not define design and drafting procedures for consultants to follow when developing files that are compliant with this standard, but does provide requirements that must be met in the resulting product. This manual also covers standard naming, object properties, delivery format and plotting. Standard naming and delivery format will allow for efficient storage and retrieval of files. Standard layer naming facilitates sharing of information between drawings and better control of drawing objects. Standard object properties will help provide uniform appearance to CADD drawings. Standard plot settings will help overcome problems associated with producing similar looking plots from different plotters.

This document is made up of multiple parts, the first part up to and including Section 4.0 Drawing Requirements, addresses MAA's requirements for construction drawings, installation permits, building permits. The second part, Section 5.0 addresses MAA's requirements specific to space allocation data. Section 6.0 presents the requirements for Electronic Deliverables.

1.1 Standard Definition

MAA has implemented a series of standards, , applications, policies, procedures and a spatial data repository. These serve as a central catalog and repository for engineering information used by MAA. This data is used within applications as well as other MAA systems that require this type of data. It also provides a structured workflow and a means of cataloging, archiving and retrieving project documents and information.

This standard prescribes general requirements for the preparation of and revision to architectural, engineering and space allocation drawings that are prepared by and for the MAA.

1.2 Document Classification

This standard shall apply, but not be limited, to the following drawing types regardless of source:

- a) Construction drawings for new and existing facilities
- b) Installation permit drawings
- c) Building permit drawings
- d) Space Allocation drawings
- e) Design, planning and record drawings

1.3 Manual Revisions

Where MAA CADD Standards do not contain the required detail for the work to be performed by the consultant or sub-consultant, additions or revisions to the standards shall be transmitted by the consultant or sub-consultant to the MAA Project Engineer for approval. All issued addenda will become part of the project-specific CADD standards. This manual will be subject to revision in response to changes in technology and by the incorporation of changes to support consultant requirements at MAA's discretion.

1.4 Software Requirements

The MAA requires that all CADD files be in AutoCAD DWG format, the version number to be specified by the MAA Project Engineer and selected from the Approved Software Lists provided in this section. The standards defined in this manual are specifically for AutoCAD environments. Consultants and sub-consultants that do not use AutoCAD are responsible for translating drawings into an AutoCAD DWG format prior to submittal. It is the

consultant or sub-consultant's responsibility to ensure that there is no degradation of the accuracy or content of the data in this translation process.

1.4.1 Approved Software,

The Administration requires the submission of AutoCAD DWG files that are in AutoCAD 2010 file format or earlier. Consultants and subconsultants may choose to use one or more products that provide additional functionality for specific vertical markets, so long as the DWG drawings delivered:

- 1. Comply with the Autodesk file format referenced
- 2. Only contain standard AutoCAD entities such as lines, polylines, circles, arcs, blocks, text, and dimensions
- 3. Have all elements within the DWG files comply with the MAA CAD Standards

These include AutoCAD-based products (such as AutoCAD Architecture, AutoCAD Civil 3D, AutoCAD Map 3D, and AutoCAD MEP) and non-AutoCAD-based products (such as Autodesk Revit and Autodesk Inventor) that generate certified DWG compliant files. Custom objects in the DWG files that are specific to these products must be converted to standard AutoCAD entities before submitting. All DWG submittals must be prepared utilizing the eTransmit functionality.

Electronic/computer files used to produce all engineering drawings and deliverables (such as BIM Models, etc.) may be requested by MAA.

2.0 APPLICABLE STANDARDS AND PUBLICATIONS

When generating CADD documents the following standards and publications should be referenced for guidance.

2.1 MAA Standards Manuals and Applications

This manual is to be used in conjunction with:

- MAA's Design Standards Manual
- MAA's GIS Data Standard, which includes a crosswalk between approved CADD and GIS layers
- MAA GIS Data Standard Utilities Supplement
- MAA Data Quality Standard
- MAA Data Security Standard
- MAA Naming, Identification & Addressing Standard
- MAA AIRPortal
 - AIRPortal provides access and reference to the most current MAA documentation.
 - The Designer's Tools Document Library provide access to the most current Standard Borders, Title Blocks and Index Sheets
 - From within the MAA internal network (intranet) the URL for AIRPortal is <u>http://airportal</u> (user account required)
 - From the internet, the URL for AIRPortal is <u>https://www.airportal.maa.maryland.gov</u> (user account required)

2.2 Government Documents

- NAS-SS-1000 Vol. 6 Facility Requirements for the National Airspace System
- FAA 7350.6 Location Identifiers
- FAA FSEP Facilities, Services and Equipment Profile Orders
- DOT Order 1360.6 Graphic Standards
- FAA Order 1000.15 Glossary
- FAA Order 7340.1 Contractions
- FAA AC 150/5300-16A "General Guidance and Specifications for Aeronautical Surveys: Establishment of Geodetic Control and Submission to the National Geodetic Survey", Sept. 15, 2007

- FAA AC 150/5300-17C "Standards for Using Remote Sensing Technologies in Airport Surveys", Sept. 30, 2011
- FAA AC 150/5300-18B "General Guidance and Specifications for Aeronautical Surveys: Airport Survey Data Collection and Geographic Information System Standards", May 21, 2009

2.3 Commercial Documents

- ANSI/AWS A2.4 Symbols for Welding & Nondestructive Testing
- ANSI/AWS A3.0 Welding Terms and Definitions
- ANSI B1.1 Unified Screw Threads
- ANSI/1EEE 2.16 Reference Designations for Electrical and Electronics Parts and Equipment
- ANSI/1EEE 91 Graphic Symbols for Logic Functions
- ANSI Y1.1 Abbreviations for use on Drawings and Text
- ANSI Y14.1 Drawing Sheet Size and Format
- ANSI Y14.2 Line Conventions and Lettering
- ANSI Y14.5 Dimensioning and Tolerance
- ANSI Y14.6 Screw Thread Representation
- ANSI Y14.7.1 Gear Drawing Standards Part 1 for Spur, Helical, Double Helical and Rack
- ANSI Y14.7.2 Gear and Spline Drawing Standards Part 2 - Bevel and Hypoid Gears
- ANSI Y14.13 Mechanical Spring Representation

- ANSI Y14.15 Electrical and Electronics Diagrams
- ANSI Y14.15 Interconnection Diagrams
- ANSI Y14.17 Fluid Power Diagrams
- ANSI Y14.26.3 Dictionary of Terms for Computer-Aided Preparation of Product Definition Data
- ANSI Y32.2 Graphic Symbols for Electrical and Electronic Diagrams
- ANSI Y32.4 Graphic Symbols for Plumbing Fixture for Diagram used in Architecture & Building Construction
- ANSI Y 32.9 Graphic Symbols for Electrical Wiring and Layout Diagrams Used in Architecture and Building Construction United States National CAD Standard, Version 5
- ASME-Y14.38M ASME Drawing & Terminology Standards

2.4 Order of Precedence

In the event of conflict between the documents referenced in Sections 2.2 and 2.3 and the contents of this manual, the contents of this manual shall be considered the superseding requirement.

3.0 GENERAL

3.1 Drawing Definitions

The following sections define general A/E/C drawing types.

3.1.1 Engineering Drawings

Engineering drawings are formal representations used to convey the physical and functional end product design and/or installation requirements of an item. They may include pictorial, graphical, schematic or textual presentations.

3.1.2 Construction Drawings

Construction drawings are engineering drawings, which show the design of buildings, structures, or the related construction, and are normally associated with the architectural, construction and civil engineering operations. Construction drawings establish all the interrelated elements of the pertinent services, equipment, utilities, and other engineering skills.

3.1.3 Installation Drawings

Installation drawings are engineering drawings, which show the installation requirements of equipment in facilities.

3.1.4 Space Allocation Drawings

Space allocation drawings are used to provide an accurate record of existing space, identify tenants and square footages of occupancy.

3.2 MAA AIRPortal Designer's Tools

As a consultant performing services for MAA, it is assumed that individuals providing engineering services for MAA have an account to AIRPortal, MAA's system of record. There are multiple applications and resources available through AIRPortal. One such resource is the Designer's Tools document library. In the Designer Tools library, consultants and sub-consultants have access to the most current resources to perform their services in order to prepare MAA-compliant products. Examples are:

- A/E/C CAD Standard Linetypes
- A/E/C CAD Standard Symbols
- Logos
- MAA Additional Topographic Symbols
- MAA CADD Manual
- MAA Signage Symbols
- Plot Styles (ctb)
- Standard Borders
- Standard Title Sheets
- Layer Template X000-Geom.dwg

3.3 Glossary

The following are definitions of terms used in this standard:

AutoCAD	AutoCAD is a full-featured CADD tool produced by Autodesk Inc. that handle both 2D and 3D (with additional add on) design. The native file format is DWC and it reads and writes DXF files.				
CADD	Computer Aided Design & Drafting. Graphic software used by engineers and drafters to create and modify drawings in 2D and 3D.				
Drawing Sheet Format	The sheet boundary lines, and title block geometry used to record administrative information about a CADD file.				
Drawing Sheet Sizes	Standard sheet sizes are determined by the American National Standards Institute. Alphabetic characters name sheet sizes such as D, E, and F.				
DWG	AutoCAD's native CADD file format.				
DXF	AutoCAD drawing exchange format for CADD files.				
Model File	Model files are to be used to describe the facility's physical layout and components. This includes the building's walls, doors, windows, structural system, mechanical system, etc. All model files are drawn at full size (1-to-1). Model files can be 2D or 3D.				
Model Space	AutoCAD Model Space is where the user creates a 2D or 3D full size (1-to-1) drawing. Model file types are created in Model Space.				
Paper Space	AutoCAD Paper Space is where the user organizes different layouts for the purpose of plotting to an appropriate drawing scale through the use of viewports.				

Plot Stamp	Plots of CADD drawing files should include a plot stamp, which should include the file name and path, date, time and the user name.		
Project Copy	A project copy drawing is part of the project copy process, which manages concurrent design updates to a single released drawing.		
Raster	Digital image process producing lines made of rectangular dots. Examples of raster formats are TIFF, JPG, BMP, GIF, etc.		
Reference File	A CADD software capability that allows vector or raster files to be attached to sheet files and displayed, plotted, and (in the case of reference design files) used for construction purposes. This capability is generally used as a project organization tool to segregate the sources of project drawing files. Additionally, it allows designers to share drawing information electronically.		
Revised Drawing	A drawing that has been revised or modified after submission.		
Sheet File	Sheet files are to be used to assemble model files, text, title block and other information for plotting purposes. Each sheet file represents one plotted drawing. Generally, sheet files are plotted at 1-to-1 scale.		
SSI	Sensitive Security Information, as defined by the Code of Federal Regulations (49 CFR 1520)		
TIFF	Tagged Image File Format, a raster graphics format.		
Vector	Computer graphics comprised of mathematical representation of points, lines and other geometric entities.		
Workflow	Routing process for information or documentation to the users responsible for working on them.		
2D	Two Dimensional		
3D	Three Dimensional		
A/E/C	Architectural, Engineering and Construction		
AIA	American Institute of Architects		
ANSI	American National Standards Institute		
GIS	Geographical Information System		
CD-R	Recordable Compact disk		

3.4 Glossary of Acronyms for Use in Airport Documents

See Appendix 3 for additional aviation industry acronyms that should be used in drawings and documents submitted to MAA.

4.0 DRAWING REQUIREMENTS

4.1 Drawing Production

MAA requires that all CADD files be provided in AutoCAD DWG format in compliant with Section **1.4.1** *Approved Software, CADD*. The standards defined in this manual are specifically for AutoCAD environments. For those consultants and sub-consultants who do not use AutoCAD, it is their responsibility to ensure that files translated to AutoCAD adhere to these standards and that the quality of the data is not degraded in the translation process before delivery.

4.1.1 Drawing File Format

Electronic drawings shall be created and maintained in native AutoCAD vector file format (DWG). All drawings shall be void of duplicate entities. **The following should be avoided:**

- a) Translations between vector file formats (DWG and DGN).
- b) Delivery of Drawing Exchange Format (DXF) files, unless mandated by special requirement in this manual.
- c) Use of the following CADD entities:
 - doughnuts
 - segments
 - solids and traces
 - point entities
 - custom fonts

- patterns or line types or styles
- special characters such as nested blocks, nested or circular Xrefs (reference files)
- infinite lines
- zero length lines

4.1.2 Creation of CADD Files

All CADD drawing files should be created at full-scale (1-to-1). Drawing borders are referenced into paper space with insertion point 0, 0 and a scale of 1. Refer to Table 4-1, Scale Factor and Text Height Conversion Chart for standard engineering, architectural and mapping scale factors and text heights to be used in model space for full size drawings.

Plotted Scale	Scale Factor	Plotted Text Height			
1/8"=1'-0"	96	9.6"	12"	18"	24"
3/16"= 1'-0"	64	6.4"	8"	12"	16"
1/4"=1'-0"	48	4.8"	6"	9"	12"
3/8"=1'-0"	32	3.2"	4"	6"	8"
1/2"=1'-0"	24	2.4"	3"	4.5"	6"
3/4"=1'-0"	16	1.6"	2"	3"	4"
1"=1'-0"	12	1.2"	1.5"	2.25"	3"
1 1/2"=1'-0"	8	.8"	1"	1.5"	2"
3"=1'-0"	4	.4"	.5"	.75"	1"
6"=1'-0"	2	.2"	.25"	.375"	.5"
12"= 1'-0"	1	.1"	.125"	.1875"	.25"
1"=10'	120	1'	1.25'	1.875'	2.5625'
1"=20'-0"	240	2'	2.5'	3.75'	5'
1"=25'-0"	300	2.5'	3.125'	4.6875'	6.26'
1"=30'-0"	360	3'	3.75'	5.625'	7.5'
1"=50'-0"	600	5'	6.25'	9.375'	12.5'
1"=100'-0"	1200	10'	12.5'	18.75'	25.0'
1=10	10	1	1.25	1.875	2.5
1=20	20	2	2.5	3.75	5
1=30	30	3	3.75	5.625	7.5

Table 4-1, Scale Factor and Text Height Conversion Chart

4.1.2.1 Drawing Sheet Format

MAA-approved drawing formats include common drawing features such as boundary geometry, title block data, filename, pathname, and title block geometry.

The most current MAA-approved drawing formats, templates and seed files are stored in AIRPortal \rightarrow Designer Tools. Consultants and sub-consultants have access to the most current resources to perform their services compliant with MAA's current standards. Consultants are responsible to review what is on Designer Tools to ensure they are using the most current versions.

4.1.2.2 Drawing Size

The MAA standard drawing size is ANSI D (22" X 34") full size and ANSI B (11" X 17") half size. Other sizes are allowed only as needed. Drawing sheet size and margins must follow the specifications shown in Table 4-2, Standard Drawing Sizes. These margins are configured in the Standard Borders. Apply ANSI Y14.1 for any information not provided in this standard, but required on drawing sheet size.

Sizo				Margin		
	Size Vertical Hor	Vertical	Horizontal	Horizontal	Ver	tical
Designation			Horizontai	Left	Right	
В	11"	17"	0.25"	0.75"	0.25"	
D	22"	34"	0.50"	1.50"	0.50"	

Table 4-2, Standard Drawing Sizes

4.1.2.3 Sizing Drawing Formats for Scaled Drawings

Each feature shall be drawn in the CADD model file at full size (1:1). The data should be scaled to fit the desired paper size at the correct scale through a view port in paper space. This can be done in AutoCAD using the zoom command and entering *nXP* where *n* is the scale factor required and *XP* remains constant. Table 4-3 provides the necessary scale factors needed to calculate each reduced plot size.

Plot Scale	Drawing Area Size (H x W) *		Scale Factor nXP	
	B (9.5" x 13.25")	D (19" x 26.5")		
1/8"=1'-0"	76' x 106'	152' x 212'	0.0104XP	
3/16"= 1'- 0"	50.7' x 70.7'	101.3' x 141.3'	0.0156XP	
¹ / ₄ "=1'-0"	38' x 53'	76' x 106'	0.0208XP	Architectural L
3/8"=1'-0"	25' x 35'	50.7' x 70.7'	0.0312XP	┨ (└────
¹ / ₂ "=1'-0"	19' x 26.5'	38' x 53'	0.0416XP	
³ / ₄ "=1'-0"	12.7' x 17.7'	25.3' x 35.3'	0.0625XP	
1"=1'-0"	9.5' x 13'	19' x 26.5'	0.0833XP	
1 ½"=1'-0"	6' x 8.9'	12.7' x 17.7'	0.125XP	
3"=1'-0"	3' x 4.4'	6.3' x 8.8'	0.25XP	
6"=1'-0"	1.6' x 2.2'	3.2' x 4.4'	0.50XP	Decimal Units
12"=1'-0"	0.8' x 1.1'	1.6' x 2.2'	1XP	
1"=10'-0"	95' x 132.5'	190' x 265'	10XP	
1"=20'-0"	190' x 265'	380' x 530'	20XP	

1"=25'-0"	237.5' x 331'	475' x 662.5'	25XP
1"=30'-0"	285' x 397.5'	570' x 795'	30XP
1"=50'-0"	475' x 662.5'	950' x 1325'	50XP
1"=100'-0"	950' x 1325'	1900' x 2650'	100XP

* NOTE: The area for the title block, notes, legend and key plan have been deducted from the sheet total area.

Table 4-3, Sheet Sizes, Drawing Field, and Scale Factors Examples

4.1.3 Borders

Figure 4-1 shows the standard MAA border at the time of this publication. Figure 4-1 shows the title block portion of the MAA border. The bubble call-outs in Figure 4-2 refer to Table 4-4, where each item is described. Consultants should use the standard border sheet that is available AIRPortal \rightarrow Designer's Tools.

The standard border includes the following features:

- BorderTitle Block
- P.E. Stamp Box
- •
- Consultant ID Block
- Drawing Field
- NotesLegend
- Key Plan

- Graphic Scales
- North Arrow
- Plot Stamp (Full path name, User name, Date, Time)

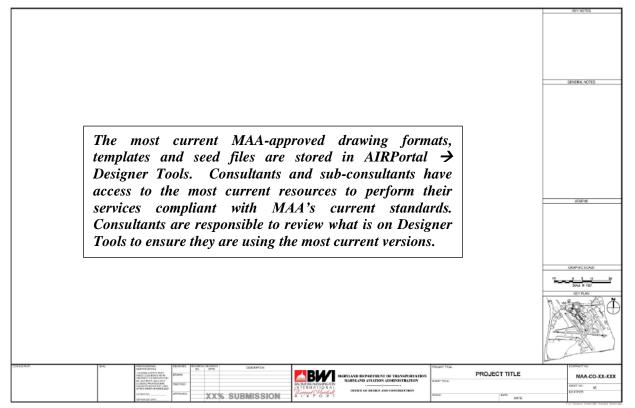


Figure 4-1, Standard Border

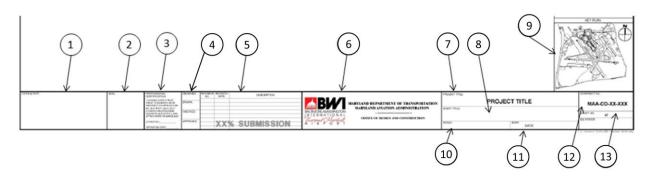


Figure 4-2, Title Block

All borders shall include the following information with the exception of the key plan, which applies to plan sheets only:

ITEM	BLOCK DESCRIPTION			
1	Consultant Name, Address, Logo			
2	Engineer's P.E. Stamp			
3	Engineer's Certification			
4	Initial Block			
5	Revision Date and Description Block			
6	Airport Logo and Name Block			
7	Project Title			
8	Sheet Title			
9	Key Plan			
10	Scale			
11	Date			
12	Contract Number			
13	Sheet Number			

Table 4-4, Drawing Title Block Descriptions

The following statement must be placed on all sheets that contain SSI as defined in the Code of Federal Regulations (49 CFR 1520). This statement should be placed in the area above the drawing title shown as item 6 in Figure 4-2 above. Individuals preparing or handling SSI, are required to read and abide by the terms and conditions in Section 2.2 of MAA's Design Standards, which define who can handle and how they should handle SSI.

Warning: This document contains Sensitive Security Information that is controlled under 49 CFR parts 15 and 1520. No part of this record may be disclosed to persons without a "need to know", as defined in 49 CFR parts 15 and 1520, except with the written permission of the Administrator of the Transportation Security Administration or the Secretary of Transportation. Unauthorized release may result in civil penalty or other action. For U.S. government agencies, public disclosure is governed by 5 U.S.C. 552 and 49 CFR parts 15 and 1520.

4.1.4 Title Sheets

Figure 4-3 below, shows the standard title sheets for projects at both BWI and Martin State Airport (MTN). Consultants should use the standard title sheet that is available in AIRPortal \rightarrow Designer's Tools.

The most current MAA-approved drawing formats, templates and seed files are stored in AIRPortal \rightarrow Designer Tools. Consultants and sub-consultants have access to the most current resources to perform their services compliant with MAA's current standards. Consultants are responsible to review what is on Designer Tools to ensure they are using the most current versions.

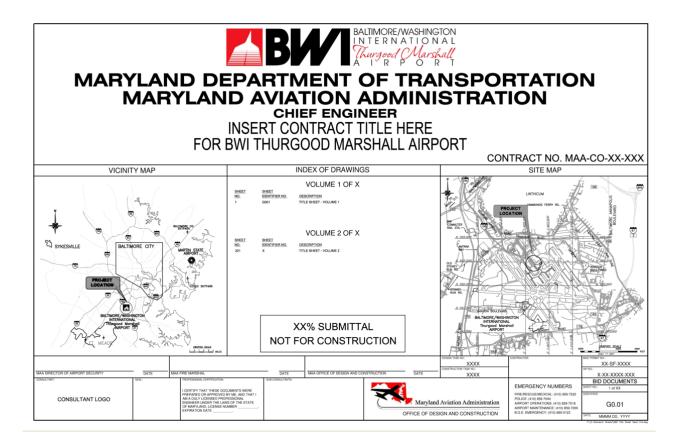
The following information will be included on all title/cover sheets:

- Airport Logo and Name
- Maryland Department of Transportation
- Maryland Aviation Administration
- Chief Engineer
- *MAA CONTRACT TITLE* (assigned by MAA)
- Contract No, MAA-CO-00-000 (assigned by MAA Office of Procurement)
- AE Design Task Number
- Construction Task Number (applicable to Comprehensive Construction Projects only)
- Submission Name (e.g. 30% Design, Bid Documents, Conformed, Record, etc.) and date
- Sensitive Security Information (SSI, as defined by 49 CFR 1520) statement as it appears below (applicable to document sets containing SSI).
- Vicinity Map and Site Map.
 - The site map should include gridlines that conform to the grid layout defined in the MAA Naming and Addressing Standard.
 - The combined extent of the area covered by all sheets provided should be clearly indicated on the site map.

- Consultant Name Block and Stamp Block
- Signature Blocks Including Signature Line and Date Line for:
 - Airport Security
 - Fire Marshall and
 - MAA Division of Facilities Design
- Drawing Index
 - Should additional space be required provide separate index sheet immediately behind cover sheet.
 - The comment '(contains SSI)' should be added after the title of any documents listed in the Index of Drawings that contain SSI.

The following statement must be placed on the title sheet of drawing sets that contain SSI as defined in the Code of Federal Regulations (49 CFR 1520).

Warning: This document contains Sensitive Security Information that is controlled under 49 CFR parts 15 and 1520. No part of this record may be disclosed to persons without a "need to know", as defined in 49 CFR parts 15 and 1520, except with the written permission of the Administrator of the Transportation Security Administration or the Secretary of Transportation. Unauthorized release may result in civil penalty or other action. For U.S. government agencies, public disclosure is governed by 5 U.S.C. 552 and 49 CFR parts 15 and 1520.



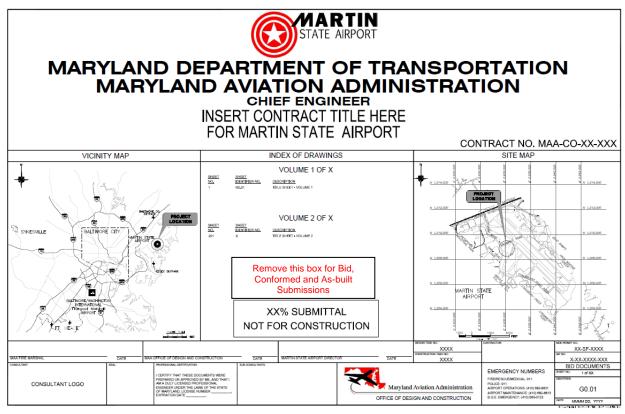


Figure 4-3, Title/Cover Sheet Layout Samples

Modifications to the standard cover sheet and border require prior approval of the Office of Design and Construction.

4.1.5 Drawing Numbering

The drawing sequence number for CADD drawing starts with an upper case letter specifying the discipline followed by a three digit sequential number, starting with 001 within each discipline code (i.e. C001, C002 ..., C00n; A001, A002 ... A00n). The discipline codes are listed below:

Discipline	Discipline	Discipline	Discipline	Discipline	Discipline
Code		Code		Code	
А	Architectural	G	General	Q	Equipment-Baggage
В	Geotechnical	Н	Hazardous Materials	R	Real Estate/Lease
С	Civil	Ι	Interiors	S	Structural
D	Demolition	L	Landscaping	Т	Telecommunication
E	Electrical	М	Mechanical	V	Surveying/Mapping
F	Fire Protection	Р	Plumbing	Z	Contractor/Shop Drawing

Table 4-5, Drawing Number Discipline Codes

4.1.6 Arrangement of Drawings

The drawings in a construction drawing set are listed by discipline in Table 4-6, Construction Drawing Set.

4.1.6.1 Construction Drawing Sets

The drawings in Table 4-6 are commonly used in identifying a complete set of drawings for the construction of a new facility. Drawing sets for the construction of facility modifications must consist of a subset of the drawings listed in this table. Demolition drawings may be submitted under the Demolition discipline or under another discipline. Construction drawing sets shall be arranged by discipline in the following order, although the exact placement of demolition drawings can vary by project.

DISCIPLINE	DRAWING CODE	DESCRIPTION
General	G	Cover, Index, Abbreviations, Symbols, Staging &
		Safety Plans
General	G	Security Plan
Real Estate/Lease	R	Property Boundaries And Legal Descriptions
Civil	С	Demolition
Civil	C	Legend
Civil	C	Site
Civil	C	Boring Log
Civil	C	Under Slab Drainage
Civil	C	Building Site Plan
Civil	C	Grading Plan
Civil	C	Utility Plan
Civil	C	Details, Elevations And Sections
Civil	C	Site Improvements
Civil	C	Layout, Grading, Draining and Landscaping
Civil	C	Structural Details
Demolition	D	Removal of Existing Construction
Hazardous Materials	Н	Hazardous Materials
Landscaping	L	Legend, Symbols and Abbreviations

DISCIPLINE	DRAWING CODE	DESCRIPTION	
Landscaping	L	Irrigation Plan	
Landscaping	L	Planting	
Landscaping	L	Irrigation and Planting Details	
Architectural	A	Legend, Symbols and Abbreviations	
Architectural	А	Floor Plan	
Architectural	A	Reflected Ceiling Plan	
Architectural	A	Roof Plan	
Architectural	A	Elevations	
Architectural	A	Sections	
Architectural	A	Details	
Architectural	A	Millwork	
Architectural	A	Equipment	
Architectural	А	Furniture	
Interiors	Ι	Interior Building Elements	
Structural	S	Legend, Symbols And Abbreviations	
Structural	S	Structural Foundation Plan	
Structural	S	Framing and Decking Plan	
Structural	S	Roof Framing Plan	
Structural	S	Structural Details	
Structural	S	Structural Steel Grounding	
Structural	S	Erection Drawings	
Mechanical	М	Legend, Symbols And Abbreviations	
Mechanical	М	Equipment Schedule	
Mechanical	М	Elevations	
Mechanical	М	Generator and Fan Room Plan	
Mechanical	М	Chiller Room Plan	
Mechanical	М	Mechanical Room Plan	
Mechanical	М	Roof Plan	
Mechanical	М	Sections and Details	
Mechanical	М	Details	
Mechanical	М	Hot and Cold Piping Diagrams	
Mechanical	М	Miscellaneous	
Mechanical	М	Steam Piping Systems	
Mechanical - HVAC	М	Under Floor Plan	
Mechanical - HVAC	М	Floor Plan (Room Area)	
Mechanical - HVAC	М	Ceiling Plan	
Baggage Handling	Q	General Notes, Legend and Abbreviations	
System			
Baggage Handling	Q	Floor Plans	
System			
Baggage Handling	Q	Enlarged Floor Plans	
System			
Baggage Handling System	Q	Sections	
Baggage Handling System	Q	Details	
Baggage Handling System	Q	Controls	

DISCIPLINE	DRAWING CODE	DESCRIPTION	
Plumbing	Р	Legend, Symbols and Abbreviations	
Plumbing	Р	Foundation Plan	
Plumbing	Р	Piping Plan	
Plumbing	Р	Riser Diagram	
Plumbing	Р	Sanitary Riser Diagram	
Plumbing	Р	Storm Riser Diagram	
Plumbing	Р	Roof Drain System	
Plumbing	Р	Details	
Electrical	E	Electrical Demolition	
Electrical	E	Legend, Symbols and Abbreviations	
Electrical	E	Single Line Diagrams	
Electrical	E	First Floor Lighting Plan	
Electrical	E	Power and Communications Plan	
Electrical	E	Grounding Plan	
Electrical	E	Security Plan	
Electrical	E	Equipment	
Electrical	E	Motor Control Schematics	
Electrical	E	Miscellaneous	
Electrical	E	Details	
Electrical	E	Panel Schedules	
Electrical	E	Airfield Electrical Duct Bank Plan and Profile	
Telecommunications	Т	Legend, Symbols And Abbreviations	
Telecommunications	Т	1st Floor Communications Plan	
Telecommunications	Т	Details	
Telecommunications	Т	Manhole and Cable Diagrams	
Fire Protection	F	Legend, Symbols And Abbreviations	
Fire Protection	F	Sprinkler System	
Fire Protection	F	Fire Pump Location Plan	
Fire Protection	F	Alarm Systems	
Fire Protection	F	Fire Fighting Equipment	
Fire Protection	F	Stand Pipe System	
Z-Contractor	Z	Shop Drawings	

Table 4-6, Construction Drawing Set

4.1.7 Typical Sheets and Layouts for Construction Drawing Sets

The following sections provide examples of drawing sheets that shall always be included in a drawing set.

4.1.7.1 Cover Sheet

See Figure 4-3, Title/Cover Sheet Layout Samples and AIRPortal \rightarrow Designer Tools for downloads.

4.1.7.2 Index Sheet

The index sheet shows a continuation of the drawing list from the title sheet, if required, all abbreviations used in the document set and a legend depicting all existing and proposed symbols. Reference contracts pertaining to the active task document are to be included in the provided attributed block. The consultant or sub-consultant should contact MAA's Office of Design and Construction to assist in identifying this list of reference contracts and to obtain copies of the documents from the reference contracts. A sample of each standard Index Sheet is available in AIRPortal \rightarrow Designer's Tools.

The most current MAA-approved drawing formats, templates and seed files are stored in AIRPortal \rightarrow Designer Tools. Consultants and sub-consultants have access to the most current resources to perform their services compliant with MAA's current standards. Consultants are responsible to review what is on Designer Tools to ensure they are using the most current versions.

An example index sheets is shown in Figure 4-4, Index Sheet. The columns shown are for illustration only and may be adjusted to accommodate more or less of one type of information.

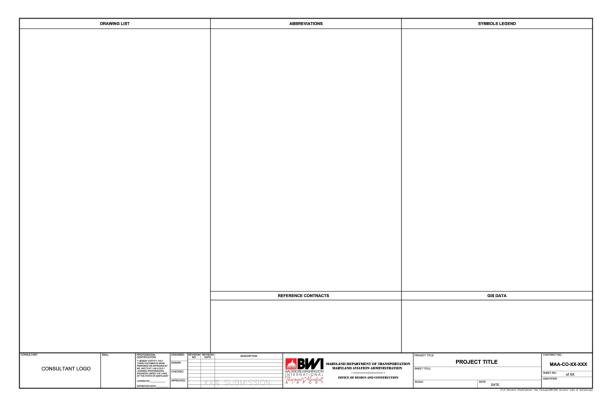


Figure 4-4, Index Sheet Example

4.1.7.3 Other Sheets

MAA has developed standard General Notes sheets for airside and landside construction projects. These are available through the MAA Design Standards publication. The remainder of the drawing sheets are discipline specific. To provide an example of all such sheets is beyond the intent of this standard. View and download files at AIRPortal \rightarrow Designer Tools.

4.1.8 MDOT/MAA Logo Art

MAA provides the following logos in electronic format for use in CADD documents. These are accessible through *MAA AIRPortal* \rightarrow *Designer's Tools*:

- MAA Logo
- BWI Logo
- Martin State Airport Logo

4.1.9 Layers

For layer naming conventions, MAA has adopted the *CADD LAYER GUIDELINES* of the National CAD Standard (NCS), Version 5. Layers commonly used by MAA are listed in Appendix 1. Additional names as defined by the NCS shall be used as needed, in a manner that is consistent with their definitions. No other layers shall be used without prior written permission from MAA.

4.1.9.1 Sheet File (Paper Space) Layer Assignment

A sheet file is synonymous with a single sheet or page of a plotted CADD drawing file. A sheet file is a selected view or portion of referenced model files within a border sheet. The addition of sheet-specific information (e.g., text, dimensions, and symbols) completes the construction of the document. Table 4-7, Common Sheet File Layers, outlines layers that will be common in all sheet files in a set of construction drawings:

General Layer Names	General Layer Descriptions	Color #
G-ANNO-DIMS	Dimensions and Leaders	5
G-ANNO-IDEN	Identification Tags: Floor Id. #s; Room #s; Door #s; hardware group; Window #s; Equipment Id. #s; Furniture #s; Tenant Identification; Area calculations; Occupant or employee names; Elevation Id. #s; Component Id. #s	7
G-ANNO-KEYN	Key Notes	7
G-ANNO-LEGN	Legends	4
G-ANNO-NOTE	Notes	7
G-ANNO-NPLT	Construction Lines, non-plotting information	8
G-ANNO-PATT	Cross-hatching, patterns, poche	5
G-ANNO-REDL	Redline Annotations	10
G-ANNO-REFR	Reference Files	7
G-ANNO-REVS	Revisions	4
G-ANNO-SCHD	Schedules	7
G-ANNO-SYMB	Miscellaneous Symbols	4
G-ANNO-TEXT	Miscellaneous text and callouts with associated leaders	7
G-ANNO-TITL	Drawing Component Titles, Detail Titles, Section Titles, Elevations	3
G-ANNO-TTLB	Border and title block information	2

Table 4-7, Common Sheet File Layers

4.1.9.2 Model File (Model Space) Layer Assignment

A model file contains the physical components or features that make up a building, facility, or site (e.g., columns, walls, windows, ductwork, piping, etc.). Both MAA and NCS layer names consist of a discipline designator, **a** major category and minor categories. Once the discipline designator, major and minor categories have been determined, a final portion of the layer name indicating status may be added. This describes to the user what the disposition is of the entities on that layer, and helps to determine if that layer should or should not be shown on a particular drawing sheet.

MAA prefers to use a four-letter abbreviation for the status category to stay consistent with the Major and Minor group names, and provide a more intuitive description for the status. Below is a list of common status categories:

PHS# Phase of project (#=1-9)

Existing item to be demolished Existing item to remain Future work New work Temporary work Not in contract
Not in contract
Existing item to be relocated Abandoned item

4.1.10 Text Styles/Fonts

The MAA standard fonts include "out of the box" fonts that ship with every installment of *AutoCAD* as well as Windows true type fonts. Any font not meeting this criterion must be submitted to the MAA Project Engineer for approval and inclusion in the project specific standard *Font Library* (.shx or .ttf) file.

All *Text Styles* shall use the naming convention, (font name) (_) (text height in decimal equivalent of inches) e.g. *ROMANS_120*

4.1.11 Text Justification

All annotation text shall be left justified.

4.1.12 Text Heights

The following text heights must be used on all drawings to ensure uniformity in the contract documents.

ENTITY	PLOTTED TEXT HEIGHT (IN INCHES)
Titles	0.25
Subtitles	0.175
Normal Text	0.125 or 0.1
Notes, callouts etc.	0.125 or 0.1

Table 4-8, Text Heights

4.1.13 Line Widths and Colors

In AutoCAD, each color represents a different line width when plotted. Although other methods exist, this is the accepted MAA Standard. It is preferable to control the line widths in a drawing by assigning a specific color to the layer, instead of assigning a specific color to a single element/entity (line, polyline, arc, etc.). The color of a single element/entity should be set to "BYLAYER", so the layer's color setting can be used to globally change all elements/entities on that layer, both in the model files and sheet files.

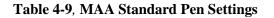
Each "sheet file" submitted to the MAA, must be able to be plotted in monochrome and still be legible with distinctions between lines types and other symbology readily apparent. To achieve this, the MAA Standard Pen Settings in Table 4-9, MAA Standard Pen Settings, should be used. Pen widths are specified for only the AutoCAD index colors. Colors 1-9 plot as solid lines, and colors 250-254 plot as screened lines. There is a pen table for both full size drawings (B) and half-size drawings (D):

MAA Full Size.ctb

AutoCAD Color No.	Plotted Pen Width in Inches	Plotted Color	Plotted Line Width		
1	0.010	Black		1)	
2	0.012	Black			
3	0.014	Black	81 <u></u>		
4	0.020	Black	5. 8. 		0
5	0.024	Black	1	1 >	Solid Lineweights
6	0.031	Black	1	1 (
7	0.007	Black			
8	0.005	Black			
9	0.047	Black	;i	1)	
250	0.010	Dark Grey		1	
251	0.010	Dark Grey	<u></u>		Screened
252	0.010	Medium Grey			
253	0.010	Light Grey] [Lineweights
254	0.010	Light Grey]]	

MAA Half Size.ctb

AutoCAD Color No.	Plotted Pen Width in Inches	Plotted Color	Plotted Line Width	
1	0.005	Black		1)
2	0.006	Black		
3	0.007	Black		
4	0.010	Black	5	
5	0.012	Black		
6	0.015	Black	6 <u></u>	Lineweights
7	0.004	Black		
8	0.003	Black		
9	0.024	Black	§	1)
250	0.010	Dark Grey]]
251	0.010	Dark Grey		
252	0.010	Medium Grey		Screened
253	0.010	Light Grey		Lineweights
254	0.010	Light Grey]]



<u>4.1.14 Line Types</u>

The MAA standard linetypes include "out of the box" linetypes (these are linetypes that ship with every installment of AutoCAD) and linetypes defined in the NCS. Linetypes for use on MAA documents are available on AIRPortal \rightarrow Designer's Tools.

The most current MAA-approved drawing formats, templates and seed files are stored in AIRPortal \rightarrow Designer Tools. Consultants and sub-consultants have access to the most current resources to perform their services compliant with MAA's current standards. Consultants are

responsible to review what is on Designer Tools to ensure they are using the most current versions.

Any new linetypes created by a consultant must be submitted to the MAA Project Engineer for approval and inclusion in the project specific standard linetype (.lin) file.

It is preferable to control the linetypes in a drawing by assigning a specific linetype to the layer, instead of assigning a specific linetype to a single element/entity (line, polyline, arc, etc.). The linetype of a single element/entity should be set to "BYLAYER", so the layer's linetype settings can be used to globally change all elements/entities on that layer, both in the model files and sheet files.

4.1.15 Units

The units for all A/E/C drawings shall be U.S. Survey Foot (1200/3937 meters), inches and fractions of an inch, with the smallest fraction normally being 1/8" or as decimals. Dimensions of less than a foot must be shown in inches or fractions of inches, or as decimals inches.

4.1.16 Working Units, Coordinate Systems and Drawing Origins

Units should be selected according to the discipline of the drawing, architectural (feet and inches), engineering (feet and tenths), or decimal. References to feet in this document are specifically to the U.S. Survey Foot (1200/3937 meters).

All topography and topography related design including structural and architectural building footprints shall be submitted to, maintained by, and provided by MAA in the Maryland Coordinate System of 1987, also referred to as Maryland State Plane. Following are the parameters of the Maryland Coordinate System of 1987:

Map Projection:	Lambert conic conformal projection of the	
	geodetic reference system of 1980	
Horizontal Datum:	NAD83 (2001)	
Latitude of Origin*:	37°40 North latitude	
Central Meridian:	77°00' West longitude	
Standard Parallel 1:	38°18' North latitude	
Standard Parallel 2:	39°27' North latitude	
False Easting*:	400,000 meters	
False Northing*:	0 meters	
Latitude**:	37°34' 38.14264" N	
Longitude**:	81°31' 45.07877" W	
-		
* at the 77th meridian		

* at the 77th meridian ** at artificial origin (0,0)

Vertical spatial data shall be submitted to, maintained by, and provided by MAA based on the National Geodetic Vertical Datum of 1988 (NGVD88).

The lower left corner of all other drawings should be positioned at the Cartesian coordinate point of 0, 0, 0.

4.1.17 Externally Referenced Files

Externally referenced files are related DWGs that are referenced to the current (aka host) DWG to provide additional content. Referenced files can include title/borders, base map information, or other details not included but related to the primary drawing. Figure 4-5, Externally Referenced Files Example, illustrates the concept of how a sheet file drawing is composed using model/design and informational xref files.

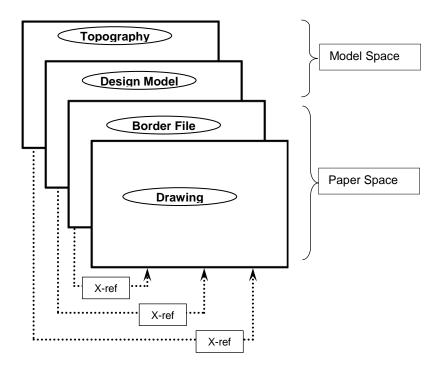


Figure 4-5, Externally Referenced Files Example

4.1.17.1 Specific Use of AutoCAD Reference Files

All files referenced in the host file shall be included in the final drawing package. AutoCAD users shall use the "Bind" option to make xrefs and their dependent objects a part of the current drawing. Nested or circular xref files are not allowed.

Reference files shall be added to all drawings using no saved paths. These paths do not include the drive letter and reflect the location of the reference file as it relates to the active file (the reference file should be in the same folder/directory as the active file).

Reference files shall be added on a specific layer and the prefix for that layer shall be "G-ANNO-REFR-" followed by the reference file name.

4.1.18 Patterning

The patterns (hatching) to be used on MAA drawings include only "out of the box" hatch patterns; customized patterns must not be used.

4.1.19 Dimensioning

Refer to the ANSI Y14.5M for additional dimensioning information not provided in this standard.

The distance from the object for the first dimension is 1/2" (0.5") and each additional dimension is 3/8" (0.375") further apart. See Figure 4-6, Dimension Directions and Spacing Example, and Figure 4-7, Dimension and Extension Line Spacing Example for dimension examples.

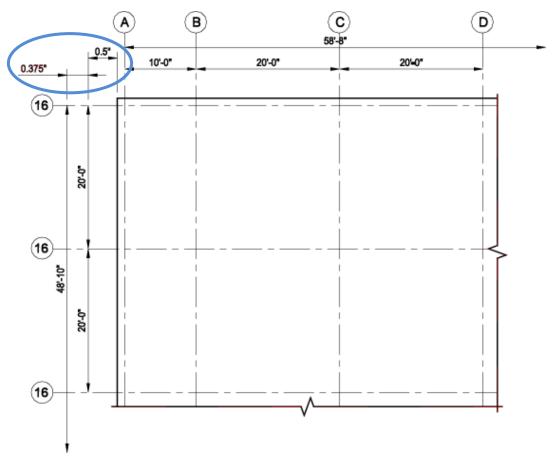


Figure 4-6, Dimension Directions and Spacing Example

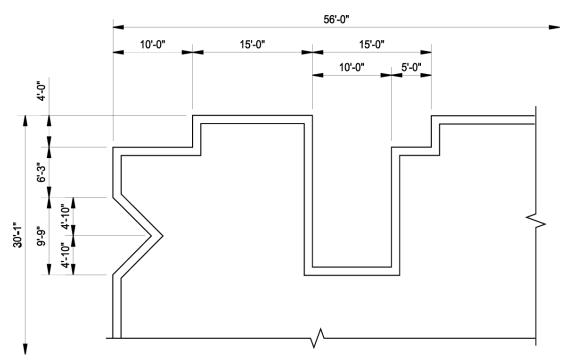


Figure 4-7, Dimension and Extension Line Spacing Example

4.1.19.1 Dimension Text Size

All dimensioning text must be placed into the dimension layer. The size of dimension text is the same as the drawing field text (no smaller than 1/10" height, with 1/8" being preferable).

Refer to Table 4-1, Scale Factor and Text Height Conversion Chart for scaling factors and text height.

4.1.19.2 Positioning Dimensions

Figure 4-6, Dimension Directions and Spacing Example and Figure 4-7, Dimension and Extension Line Spacing Example. Refer to these figures for examples.

The following guidelines shall apply:

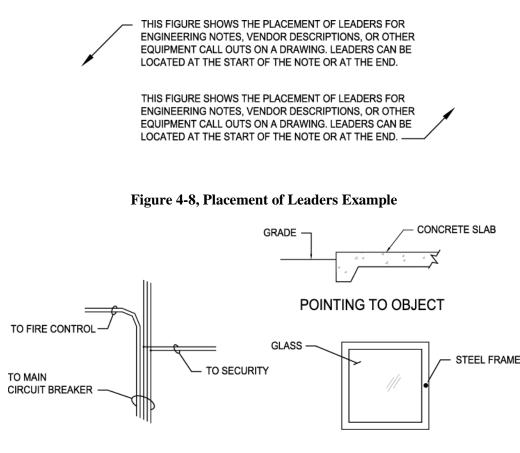
- Avoid crossing dimension lines.
- Centerlines may be extended and used as extension lines.
- Place longer dimensions outside of shorter ones.
- Do not cover dimensions with patterns in sectioned areas.
- Whenever possible, arrange dimensions so they can be read easily on one continuous line.
- Dimensions are always placed on the drawing so that the text may be read from the bottom or the right.
- Locate dimension lines so that they do not cross extension lines. If it is necessary to dimension at an angle, that angle should be in quadrant between the horizontal and vertical so text may be read between 0 and 90 degrees.

- All text must be located above or centered on the dimension lines.
- The location of text on the dimension line shall be consistent throughout the drawing set.
- Fractions must be located on one line with a space between the whole inch and fraction.
- Make fractions with a slant bar with numbers the same height as text, for example, 1/4".
- All dimension and extension lines shall be created using the "Color 1" line weight.
- Arrowheads and dimension text shall be created using the "Color 1" line weight.
- All text shall be left justified per standard drafting standards.

4.1.19.3 Leaders

When a note or dimension cannot be placed close to an object, a leader may be used. A leader consists of a short horizontal line, an angled line and a terminator. When placing a leader to the left side of a note the horizontal line must be place in line with the top of the note. If the leader is on the right side, the horizontal line is placed at the bottom of the note, see Figure 4-8, Placement of Leaders Example. When a leader points to an object, the angled line must terminate with an arrowhead at its first object line. When the information refers to (applies to, or points to) a surface of an object, use a small filled dot or tilde (~). When the information refers to a bundle or grouping of wires or cables, use a lasso. An example is shown in Figure 4-9, Typical Leaders Example.

All leader lines and arrowheads shall be created using the "Color 1" line weight.



GROUPING WIRES

POINTING TO SURFACE

Figure 4-9, Typical Leaders Example

4.1.19.4 Arrowheads

Arrowheads denote termination of dimensions and leader lines and show direction. They must be filled, and must be the same size and style as the arrowheads used in other dimensions. Arrowhead size should be a 3:1 ratio for length to width, and in proportion to any associated text.

4.1.20 Symbols

Symbols used in drawings should comply with the NCS and all symbols used in a drawing must be indicated in a legend.

4.1.21 Drawing Subtitles

Subtitles must be used on drawings with more than one view or when sections or details are required for clarity and must also be used on drawings with a single view when title block information is inadequate and additional identification is required. Subtitles are always located below and centered on the view to which they apply, except for detail drawings where the title shall be located to the lower left.

Subtitles for plans, standard details, typical details, etc., which are not referenced in other views, consist of two lines. The first line shows the exact title of the view or detail and the second line indicates the scale of the view or detail, along with bar scale, see Figure 4-10, Standard Subtitle Annotation Example.

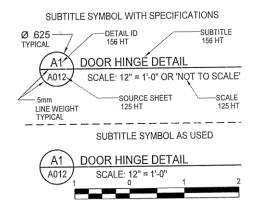


Figure 4-10, Standard Subtitle Annotation Example

4.1.22 Sections and Details

Sections must be drawn when additional clarification is warranted and details must be created whenever additional clarification is required and a section cannot readily be cut.

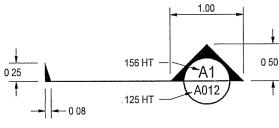
4.1.22.1 Sections

Sections must be drawn using the drafting standards shown in Figure 4-11, Standard Section Annotation Example. The three types of section indicators to be used are short sections, extended sections, and offset sections as shown in Figure 4-12, Section Types Example. All sections must be cut toward the top or left side of the drawing, except in unusual situations. In some cases, it may be necessary to cut a short section reading from the left, but this should be avoided if possible.

Sections must appear on the same drawing on which they are cut, if possible. If the section cannot be drawn on the same drawing, it must appear on a separate drawing reserved for sections. Under no circumstances are sections to be scattered indiscriminately throughout the set of drawings.

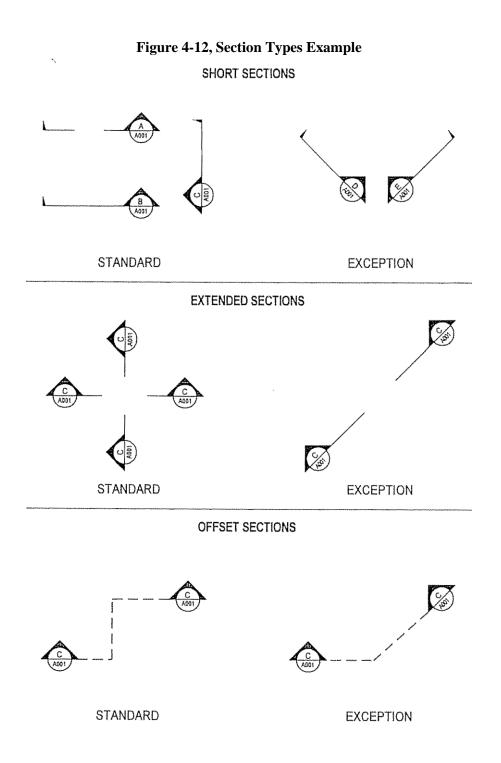
Section cuts shall be lettered in alphabetical order on each drawing. The letter in the top half of the circle marker must indicate the section letter. The alphanumeric number in the lower half of the circle marker must indicate the drawing on which the section is shown. Heavy dark lines located in the position where the section is cut must indicate the location of the cutting plane.

Offset sections may be used only when section clarity requires adjustment of a portion of the cutting plane. On all section cuts, the circle markers must be placed so they can be read from the direction of cut.



SECTION SYMBOL WITH SPECIFICATIONS

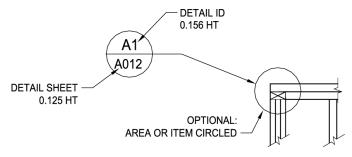
Figure 4-11, Standard Section Annotation Example



4.1.22.2 Detail Drawings

The detail must be a section, a plan view, an elevation, or an enlargement. Details must have an alphanumeric (e.g. A1) designation in the upper half of the circle marker. When details are intermixed with sections and it would be difficult to locate a lettered detail on a drawing, the details must be numbered consecutively with the sections. The alphanumeric number in the lower half of the circle marker must indicate the sheet number on which the details reside (see Figure 4-13, Standard Detail Symbol Example).

When a detail appears more than once on the same drawing, extend a line off the detail, abbreviate the word typical (TYP), and indicate the quantity in parentheses.



DETAIL SYMBOL AS USED WITH SPECIFICATIONS

Figure 4-13, Standard Detail Symbol Example

4.1.23 Revision of Drawings

Changes to contract drawings must be clearly identified and tracked. The following sections outline the required methodologies for incorporating changes to the drawing set.

4.1.23.1 Required Revisions

Once a drawing has been approved and submitted as final, all subsequent changes shall be recorded as a revision.

4.1.23.2 Revision Methods

Revisions shall be made by the addition or deletion of information and the changes annotated on drawings.

4.1.23.3 Drawing Practices

When revising an existing drawing the most recently approved graphic symbols, abbreviations, layer naming requirements, and drawing practices, as documented in this standard, shall be used to incorporate changes or revisions.

4.1.23.4 Identifying Revisions on Drawings

All revisions shall be identified with a revision cloud and revision number within a triangle for addenda and a square for redline revisions. The revision number in the title block must correspond to the revision number in the drawing area where the change was made.

4.1.23.5 Revision Locations

The revision location is identified by the revision cloud and only additions or modifications are to be included within the revision cloud.

4.1.23.6 Revision Numbers

Revisions are to be identified by a sequential number starting at 1. Letters are not to be used for revision identification.

4.1.23.7 Multiple Changes

The same revision number shall identify all changes made to a drawing regardless of number of locations modified that are incorporated at the same time.

4.1.23.8 Revision Block

The revision block size and format shall conform to that in the standard border sheet provided. Only the five most current revisions shall be shown in the revision block and each revision shall be recorded in accordance with the following:

- a) The identifying number pertaining to the revision shall be entered in the "REV" column.
- b) The date the CADD file changes revision shall be entered in the "DATE" column.
- c) A brief description of the change shall be entered in the "DESCRIPTION" column.

4.1.23.9 Redrawn or Replaced Drawings

4.1.24 Feature Drawing Rules

Geometric features are objects in drawings that represent specific objects in the real world such as an airfield light, utility conduit, building outline, or property boundary.

4.1.24.1 Allowable Geometry Types

There are three basic types of geometry (i.e., points, lines, and polygons) that are permissible in CADD drawings provided to MAA. Only one geometry type is allowed on layers that contain geometric features, as opposed to annotation or dimension layers. Only one type of geometry should be present on a single layer. The following geometry type definitions are used in accordance with ISO 19107 and in compliance with the Open GIS Consortium Level 0 Profile of GML Version 3.

Point: a single location represented by X and Y (and in some cases Z) coordinates on a reference coordinate system, as shown below in Figure 4-14. Blocks can be used to symbolize point features so long as the block is placed on the appropriate layer for that type of feature. The insertion point of the block should be placed at the correct geographic location of the feature. If blocks are used, no additional point object should be placed at the features location.



Figure 4-14, Example of a Point Feature

Line: straight line connections between two or more discrete locations represented by X and Y (and in some cases Z) coordinates on a reference coordinate system, as shown below in Figure 4-

15. Note that line segments (i.e., a straight line connecting two points) and polylines (i.e., one or more connected line segments) are both included in this definition but that arcs (i.e., a curve joining two points) are not.



Figure 4-15, Example of Line Features

Polygons: A closed connection between three or more discrete locations represented by X and Y (and in some cases Z) coordinates on a reference coordinate system, as shown below in Figure 4-16. A closed polyline can also be used to represent a polygon.



Figure 4-16, Example of Polygon Features

Complex Geometry Types: Arcs, circles, and ellipses should not be used to represent geographic features. These complex geometry types can be used in details, building faces, and other drawing components that are not intended to be represented in geographic space. This is intended to facilitate data exchange between software that processes these complex data types differently. These shapes may however be represented by polylines or polygons as appropriate. For example, if arcs are used in a CADD drawing, they must first be broken into a line with vertices placed at intervals that are sufficient to maintain the feature's accuracy requirements.

4.1.24.2 Topology Rules

The placement of geometric features in juxtaposition to one another (i.e., next to, connected to, or on top of) is referred to as a topology. Topology rules establish requirements for the placement of features in relation to one another and in relation to features in other Feature Types. Unless stated otherwise, this standard requires the following topological rules:

Line Feature Types: Lines should contain one or more line segments with vertices placed at required intervals so the line feature does not stray from the actual feature by more than half the accuracy limit for that feature type, as shown below in Figure 4-17.

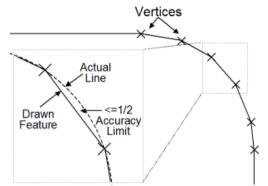


Figure 4-17, Placement of Vertices Along a Curve

Lines should begin and end at (snap to) vertices coincident (i.e., exactly at the same coordinate) with features (often point Feature Types) designed to join two or more linear features, as shown in Figure 4-18. An example is electrical conduit lines that are joined only at junction boxes and other similar point features. For lines not naturally joined by physical features (e.g., marking lines), beginning and ending nodes should be placed where an attribute or other property change occurs.

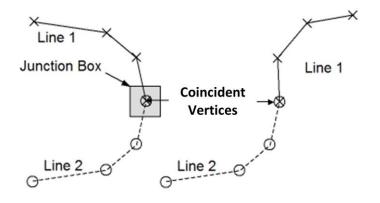


Figure 4-18, Coincident Line End Points

Lines should not fall short (i.e. have gaps) or extend beyond (i.e. have dangles) features they are intended to connect to. When lines are connected to features represented by blocks, the line should connect (snap) to the insertion point of the block and not to the outer edge of the block.

Polygon Feature Types: Polygons must always be closed, meaning all vertices must be shared by two adjacent line segments forming the edges of the polygon, as shown in Figure 4-19.

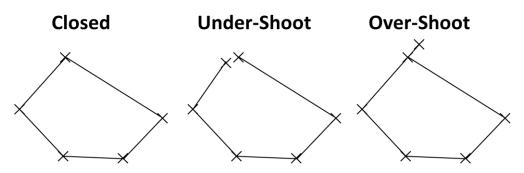


Figure 4-19, Example of Closed and Unclosed Polygons

Unless otherwise stated, polygons must not overlap other polygons on the same layer, as shown in Figure 4-20. This includes polygons placed on top of other polygons, as well as small overlapping splices because one or more vertices of adjacent sides are not matched. Polygons placed within (e.g., a 'doughnut hole') a larger polygon (e.g., the 'doughnut') which do not overlap are acceptable, because they describe a physically different space from the surrounding polygon.

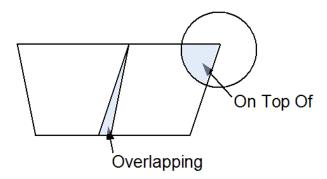


Figure 4-20, Examples of Overlapping Polygons

Polygons must share vertices with adjacent polygons where the real-world features they represent are adjacent, as shown below in Figure 4-21. This rule applies to polygons in the same Feature Type as well as polygons of different but related Feature Types.

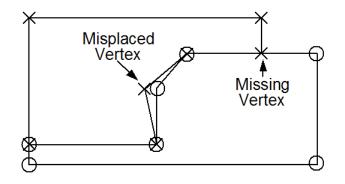


Figure 4-21, Placement of Vertices of Adjacent Polygons

4.1.24.3Layering of Features

Features of the same type and geometry should be the only elements on any specific layer. Text and leaders relevant to feature on a layer should appear on a corresponding but different layer that complies with the layer naming conventions in this standard.

4.1.24.6Relationship Between GIS & CADD Layers

MAA requires that CADD data be easily convertible into a GIS format to the extent feasible. To accommodate this exchange of data, a crosswalk between CADD and GIS layers has been developed and can be found in Appendix 4.

4.1.25 Feature Attribution

In some cases, MAA requires that geometric features in CADD drawings include attributes such as size, material, and condition. These requirements will be defined in individual project statements of work. When MAA requires attributes, they should be attached to geometric objects in drawings via an object data table. If the same set of attributes are required for all features, a single object data table is preferred.

The attributes found in the object data table should align with attributes in MAA's GIS Data Standard for the corresponding GIS layer. For example, points or block symbols on the C-RUNW-ENDP layer, which corresponds to the RunwayEnd GIS layer per the CADD-GIS crosswalk, should include attributes for the runwayEndDesignator, thresholdType, and others. In some cases, the values that can be entered into

these attributes will be bound to a domain list. For example, the attribute thresholdType is bound to domain called CodeThresholdType, which allows the values of Normal or Displaced.

Note that the ability to define, enter and edit object data is limited to AutoCAD Map 3D or AutoCAD Civil 3D products. This software will be required to enter such values into DWGs where required by MAA.

5.0 SPACE ALLOCATION DATA

5.1 Introduction

Space allocation data describes how interior and exterior space is used and by whom. This information is important for property management, emergency response, planning and many other critical airport functions. Space allocation data is often created and maintained using CADD software. Due to its unique nature and purpose, there are specific CADD requirements that pertain to this important type of data. These requirements are defined in this section.

5.2 Layer Naming

Space allocation data should be drawn on specific layers in CADD drawings. Specifically, the polygons which form space allocation boundaries should be drawn on the C-PROP-LEAS layer for exterior data and the A-PROP-LEAS layer for interior data. Following this standard sequence of discipline, major and minor codes, should be a dash (i.e. "-") followed by TOOOUU where:

- T represents a one-letter code indicating whether the space is leasable or not. It has one of two values:

L = Leasable Space N = Non-leasable Space

- OOO represents a three-character code identifying the occupant of the space. For airline tenants, the code is based on the International Air Transport Association (IATA) listing of airline codes. For non-airline tenants, an attempt has been made to create three letter codes that are an intuitive extrapolation of the tenants' names. A complete list of occupant codes for tenants can be found in Appendix 2 Occupant Codes for Airline Tenants and Occupant Codes for Other Tenants. These codes represent tenant, vacant space, or common (public) space. The \$ sign should be used as a placeholder when airline identifier codes consist of only two characters. Following are some examples:

\$US = US Airways (tenant) VAC = vacant COM = common

- UU represent a two-letter code that describes the specific use of the space by the indicated occupant. A complete list of designation codes can be found in Appendix 2.

To illustrate the use of this convention, the layer name for a US Airways hold room would be A-PROP-LEAS-L\$USHR, where the L designates leasable space, the \$US indicates US Airways as the occupant, and the HR indicates the use as a hold room. Similarly, the layer name for an electrical room would be A-PROP-LEAS-NCOMUE.

5.3 Identification via Hatch Patterns

Space allocation CADD drawings shall utilize two hatch layers per tenant to segregate occupants according to space designation and specific use. The first hatch layer contains a solid hatch distinguishing the major types of

space designations. The color of the solid hatch is controlled by-layer using the color number identified in Table 5-10. The second hatch layer contains the patterned hatch overlay subdividing the tenant's space according to the various uses. The patterned hatch is always color 251 and is on a separate layer from the solid hatch. The layer naming convention for the patterned hatches is to create a new layer for each tenant by appending '–H' to the end of the layer name containing the solid hatch.

For example, layer A-PROP-LEAS-L\$UATC contains United Airlines (\$UA) solid hatching for ticket counters (TC). Layer A-PROP-LEAS-L\$UATC-H contains the patterned hatch for the same space.

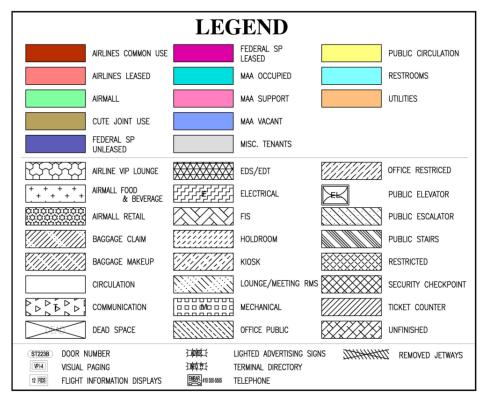


Table 5-10, Space Allocation Hatching Guidelines

5.4 Viewing Hatched Lease Areas

In some instances, the patterned hatch may be hidden beneath the solid hatch. In order to view the patterned hatches in both the AutoCAD drawings and in subsequent plots, use the *Bring to Front* or *Send to Back* commands found under *Tools* \rightarrow *Display Order* in AutoCAD's pull-down menu on the patterned hatch or solid hatch, respectively. If you still cannot view the patterned hatch on top of the solid hatch, invoking the *Regen* command should solve the problem. If these steps do not give the correct view, use the *Send under Object* command found under the *Tools* \rightarrow *Display Order* pull down menu command, and send the solid hatching under the layer A-WALL-FULL.

5.5 Occupant Identification via Polygons

Every occupant area, public area, and all other miscellaneous spaces in the Terminal Building are enclosed by an AutoCAD polygon. This *Occupant Polygon* is used for multiple purposes:

- 1) To facilitate the hatching of the area.
- 2) To permit listing the square footage via the AutoCAD Area \rightarrow Entity command.

These Occupant Polygons do not surround individual rooms within the leased space, but rather they surround the entire tenant space as long as that tenant space is for the same use and at the same lease rate. For example, an

airline's office space behind ticketing counters will be enclosed by one *Occupant Polygon* but will be separate from the *Occupant Polygon* surrounding the same airline's ticketing counters. The *Occupant Polygon* is generally not intended to be visible, but at times is turned on to enable visual differentiation between adjacent occupants. When plotting in color, the polygon appears as a thick, fuchsia border. When plotting in black and white, the polygon appears as a thick, phantom linestyle, gray line.

The lines that form occupant polygons should be placed on the inside face of exterior walls. For interior walls, the lines should be placed in the center of each interior wall where tenants occupy the space on either side. If MAA is using the adjacent space or it is unoccupied, the lines should be placed on the edge of the wall that is closest to the side occupied by the tenant. These guidelines establish the square footage quantities that will be calculated based on space allocation drawings (square footages in the lease agreement may vary).

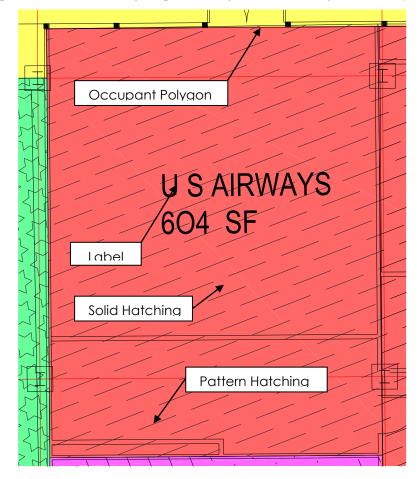


Figure 5-22, Example of Hatching, Polygons and Labels

5.6 Labeling Terminal Spaces

Within each *Occupant Polygon* mentioned in the previous section, an identifying label is provided. That label is defined as an AutoCAD attributed block. The information contained within this attribute block is the tenant name or type of space and the area in square feet, which that polygon encloses. Each label may be edited using the AutoCAD *DDATTE or ATE* command. A dialog box will appear with the various items of information, which can be edited for that label. Figure 5-23 illustrates the use of polylines, solid hatching, and pattern hatching to identify a lease space.

5.7 Attribute Blocks

The architectural model also contains lease information that is not contained within the *Occupant Polygon*. This includes public telephones and lighted advertising signs. For these leaseholds, the layer naming convention

defined in Section 4.1 holds, however, their representation in the AutoCAD drawing model is done through the use of editable attribute blocks. Editable attribute blocks are also used for a variety of non-leasable spaces and objects such as flight information displays, terminal directories, visual paging monitors, as well as for the representation of door identification numbers.

5.9 Externally Referenced Files

Space Allocation Drawings require that xref's be handled in a slightly different manner than normal engineering drawings by the nature of their content, content manipulation and intended use. The following section outlines the requirements.

Each of the drawings in the space allocation drawing set, covers a portion of the Terminal Building floor space with some overlap between adjacent sheets. Every square foot of space has been documented. Each drawing contains an easy to follow key plan, which identifies the extent of coverage within the Terminal Building for that particular drawing. Each individual space allocation drawing sheet consists of a common border sheet (border-U.dwg or borderL.dwg) with specific title block information. The architectural information shown in each individual drawing is merely a graphical representation of the floor plan and is not editable within that drawing file. The architectural model is contained in a separate drawing file (bldg-up.dwg or bldg-lo.dwg) which is brought into each individual space allocation drawing as an *Xref* (external reference). Each individual drawing incorporates a group of Xrefs including the border file, a legend appropriate to that drawings orientation, and an architectural model (see Section 4.1.17). Therefore, all updates, corrections, or additions to the architectural features must be made in the appropriate Xref model.

5.10 Plotting

5.10.1 Layer Manager (Express Tools)

To simplify the process of plotting drawings, it is time-efficient to use the layer manager option under *Express* \rightarrow *Layers* \rightarrow *Layer Manager*... pull-down menu to create a *snapshot* of the information contained in the *Layer Properties Manager* dialog box. This resulting *Layer State* is to be restored in the architectural models bldg-up.dwg or bldg-lo.dwg, and not in the individual space allocation drawing sheet to be plotted. When plotting is desired, the appropriate *Layer State* is restored prior to saving and exiting the architectural model. No particular convention is used in naming *Layer States*. However, the names are intended to be intuitive. NOTE: Be sure to re-save all *Layer States* if any layers are added or changes are made to existing layers to ensure that plots set up through the Layer Manager reflect the correct information.

5.10.2 Default Layer Settings

Certain information within the space allocation drawings is typically not intended to be visible. Additional information may be added to the architectural model that, except in certain instances, is not displayed on the space allocation drawings. Table 5-11 lists the 13 layers that contain default settings. All layers are assumed to be on.

Layer	Default Setting
A-COLS-DIM	Frozen
A-COLS-OLD	Frozen
A-FURN-OBSV	Frozen
A-FURN-PLNT	Frozen
A-ROOM-DIMS	Frozen
A-ROOM-DIMS-MISC	Frozen
A-WALL-OBSV	Frozen
L-COM-PT-N	Frozen
N-COM-RR-H	Frozen
N-MAA-FD	Thawed
N-MAA-VP	Thawed
N-MAA-DR	Thawed
N-MAA-CP	Thawed

Table 5-11, Layers with Default Setting

These 13 individual layer settings are considered constant in any layer state defined via the Layer Manager.

5.10.3 Existing Layer States

A standard *Layer State* naming convention makes it easy to globally set the desired view. One example would be to save a *Layer State* configured to isolate an individual occupant. The layer naming convention is intended to allow the use of wildcards (* and ?) to easily isolate tenants in the AutoCAD *Layer* command. The user is encouraged to create or delete *Layer States* deemed necessary to facilitate the viewing and editing of occupant information.

Existing *Layer States* include the following:

NO_HATCH: Used for editing Occupant Polygons and floor plans, this configuration does not contain hatching.
 PRINTABLE-COLOR: Used for plotting full color copies.
 PRINTABLE-B/W: Used for plotting black-and-white copies.
 SQUARE_FOOTAGE: Used for determining and verifying square footage of lease space.

There has been no attempt to create *Layer States* that allow a multitude of management options sinceit would be very cumbersome to attempt to cover all potential options a user may utilize.

5.10.4 Plotting Individual Space Allocation Drawings

Each individual space allocation drawing can be plotted in a variety of ways, depending on the intended use.

There are four primary uses anticipated:

- 1) Full Color, hatch patterns displayed, excluding Occupant Polygons.
- 2) Full Color, hatch patterns displayed, including Occupant Polygons.
- 3) Black-and-white, hatch patterns displayed, excluding Occupant Polygons.
- 4) Black-and-white, hatch patterns displayed, including Occupant Polygons.

The color plots will offer the clearest presentation in regards to differentiating tenant occupancy and are best plotted on bond paper. However, color plots can be expensive in large quantity. Therefore, blackand-white plots shall be plotted on reproducible paper when large quantities of prints are required for distribution.

Prior to opening and printing an individual space allocation drawing sheet, the user must restore the appropriate Layer and linetype property settings in the architectural model either manually or via the layer states defined in the 5.10.1 Layer Manager (Express Tools).

As previously mentioned, prior to opening and printing an individual sheet of a space allocation drawing, the user must restore the appropriate Layer and Line type property settings in the *Architectural Model Xref*, either manually or via the *Layer States*.

This is necessary because the AutoCAD variable *VisRetain* (see note below) for the space allocation drawings is set to 0. Therefore, the *Xref* files' *Layer States* will control the appearance of the final plots and not the individual sheets. Once settings are completed in the Architectural Model, save the drawing and:

- 1) Open the appropriate space allocation drawing.
- 2) Invoke the PLOT command.
- 3) Load the bwi-cl.ctb file (for color plots) or bwi.ctb (for black and white plots).
- 4) Choose the plot window using the circles in the bottom left and top right hand corner of the border sheet. Create a user-defined sheet size of 22" x 34" if necessary.
- 5) Choose OK.

Note:

The System Variable *VisRetain*: Controls the visibility, color, linetype, lineweight, and plot styles (if PSTYLEPOLICY is set to 0) of *Xref*-dependent layers; specifies whether nested xref path changes are saved.

When set to 0, the layer table as stored in the reference drawing (*Xref*) takes precedence. Changes made to *Xref*-dependent layers in the current drawing are valid in the current session only and are not saved with the drawing. When the current drawing is reopened, the layer table is reloaded from the reference drawing and the current drawing reflects those settings. The layer settings affected are On, Off, Freeze, Thaw, Color, Ltype, LWeight, and PStyle (if PSTYLEPOLICY is set to 0). This setting also specifies that changes made to the paths of nested *Xrefs* are for the current session only and are not saved with the drawing.

When set to 1 *Xref*-dependent layer changes made in the current drawing take precedence. Layer settings are saved with the current drawing's layer table and persist from session to session. Nested *Xref* path changes are saved with the current drawing and persist from session to session.

6.0 ELECTRONIC DELIVERABLES

6.1 General

MAA requires all submittals to be made electronically / digitally.

All CADD drawing files MUST be delivered in AutoCAD DWG and PDF formats. The DWG files MUST be created with the approved software from the list provided in Section 1.4 of this manual. Additionally, all DWG submittals must be made utilizing the *eTransmit* function within Autodesk products. Instructions appear later in this section.

All PDF files shall be created to allow printing but restrict editing by a third party. Each PDF should contain a single sheet drawing. Consultants will use the Standard Drawing File Naming Format shown in Section 6.1.4.

When submitting electronic contract documents to MAA, one sheet file representing each contract drawing shall be submitted in accordance with the MAA Design Standards. Each *sheet file* shall be ready to plot at full-size (1:1) in paper space. Layers must be controlled properly to reflect the document's intended appearance. Use of drawing files with multiple layouts is permitted only in the case of cross sections.

6.1.1 Delivery Media

Currently, DWGs and any related documents or files should be submitted on CD or DVD with the read/write session closed to ensure maximum cross platform readability. Electronic delivery via a secure FTP site, on-line document repository, or other system must be approved by the MAA Project Engineer and comply with SSI requirements as needed. All electronic deliverables must be virus free.

6.1.2 Media Labeling

The submitted CD/DVD will include a cover and label with the following information:

Construction Contract Title:	Insert Complete Contract Title
Construction Contract No.:	MAA-CO-XX-XXX (Insert Complete Contract Number)
Construction Task No.:	Insert if Applicable
Construction Contract Task Title:	Insert Complete Task Title (If Applicable)
Design Task Number:	Insert A/E Task Number
Airport Logo:	Insert BWI Marshall or MTN AIRPORT as Applicable
Consultant Logo:	Insert Consultant Logo
SSI Notice:	Insert SSI Warning Notice on all disks containing SSI
Submission Status:	Insert "Advertisement", "Addendum Number
XX", "Conformed Documents", etc.	as applicable
Date:	Insert MONTH, DAY, YEAR
CD/DVD Number	X of XX (Insert Data)
	Construction Contract No.: Construction Task No.: Construction Contract Task Title: Design Task Number: Airport Logo: Consultant Logo: SSI Notice: Submission Status: <i>XX", "Conformed Documents", etc.</i> Date:

For projects containing Sensitive Security Information (SSI), the A/E shall include SSI files on a separate CD. Media that contains SSI must include the following statement on the label:

Sensitive Security Information

Warning: This media contains Sensitive Security Information that is controlled under 49 CFR 1520. No part of this record may be disclosed to persons without a need to know, as defined in CFR 1520, except with the written permission of the TSA Administrator, Washington, D.C.. Unauthorized release may result in civil penalty or other action. For U.S. government agencies, public disclosure is governed by 5 U.S.C. 552. For projects containing SSI, the following "Notice" shall be included in place of each drawing on the CD containing the non-SSI files. The intent of the notice is to direct the user to the disk containing SSI.

Revise Text as appropriate for content

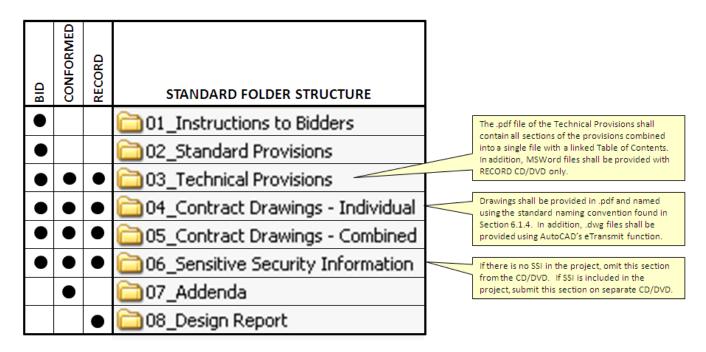
Drawing No. XXXX or Specification Section No. XXXXX NOTICE: THIS DRAWING CONTAINS SENSITIVE SECURITY INFORMATION (SSI) THAT IS CONTROLLED UNDER 49 CFR 1520 Requirements for viewing and handling SSI are contained in the <u>Notice to</u> Contractors that is provided in Volume 1 of the Technical Specifications that are provided on this CD. All SSI information associated with this project, **including this drawing**, is provided on a separate CD that is clearly marked "Sensitive Security Information". No part of this document may be released to persons without a need to know, as defined in CFR 1520, except with the written permission of the TSA Administrator, Washington, DC. Unauthorized release may result in civil penalty or other action. For U.S. Government agencies, public release is governed by 5

This requirement shall apply to CADD and non-CADD deliverables.

6.1.3 Directory Structure

USC 522.

Files shall be organized into the following folder and file structure for submittal to MAA. This folder and file structure shall be considered standard and the A/E shall not alter the folder names or add/delete folders without the written permission of the Engineering Document Manager. (Contact information for the Engineering Document Manager may be obtained upon request from the MAA Project Manager.) Document file names within the folder structure shall also be considered a standard with the exception of the individual drawing names, which shall be developed in accordance with the drawing file naming convention contained in Section 6.1.4.



6.1.4 Electronic File Preparation

Consultants shall deliver one zip file containing all sheets, their unbound DWGs and their related files as gathered and presented by the eTransmit functionality. The eTransmit utility will be used to combine each AutoCAD file and its related support files such as raster images, external references, and fonts into a single zip file.

For the PDF version of contract drawings documentation submittals, each PDF file should contain only one contract drawing. The drawings should be organized and submitted in the proper sequence of the drawings set. Each file should follow the "Standard Drawing File Naming Format" as defined in the DST and shown below.

Standard Drawing File Naming Format



Volume Identifier: 2 character field should contain "V1", "V2", etc. Used when drawing set is divided in multiple packets or "volumes". Omit field and underscore if all drawings are included in one volume.

Sheet Sequence: 4-digit number starting with "0001." Leading zeros are required. The number reflects the sheet sequence as shown in the Index of Sheets. Title Sheet is always "0001". (*Note: When generating sequence number, title sheets are not always represented in the index of sheets.*)

Insert Identifier: Single letter characters used for inserting added drawings into an existing sequence. "A" is the first insertion. "B" is the second and so on, through "Z". Where there are no inserted sheets, this field is omitted.

Sheet Identifier: Sheet number as shown in drawing title block. Follows existing CAD standards (Example: G0.0, E1.1, C1.0, etc.).

Sheet Title: Sheet title as shown as shown in drawing title block. Special characters such as "/", "\", "&", "*" etc. are not permitted.

SSI Identifier: Insert the letters "SSI" to identify drawings that contain Security Sensitive Information for special handling. Omit field and preceding underscore if no SSI data present.

Format Extension: Application defined code (Example: dwg, dwf, pdf, etc.).

6.1.4.1 eTransmit Procedures

- a. With a drawing open, choose File > eTransmit
- b. In the Create Transmittal dialog box, click Transmittal Setups...

Create Transmittal	? 🔀
Current Drawing(s):	🍐 Current user: Ken
<u>Files Tree</u> Files Ta <u>b</u> le	Select a transmittal setup
E- T Current Drawing	Standard
🖻 🚱 🗹 Drawing1.dwg	
🕀 🎆 AutoCAD LT Font Map	
⊕- 🎰 AutoCAD LT Compiled Shape	
⊕ 🧿 TrueType Font file	
🗄 🐖 AutoCAD LT Plotter Configuration File	
Included 6 file(s), 187KB <u>A</u> dd File	<u>T</u> ransmittal Setups
Enter notes to include with this transmittal package:	
· · · · · · · · · · · · · · · · · · ·	View Report OK
	Cancel

c. In the Transmittal Setups dialog box, click Modify... to modify the Standard setup

T 1	ransmittal Setup	ps	? 🗙
۵	Current user: Ken Standard		New
			<u>R</u> ename
			Modify
			<u>D</u> elete
		Close	<u>H</u> elp

- d. In the top section of the Modify Transmittal Setup dialog box, set the Transmittal Type and Location information.
 - i. In the Modify Transmittal Setup dialog box, choose a transmittal package type of .zip.
 - ii. Under File Format, choose 'Keep existing drawing file formats'. If the MAA Project Manager requires the file in an older version of AutoCAD, you can change this setting.
 - iii. Under Transmittal file folder, choose the file folder where the transmittal file will be generated.
 - iv. Set the Transmittal file name text box to 'Prompt for a filename'

B M	odify Transmittal Setup 🛛 🔹 🔀
\$	Current user: Ken Current transmittal setup: Standard Transmittal type and location Iransmittal package type:
	Zip (*.zip)
	File Eormat:
	Keep existing drawing file formats
	Transmittal file folder:
	C:\Documents and Settings\Ken\Desktop
	Transmittal file <u>n</u> ame:
	Prompt for a filename 🗸
	Drawing2 - Standard.zip

- e. In the bottom section of the Modify Transmittal Setup dialog box, set the Transmittal Options
 - i. Under Transmittal Options, choose the 'Use organized folder structure' radio button and supply your Source root folder (location where the project root tree structure resides on your server).
 - ii. Click the radio button next to 'Place all files in one folder'
 - iii. Check the box next to 'Include fonts'
 - iv. Check the box next to 'Set default plotter to 'none''
 - v. Name your transmittal setup for future use
 - vi. Click OK to accept changes and return to the "CREATE TRANSMITTAL" dialog box.

	Q:\4091	*	Browse
	Place all files in one folder		
0	Keep files and folders as is		
	nclude fonts		
	Send e-mail with transmittal		
	Set default plotter to 'none'		
-	Bind external references		
	Prompt for password		
Tran	smittal setup description:		
rian	smillide setup description.		

- f. In the Create Transmittal dialog box, ensure all necessary files are included in the <u>Files</u> Tree tab. This includes fonts, xref files, ASCII files, etc. Click Add File... to add additional files.
- g. Click OK
- h. When prompted for a file name, enter a file name that conforms to the naming convention defined in Section 6.1.4

B C	reate Transmittal	? 🔀
	Current Drawing(s):	👃 Current user: Ken
	<u>Files Tree</u> Files Ta <u>b</u> le	Select a transmittal setup
	E-T Current Drawing	Standard
	🗄 💽 🗹 Drawing1.dwg	
	🕀 🎆 AutoCAD LT Font Map	
	🕀 🊵 AutoCAD LT Compiled Shape	
	🗈 🧿 TrueType Font file	
	🗄 🐖 AutoCAD LT Plotter Configuration File	
	Included 6 file(s), 187KB Add File	Iransmittal Setups
	Enter notes to include with this transmittal package:	
	~	View Report OK
		Cancel

6.1.5 Documentation

All drawing packages submitted to the MAA shall include a transmittal letter containing the same information as on the external media label, and any special instructions for the restoring/transferring of files from the media.

6.1.6 Ownership

A statement similar to the following should be included in each contract under which electronic drawings will be delivered:

MAA shall have unlimited rights under this contract to all information and materials developed under this contract and furnished to the MAA and documentation thereof, reports and listings, and all other items pertaining to the work and services pursuant to this agreement including any copyright. Unlimited rights under this contract are rights to use, duplicate, or disclose data and information, in whole or part in any manner and for any purpose whatsoever without compensation to or approval from Contractor. The MAA will at all reasonable times have the right to inspect the work and will have access to and the rights to make copies of the above-mentioned items. All digital files and data, and other products generated under this contract shall become the property of the MAA.

6.2 Quality Assurance

This section lists the requirements for the inspection of drawings before they are submitted to MAA, and the engineering data quality assurance process that consultants and contractors must have in place

6.2.1 Responsibility for Quality

The consultant is responsible for seeing that the electronic files are in compliance with MAA standards.

6.2.2 Quality Assurance Testing

Quality assurance testing carried out by consultants and contractors should include examining files for entities placed in the proper layer or level, proper drawing and plot parameters, title block is filled out and set correctly, and the drawing is free of unwanted entities. Where specific spatial accuracy is required, additional checking to ensure the accuracy of the data being submitted is required. Where attribution is required, attributes will be complete and will contain appropriate values. Procedures that MAA will use for acceptance testing and a recommended for consultant and contractor quality assurance are detailed in the MAA Data Quality Standard.

6.2.3 Engineering Data Quality Assurance Process

Unless otherwise specified in the contract or order, the contractor/supplier must have an effective quality assurance process for the detailed quality assurance and technical accuracy of all engineering drawings and associated lists to be supplied under the terms of the contract. The procedures of the quality assurance system shall assure the conformance of the engineering drawings and associated lists to the applicable contract provisions. The quality assurance system shall be documented, and subject to the approval of MAA's Contracting Officer.

APPENDIX 1 – LAYER DEVELOPMENT

Discipline Layer Naming

The layer name format is organized as a hierarchy. This arrangement allows users to select from a number of options for naming layers according to the level of detailed information desired. Layer names consist of distinct data fields separated from one another by dashes. A detailed list of abbreviations, or field codes, is prescribed to define the content of layers. Most field codes are mnemonic English abbreviations of construction terminology that are easy to remember.

Layer naming generally follows the *CADD LAYER GUIDELINES*, NCS Edition, published by the American Institute of Architects (AIA). There are five defined layer name data fields: Discipline Designator, Major Group, two Minor Groups, and Status. Each data field is separated from adjacent fields by a dash ("-") for clarity. Below are guidelines for compiling a layer name, followed by a table of common layer names.

Free software is available from *The CAD BIM Technology Center* website that works with AutoCAD, which allows users to choose the proper standard layer names from a list. The layer names are easily found by defining the discipline, the type of drawing you are creating, and the types of entities that will be placed on the layer. Software can be downloaded from <u>https://cadbim.usace.army.mil/CAD</u>. Note that the colors that are automatically assigned to the layers may not meet the MAA standard pen table, and may have to be adjusted.

Discipline Designator	Discipline	Discipline Designator	Discipline
А	Architectural	L	Landscaping
В	Geotechnical	М	Mechanical
С	Civil	Р	Plumbing
D	Demolition	Q	Equipment – Baggage
Е	Electrical	R	Real Estate/Lease
F	Fire Protection	S	Structural
G	General	Т	Telecommunications
Н	Hazardous Materials	V	Surveying/Mapping
Ι	Interiors	Z	Contractor/Shop Drawing

Common Discipline Designators

Common Major and Minor Groups

A four-letter major group and either one or two four-letter minor groups follow the discipline designator in a layer name. Common major and minor groups are listed below:

Α	
ACID	Industrial waste piping
AERI	Aerial
AFFF	Aqueous film forming foam
AFRZ	Anti-freeze
AIRF	Airfield
AIRS	Airspace, approach surface
ALGN	Alignment
ALRM	Alarm
ANNO	Annotation
APRN	Apron
AREA	Area
В	
BAGS	Baggage system information
BCNS	Beacons
BEAM	Beam
BELL	Bell systems
BLDG	Building
BORE	Bore
BORW	Borrow
BRAC	Brace
BRIN	Brine
С	
CABL	Cable
CABL	Cathode
CATV	Cable TV
CCTV	Closed Circuit TV
CHAN	Channel
CHEM	Chemical
CIRC	Circuit
CLNG	Ceiling
CLOK	Clock systems
CMPA	Compressed air
CNDW	Condenser water
CO2S	Carbon Dioxide system
COLS	Columns
COMM	Communications
COND	Condensate piping
CONT	Controls
CTRL	Control panels
CWTR	Chilled water
D	
DECK	Deck
DECN	Decontamination
DETL	Details
DIAG	Diagram
DICT	Central dictation
DISC	Discipline
DISP	Displaced
DOOR	Door
DOMW	Domestic Water
DRED	Dredge
DUAL	Dual
DUCT	Duct
DUST	Dust and fume collection
DODI	Dust and fume conection

E	
E	Electrical
ELEV	Elevation
ELEV	Emergency Systems
EMER EMCS	Emergency Systems Emergency Monitoring Control System
EQPM	Equipment
EXHS	Exhaust
ЕЛПЭ	Exilausi
F	
F FEAT	Feature
FIXT	Fixture
FLOR	Floor
FNDN	Foundation
FUEL	Fuel lines
FURN	Furnishing
<u> </u>	
G	Closed
GLAZ	Glazed
GRAD	Grade
GRAT	Grating
GRDL	Ground/grade level
GRID	Grid
GRND	Ground
GTHP	Geothermal heat pump
H	
HALN	Halon
HELI	Heliport
HTCW	High temperature/chilled water
HVAC	Heating, ventilation and air conditioning
HWTR	Hot water
HWTR HYDR	Hot water Hydraulics
HYDR	
HYDR I	Hydraulics
HYDR I IGAS	Hydraulics Inert gas
HYDR I IGAS INDW	Hydraulics Inert gas Industrial waste
HYDR I IGAS INDW INSL	Hydraulics Inert gas Industrial waste Insulation
HYDR I IGAS INDW INSL INTC	Hydraulics Inert gas Industrial waste Insulation Intercom/PA systems
HYDR I IGAS INDW INSL	Hydraulics Inert gas Industrial waste Insulation
HYDR I IGAS INDW INSL INTC IRRG	Hydraulics Inert gas Industrial waste Insulation Intercom/PA systems
HYDR I IGAS INDW INSL INTC IRRG J	Hydraulics Inert gas Industrial waste Insulation Intercom/PA systems Irrigation
HYDR I IGAS INDW INSL INTC IRRG J JOIN	Hydraulics Inert gas Industrial waste Insulation Intercom/PA systems Irrigation Joints
HYDR I IGAS INDW INSL INTC IRRG J JOIN JOIS	Hydraulics Inert gas Industrial waste Insulation Intercom/PA systems Irrigation Joints Joists
HYDR I IGAS INDW INSL INTC IRRG J JOIN	Hydraulics Inert gas Industrial waste Insulation Intercom/PA systems Irrigation Joints
HYDR I IGAS INDW INSL INTC IRRG J JOIN JOIS JACK	Hydraulics Inert gas Industrial waste Insulation Intercom/PA systems Irrigation Joints Joists
HYDR I IGAS INDW INSL INTC IRRG J JOIN JOIS	Hydraulics Inert gas Industrial waste Insulation Intercom/PA systems Irrigation Joints Joists
HYDR I IGAS INDW INSL INTC IRRG J JOIN JOIS JACK K	Hydraulics Inert gas Industrial waste Insulation Intercom/PA systems Irrigation Joints Joists
HYDR I IGAS INDW INSL INTC IRRG J JOIN JOIS JACK K L	Hydraulics Inert gas Industrial waste Insulation Intercom/PA systems Irrigation Joints Joists Jacks Intercom/PA systems
HYDR I IGAS INDW INSL INTC IRRG J JOIN JOIS JACK K L LGAS	Hydraulics Inert gas Industrial waste Insulation Intercom/PA systems Irrigation Joints Joists Jacks Liquid gas
HYDR I IGAS INDW INSL INTC IRRG J JOIN JOIS JACK K L LGAS LITE	Hydraulics Inert gas Industrial waste Insulation Intercom/PA systems Irrigation Joints Joists Jacks Liquid gas Lighting
HYDR I IGAS INDW INSL INTC IRRG J JOIN JOIN JOIS JACK K L LGAS LITE LSFT	Hydraulics Inert gas Industrial waste Insulation Intercom/PA systems Irrigation Joints Joists Jacks Liquid gas Lighting Life safety / egress requirements
HYDR I IGAS INDW INSL INTC IRRG J JOIN JOIN JOIS JACK K L LGAS LITE LSFT LTNG	Hydraulics Inert gas Industrial waste Insulation Intercom/PA systems Irrigation Joints Joints Joists Jacks Liquid gas Lighting Life safety / egress requirements Lightning protection
HYDR I IGAS INDW INSL INTC IRRG J JOIN JOIN JOIS JACK K L LGAS LITE LSFT	Hydraulics Inert gas Industrial waste Insulation Intercom/PA systems Irrigation Joints Joists Jacks Liquid gas Lighting Life safety / egress requirements
HYDR I IGAS INDW INSL INTC INTC IRRG J JOIN JOIN JOIS JACK K L LGAS LITE LSFT LTNG LUBE	Hydraulics Inert gas Industrial waste Insulation Intercom/PA systems Irrigation Joints Joints Joists Jacks Liquid gas Lighting Life safety / egress requirements Lightning protection
HYDR I IGAS INDW INSL INTC INTC IRRG J JOIN JOIN JOIS JACK K K L LGAS LITE LSFT LTNG LUBE M	Hydraulics Inert gas Industrial waste Insulation Intercom/PA systems Irrigation Joints Joints Joists Jacks Liquid gas Lighting Life safety / egress requirements Lightning protection Lubrication
HYDR I IGAS INDW INSL INTC INTC IRRG J JOIN JOIN JOIS JACK K K L LGAS LITE LSFT LTNG LUBE M MACH	Hydraulics Inert gas Industrial waste Insulation Intercom/PA systems Irrigation Joints Joints Joists Jacks Liquid gas Lighting Life safety / egress requirements Lightning protection Lubrication
HYDR I IGAS INDW INSL INTC IRRG J JOIN JOIN JOIS JACK K K L LGAS LITE LSFT LTNG LUBE M MACH MATL	Hydraulics Inert gas Industrial waste Insulation Intercom/PA systems Irrigation Joints Joints Joists Jacks Liquid gas Lighting Life safety / egress requirements Lightning protection Lubrication Machinery Materials
HYDR I IGAS INDW INSL INTC INTC IRRG J JOIN JOIN JOIS JACK K K L LGAS LITE LSFT LTNG LUBE M MACH	Hydraulics Inert gas Industrial waste Insulation Intercom/PA systems Irrigation Joints Joints Joists Jacks Liquid gas Lighting Life safety / egress requirements Lightning protection Lubrication Machinery Materials Metal
HYDR I IGAS INDW INSL INTC IRRG J JOIN JOIN JOIS JACK K K L LGAS LITE LSFT LTNG LUBE M MACH MATL METL MDGS	Hydraulics Inert gas Industrial waste Insulation Intercom/PA systems Irrigation Joints Joints Joists Jacks Liquid gas Lighting Life safety / egress requirements Lightning protection Lubrication Machinery Materials
HYDR I IGAS INDW INSL INTC IRRG J JOIN JOIN JOIS JACK K L LGAS LITE LSFT LTNG LUBE M MACH MATL METL	Hydraulics Inert gas Industrial waste Insulation Intercom/PA systems Irrigation Joints Joints Joists Jacks Liquid gas Lighting Life safety / egress requirements Lightning protection Lubrication Machinery Materials Metal
HYDR I IGAS INDW INSL INTC INTC IRRG J JOIN JOIN JOIS JACK K K L LGAS LITE LSFT LTNG LUBE M MACH MATL METL MDGS	Hydraulics Inert gas Industrial waste Insulation Intercom/PA systems Irrigation Joints Joints Joists Jacks Liquid gas Lighting Life safety / egress requirements Lightning protection Lubrication Machinery Materials Metal Medical/Dental gas

Ν	
NGAS	Natural gas
NURS	Nurse call/paging systems
0	
OPEN	Opening
OVRN	Overrun
n	
P PADS	Dada
PADS	Pads Pattern (hatching)
PENE	Penetrations
PIPE	Piping
PKNG	Parking
PLAN	Plan, blueprint
PLNT	Plants/vegetation
POLE	Utility pole
POLL	Pollution
POWR	Power
PRIM	Primary electrical cable
PROC	Process piping
PROF	Profile
PROP PROT	Property Protection
PVMT	Pavement
0	
×	
R	
RAIL	Railroad
RATE	Rating
RCOV	Recovery
REFG	Refrigeration
REIN	Reinforcement
ROAD	Roadway
ROOF RUNW	Roof Runway
RWTR	Raw water
	Kaw water
S	
SAFE	Safety
SAMP	Sample
SANR	Sanitary
SEAP	Seaplane
SECD	Secondary electrical cable
SECT	Section
SERT	Security systems
SITE SLAB	Sitework Slab
SOUN	Sund systems
SPCL	Special
SPPT	Support
SPRN	Sprinkler
SSWR	Sanitary sewer
STAT	Status
STEM	Steam
STOR	Storage
STRC	Structures
STRM	Storm sewers/drain
STRS	Stairways
SURV	Survey
SYST	System

Т	
TAXI	Taxiway
ТОРО	Topography
TRAF	Traffic
TRUS	Trusses
TVAN	TV antenna systems
U	
UTIL	Utilities
V	
W	
WALL	Wall
WATR	Water
X	
Y	
Ζ	

Common Status Categories

Once the discipline designator, major and minor categories have been chosen, the final portion of the layer name is the status. This describes to the user what the disposition is of the entities on that layer, and helps to determine if that layer should or should not be shown on a particular drawing sheet. Note that AutoCAD uses a single letter abbreviation for its status categories. MAA prefers to use a four-letter abbreviation to stay consistent with the Major and Minor group names, and provide a more intuitive description for the status. Below is a list of common status categories:

PHS#	Phase of project (#=1-9)
DEMO	Existing item to be demolished
EXST	Existing item to remain
FUTR	Future work
MOVE	Existing item to be moved
NEWW	New work
TEMP	Temporary work
NICN	Not in contract (not included in AutoCAD layer naming routine)
RELO	Existing item to be relocated (not included in AutoCAD layer naming routine)
ABND	Abandoned item (not included in AutoCAD layer naming routine)

Common Layer Names – Architectural (A)

Discipline	Major	Minor1	Minor2	Status	Layer Description
GENERAL	INFORM	ATION			
А	ANNO	DIMS			Witness/extension lines, dimension terminators, dimension text
А	ANNO	KEYN			Reference keynotes with associated leaders
А	ANNO	NOTE			General notes and general remarks
А	ANNO	NPLT			Non-plotting graphic information
А	ANNO	PATT			Miscellaneous patterning and hatching
А	ANNO	REFR			Reference files
А	ANNO	SYMB			Miscellaneous symbols
А	ANNO	TEXT			Miscellaneous text and callouts with associated leaders
AREA INF	ORMATIC	DN			
А	AREA	IDEN			Room numbers, tenant identifications, area calculations
А	AREA	LINE			Architectural area calculation boundary lines
А	AREA	OCCP			Occupant or employee names
А	AREA	PATT			Area cross hatching
BAGGAGE	SYSTEM	INFORMA	TION		
А	BAGS	CART			Cart/Tug
А	BAGS	CATW			Catwalk
А	BAGS	CLMD			Claim Device
А	BAGS	CONV			Baggage Conveyor
А	BAGS	CRBS			Curbside Baggage Conveyor
А	BAGS	CTRL			Control
А	BAGS	DIMM			Dimension
А	BAGS	DOOR			Doors
А	BAGS	ELEV			Elevation
А	BAGS	EQPM			Equipment
А	BAGS	ICNV			Inbound Baggage Conveyor
А	BAGS	IOSZ			Inbound Oversized Baggage Conveyor
A	BAGS	MKUP			Make-Up Device
A	BAGS	MTCH			Match Lines
A	BAGS	NOTE			Notes
A	BAGS	OCNV			Outbound Baggage Conveyor
A	BAGS	OOSZ			Outbound Oversized Baggage Conveyor
A	BAGS	RAIL			Guardrail
A	BAGS	ROWY			Right-of-Way
A	BAGS	SCDR			Security Door
A	BAGS	SCNU TBLK			Screening Unit
A	BAGS				Title Block
A	BAGS	TCBC			Ticket Counter Baggage Conveyor
A	BAGS	TEMP			Temporary
A	BAGS	TTRY VPRT			Tilt-Tray Baggage System View Port Layer for Paper Space
A	BAGS				
A	BAGS	XFER XRAY			Transfer Baggage Conveyor
A	BAGS				X-Ray Unit
CEILING I	NFORMA CLNG				
A		ACCS			Access panels Ceiling control joints
А	CLNG	CTLJ			Cennig control joints

Discipline	Major	Minor1	Minor2	Status	Layer Description
А	CLNG	GRID			Ceiling grid
А	CLNG	LEVL			Level Changes
А	CLNG	OPEN			Openings, ceiling/roof penetrations (see also A-FLOR-OVHD in Model File Type: Floor Plan)
А	CLNG	PATT			Ceiling patterns
А	CLNG	REFL			Reflective Ceiling
А	CLNG	SUSP			Suspended elements, ceiling mounted specialties (e.g., clocks, fans, etc.)
А	CLNG	TEES			Main tees
А	COLS	ENCL			Column enclosures/fire protection
DETAIL IN		TION			
А	DETL	GRPH			Graphics, gridlines, non-text items
А	DETL	INPD			Inch-pound-specific dimensions and notes
А	DETL	METR			Metric-specific dimensions and notes
DOORS		1			
А	DOOR	FULL			Full height (to ceiling) door: swing and leaf
А	DOOR	IDEN			Door number and symbol, hardware group, etc.
А	DOOR	PRHT			Partial height door: swing and leaf
А	DOOR	SECR			Security Door
A	DOOR	SYMB			Miscellaneous door symbols (e.g., overhead, bifold, pocket, etc.)
ELEVATIO		1		n	r
A	ELEV	CASE			Wall-mounted casework
A	ELEV	FIXT			Miscellaneous fixtures
A	ELEV	FNSH			Finishes, woodwork, trim
A	ELEV	IDEN			Component identification numbers
A	ELEV	OTLN			Building outlines
A	ELEV	PATT			Textures and hatch patterns
A	ELEV	PFIX			Plumbing fixtures
A	ELEV	SIGN			Signage
EQUIPME				r	
A	EQPM	ACCS			Equipment access
A	EQPM	BELW			Equipment below Floor
A	EQPM	CLRN			Equipment clearance
A	EQPM	FIXD			Fixed equipment
A	EQPM	IDEN			Equipment identification numbers
A	EQPM	JETB			Aircraft Jet bridge
A	EQPM	MOVE			Moveable equipment
A	EQPM	NICN			Not in contract equipment
A	EQPM	OVHD			Overhead, ceiling mounted, or suspended equipment
FLOOR IN	FORMAT	CASE			Casework (manufactured cabinets)
A	FLOR	ESCL			Escalators
A	FLOR	EVTR			Elevator cars and equipment
A	FLOR	EXPJ			Expansion and Seismic Joints Floor mounted/Free standing miscellaneous fixtures
A	FLOR	FIXT			-
A	FLOR	FURN			Furniture Layers
A	FLOR	HRAL			Stair and balcony handrails, guard rails
A	FLOR	IDEN			Room name, space identification text
A	FLOR	LADR			Ladders
A	FLOR	LEVL			Level changes, shafts, ramps, pits, breaks in construction, and depressions

Discipline	Major	Minor1	Minor2	Status	Layer Description
A	FLOR	MOVS			Moving sidewalks
А	FLOR	NUMB			Room/space identification number and symbol
A	FLOR	OTLN			Floor outline/perimeter/building footprint
A	FLOR	OTLN	RPRM		Room perimeter shape (Interior walls)
A	FLOR	OVHD			Overhead items (skylights, overhangs etc.)
A	FLOR	PATT			Paving, tile, carpet patterns
А	FLOR	RAIS			Access (raised) flooring
A	FLOR	SIGN			Signage
A	FLOR	SPCE			Interior space not delineated by walls
A	FLOR	SPCL			Architectural specialties (e.g., toilet room accessories, display cases)
А	FLOR	STRS			Stair risers/treads
А	FLOR	TPTN			Toilet partitions
А	FLOR	WDWK			Architectural woodwork (field built cabinets and counters)
WINDOWS					
A	GLAZ	FULL			Full height glazed walls and partitions (see A-WALL-CWMG for curtain walls)
А	GLAZ	IDEN			Window number and symbol
А	GLAZ	PRHT			Windows and partial height glazed partitions
А	GLAZ	SILL			Window sills
LIGHTING	j			1	
А	LITE	CLNG			Specialty ceiling lights not shown on Electrical Lighting Plan
PROPERT	Y INFORM	IATION		1	
А	PROP	LEAS			Lease line (interior)
ROOFING	INFORM	ATION		1	
А	ROOF	CRTS			Crickets flow arrows flow info
А	ROOF	EXPJ			Expansion joints
А	ROOF	GUTR			Roof internal gutters
А	ROOF	HRAL			Stair handrails, nosings, guard rails
А	ROOF	LEVL			Level changes
А	ROOF	OPEN			Roof Open Below ('X' line symbol)
А	ROOF	OTLN			Roof perimeter/edge, roof geometry
А	ROOF	PATT			Roof surface patterns, hatching
А	ROOF	RFDR			Roof drains
А	ROOF	SPCL			Roof specialties, accessories, access hatches, dormers
А	ROOF	STRS			Stair risers/treads, ladders
А	ROOF	WALK			Roof walkways
А	ROOF	WALL			Parapet walls and wall caps
SECTIONS					
А	SECT	IDEN			Component identification numbers
А	SECT	MBND			Material beyond section cut
А	SECT	MCUT			Material cut by section
А	SECT	PATT			Textures and hatch patterns
WALLS					
А	WALL	CAVI			Cavity wall lines
А	WALL	CNTR			Wall centerlines
А	WALL	CWMG			Curtain wall mullions and glass
А	WALL	FIRE			Fire wall designators (patterning)
А	WALL	FULL	EXTR		Exterior full height walls
А	WALL	FULL	INTR		Interior full height walls
А	WALL	HEAD			Door and window headers (appear on Reflected Ceiling Plan)

Discipline	Major	Minor1	Minor2	Status	Layer Description
А	WALL	IDEN			Wall identification/type text or tags
А	WALL	JAMB			Door and window jambs (do not appear on Reflected Ceiling Plan)
А	WALL	MOVE			Moveable walls/partitions
А	WALL	PATT			Wall insulation, hatching, and fill
А	WALL	PRHT			Partial height walls (do not appear on Reflected Ceiling Plan)
A	WALL	SPCL			Wall-hung/attached specialties (e.g., fixtures, grab bars (incl. handicap), telephone booths)

Common Layer Names – Geotechnical (B)

Discipline	Major	Minor1	Minor2	Status	Description
GENERAL	INFORM	ATION			
В	ANNO	DIMS			Witness/extension lines, dimension terminators, dimension text
В	ANNO	KEYN			Reference keynotes with associated leaders
В	ANNO	NOTE			General notes and general remarks
В	ANNO	NPLT			Non-plotting graphic information
В	ANNO	PATT			Miscellaneous patterning and hatching
В	ANNO	REFR			Reference files (AutoCAD users only, see Chapter 4)
В	ANNO	SYMB			Miscellaneous symbols
В	ANNO	TEXT			Miscellaneous text and callouts with associated leaders
GEOPHYS	ICAL BOR	RINGS			
В	BORE	ELEV			Boring elevations
В	BORE	FDTA			Field data
В	BORE	HOLE			Bore/perc hole number
В	BORE	IDEN			Component identification numbers
В	BORE	LDTA			Laboratory data
В	BORE	PATT			Soil/rock patterns

Discipline	Major	Minor1	Minor2	Status	Description
GENERAL	INFORM	ATION			
С	ANNO	DIMS			Witness/extension lines, dimension terminators, dimension text
С	ANNO	KEYN			Reference keynotes with associated leaders
С	ANNO	NOTE			General notes and general remarks
С	ANNO	NPLT			Non-plotting graphic information
С	ANNO	PATT			Miscellaneous patterning and hatching
С	ANNO	REFR			Reference files (AutoCAD users only, see Chapter 4)
С	ANNO	SYMB			Miscellaneous symbols
С	ANNO	TEXT			Miscellaneous text and callouts with associated leaders
AIRFIELD					
С	AIRF	AHOA			Air Operations Area
С	AIRF	AIDS	CRIT		Airfield Navigational Aid - Critical Area
С	AIRF	AIDS	OTHR		Other airfield navigational aides
С	AIRF	AIDS	SITE		Airfield Navigational Aid - Site
С	AIRF	AIDS	RADI		Radio airfield navigational aides
С	AIRF	AIDS	ILS_		Airfield Instrument Landing System
С	AIRF	AIDS	RADR		Radar airfield navigational aides
С	AIRF	AIDS	COMM		Communications airfield navigational aides
С	AIRF	AIDS	GPS_		GPS airfield navigational aides
С	AIRF	AIDS	MCWV		Microwave airfield navigational aides
С	AIRF	AIDS	WTHR		Weather airfield navigational aides
С	AIRF	AIDS	RMTE		Remote airfield navigational aides
С	AIRF	AIDS	SYST		NAVAID system
С	AIRF	ARWY			Airway
С	AIRF	DSRF	BLDR		Building Restriction Line
С	AIRF	DSRF	RSA_		Runway Safety Area
С	AIRF	DSRF	RPZ_		Runway Protection Zone
С	AIRF	DSRF	OFA_		Object Free Area
С	AIRF	DSRF	OFZ_		Object Free Zone
С	AIRF	DSRF	POFA		Precision Object Free Area
С	AIRF	DSRF	KEYH		Key holes
С	AIRF	DSRF	NMOV		Aircraft Non-Movement Area
С	AIRF	FAAR			FAA Region
С	AIRF	FREQ			Frequency Area
С	AIRF	GLCL	PIPE		Glycol pipes
С	AIRF	GLCL	MHOL		Glycol manholes
С	AIRF	GLCL	BUBL		Glycol bubble callout
С	AIRF	PAVE			Airfield pavement section
С	AIRF	PROP			Airport property
С	AIRF	SECR	SIDA		Security Identification Display Area
С	AIRF	SECR	SECA		Airfield security area
С	AIRF	SECR	STER		Airfield sterile area
С	AIRF	SECR	RSTR		Military restricted access boundary
С	AIRF	TRKL			Flight Track Line
С	AIRF	TRKP			Flight Track Point

Discipline	Major	Minor1	Minor2	Status	Description
AIRFIELD	TRAFFIC	AREAS			
С	TRAF	IDEN			Airfield traffic area annotation
С	TRAF	ТҮРА			Type A traffic area
С	TRAF	TYPB			Type B traffic area
С	TRAF	TYPC			Type C traffic area
AIRSPACE	E	•			
С	AIRS	ISOC			Approach surface isoclines
С	AIRS	LNDM			Landmark segment
С	AIRS	OBSC			Airfield obstruction
С	AIRS	OBST	LINE		Airspace obstructions - Line
С	AIRS	OBST	PPNT		Airspace obstructions - Point
С	AIRS	OBST	POLY		Airspace obstructions - Polygon
С	AIRS	OTHR			Other airspace surfaces
С	AIRS	PART	PRIM		FAR Part 77 Primary Surface
С	AIRS	PART	HORZ		FAR Part 77 Horizontal Surface
С	AIRS	PART	CONL		FAR Part 77 Conical Surface
С	AIRS	PART	TRNS		FAR Part 77 Transitional Surface
С	AIRS	PART	APRC		FAR Part 77 Approach Surface
С	AIRS	TERP			TERPS surfaces
ALIGNME	INTS		I	I	
С	ALGN	DATA			Alignment coordinates and curve data
С	ALGN	LINE			Alignments
С	ALGN	STAT			Stationing and tick marks
APRONS					
С	APRN	АСРК			Aircraft gate/stand parking area
С	APRN	ANOM			Aircraft non-movement area
С	APRN	CNTR			Centerlines
С	APRN	CNTR	IDEN		Centerline annotation
С	APRN	DEIC			Aircraft Deicing Area
С	APRN	GRND			Grounding points
С	APRN	HOLD			Holding position markings
С	APRN	IDEN			Annotation
С	APRN	JOIN			Apron joints
С	APRN	MOOR			Mooring points
C	APRN	MRKG			Apron markings
C	APRN	OTLN			Airfield apron
С	APRN	SECU			Security zone markings
C	APRN	SHLD	MRKG		Shoulder markings
C	APRN	SIGN	_		Airfield signs on the apron
BUILDING			RUCTUR	ES	
С	BLDG	IDEN			Building and other structure annotation
C	BLDG	OTLN			Buildings and other structures
C	BLDG	OVHD			Building overhang
C	BLDG	PATT			Building hatching and patterns
BORROW			I	I	6 6 F
C	BORW	IDEN			Borrow/Spoil area annotation
<u>с</u>	BORW	LINE			Borrow/Spoil area
C	DORM				

Discipline	Major	Minor1	Minor2	Status	Description
CHANNEL	•	1	I	I	1
С	CHAN	AIDS			Navigation aids and text
С	CHAN	CNTR			Channel centerline and survey report lines
С	CHAN	CNTR	IDEN		Channel centerline and survey report lines - annotation
С	CHAN	DACL			De-authorized channel limits, anchorages, etc.
С	CHAN	DACL	IDEN		De-authorized channel limits, anchorages, etc annotation
С	CHAN	IDEN			Channel limits, anchorages, turning basins, disposal areas, etc annotation
С	CHAN	LIMT			Channel limits, anchorages, turning basins, disposal areas, etc.
С	CHAN	TURN			Turning points
DETAIL IN	FORMAT	ION		1	
С	DETL	CONC			Concrete
С	DETL	COVR			Covers and fittings
С	DETL	ERTH			Earth
С	DETL	FAST			Fasteners
С	DETL	FENC			Fencing
С	DETL	FENC	SECU		Security Fencing
С	DETL	FILL			Fill
С	DETL	GENF			General features (miscellaneous items)
С	DETL	GRPH			Graphics, gridlines, non-text items
С	DETL	INPD			Inch-pound-specific dimensions and notes
С	DETL	METR			Metric-specific dimensions and notes
С	DETL	PAVE			Pavements
С	DETL	PIPE			Piping
С	DETL	SPCF			Special features
С	DETL	STRC			Structural metal
С	DETL	TANK			Tanks
С	DETL	VLVE			Valves and fittings
DITCHES			I	I	
С	DTCH	BOTD			Bottom of ditch
С	DTCH	CNTR			Centerline of ditch
С	DTCH	EWAT			Edge of water
С	DTCH	IDEN			Ditch annotatior
С	DTCH	TOPD			Top of ditch
DOMESTI	C WATER		I	I	
С	DOMW	PIPE		ABND	Abandoned piping
С	DOMW	DEVC			Connectors, faucets, reducers, regulators, vents, intake points, tanks, taps, backflow presenters, and valves
С	DOMW	DEVC	ANOD		Anode
С	DOMW	DEVC	ANOT		Anode test station
С	DOMW	DEVC	FIRE		Fire connection pint other than hydrants
С	DOMW	DEVC	INTK		Intake point
С	DOMW	DEVC	INTK		The location where water is allowed into the water distribution system
С	DOMW	DEVC	PIGL		Pig launch point
С	DOMW	DEVC	PUMP		Pump
С	DOMW	DEVC	RECT		Rectifier
С	DOMW	DEVC	REGL		Regulator, reducer
С	DOMW	DEVC	SMPL		Sample location
С	DOMW	DEVC	TRET		Treatment unit
С	DOMW	FIRE			Fire lines

Discipline	Major	Minor1	Minor2	Status	Description
C	DOMW	FTTG			Caps, cleanouts, crosses, and tees
С	DOMW	HYDR			Hydrants
С	DOMW	IDEN			Identifier tags, symbol modifier, and text
С	DOMW	JBOX			A box or small vault (usually concrete, brick, or cast iron) in water systems located below grade with above grade access where pipes intersect. Manhole also houses associated fittings, valves, meters, etc.
С	DOMW	MAIN			Main domestic water piping
С	DOMW	METR			Meters
С	DOMW	NHYD			Non-potable hydrants/flushing hydrants
С	DOMW	NPOT			Non-potable water piping
С	DOMW	PITS	IDEN		Identifier tags, symbol modifier, and text
С	DOMW	PLNT			A water treatment plant and all appurtenant equipment, buildings, and facilities relating to water treatment
С	DOMW	PUMP			Booster pump stations
С	DOMW	REDC			Pressure reducing stations
С	DOMW	RSVR			Reservoirs
С	DOMW	RSVR	IDEN		Identifier tags, symbol modifier, and text
С	DOMW	SERV			Domestic water service piping
С	DOMW	SIGN			Surface markers/signs
С	DOMW	SITE			A water utility company or organization's certificated area of jurisdiction or responsibility as approved by a federal, state, or local utility regulatory authority
С	DOMW	SRCE			The point from which water is supplied for processing and distribution
С	DOMW	STNS	IDEN		Identifier tags, symbol modifier, and text
С	DOMW	TANK			Water storage tanks
С	DOMW	VENT			Vent pits
С	DOMW	VLVE			Valve pits/vaults
С	DOMW	WELL			Water well houses
DREDGIN	G	•		•	
С	DRED	LIMT			Dredge limit lines
С	DRED	OHWM			Ordinary high water marks
ELEVATIO	ONS				
С	ELEV	FIXT			Miscellaneous fixtures
С	ELEV	IDEN			Component identification numbers
С	ELEV	OTLN			Building outlines
С	ELEV	PATT			Textures and hatch patterns
С	ELEV	SIGN			Signage
EROSION			ON CONT	ROL	
С	EROS	CIPR			Culvert inlet protection
С	EROS	CNST	ENTR		Construction entrance
С	EROS	DDIV			Drainage divides
С	EROS	DVDK			Diversion dike
С	EROS	IDEN			Erosion and sediment control annotation
С	EROS	INLT	PROT		Inlet protection
С	EROS	LOD			Limit of Division
С	EROS	SILT	FENC		Silt fence
С	EROS	SILT	TRAP		Silt trap
С	EROS	SSLT	FENC		Super silt fence
LIQUID F				1	
С	FUEL	PIPE		ABND	Abandoned piping
С	FUEL	DEFL			Defueling piping

Discipline	Major	Minor1	Minor2	Status	Description
С	FUEL	DEVC			Air eliminators, filter strainers, hydrant fill points, line vents, markers,
					oil/water separators, reducers, regulators, and valves
C	FUEL	DEVC	AIRE		Air eliminator
C	FUEL	DEVC	ANOD		Anode
C	FUEL	DEVC	ANOT		Anode test station
C	FUEL	DEVC	FILT		Filter strainer point
C	FUEL	DEVC	OILW		Oil water separator
С	FUEL	DEVC	PUMP		Pump
C	FUEL	DEVC	RECT		Rectifier
C	FUEL	DEVC	REDC		Reducer
С	FUEL	DEVC	SRCE		Source point
С	FUEL	DEVC	VLVE		Valve
С	FUEL	FARM			Fuel farm site
С	FUEL	FLOW			Flow direction arrows
С	FUEL	FTTG			Caps, crosses, and tees
С	FUEL	HYDR			Hydrant control pits
С	FUEL	IDEN			Identifier tags, symbol modifier, and text
С	FUEL	JBOX			Junction boxes, manholes, handholes, test boxes
С	FUEL	MAIN			Main fuel piping
С	FUEL	METR			Meters
С	FUEL	REFN			Refinery site
C	FUEL	PIPL			Pipe line
C	FUEL	PIPS			Pipeline segment line
С	FUEL	PITS	IDEN		Identifier tags, symbol modifier, and text
С	FUEL	PUMP			Booster pump stations
С	FUEL	SERV			Service piping
С	FUEL	STNS	IDEN		Identifier tags, symbol modifier, and text
C	FUEL	TANK			Fuel tanks
C	FUEL	TRCH			Fuel line trench
С	FUEL	VENT			Vent pits
С	FUEL	VLVE			Valve pits
GRADE LI		r	1	1	
C	GRAD	EXST			Existing grade, ground line
C	GRAD	FNSH			Finished grade
GRID LINI					
C	GRID	FRAM			Frame (bounding frame of an area referenced by a grid)
C	GRID	MAJR			Major grid lines
C	GRID	MINR			Minor grid lines
C	GRID	TEXT			Border text, annotation
HELIPOR		DLOT			
C	HELI	BLST			Helipad blast pad and stopway markings Centerline
C C	HELI HELI	CNTR CNTR	MRKG		Centerline Centerline markings
C	HELI	DISP	WIKKU		Displaced threshold markings
C	HELI	DISP			Fixed distance markings
C	HELI	DIST			Helipad design surface
C	HELI	FATO			Helipad FATO
C C	HELI	IDEN			Heliport numbers and letters
C	HELI	SHLD			Shoulder
C	IICLI	SILD			

Discipline	Major	Minor1	Minor2	Status	Description
С	HELI	SIDE			Side stripes
С	HELI	TDZM			Touchdown zone markers
С	HELI	THRS			Threshold markers
С	HELI	TLOF			Helipad take off and landing area
INDUSTRI	AL WAST	E WATER			
С	INDW	PIPE		ABND	Abandoned piping
С	INDW	DEVC			Grit chambers, meters, flumes, neutralizers, oil/water separators, ejectors, tanks, and valves
С	INDW	DEVC	ANOD		Anode
С	INDW	DEVC	ANOT		Anode test station
С	INDW	DEVC	DISC		Discharge point
С	INDW	DEVC	GRIT		Grit chamber
С	INDW	DEVC	INLT		Inlet
С	INDW	DEVC	NEUT		Neutralizer
С	INDW	DEVC	PUMP		Pump
С	INDW	DEVC	RECT		Rectifier
С	INDW	DEVC	OILW		Oil water separator
С	INDW	DEVC	WFIT		Waste fitting
С	INDW	FLOW			Flow direction arrows
С	INDW	FTTG			Caps and cleanouts
С	INDW	HEAD	LINE		Headwall line
С	INDW	HEAD	PONT		Headwall point
С	INDW	IDEN			Identifier tags, symbol modifier, and text
С	INDW	JBOX			Junction boxes and manholes
С	INDW	LAGN			Lagoons
С	INDW	LIFT			Lift stations
С	INDW	MAIN			Main industrial waste water piping
С	INDW	METR			Meters
С	INDW	PLNT			Treatment plants
С	INDW	RSVR	IDEN		Identifier tags, symbol modifier, and text
С	INDW	SERV			Industrial waste water service piping
С	INDW	SIGN			Surface markers/signs
С	INDW	STNS	IDEN		Identifier tags, symbol modifier, and text
JOINTS					
С	JOIN	CNSL			Construction joints - longitudinal
С	JOIN	CNST			Construction joints - transverse
С	JOIN	CNTL			Contraction joints - longitudinal
С	JOIN	CNTT			Contraction joints - transverse
С	JOIN	EDGE			Thickened edges
С	JOIN	EXPN			Expansion joints
С	JOIN	IDEN			Joint annotation
NATURAL	GAS				
C	NGAS	PIPE		ABND	Abandoned piping
C	NGAS	DEVC			Hydrant fill points, lights, vents, markers, rectifiers, reducers, regulators,
С	NGAS	DEVC	ANOD		sources, tanks, drip pots, taps, and valves Anode
C	NGAS	DEVC	ANOT		Anode test station
C	NGAS	DEVC	FILL		Fill point
C	NGAS	DEVC	IDEN		Identifier tags, symbol modifier, and text

C C C	NGAS	DEVO		
С		DEVC	LITE	Light
	NGAS	DEVC	PUMP	Pump
	NGAS	DEVC	RECT	Rectifier
С	NGAS	DEVC	SRCE	Source point
С	NGAS	FLOW		Flow direction arrows
С	NGAS	FTTG		Caps, crosses, and tees
С	NGAS	IDEN		Identifier tags, symbol modifier, and text
С	NGAS	MAIN		Main natural gas piping
С	NGAS	METR		Meters
С	NGAS	PITS	IDEN	Identifier tags, symbol modifier, and text
С	NGAS	PUMP		Compressor stations
С	NGAS	REDC		Reducing stations
С	NGAS	SERV		Service piping
С	NGAS	SIGN		Surface markers/signs
С	NGAS	STNS	IDEN	Identifier tags, symbol modifier, and text
С	NGAS	VENT		Vent pits
С	NGAS	VLVE		Valve pits/boxes
OVERRUN	AREAS			
С	OVRN	CNTR		Centerlines
С	OVRN	CNTR	IDEN	Centerline annotation
С	OVRN	IDEN		Airfield overrun area - annotation
С	OVRN	JOIN		Airfield overrun joints
С	OVRN	OTLN		Airfield overrun area - outlines
С	OVRN	SHLD		Shoulder markings
PADS (arm	/ disarm /	calibration,	etc.)	
С	PADS	CNTR		Centerlines
С	PADS	CNTR	IDEN	Centerline annotation
С	PADS	IDEN		Pads - annotation
С	PADS	OTLN		Pad - outlines
С	PADS	SHLD		Shoulders with annotation
PARKING I	LOTS			
С	PKNG	CARS		Graphic illustration of cars
С	PKNG	CNTR		Centerlines
С	PKNG	CNTR	IDEN	Centerline annotation
С	PKNG	CURB		Curbs and gutters
С	PKNG	DRAN		Parking lot drainage slope indications
С	PKNG	EQPM		Parking Equipment (I.e. booths, gates, etc.)
С	PKNG	FIXT		Parking lot fixtures (e.g., wheel stops, parking meters)
С	PKNG	IDEN		Parking lot, minor road, and curb annotation
С	PKNG	ISLD		Parking islands
С	PKNG	MRKG		Parking lot striping, handicapped symbols, pavement markings
С	PKNG	OTLN		Parking lot outline
С	PKNG	SIGN		Parking lot signage
С	PKNG	SBMP		Speed bumps in parking areas
PROFILES				
С	PROF	CUID		Existing grade and grading cuts - annotation
С	PROF	FILL		New work, grading fills
С	PROF	INLT		Curb and surface inlets, catch basins
С	PROF	MHOL		Manholes

Discipline	Major	Minor1	Minor2	Status	Description			
С	PROF	PIPE			Piping			
С	PROF	ROAD			Roads			
PROPERTY								
С	PROP	CONS			Construction limits/controls, staging area			
С	PROP	ESMT			Easements			
С	PROP	IDEN			Property annotation			
С	PROP	LEAS			Lease line (exterior / ground lease)			
С	PROP	RWAY			Right of ways			
PAVEMEN	TS							
С	PVMT	ASPH			Pavement pattern - asphalt			
C	PVMT	CONC			Pavement pattern - concrete			
С	PVMT	GROV			Pavement Grooving			
С	PVMT	GRVL			Pavement pattern - gravel			
С	PVMT	IDEN			Road, parking lot, railroad, airfield pavement annotation			
С	PVMT	MRKG			Pavement markings			
С	PVMT	MRKG	WHIT		Roadway markings (white)			
С	PVMT	MRKG	YELO		Roadway markings (yellow)			
С	PVMT	PATT			Joint patterns, text and dimensions			
С	PVMT	ROAD			Roads, parking lots, railroads, airfield pavements			
С	PVMT	SBMP			Speed bumps on roadways			
С	PVMT	SIGN			Other signs			
RAILROA		1	1	I	1			
С	RAIL	BRDG			Railroad bridge area			
С	RAIL	BRDG	CNTR		Railroad bridge centerline			
С	RAIL	CNTR			Centerlines			
C	RAIL	CNTR	IDEN		Centerline annotation			
C	RAIL	EQPM			Railroad equipment (e.g., gates, signals)			
C	RAIL	IDEN			Railroad - annotation			
C	RAIL	TRAK			Railroads			
C	RAIL	YARD	~		Railroad Yard			
ROADS, ST	-		5	1				
C	ROAD	ASPH			Road outlines-asphalt surface			
C	ROAD	CNTR	IDEN		Centerlines			
C	ROAD ROAD	CNTR	IDEN		Centerline annotation			
C C	ROAD	CONC CURB			Road outlines-concrete surface Curbs			
C	ROAD	DRIV			Driveway edge of pavement			
C	ROAD	DRIV	CNTR		Driveway centerline			
C	ROAD	GRAL	CNIK		Guardrails			
C	ROAD	GRVL			Road outlines-gravel surface			
C	ROAD	IDEN			Road outlines-graver surface Road, curb, and guardrail annotation			
C	ROAD	MRKG			Pavement markings			
C	ROAD	SHLD			Roadway shoulder			
C	ROAD	SIGN			Roadway sinonder Roadway signs			
C C	ROAD	UPVD			Road outlines-unpaved			
	KOND				Roud outlines unpurou			
RUNWAYS	5							
C	, RUNW	ARST			Runway Arresting Gear Location			
C	RUNW	ARST			Runway arresting area			
Ŭ								

Discipline	Major	Minor1	Minor2	Status	Description
С	RUNW	BLST			Runway blast pad
С	RUNW	CLRW			Runway clearway
С	RUNW	CNTR			Runway Centerline
С	RUNW	CNTR	MRKG		Centerline markings
С	RUNW	DISP			Displaced threshold
С	RUNW	DIST			Fixed distance markings
С	RUNW	EDGE			Airfield runway edges
С	RUNW	ENDP			Runway endpoint
С	RUNW	ENDP	MRKG		Runway label marking point
С	RUNW	IDEN			Runway numbers and letters
С	RUNW	INTS			Runway intersection
С	RUNW	LAHS			Runway land and hold short area
С	RUNW	SAFT			Runway Safety Area
С	RUNW	SEGM			Runway segment
С	RUNW	SHLD			Shoulder markings
С	RUNW	SHLD			Runway Shoulder
С	RUNW	SIDE			Side stripes
С	RUNW	SIGN			Airfield signs on the runway such as distance remaining signs
С	RUNW	STWY			Runway stopway markings
С	RUNW	TDZM			Touchdown zone markers
С	RUNW	THRS			Threshold markers
SEAPLAN	ES				
С	SEAP	BUOY			Seaplane navigation buoy
С	SEAP	DOCK			Seaplane dock
С	SEAP	LNDA			Seaplane landing area
С	SEAP	RAMP	CNTR		Seaplane ramp centerline
С	SEAP	RAMP			Seaplane ramp site
SECTIONS	5				
С	SECT	IDEN			Component identification numbers
С	SECT	MBND			Material beyond section cut
С	SECT	MCUT			Material cut by section
С	SECT	PATT			Textures and hatch patterns
SITE FEAT	TURES			1	
С	SITE	EROS			Riprap, revetments/stone protection, breakwaters, dikes, jetties, and drains
С	SITE	EROS	IDEN		Riprap, revetment/stone protection, breakwater, dike, jetty, and drain annotation
С	SITE	FENC			Fences and handrails
С	SITE	FENC	IDEN		Fence, handrail, ramp, sign, and trail annotation
С	SITE	FENP			Fence Posts
С	SITE	GATE			Gates along fences or other barriers intended to restrict access
С	SITE	IDEN			Site improvement annotation
С	SITE	IMPR			Site improvements (channel or levee features)
С	SITE	SECU	CMRA		Security camera locations outside of buildings
С	SITE	STRC			Structures (bridges, sheds, foundation pads, footings, etc.)
С	SITE	STRS			Stairs and ramps
С	SITE	WALK			Walks, trails and bicycle paths
SANITARY	SEWER				
С	SSWR	PIPE		ABND	Abandoned piping
С	SSWR	DEVC			Grease traps, grit chambers, flumes, neutralizers, oil/water separators, ejectors,
					and valves

Discipline	Major	Minor1	Minor2	Status	Description
C	SSWR	DEVC	ANOD		Anode
С	SSWR	DEVC	ANOT		Anode test station
С	SSWR	DEVC	DNWS		Downspout point
С	SSWR	DEVC	DSCH		Discharge point
С	SSWR	DEVC	GRIT		Grit chamber
С	SSWR	DEVC	GRSE		Grease trap
С	SSWR	DEVC	IDEN		Identifier tags, symbol modifier, and text
С	SSWR	DEVC	INLT		inlet
С	SSWR	DEVC	METR		Meters
С	SSWR	DEVC	NEUT		Neutralizer
С	SSWR	DEVC	OILW		Oil water separator
С	SSWR	DEVC	PUMP		Pump
С	SSWR	DEVC	RECT		rectifier
С	SSWR	DEVC	TRET		Treatment unit
С	SSWR	DEVC	VLVE		valve
С	SSWR	FILT			Filtration beds
С	SSWR	FILT	IDEN		Identifier tags, symbol modifier, and text
С	SSWR	FLOW			Flow direction arrows
С	SSWR	FTTG			Caps and cleanouts
С	SSWR	IDEN			Identifier tags, symbol modifier, and text
С	SSWR	JBOX			Junction boxes and manholes
С	SSWR	JBOX	IDEN		Identifier tags, symbol modifier, and text
С	SSWR	LAGN			Lagoons
С	SSWR	LEAC			Leach field
С	SSWR	LEAC	LAGN		Lagoon
С	SSWR	LEAC	SBED		Sludge bed
С	SSWR	MAIN			Sanitary sewer piping
С	SSWR	MHOL			Sanitary sewer manholes
С	SSWR	NITF			Nitrification drain fields
С	SSWR	PLNT			Treatment plants
С	SSWR	PUMP			Booster pump stations
С	SSWR	RSVR	IDEN		Identifier tags, symbol modifier, and text
С	SSWR	SERV			Sanitary sewer service piping
С	SSWR	SIGN			Surface markers/signs
С	SSWR	SITE			A wastewater utility company or organization's certificated area of jurisdiction of responsibility as approved by a federal, state, or local utility regulatory authority
С	SSWR	STNS	IDEN		Identifier tags, symbol modifier, and text
С	SSWR	TANK			Septic tanks
С	SSWR	TANK	DISP		Disposal tanks
С	SSWR	TRET			A wastewater treatment plant and all appurtenant equipment, buildings, and facilities relating to water treatment
STRUCTU		I	I	I	
С	STRC	IDEN			Bridges, piers, breakwaters, docks, floats, etc annotation
С	STRC	OTLN			Bridges, piers, breakwaters, docks, floats, etc outlines
С	STRC	TOWR			Tower
STORM SH		1		I	
С	STRM	PIPE		ABND	Abandoned piping
С	STRM	AFFF			AFFF lagoon/detention pond
С	STRM	CHUT			Chutes and concrete erosion control structures

Discipline	Major	Minor1	Minor2	Status	Description
С	STRM	CULV			Culverts
С	STRM	CULV	CLIN		Culvert centerline
С	STRM	CULV	LINE		Culvert line
С	STRM	DEVC			Downspouts, flumes, oil/water separators, and flap gates
С	STRM	DRAN	DIVL		Drainage divide line
С	STRM	DRAN	IDEN		Identifier tags, symbol modifier, and text
С	STRM	DRAN	LINE		Open drainage line
С	STRM	EROS			Erosion control (riprap)
С	STRM	FLOD			Flood area
С	STRM	FLOW			Flow direction arrows
С	STRM	FMON			Flow monitoring station
С	STRM	FTTG			Caps and cleanouts
С	STRM	HDWL			Headwalls and endwalls
С	STRM	IDEN			Identifier tags, symbol modifier, and text
С	STRM	INLT			Inlets (curb, surface, and catch basins)
С	STRM	JBOX			Junction
С	STRM	LAGN			Lagoons, ponds, watersheds, and basins
С	STRM	LAGN	BASN		Drainage basin
С	STRM	LAGN	OPEN		Open drainage area
С	STRM	LAGN	STIL		Stilling basin
С	STRM	LAGN	RPNT		Reservoir point
С	STRM	MAIN			Storm sewer piping
С	STRM	MHOL			Manholes
С	STRM	PUMP			Pump stations
С	STRM	ROOF			Roof drain line
С	STRM	RSVR	IDEN		Identifier tags, symbol modifier, and text
С	STRM	SERV			Storm sewer service piping
С	STRM	SIGN			Surface markers/signs
С	STRM	STAT	PUMP		Pump station
С	STRM	STNS	IDEN		Identifier tags, symbol modifier, and text
С	STRM	STRC			Storm drainage, headwalls, inlets, manholes, culverts, and drainage structures
С	STRM	SUBS			Subsurface drain piping
SURVEY					
С	SURV	DATA			Survey data (benchmarks and horizontal control points or monuments)
С	SURV	IDEN			Survey, baseline, and control line annotation
С	SURV	LINE			Survey, baseline, and control lines
TAXIWAY	S				
С	TAXI	CNTR			Taxiway centerline
С	TAXI	CNTR	IDEN		Centerline annotation
С	TAXI	CNTR	MRKG		Centerline markings
С	TAXI	EDGE			Edge markings
С	TAXI	HOLD			Holding lines
С	TAXI	IDEN			Annotation
С	TAXI	INTS			Taxiway intersection
С	TAXI	JOIN			Taxiway joints
С	TAXI	OTLN			Taxiway - outlines
С	TAXI	SHLD			Shoulder transverse stripes
С	TAXI	SIGN			Airfield signs on the taxiway such as taxiway designator, hold short and
					directional signs

Discipline	Major	Minor1	Minor2	Status	Description
TOPOGRA	PHY	1		1	
С	TOPO	AUCO			Noise Complaint
С	TOPO	AUST			Noise Monitoring Station
С	TOPO	AUZN			Noise Contour/Zone
С	TOPO	BKLN			Breaklines
С	ТОРО	BORE			Boring locations
С	TOPO	COOR			Coordinate grid ticks and text
С	TOPO	DTMP			DTM points
С	ТОРО	DTMT			DTM triangles
С	TOPO	FLZN			Flood Zone
С	TOPO	MAJR			Major contours
С	TOPO	MAJR	IDEN		Major contours - annotation
С	TOPO	MINR			Minor contours
С	TOPO	MINR	IDEN		Minor contours - annotation
С	TOPO	MINR	ONEF		Minor contours - One Foot Intervals
С	TOPO	MINR	TWOF		Minor contours - Two Foot Intervals
С	TOPO	RNYE			Runway centerline elevation point
С	TOPO	RTWL			Retaining wall
С	TOPO	SHOR			Shorelines, land features, and references
С	TOPO	SHOR			Shoreline
С	TOPO	SLOP			Cut/fill slopes
С	TOPO	SLOP	FILL		Cut/fill slopes
С	TOPO	SLOP	IDEN		Cut/fill slope, top/toe slope annotation
С	TOPO	SLOP	TOPT		Top/toe slopes
С	TOPO	SLTP			Top/toe slopes
С	TOPO	SOUN			Soundings
С	TOPO	SPOT			Spot elevations
С	TOPO	SPOT	IDEN		Spot elevations - annotation
С	TOPO	WATR			Water area
UTILITIES	GENERA	L			
С	UTIL	AREA			Utility area
С	UTIL	COND			Conduit centerline
С	UTIL	DIST			Energy distribution control facility
С	UTIL	SOLR			Solar panel
С	UTIL	TANK			Tank
С	UTIL	TUNL			Tunnel centerline
С	UTIL	UDEF			Undefined feature
С	UTIL	UDOR			Utility utilidor line
С	UTIL	UNDL			Undefined utility line

Common Layer Names – Demolition (D)

Follow National CAD Standards.

Discipline	Major	Minor1	Minor2	Status	Description
GENERAL	=	ATION	1	1	1
Е	ANNO	DIMS			Witness/extension lines, dimension terminators, dimension text
Е	ANNO	KEYN			Reference keynotes with associated leaders
Е	ANNO	NOTE			General notes and general remarks
Е	ANNO	NPLT			Non-plotting graphic information
Е	ANNO	PATT			Miscellaneous patterning and hatching
Е	ANNO	REFR			Reference files (AutoCAD users only, see Chapter 4)
Е	ANNO	SYMB			Miscellaneous symbols
Е	ANNO	TEXT			Miscellaneous text and callouts with associated leaders
AIRFIELD	S				
Е	AFLD	CIRC	CTRL		Control and monitoring circuits
Е	AFLD	CIRC	MULT		Multiple circuits
Е	AFLD	CIRC	SERS		Series circuits
Е	AFLD	VALT			Airfield lighting vaults
ALARM SY	YSTEMS				
Е	ALRM	EQPM			Alarm system equipment
Е	ALRM	IDEN			Identifier tags, symbol modifier, and text
Е	ALRM	SYMB			Miscellaneous alarm system symbols
BEACONS					
Е	BCNS	IDEN			Identifier tags, symbol modifier, and text
Е	BCNS	MISC			Miscellaneous navaids - windcones and beacons
E	BCNS	STRB			Strobe beacons
BELL SYS	TEMS				
E	BELL	EQPM			Bell system equipment
E	BELL	IDEN			Identifier tags, symbol modifier, and text
E	BELL	SYMB			Bell system symbols
CABLE SY	STEMS				
E	CABL	COAX			Coax cable
E	CABL	FIBR			Fiber optics cable
E	CABL	IDEN			Cable identifiers
Е	CABL	MULT			Multi-conductor cable
Е	CABL	TRAY			Cable trays and wireways
CATHODI			STEM		
Е	CATH	ANOD			Sacrificial anode system
Е	CATH	CURR			Impress current system
Е	CATH	IDEN			Identifier tags, symbol modifier, and text
Е	CATH	TEST			Test stations
Е	CATV	IDEN			Identifier tags, symbol modifier, and text
Е	CATV	SYMB			Cable television system symbols
CLOSED-C			N SYSTEN	1	<u>1</u>
E	CCTV	IDEN			Identifier tags, symbol modifier, and text
E	CCTV	SYMB			Closed-circuit television system symbols
CIRCUITS					
E	CIRC	CTRL			Control and monitoring circuits
E	CIRC	IDEN			Identifier tags, symbol modifier, and text
E	CIRC	MULT			Multiple circuits
Е	CIRC	SERS			Series circuits

CLOCK SYS	STEMS			Description
E	51 E AVIS			
	CLOK	IDEN		Identifier tags, symbol modifier, and text
E	CLOK	SYMB		Clock system symbols
COMMUNIC	CATIONS			
Е	COMM	ACCS		Access point
Е	COMM	AIRP		Air pipe line
Е	COMM	COVR		Access coverage area
Е	COMM	DUCT		Duct line
Е	COMM	EQPM		Other communications distribution equipment
Е	COMM	EQPM	AIRP	Air pressure device
Е	COMM	EQPM	AMPL	Amplifier
Е	COMM	EQPM	ANTL	Antenna line
Е	COMM	EQPM	ANTS	Antenna site
Е	COMM	EQPM	ATTN	Attenuator
Е	COMM	EQPM	BOTH	Telephone booth site
Е	COMM	EQPM	CLAD	Cable ladder
Е	COMM	EQPM	CRCK	Cable rack line
Е	COMM	EQPM	DSPL	Dbsplice site
Е	COMM	EQPM	GPLN	Ground plane
Е	COMM	EQPM	GPNT	Ground point
Е	COMM	EQPM	GWAV	Ground wave
Е	COMM	EQPM	IMPD	Impedance matching point
Е	COMM	INET	SITE	Internet center site
Е	COMM	EQPM	PULB	Pullbox site
Е	COMM	EQPM	RELY	Relay station
Е	COMM	EQPM	RISR	Riser
Е	COMM	EQPM	RPTR	Repeater
Е	COMM	EQPM	SATE	Satellite
Е	COMM	EQPM	SENS	Sensor
Е	COMM	EQPM	SPKR	Speaker
Е	COMM	EQPM	SPLC	Splice
Е	COMM	EQPM	SPLT	Splitter
Е	COMM	EQPM	TELE	Telephone
Е	COMM	EQPM	TERM	Terminator
Е	COMM	EQPM	TRML	Terminal
Е	COMM	EQPM	TWIS	Twisted pair line
Е	COMM	HAND		Handhole
Е	COMM	JBOX		Communication junction or pull boxes, man/handholes, pedestals, splices
Е	COMM	LCAP		Load capacitor
Е	COMM	LCOL		Load coil
Е	COMM	LINE	CBRG	Cable bridge line
Е	COMM	LINE	LOOP	Service loop
Е	COMM	LINE	SEGL	Segmented cable line
Е	COMM	LINE	SEGS	Segmented cable site
Е	COMM	LOSL		Line of sight line
Е	COMM	MCNV		Media converter
Е	COMM	MHOL		Manhole site
Е	COMM	MHOP		Multihop polygon area
Е	COMM	NETS		Network systems site

Discipline	Major	Minor1	Minor2	Status	Description
E	COMM	OVHD			Overhead communications/telephone lines
Е	COMM	OVHD	IDEN		Identifier tags, symbol modifier and text
Е	COMM	PATH	SITE		Path node site
Е	COMM	PATH	SLIN		Path segment line
Е	COMM	PEDS			Pedestal site
Е	COMM	RADI			Radio
Е	COMM	RADI	RCVR		Radio receiver site
Е	COMM	RADI	TRNS		Radio transmitter site
Е	COMM	RADR			Radar site
Е	COMM	SIGN			Marker
Е	COMM	UNDR			Underground communications/telephone lines
Е	COMM	UNDR	IDEN		Identifier tags, symbol modifier and text
Е	COMM	VALT			Communications vault site
Е	COMM	VIDS			Video site
Е	COMM	VOIC			Voice switch site
Е	COMM	VSIT			Vertical site
Е	COMM	WAVG			Waveguide line
DETAIL IN	FORMAT	ION	1	1	
Е	DETL	GRPH			Graphics, gridlines, non-text items
Е	DETL	INPD			Inch-pound-specific dimensions and notes
Е	DETL	METR			Metric-specific dimensions and notes
DIAGRAM	INFORM	ATION			
Е	DIAG	GRPH			Graphics, gridlines, non-text items
Е	DIAG	IDEN			Identifier tags, symbol modifier and text
Е	DIAG	INPD			Inch-pound-specific dimensions and notes
Е	DIAG	METR			Metric-specific dimensions and notes
CENTRAL	DICTRAT	TION SYST	EMS	1	
Е	DICT	IDEN			Identifier tags, symbol modifier, and text
Е	DICT	SYMB			Central dictation system symbols
Е	DISC	INFO			Clearances and working space information (NEC code, etc.)
UNDERGR	OUND DU	CTBANKS	5 (to be used	d when mu	ultiple systems are in one ductbank system)
Е	DUCT	MULT			Ductbank
Е	DUCT	MULT	IDEN		Identifier tags, symbol modifier and text
ELECTRIC	2	•	•	•	•
Е	ELEC	DEVC			Capacitors, voltage regulators, motors, buses, generators, meters, grounds, and markers
Е	ELEC	JBOX			Junction boxes, pull boxes, manholes, handholes, pedestals, splices
Е	ELEC	SUBS			Other substation equipment
E	ELEC	SWCH			Fuse cutouts, pole mounted switches, circuit breakers, gang operated disconnects, reclosers, cubicle switches
Е	ELEC	VALT			Vaults
ENERGY N			ROL SYS	ГЕMS	
Е	EMCS	EQPM			Energy monitoring control system equipment
Е	EMCS	EQPM	DUCT		Ductbank line
Е	EMCS	EQPM	JBOX		Junction
Е	EMCS	EQPM	SIGN		Marker
Е	EMCS	IDEN			Identifier tags, symbol modifier, and text
Е	EMCS	SYMB			Energy monitoring control system symbols
Е	EMER	EMER			Emergency systems equipment
FLOOR IN	FORMAT	ION			

Discipline	Major	Minor1	Minor2	Status	Description
Е	FLOR	IDEN			Room name, space identification text (copied from Architectural - Floor Plan model file)
Е	FLOR	NUMB			Room/space identification number and symbol (copied from Architectural - Floor Plan model file)
GROUND	SYSTEM				
Е	GRND	CIRC			Circuits
Е	GRND	DIAG			Ground system diagram
Е	GRND	EQUI			Equipotential ground system
Е	GRND	REFR			Reference ground system
INTERCO	M SYSTEM	1			
Е	INTC	IDEN			Identifier tags, symbol modifier, and text
Е	INTC	SYMB			Intercom/PA system symbols
LIGHTING	r J				•
Е	LITE	APPR			Approach lights
Е	LITE	APRN			Apron Lighting
Е	LITE	CIRC			Lighting circuits (including crosslines and homeruns)
Е	LITE	CIRC	NUMB		Lighting circuit numbers (e.g., panel/circuit number, wire/conduit size)
Е	LITE	CLNG			Ceiling mounted (surface/pendant) fixtures
Е	LITE	CONS			Constant Current Regulators
Е	LITE	DIST			Distance and arresting gear markers and lights
E	LITE	EMER			Emergency fixtures (outline of light (if ceiling mounted) should go on E-LITE- CLNG)
Е	LITE	EXIT			Exit fixtures (outline of light (if ceiling mounted) should go on E-LITE-CLNG)
Е	LITE	EXTR			Exterior lights
Е	LITE	EXTR	IDEN		Identifier tags, symbol modifier, and text
Е	LITE	FLOR			Floor mounted fixtures (e.g., stage)
Е	LITE	IDEN			Light fixture identifier tags
Е	LITE	JBOX			Junction boxes
Е	LITE	LANE			Hoverlane, taxilane, and helipad lights
Е	LITE	OBST			Obstruction lights
Е	LITE	PANL			Main distribution panels, switchboards, lighting panels
Е	LITE	RNWY	GARD		Runway guard lights
Е	LITE	ROOF			Roof lighting
Е	LITE	RUNW	EDGE		Runway edge lights
Е	LITE	RUNW	TDZN		Runway Touchdown Zone lights
Е	LITE	RUNW	CNTR		Runway Centerline lights
Е	LITE	RUNW	DTGS		Runway Distance to go lights
Е	LITE	SIGN			Taxiway guidance signs
Е	LITE	SPCL			Special fixtures
Е	LITE	SWCH			Lighting contactors, photoelectric controls, low-voltage lighting controls, etc.
Е	LITE	TAXI	CNTL		Taxiway centerline lights
Е	LITE	TAXI	EDGE		Taxiway edge lights
Е	LITE	THRS			Threshold lights
Е	LITE	WALL			Wall mounted fixtures
LIGHTNIN	IG PROTE	CTION SY	STEM		
Е	LTNG	COND			Lightning protection conductors
Е	LTNG	TERM			Lightning protection terminals
NURSE CA	LL / PAG	ING SYSTI	EMS		
Е	NURS	IDEN			Identifier tags, symbol modifier, and text
Е	NURS	SYMB			Nurse call/paging system symbols

Discipline	Major	Minor1	Minor2	Status	Description
POLES		1	1	1	1
Е	POLE	GUYS			Guying equipment
Е	POLE	GUYS	IDEN		Guying equipment identifier tags, symbol modifiers, and text
Е	POLE	IDEN			Utility pole identifier tags, symbol modifier, and text
Е	POLE	UTIL			Utility poles
POWER					
Е	POWR	BUSW			Busways and wireways
Е	POWR	CABL			Cable trays
Е	POWR	CIRC			Power circuits (including crosslines and homeruns)
Е	POWR	CIRC	NUMB		Power circuit numbers (e.g., panel/circuit number, wire/conduit size)
Е	POWR	CLNG			Ceiling outlets (receptacles and switches)
Е	POWR	FEED			Feeders
Е	POWR	GENR			Generators and auxiliary equipment
Е	POWR	JBOX			Junction boxes
Е	POWR	MOTR			Motors and utilization equipment
Е	POWR	PANL			Panelboards, switchboards, MCC, unit substations
Е	POWR	POLE	COND		Utility pole conduit
Е	POWR	POLE	GUYP		Utility pole guy point
Е	POWR	SUBS			Other substation equipment
Е	POWR	SWCH			Fuse cutouts, motor starters, contactors, pole mounted switches, circuit breakers, gang operated disconnects, reclosers, cubicle switches
Е	POWR	URAC			Underfloor raceways
Е	POWR	XFMR	PADM		Pad mounted transformers
Е	POWR	XFMR	POLE		Pole mounted transformers
Е	POWR	WALL			Wall/floor outlets (receptacles and switches)
PRIMARY	ELECTRI	CAL CAB	LES		
Е	PRIM	OVHD			Overhead electrical utility lines
Е	PRIM	OVHD	IDEN		Identifier tags, symbol modifier, and text
Е	PRIM	UNDR			Underground electrical utility lines
Е	PRIM	UNDR	IDEN		Identifier tags, symbol modifier, and text
SECONDA	RY ELEC	FRICAL C	ABLES		
Е	POWR	CAPC			Capacitor
Е	POWR	HBLT			Head bolt outlet
Е	POWR	METR			Meter
Е	POWR	PEDS			Pedestal
Е	POWR	REGL			Regulator
Е	POWR	RISR			Riser
Е	POWR	SIGN			Marker
Е	POWR	SITE			Utility electric utility site
Е	POWR	SPLC			Splice
E	SECD	OVHD			Overhead electrical utility lines
E	SECD	OVHD	IDEN		Identifier tags, symbol modifier, and text
E	SECD	UNDR			Underground electrical utility lines
E	SECD	UNDR	IDEN		Identifier tags, symbol modifier, and text
SECURITY					
Е	SERT	ACCS			Access control system symbols
Е	SERT	BURD			Buried sensors
Е	SERT	CLNG			Ceiling mounted sensors
Е	SERT	FLOR			Floor mounted sensors

Discipline	Major	Minor1	Minor2	Status	Description
Е	SERT	IDEN			Identifier tags, symbol modifier, and text
Е	SERT	UNDR			Buried sensors
Е	SERT	WALL			Wall mounted sensors
SOUND / P	A SYSTEN	IS			
Е	SOUN	IDEN			Identifier tags, symbol modifier, and text
Е	SOUN	SYMB			Sound system symbols
SPECIAL S	SYSTEMS				
E	SPCL	IDEN			Special systems (UMCS, EMCS, CATV, etc.) identifier tags, symbol modifier, and text
Е	SPCL	JBOX			Junction boxes
Е	SPCL	PANL			Panelboards, backing boards, patch panel racks
Е	SPCL	SRFS			Surface Sensor System
Е	SPCL	SYST			Special systems (UMCS, EMCS, CATV, etc.)
Е	SPCL	TRAF			Traffic signal system
Е	SPCL	TRAF	IDEN		Traffic signal identifier tags, symbol modifier, and text
TV ANTEN	INA SYSTI	EMS	-		·
Е	TVAN	IDEN			Identifier tags, symbol modifier, and text
Е	TVAN	SYMB			TV antenna system symbols

Common Layer Names – Fire Protection (F)

Discipline	Major	Minor1	Minor2	Status	Description
AQUEOUS	-				The second se
F	AFFF	EQPM			Equipment
F	AFFF	PIPE			Piping
ALARM SY					- 10
F	ALRM	DTCT			Smoke/heat/other detectors
F	ALRM	INDC			Indicating appliances
F	ALRM	MANL			Manual fire alarm pull stations
F	ALRM	PHON			Fire service or emergency telephone stations
GENERAL	INFORM	ATION			
F	ANNO	DIMS			Witness/extension lines, dimension terminators, dimension text
F	ANNO	KEYN			Reference keynotes with associated leaders
F	ANNO	NOTE			General notes and general remarks
F	ANNO	NPLT			Non-plotting graphic information
F	ANNO	PATT			Miscellaneous patterning and hatching
F	ANNO	REFR			Reference files (AutoCAD users only, see Chapter 4)
F	ANNO	SYMB			Miscellaneous symbols
F	ANNO	TEXT			Miscellaneous text and callouts with associated leaders
CO2 SPRIM	NKLER SY				
F	CO2S	EQPM			Equipment
F	CO2S	PIPE			CO2 piping or CO2 discharge nozzle piping
CONTROL	-	1		T	1
F	CTRL	PANL			Control panels
DETAIL IN	-				
F	DETL	GRPH			Graphics, gridlines, non-text items
F	DETL	INPD			Inch-pound-specific dimensions and notes
F	DETL	METR			Metric-specific dimensions and notes
FLOOR IN	-				Description and the start for the form Architestard Eleven Disc
F	FLOR	IDEN			Room name, space identification text (copied from Architectural - Floor Plan model file)
F	FLOR	NUMB			Room/space identification number and symbol (copied from Architectural - Floor Plan model file)
HALON SY	YSTEM				
	HALN	EQPM			Halon equipment
F	HALN	PIPE			Halon piping
INERT GA		1			
F	IGAS	EQPM			Inert gas equipment
F	IGAS	PIPE			Inert gas piping
LIGHTING					
F	LITE	EMER			Emergency fixtures
F	LITE	EXIT			Exit fixtures
EGRESS R					Egrano granikomenta degionator
F	LSFT	EGRE OCCP			Egress requirements designator
F F	LSFT LSFT	TRVL			Occupant load for egress capacity Maximum travel distances
			SION / AT		ETECTION EQUIPMENT
F	PROT	CABN	GIUN / AL		Fire hose cabinets
F F	PROT	EXTN			Fire extinguishers and fire extinguisher cabinets
1.	INUT	LAIN			

Discipline	Major	Minor1	Minor2	Status	Description
F	PROT	HOSE			Fire hoses
FIRE RAT	INGS				
F	RATE	DOOR			Door fire ratings
F	RATE	WALL			Wall fire ratings
SMOKE / F	PRESSURI	ZATION C	ONTROL		
F	SMOK	DAMP			Dampers
SPRINKLE	ER SYSTE	M			
F	SPRN	CLHD			Sprinkler - ceiling heads
F	SPRN	COMB			Combination system
F	SPRN	OTHD			Sprinkler - other heads
F	SPRN	OTHR			Sprinkler - other
F	SPRN	PEND			Sprinkler - pendant
F	SPRN	PIPE			Sprinkler piping
F	SPRN	STAN			Standpipe system
WATER SU	UPPLY AN	D DISTRII	BUTION		
F	WATR	CONN			Fire department connections
F	WATR	HYDR			Hydrants
F	WATR	PIPE			Piping
F	WATR	PUMP			Fire pumps

Discipline	Major	Minor1	Minor2	Status	Description					
	GENERAL INFORMATION									
G	ANNO	DIMS			Witness/extension lines, dimension terminators, dimension text					
G	ANNO	IDEN			Identification Tags: Floor Id. #s; Room #s; Door #s; hardware group; Window #s; Equipment Id. #s; Furniture #s; Tenant Identification; Area calculations; Occupant or employee names; Elevation Id. #s; Component Id. #s					
G	ANNO	KEYN			Reference keynotes with associated leaders					
G	ANNO	LEGN			Legends					
G	ANNO	NOTE			Notes					
G	ANNO	NPLT			Non-plotting graphic information					
G	ANNO	PATT			Miscellaneous patterning and hatching					
G	ANNO	REDL			Redline Annotations					
G	ANNO	REFR			Reference files (AutoCAD users only, see Chapter 4)					
G	ANNO	REVS			Revisions					
G	ANNO	SCHD			Schedules					
G	ANNO	SYMB			Miscellaneous symbols					
G	ANNO	TEXT			Miscellaneous text and callouts with associated leaders					
G	ANNO	TITL			Drawing Component Titles, Detail Titles, Section Titles, Elevations					
G	ANNO	TTLB			Border and title block linework					
GRIDS										
G	GRID	EXTR			Column grid outside building					
G	GRID	IDEN			Column grid tags					
PLAN / OU	TLINE									
G	PLAN	OTLN			Floor outline/perimeter/building footprint					
SITE INFO	RMATIO	N	1	•						
G	SITE	OTLN			Site plan - key map					

Common Layer Names – General (G)

Common Layer Names – Hazardous Materials (H)

Discipline	Major	Minor1	Minor2	Status	Description
GENERAL	-	ATION	1	L	
Н	ANNO	DIMS			Witness/extension lines, dimension terminators, dimension text
Н	ANNO	KEYN			Reference keynotes with associated leaders
Н	ANNO	NPLT			Non-plotting graphic information
Н	ANNO	PATT			Miscellaneous patterning
Н	ANNO	SYMB			Reference bubbles, matchlines and breaklines
Н	ANNO	TEXT			Detail title text, text and associated leaders, notes
BUILDING	S				
Н	BLDG	IDEN			Annotation
Н	BLDG	OTLN			Command posts, information centers
DECONTA	MINATIO	N			
Н	DECN	EQPM			Decontamination equipment
Н	DECN	IDEN			Annotation
DETAIL IN	FORMAT	ION			
Н	DETL	GRPH			Graphics, gridlines, non-text items
Н	DETL	INPD			Inch-pound-specific dimensions and notes
Н	DETL	METR			Metric-specific dimensions and notes
DISPOSAL	AREAS				
Н	DISP	HAZW			Hazardous waste
Н	DISP	IDEN			Annotation
Н	DISP	MUNT			Munitions
Н	DISP	TANK			Spill containment tanks
FIXTURES	5				
Н	FIXT	EYEW			Emergency eyewashes
Н	FIXT	SHOW			Emergency showers
MONITOR	ING SYST				
Н	MNST	AIRQ			Air quality
Н	MNST	GWTR			Ground water
Н	MNST	IDEN			Annotation
Н	MNST	LAND			Landfill gas
Н	MNST	SOIL			Soil gas
Н	MNST	SWTR			Surface water
POLLUTIO					
Н	POLL	CONC			Polluted area of concern
Н	POLL	IDEN			Annotation
Н	POLL	ORIG			Point of pollution origin
H	POLL	POTN			Potential spill, emission, or release source
SAMPLE P					
Н	SAMP	AIRS			Air samples
Н	SAMP	BIOL			Biological samples Ground water samples
H	SAMP	GWTR			`
Н	SAMP	IDEN MACN			Annotation
H	SAMP	MAGN			Magnetometer location points
H	SAMP	SEDI			Sediment samples
H	SAMP	SOIL			Solid material complex
Н	SAMP	SOLI			Solid material samples

Discipline	Major	Minor1	Minor2	Status	Description				
Н	SAMP	SWTR			Surface water samples				
Н	SAMP	WAST			Waste samples				
SECTIONS	SECTIONS								
Н	SECT	IDEN			Component identification numbers				
Н	SECT	MBND			Material beyond section cut				
Н	SECT	MCUT			Material cut by section				
Н	SECT	PATT			Textures and hatch patterns				
STORAGE	FACILITI	ES							
Н	STOR	HAZM			Hazardous materials				
Н	STOR	HAZW			Hazardous waste				
Н	STOR	IDEN			Annotation				

Common Layer Names – Interiors (I)

Major	Minor1	Minor2	Status	Description
-			1	
ANNO	DIMS			Witness/extension lines, dimension terminators, dimension text
ANNO	KEYN			Reference keynotes with associated leaders
ANNO	NOTE			General notes and general remarks
ANNO	NPLT			Non-plotting graphic information
ANNO	PATT			Miscellaneous patterning
ANNO	SYMB			Reference bubbles, matchlines and breaklines
ANNO	TEXT			Detail title text, text and associated leaders, notes
FORMAT	ION			
DETL	GRPH			Graphics, gridlines, non-text items
DETL	INPD			Inch-pound-specific dimensions and notes
DETL	METR			Metric-specific dimensions and notes
NS				
ELEV	CASE			Wall mounted casework
ELEV	FIXT			Miscellaneous fixtures
ELEV	FNSH			Finishes, woodwork and trim
ELEV	IDEN			Component identification numbers
ELEV	PATT			Textures and hatch patterns
ELEV	PFIX			Plumbing fixtures in elevation
	SIGN			Signage
лт				-
-				Equipment access
				Child development (play toys, teaching rugs, play forms)
-				Copiers, fax machines, office equipment
-	FIXD			Fixed equipment
-				Equipment identification numbers
				Medical (exam beds, dental chairs, etc.)
-				Moveable equipment
-				Not in contract equipment
-				Overhead, ceiling mounted, and suspended equipment
				Storage equipment
		RIALS	1	
	SIGN			Signage
FURN	ACCS			Accessories (vestibule matts, partitions, draperies, clocks, trashcans, lecturns, lamps, etc.)
FURN	ADPC			Automated Data Processing Components
FURN				Artwork
FURN				Case goods (desks, credenzas, beds, dressers, nightstands, wardrobes, etc.)
FURN	FLOR			Flooring (carpet, rugs, etc.)
FURN	FREE			Free-standing furnishings (desks, beds, tables, dressers, credenzas, case goods)
FURN	GRID			Planning grid/modular outline
FURN	IDEN			Furniture code identification
FURN	MISC			Miscellaneous furniture
FURN	PLNT			Plants
FURN	SEAT			Chairs, sofas, etc.
FURN	STOR			File cabinets, high density storage, shelving, storage cabinets
	INFORMA ANNO ANNO ANNO ANNO ANNO ANNO ANNO AN	INFORMATIONANNODIMSANNONOTEANNONOTEANNOPATTANNOSYMBANNOSYMBANNOSYMBANNOSYMBANNOSYMBANNOSYMBANNOTEXTDETLGRPHDETLINPDDETLMETRDETLMETRELEVFIXTELEVFIXTELEVFIXTELEVSIGNELEVSIGNELEVSIGNEQPMCOPYEQPMCOPYEQPMFIXDEQPMMOVEEQPMMOVEEQPMSTOREQPMSIGNFURNACCSFURNAACCSFURNAACCSFURNGRIDFURNACCSFURNACCSFURNACCSFURNACCSFURNGRIDFURNACCSFURNGRIDFURNGRIDFURNGRIDFURNGRIDFURNGRIDFURNGRIDFURNGRIDFURNMISCFURNMISCFURNPLNT	INFORMATIONANNODIMSANNOKEYNANNONOTEANNONPLTANNOPATTANNOSYMBANNOTEXTFORMATIONDETLGRPHDETLMETRDETLMETRDETLMETRDETLMETRELEVFASHELEVFIXTELEVFNSHELEVFNSHELEVSIGNELEVSIGNEQPMCOPYEQPMFIXDEQPMMOVEEQPMMEDIEQPMMICNEQPMSTORFURNACCSFURNACCSFURNACCSFURNACCSFURNSTORFURNSTORFURNACCSFURNACCSFURNACCSFURNACCSFURNSTORFURNACCSFURNACCSFURNACCSFURNACCSFURNACCSFURNACCSFURNACCSFURNACCSFURNACCSFURNARTWFURNACCSFURNACCSFURNACCSFURNACCSFURNACCSFURNACCSFURNACCSFURNACCSFURNACCSFURNFLORFURNGRIDFU	INFORMATIONANNODIMSIANNOKEYNIANNONOTEIANNONPLTIANNOPATTIANNOSYMBIANNOSYMBIANNOSYMBIANNOSYMBIANNOSYMBIANNOTEXTIDETLGRPHIDETLMETRIDETLMETRIDETLMETRIDETLMETRIELEVCASEIELEVFIXTIELEVFIXTIELEVFIXTIELEVSIGNIELEVSIGNIELEVSIGNIELEVSIGNIELEVSIGNIEQPMCOPYIEQPMMOVEIEQPMMOVEIEQPMMOVEIEQPMSTORIEQPMSIGNIEQPMSIGNIEQPMSIGNIFURNACCSIFURNACCSIFURNACCSIFURNACCSIFURNACCSIFURNACCSIFURNACCSIFURNACCSIFURNACCSIFURNACCSIFURNACCSIFURN

Discipline	Major	Minor1	Minor2	Status	Description
SYSTEM F	URNITUR	E	•	•	
Ι	SYST	BIDS			Baggage information display system equipment used in an airport terminal
Ι	SYST	CUTE			Common use terminal equipment in an airport terminal
Ι	SYST	FIDS			Flight information display system equipment used in an airport terminal
Ι	SYST	FURN			Furniture
Ι	SYST	IDEN			Code identification
Ι	SYST	LITE			Lighting components
Ι	SYST	PATT			Patterns
Ι	SYST	PNLS			Panels
Ι	SYST	POWR			Power, communication components
Ι	SYST	SECU	CMRA		Security camera locations inside buildings
Ι	SYST	STOR			Storage components
Ι	SYST	WALL			Systems furniture partition walls
Ι	SYST	WKSF			Work surface components

Common Layer Names – Landscaping (L)

Discipline	Major	Minor1	Minor2	Status	Description
GENERAL	INFORM	ATION		1	
L	ANNO	DIMS			Witness/extension lines, dimension terminators, dimension text
L	ANNO	KEYN			Reference keynotes with associated leaders
L	ANNO	NOTE			General notes and general remarks
L	ANNO	NPLT			Non-plotting graphic information
L	ANNO	PATT			Miscellaneous patterning
L	ANNO	SYMB			Reference bubbles, matchlines and breaklines
L	ANNO	TEXT			Detail title text, text and associated leaders, notes
DETAIL IN	FORMAT	TION		1	
L	DETL	CABS			Cabinets, enclosures
L	DETL	CONC			Concrete
L	DETL	ERTH			Earth
L	DETL	FENC			Fencing
L	DETL	FILL			Fill/cover material
L	DETL	FURN			Furniture, furnishings
L	DETL	GATE			Gate
L	DETL	GENF			General features (miscellaneous items)
L	DETL	GRAS			Grass, sod
L	DETL	GRPH			Graphics, gridlines, non-text items
L	DETL	INPD			Inch-pound-specific dimensions and notes
L	DETL	METR			Metric-specific dimensions and notes
L	DETL	STRC			Structural metal, supports
L	DETL	TKST			Tank Site
L	DETL	VEGI			Planting details
L	DETL	VLVE			Valves, fittings
L	DETL	WIRE			Wiring
IRRIGATI					
L	IRRG	COVR			Irrigation coverage, spray distribution patterns
L	IRRG	EQPM			Equipment (e.g., controllers, valves, RPBPs, etc.)
L	IRRG	HEAD			Irrigation heads, bubblers, and drip irrigation emitters
L	IRRG	IDEN			Annotation
L	IRRG	PIPE			Piping
L	IRRG	SPKL			Sprinklers
PLANT AN			IATERIAL	1	
L	PLNT	BEDS			Planting beds
L	PLNT	BUSH	LDT		Bushes and shrubs (e.g., evergreen, deciduous)
L	PLNT	BUSH	LINE		Bush and shrub line
L	PLNT	CTNR			Containers or planters
L	PLNT	GRND			Groundcover and vines
L	PLNT DLNT	IDEN MLCH			Annotation
L	PLNT	MLCH			Mulches - organic and inorganic
L	PLNT DLNT	PLTS			Planting plants (e.g., ornamental annuals and perennials)
L	PLNT	SHAD			Shadow areas
L	PLNT	SPRG			Sprigs
L	PLNT	TREE			Trees (e.g., evergreen, deciduous, etc.)
L	PLNT	TREE	LINE		Tree line

Discipline	Major	Minor1	Minor2	Status	Description
L	PLNT	TURF			Lawn areas (turfing limits)
SITE IMPR	ROVEMEN	ITS			
L	SITE	BRDG			Bridges
L	SITE	DECK			Decks
L	SITE	FENC			Fencing
L	SITE	FURN			Furnishings
L	SITE	GATE			Gate
L	SITE	IDEN			Annotation
L	SITE	PLAY			Play structures
L	SITE	POOL			Pools and spas
L	SITE	ROCK			Boulders and cobble
L	SITE	RTWL			Retaining walls
L	SITE	SPRT			Sports fields
L	SITE	TUNL			Tunnels
L	SITE	WALK			Walks and steps

Common Layer Names – Mechanical (M)

Discipline	Major	Minor1	Minor2	Status	Description
INDUSTRI	-	E PIPING			•
М	ACID	EQPM			Acid, alkaline, and oil waste equipment
М	ACID	PIPE			Acid, alkaline, and oil waste piping
М	ACID	VENT			Acid, alkaline, and oil waste vent piping
ANTI-FRE	EZE	1		1	
М	AFRZ	PIPE			Anti-freeze piping
М	AFRZ	WAST			Waste anti-freeze piping
ALIGNME	NTS	1		1	
М	ALGN	DATA			Alignment coordinates and curve data
М	ALGN	LINE			Alignments
М	ALGN	STAT			Alignment stationing and tick marks
GENERAL	INFORM	ATION			•
М	ANNO	DIMS			Witness/extension lines, dimension terminators, dimension text
М	ANNO	KEYN			Reference keynotes with associated leaders
М	ANNO	NOTE			General notes and general remarks
М	ANNO	NPLT			Non-plotting graphic information
М	ANNO	PATT			Miscellaneous patterning and hatching
М	ANNO	REFR			Reference files (AutoCAD users only, see Chapter 4)
М	ANNO	SYMB			Miscellaneous symbols
М	ANNO	TEXT			Miscellaneous text and callouts with associated leaders
BRINE SY	STEM				
М	BRIN	EQPM			Brine system equipment
М	BRIN	PIPE			Brine system piping
CHEMINC			TEM	1	1
М	CHEM	EQPM			Equipment
М	CHEM	PIPE			Piping (includes fittings, valves)
COMPRES		FORM		1	
M	CMPA	EQPM	AIRD		Air drain separator point
M	CMPA	EQPM	VLVP		Valve point
M	CMPA	EQPM	VLVE		Valve
M	CMPA	FTTG			Fitting
M	CMPA	TANK	-		Tank
CONDENS M	CNDW	EQPM	1		Condenser water equipment
M	CNDW	PIPE			Condenser water piping
M	COND	PIPE			Condensate piping (includes fittings, valves)
M	COND	THER			Thermostats, controls, instrumentation, and sensors
M	CONT	WIRE			Low voltage wiring
CHILLED					Low totally writing
M	CWTR	EQPM			Equipment
M	CWTR	PIPE			Piping (includes fittings, valves)
DETAIL IN					1. 6 (
M	DETL	ACCS			Accessories
M	DETL	BOIL			Boilers
M	DETL	CABS			Cabinets
M	DETL	COIL			Coils and fin tubes
	·		1	1	1

Discipline	Major	Minor1	Minor2	Status	Description
M	DETL	DUCT			Ducts
М	DETL	EQPT			Equipment and fixtures
М	DETL	FANS			Fans
М	DETL	GENF			General features (miscellaneous items)
М	DETL	GRLS			Grilles and louvers
М	DETL	GRPH			Graphics, gridlines, non-text items
М	DETL	INPD			Inch-pound-specific dimensions and notes
М	DETL	INSL			Insulation and coverings
М	DETL	METR			Metric-specific dimensions and notes
М	DETL	MOTR			Motors
М	DETL	PIPE			Piping
М	DETL	PUMP			Pumps and compressors
М	DETL	STRC			Structural support features
М	DETL	TANK			Tanks
М	DETL	TRAP			Traps and drains
М	DETL	VENT			Vents
М	DETL	VLVE			Valves and fittings
М	DETL	WIRE			Electrical wiring
DIAGRAM		ATION			
М	DIAG	GRPH			Graphics, gridlines, non-text items
М	DIAG	INPD			Inch-pound-specific dimensions and notes
М	DIAG	METR			Metric-specific dimensions and notes
OTHER DI	SCIPLINE	2			
М	DISC	INFO			Clearances and working space information
DUAL TEN	APERATU	RE SYSTE	М	1	
М	DUAL	EQPM			Equipment
М	DUAL	PIPE			Piping (includes fittings, valves)
DUST AND	FUME CO	OLLECTIO	N SYSTEN	AS	
М	DUST	DUCT			Dust and fume ductwork
М	DUST	EQPM			Dust and fume collection equipment
ELEVATIO	ONS			1	
М	ELEV	FIXT			Miscellaneous fixtures
М	ELEV	IDEN			Component identification numbers
М	ELEV	OTLN			Building outlines
М	ELEV	PATT			Textures and hatch patterns
М	ELEV	PFIX			Plumbing fixtures
EXHAUST	AIR SYST	EM		1	
М	EXHS	CDFF			Exhaust air ceiling registers and grilles
М	EXHS	DUCT			Exhaust ductwork
М	EXHS	EQPM			Equipment
FLOOR IN	FORMAT	ION			t.
М	FLOR	IDEN			Room name, space identification text (copied from Architectural - Floor Plan model file)
М	FLOR	NUMB			Room/space identification number and symbol (copied from Architectural - Floor Plan model file)
GEOTHER			YSTEM		
М	GTHP	EQPM			Equipment
M	GTHP	PIPE			Piping (includes fittings, valves)
		PIPE			Piping (includes fittings, valves)

Discipline	Major	Minor1	Minor2	Status	Description
M	GLYC	CULV	SITE		Culvert site
М	GLYC	DRAN	BASN		Deicing drainage basin
М	GLYC	DRAN	DIVD		Deicing drainage divide
М	GLYC	EQPM	COUT		Clean out
М	GLYC	EQPM	DSCH		Discharge point
М	GLYC	EQPM	FLOW		Flow control point
М	GLYC	EQPM	INLT		inlet
М	GLYC	EQPM	LIFT		Lift station
М	GLYC	EQPM	PUMP		pump
М	GLYC	EQPM	VLVE		Valve
М	GLYC	FTTG			Fitting
М	GLYC	JBOX			Junction
М	GLYC	RESV			Reservoir point
М	GLYC	REVR			Recovery point
М	GLYC	SIGN			Marker
М	GLYC	STAT	PUMP		Pump station
М	GLYC	TANK			Tank
М	GLYC	VALT			Vault
HIGH TEM	IPERATU	RE / CHILI	LED WATH	ER SYSTE	M
М	HTCW	PIPE		ABND	Abandoned piping
М	HTCW	CHLL			Main chilled water piping
М	HTCW	CHLP			Chilled water plant
М	HTCW	CHLS			Chilled water service piping
М	HTCW	DEVC			Rigid anchors, anchor guides, rectifiers, reducers, markers, meters, pumps,
м	HTCW	FLOW			regulators, tanks, and valves Flow direction arrows
M		FLOW			
M	HTCW HTCW	HTPL			Caps and flanges Main high temperature piping
M M	HTCW	HTPL			High temperature plant
M	HTCW	HTPS			High temperature water plant High temperature service piping
M	HTCW	IDEN			Identifier tags, symbol modifier, and text
M	HTCW	JBOX			Junction boxes, manholes, handholes, test boxes
M	HTCW	LTPL			Main low temperature piping
M	HTCW	LTPS			Low temperature service piping
M	HTCW	PITS			Valve pits/vaults, steam pits
M	HTCW	PLNT	IDEN		Identifier tags, symbol modifier, and text
M	HTCW	PUMP			Pump stations
M	HTCW	RTRN			Return for all HTCW lines
M	HTCW	STML			Main steam piping
M	HTCW	STME			Steam service piping
M	HTCW	STNS	IDEN		Identifier tags, symbol modifier, and text
HVAC SYS				I	
M	HVAC	ACCS			Equipment access doors
M	HVAC	CDFF			Ceiling diffusers, registers, and grilles
M	HVAC	DAMP			Fire and smoke dampers
M	HVAC	EQPM			Air system equipment
M	HVAC	EQPM	ANCH		Anchor point
M	HVAC	EQPM	ANOD		Anode
M	HVAC	EQPM	ANOT		Anode test station
	-		1	1	

Discipline	Major	Minor1	Minor2	Status	Description
М	HVAC	EQPM	PUMP		Pump
М	HVAC	EQPM	RECT		Rectifier
М	HVAC	EQPM	REGL		Regulator
М	HVAC	EQPM	VLVE		Valve
М	HVAC	FDFF			Floor diffusers, registers, and grilles
М	HVAC	FTTG			Fitting
М	HVAC	IDEN			Duct sizes
М	HVAC	JBOX			Junction
М	HVAC	METR			Meters
М	HVAC	RETN			Return ductwork
М	HVAC	ROOF			Roof mounted HVAC equipment
М	HVAC	SIGN			Marker
М	HVAC	SUPP			Supply ductwork
М	HVAC	TAGS			Diffuser/register/grille tags and air flow arrows
М	HVAC	WDFF			Wall diffusers, registers, and grilles
HOT WAT	ER HEATI	ING SYSTE	EM		
М	HWTR	EQPM			Equipment
М	HWTR	PIPE			Piping (includes fittings, valves)
HYDRAUL	IC SYSTE	MS			
М	HYDR	EQPM			Hydraulic system equipment
М	HYDR	PIPE			Hydraulic system piping
INSULATI	NG (TRAN	SFORME	R) OIL SYS	TEM	
М	INSL	EQPM			Insulating oil equipment
М	INSL	PIPE			Insulating oil piping
LUBRICAT	FION OIL				
М	LUBE	EQPM			Lubrication oil equipment
М	LUBE	PIPE			Lubrication oil piping
MACHINE					
М	MACH	BASE			Machinery bases
М	MACH	COMP			Miscellaneous machinery parts and components
М	MACH	EXST			Existing machinery
М	MACH	FAST			Fasteners, nuts, and bolts
М	MACH	LROT			Large rotating machinery (turbine and pump outlines)
М	MACH	MOTR			Machinery motors
М	MATL	CRAN			Bridge cranes, jib cranes, and monorails
М	MATL	HOIS			Hoists and hooks
М	MATL	LIFT			Miscellaneous lifting equipment
PENETRA			1	1	
M	PENE	FLOR			Floor penetrations
М	PENE	ROOF			Roof penetrations
PROCESS			1	1	
M	PROC	EQPM			Equipment
M	PROC	PIPE			Process piping
ENERGY I			[
M	RCOV	EQPM			Equipment
М	RCOV	PIPE			Piping (includes fittings, valves)
REFRIDG					
M	REFG	EQPM			Equipment
М	REFG	PIPE			Piping (includes fittings, valves)

Discipline	Major	Minor1	Minor2	Status	Description
RAW WAT	ER PIPIN	G			
М	RWTR	EQPM			Raw water equipment
М	RWTR	PIPE			Raw water piping
SECTIONS	5				
М	SECT	IDEN			Component identification numbers
М	SECT	MBND			Material beyond section cut
М	SECT	MCUT			Material cut by section
М	SECT	PATT			Textures and hatch patterns
STEAM SY	STEM				
М	STEM	EQPM			Equipment
М	STEM	PIPE			Steam piping

Common Layer Names – Plumbing (P)

Discipline	Major	Minor1	Minor2	Status	Description
GENERAL	-	ATION	1	•	1
Р	ANNO	DIMS			Witness/extension lines, dimension terminators, dimension text
Р	ANNO	KEYN			Reference keynotes with associated leaders
Р	ANNO	NOTE			General notes and general remarks
Р	ANNO	NPLT			Non-plotting graphic information
P	ANNO	PATT			Miscellaneous patterning and hatching
P	ANNO	REFR			Reference files (AutoCAD users only, see Chapter 4)
P	ANNO	SYMB			Reference bubbles, matchlines and breaklines
P	ANNO	TEXT			Detail title text, text and associated leaders, notes
COMPRES		112/11			betan the text, text and associated readers, notes
P	CMPA	EQPM			Equipment
Р	CMPA	PIPE			Piping
DETAIL IN					1 iping
P	DETL	GRPH			Graphics, gridlines, non-text items
P	DETL	INPD			Inch-pound-specific dimensions and notes
Р Р	DETL	METR			Metric-specific dimensions and notes
P DIAGRAM					wente-specific unitensions and notes
P	DIAG	GRPH		1	Graphics, gridlines, non-text items
Р Р	DIAG	INPD			Inch-pound-specific dimensions and notes
Р Р	DIAG	METR			Metric-specific dimensions and notes
	_				Metric-specific differisions and notes
OTHER DI P				1	Information and mater for other disciplines
	DISC	INFO			Information and notes for other disciplines
DOMESTI				1	
P	DOMW	ACCS			Equipment access doors
P	DOMW	CPIP			Domestic cold water piping
P	DOMW	EQPM			Hot and cold water equipment
P	DOMW	FPIP			Domestic filtered water piping
P	DOMW	HPIP			Domestic hot water piping
P	DOMW	RISR			Domestic hot and cold water risers
P	DOMW	RPIP			Domestic hot water recirculation piping
FLOOR IN				1	
Р	FLOR	IDEN			Room name, space identification text (copied from Architectural - Floor Plan model file)
Р	FLOR	NUMB			Room/space identification number and symbol (copied from Architectural - Floor Plan model file)
LIQUID FU	JEL				
Р	FUEL	EQPM			Equipment
Р	FUEL	FGAS			Fuel gas piping
Р	FUEL	FOIL			Fuel oil piping
Р	FUEL	NGAS			Natural gas piping
LIQUID G	AS				
Р	LGAS	EQPM			Equipment
Р	LGAS	PIPE			Piping
MEDICAL	/ DENTAI	GAS	•	•	
Р	MDGS	EQPM			Medical/Dental Gas Equipment
					Medical/Dental Gas Piping

Discipline	Major	Minor1	Minor2	Status	Description
PENETRA	TIONS				
Р	PENE	FLOR			Floor penetrations
Р	PENE	ROOF			Roof penetrations
SANITARY	Y DRAINA	GE			
Р	SANR	COND			Sanitary Condensate piping
Р	SANR	EQPM			Sanitary Equipment (e.g., sand/oil/water separators)
Р	SANR	FIXT			Sanitary Plumbing fixtures
Р	SANR	FLDR			Sanitary Floor drains, sinks, and cleanouts
Р	SANR	PIPE			Sanitary Piping
Р	SANR	RISR			Sanitary risers
Р	SANR	VENT			Sanitary Vent piping
STORM D	RAINAGE	SYSTEM			
Р	STRM	PIPE			Storm drain piping
Р	STRM	RFDR			Roof drains
Р	STRM	RISR			Storm drain risers

Common Layer Names – Equipment Baggage (Q)

Follow National CAD Standards.

Common Layer Names – Real Estate (R)

Follow National CAD Standards.

Discipline	Major	Minor1	Minor2	Status	Description
GENERAL	INFORM	ATION			
S	ANNO	DIMS			Witness/extension lines, dimension terminators, dimension text, welding symbols
S	ANNO	KEYN			Reference keynotes with associated leaders
S	ANNO	NOTE			General notes and general remarks
S	ANNO	NPLT			Non-plotting graphic information
S	ANNO	PATT			Miscellaneous patterning and hatching
S	ANNO	REFR			Reference files (AutoCAD users only, see Chapter 4)
S	ANNO	SYMB			Reference bubbles, matchlines and breaklines
S	ANNO	TEXT			Miscellaneous text and callouts with associated leaders
BEAMS		1		1	
S	BEAM	CNTR			Beam centerlines
S	BEAM	PRIM			Primary beams, girders
S	BEAM	SECD			Secondary beams, girders
BRACING	I		I		
S	BRAC	LATL			Lateral bracing
S	BRAC	SHEA			Shear walls
S	BRAC	VERT			Vertical bracing
COLUMNS	5		I	l	
S	COLS	CNTR			Column centerlines/working lines
S	COLS	MSC1			Miscellaneous columns (Type 1)
S	COLS	MSC2			Miscellaneous columns (Type 2)
S	COLS	MSC3			Miscellaneous columns (Type 3)
S	COLS	MSC4			Miscellaneous columns (Type 4)
S	COLS	PRIM			Primary columns
S	COLS	SCND			Secondary columns
DECKING					
S	DECK	FLOR			Floor deck
S	DECK	OPEN			Openings and penetrations
S	DECK	RBAR			Deck/slab reinforcing
S	DECK	ROOF			Roof deck
DETAIL IN	NFORMAT	TION			
S	DETL	GRPH			Graphics, gridlines, non-text items
S	DETL	INPD			Inch-pound-specific dimensions and notes
S	DETL	METR			Metric-specific dimensions and notes
FEATURE	S				
S	FEAT	CMUW			CMU outline (no patterning)
S	FEAT	CNTR			Feature centerlines
S	FEAT	CONC			Concrete outline (no patterning)
S	FEAT	GENL			General features (miscellaneous items)
S	FEAT	WOOD			Wood outline (no patterning)
FOUNDAT		1	1	1	
S	FNDN	CNTR			Beam centerlines
S	FNDN	FTNG			Footings
S	FNDN	GRBM			Grade beams
S	FNDN	PEDS			Column pedestals
S	FNDN	PILE			Piles (steel sheet, concrete, wood), piers, caisson piers, drilled piers
S	FNDN	RBAR			Foundation reinforcing
2			1		

Discipline	Major	Minor1	Minor2	Status	Description
GRATING		-	-		
S	GRAT	ELEV			Elevated grating (catwalks)
S	GRAT	FLOR			Floor grating
S	GRAT	SUBS			Subsurface grating
GRADE LI	NES				
S	GRDL	EXGL			Existing ground
S	GRDL	FNGR			Finished grade
S	GRDL	WATR			Water surface
GRIDS					
S	GRID	HORZ			Primary grid lines (horizontal)
S	GRID	IDEN			Column I.D. tags
S	GRID	MSC			Miscellaneous grid lines (Type 1)
S	GRID	MSC2			Miscellaneous grid lines (Type 2)
S	GRID	MSC3			Miscellaneous grid lines (Type 3)
S	GRID	MSC4			Miscellaneous grid lines (Type 4)
S	GRID	VERT			Primary grid lines (vertical)
JOINTS	I	I		Γ	
S	JOIN	CNST			Construction joints
S	JOIN	CTRL			Control/expansion joints
JOISTS			1	1	
S	JOIS	BRDG			Bridging
S	JOIS	PRIM			Primary joists
S	JOIS	SECD			Secondary joists
METAL		Mag			
S	METL	MISC			Miscellaneous metal
OPENINGS		MICC			
S PADS	OPEN	MISC			Openings and penetrations
S PADS	PADS	EQPM			Equipment pads
PIPING	TADS	LQIW			Equipment paus
S	PIPE	GATE			Gates (flap gates, sluice gates, other)
S	PIPE	MISC			Miscellaneous piping/culverts
S	PIPE	TRSH			Trash racks
REINFOR		mon			
S	REIN	RBAR			Rebar, welded wire mesh
SAFETY F					,
S	SAFE	FENC			Fencing
S	SAFE	HRAL			Handrails
SECTIONS		1	1	1	
S	SECT	CMUW			CMU outline (no patterning)
S	SECT	CNTR			Centerlines
S	SECT	CONC			Concrete outline (no patterning)
S	SECT	FNGR			Finished grade
S	SECT	GENF			General features (miscellaneous items)
S	SECT	JOIN			Joint materials (e.g., felt), vapor barrier, other
S	SECT	MISC			Miscellaneous fasteners, anchor bolts, supports
S	SECT	PRIM			Primary beams/girders outlines
S	SECT	RBAR			Rebar, welded wire mesh
S	SECT	SHPS			Miscellaneous shapes, plates

Discipline	Major	Minor1	Minor2	Status	Description
S	SECT	STLS			Wide flange shapes, plates, open web joists, decking
S	SECT	WOOD			Wood outline (no patterning)
SLABS	•	•	•	•	
S	SLAB	EDGE			Edge of slab
S	SLAB	OPEN			Openings and penetrations
S	SLAB	RBAR			Slab reinforcing
SUPPORTS	S				
S	SPPT	MISC			Miscellaneous fasteners, anchor bolts, supports
S	SPPT	SHPS			Miscellaneous shapes, plates
STAIRWA	YS				
S	STRS	FRAM			Stair/elevator framing
S	STRS	LADD			Ladders, ladder handrails, safety guard, grab bars
S	STRS	RBAR			Stair reinforcing
TRUSSES					
S	TRUS	PRIM			Primary trusses
S	TRUS	SECD			Secondary trusses
WALLS					
S	WALL	CONC			Concrete walls
S	WALL	HBAR			Horizontal/secondary reinforcement
S	WALL	LOAD			Load bearing CMU walls
S	WALL	NONL			Non-load bearing CMU walls
S	WALL	OPEN			Openings and penetrations
S	WALL	OTLN			Wall outline
S	WALL	PCST			Precast walls
S	WALL	RBAR			Wall reinforcing
S	WALL	STUD			Stud walls
S	WALL	VBAR			Vertical/primary reinforcement

Common Layer Names - Telecommunications (T)

Discipline	Major	Minor1	Minor2	Status	Description
ALARM SY					
Т	ALRM	EQPM	SECU		Security Alarm Equipment
Т	ALRM	IDEN			Identifier tags, symbol modifier, and text
Т	ALRM	SYST			Miscellaneous alarm system symbols
GENERAL		ATION			
Т	ANNO	DIMS			Witness/extension lines, dimension terminators, dimension text
Т	ANNO	KEYN			Reference keynotes with associated leaders
Т	ANNO	NOTE			General notes and general remarks
Т	ANNO	NPLT			Non-plotting graphic information
Т	ANNO	PATT			Miscellaneous patterning and hatching
Т	ANNO	REFR			Reference files (AutoCAD users only, see Chapter 4)
Т	ANNO	SYMB			Miscellaneous symbols
Т	ANNO	TEXT			Miscellaneous text and callouts with associated leaders
CABLE SY	STEMS				
Т	CABL	COAX			Coax cable
Т	CABL	FIBR			Fiber optics cable
Т	CABL	IDEN			Cable identifiers
Т	CABL	MULT			Multi-conductor cable
Т	CABL	TRAY			Cable trays and wireways
CLOCK SY	STEMS				
Т	CLOK	IDEN			Identifier tags, symbol modifier, and text
Т	CLOK	SYST			Clock system symbols
COMMUN	ICATIONS	5			
Т	COMM	ANTN			Telecommunications antennae
Т	COMM	APSY			Audio paging system
Т	COMM	ATMS			Advanced traffic management system
Т	COMM	AVID			Automatic vehicle identification system
Т	COMM	BIDS			Baggage information display system
Т	COMM	FIDS			Flight information display system
Т	COMM	GIDS			Gate information display system
Т	COMM	JBOX			Junction boxes
Т	COMM	PMRC			Parking management and revenue control
Т	COMM	VPSY			Visual paging system
DIAGRAM				1	
Т	DIAG	GRPH			Graphics, gridlines, non-text items
Т	DIAG	IDEN			Identifier tags, symbol modifier and text
Т	DIAG	INPD			Inch-pound-specific dimensions and notes
Т	DIAG	METR			Metric-specific dimensions and notes
OTHER DI			ATION		
Т	DISC	INFO			Information and notes for other disciplines
EQUIPME		00100	[[
Т	EQPM	COMB			Distribution equipment for both copper and fiber optics
T	EQPM	COPP			Distribution equipment for copper
Т	EQPM	FIBR			Distribution equipment for fiber optic
T	EQPM	OTHR			Other telecommunications equipment
Т	EQPM	RELA			Relays, resistors, capacitors, and inducers

Discipline	Major	Minor1	Minor2	Status	Description
FLOOR IN	FORMAT	ION	•	•	
Т	FLOR	IDEN			Room name, space identification text (copied from Architectural - Floor Plan model file)
Т	FLOR	NUMB			Room/space identification number and symbol (copied from Architectural - Floor Plan model file)
JACKS					
Т	JACK	COMB			Combination telephone and data/LAN jacks
Т	JACK	DATA			Data/LAN jacks
Т	JACK	IDEN			Identifier tags, symbol modifier, and text
Т	JACK	PHON			Telephone jacks
NURSE CA	LL SYSTI	EMS			
Т	NURS	IDEN			Identifier tags, symbol modifier, and text
Т	NURS	SYST			Nurse call system symbols
SOUND SY	STEMS	•	•	•	•
Т	SOUN	IDEN			Identifier tags, symbol modifier, and text
Т	SOUN	SYST			Sound system symbols

Common Layer Names – Survey (V)

Discipline	Major	Minor1	Minor2	Status	Description
GENERAL	INFORM	ATION			1
V	ANNO	DIMS			Witness/extension lines, dimension terminators, dimension text
V	ANNO	KEYN			Reference keynotes with associated leaders
V	ANNO	NOTE			General notes and general remarks
V	ANNO	NPLT			Non-plotting graphic information
V	ANNO	PATT			Miscellaneous patterning and hatching
V	ANNO	REFR			Reference files (AutoCAD users only, see Chapter 4)
V	ANNO	SYMB			Miscellaneous symbols
V	ANNO	TEXT			Miscellaneous text and callouts with associated leaders
AERIAL S	URVEY	1			
V	AERI	BNDY			Aerial photography boundaries
V	AERI	INDX			Aerial photo index
V	AERI	PATH			Aerial flight lines/paths
AIFIELD					
V	AIRF	BCNS	IDEN		Identifier tags, symbol modifiers, and text
V	AIRF	BCNS	MISC		Miscellaneous navaids-windcones and beacons
V	AIRF	BCNS	STRB		Strobe beacons
V	AIRF	CIRC	CTRL		Control and monitoring circuits
V	AIRF	CIRC	IDEN		Circuit identifier tags, symbol modifier, and text
V	AIRF	CIRC	MULT		Multiple circuits
V	AIRF	CIRC	SERS		Series circuits
V	AIRF	DEVC			Capacitors, voltage regulators, motors, buses, generators, meters, grounds, and markers
V	AIRF	DUCT			Ductbanks
V	AIRF	IDEN			Airfield annotation
V	AIRF	JBOX			Junction boxes, pull boxes, manholes, handholes, pedestals, splices
V	AIRF	LITE	APPR		Approach lights
V	AIRF	LITE	DIST		Distance and arresting gear markers
V	AIRF	LITE	LANE		Hoverlane, taxilane and helipad lights
V	AIRF	LITE	OBST		Obstruction lights
V	AIRF	LITE	RUNW		Runway lights
V	AIRF	LITE	SIGN		Taxiway guidance signs
V	AIRF	LITE	TAXI		Taxiway lights
V	AIRF	LITE	THRS		Threshold lights
V	AIRF	VALT			Airfield lighting vaults
ALIGNME	NTS				
V	ALGN	DATA			Alignment coordinates and curve data
V	ALGN	LINE			Alignments
V	ALGN	MRKG			Alignment tick marks
V	ALGN	STAT			Alignment stationing and tick marks
BUILDING					
V	BLDG	IDEN			Building and other structure annotation
V	BLDG	OTLN			Buildings and other structures outline
V	BLDG	OVHD			Building overhangs
CATHODI		CTION SYS	STEM		
V	CATH	ANOD			Sacrificial anode system
V	CATH	CURR			Impress current system

Discipline	Major	Minor1	Minor2	Status	Description
V	CATH	IDEN			Identifier tags, symbol modifier, and text
V	CATH	TEST			Test stations
CHANNEL	.S	l		l	
V	CHAN	AIDS			Navigation aids and text
V	CHAN	CNTR			Channel centerline and survey report lines
V	CHAN	CNTR	IDEN		Channel centerline and survey report lines - annotation
V	CHAN	DACL			De-authorized channel limits, anchorages, etc.
V	CHAN	DACL	IDEN		De-authorized channel limits, anchorages, etc annotation
V	CHAN	IDEN			Channel limits, anchorages, turning basins, disposal areas, etc annotation
V	CHAN	LIMT			Channel limits, anchorages, turning basins, disposal areas, etc.
CIRCUITS					
V	CIRC	CTRL			Control and monitoring circuits
V	CIRC	IDEN			Identifier tags, symbol modifier, and text
V	CIRC	MULT			Multiple circuits
V	CIRC	SERS			Series circuits
COMMUN	ICATIONS	5			
V	COMM	EQPM			Other communications distribution equipment
V	COMM	JBOX			Communication junction boxes, pull boxes, manholes, handholes, pedestals, splices
V	COMM	OVHD			Overhead communications/telephone lines
V	COMM	OVHD	IDEN		Identifier tags, symbol modifier and text
V	COMM	UNDR			Underground communications/telephone lines
V	COMM	UNDR	IDEN		Identifier tags, symbol modifier and text
V	COMM	VALT			Communications vault
CONTROL					
V	CTRL	BMRK			Benchmarks
V	CTRL	GRID			Grid
V	CTRL	HCPT			Horizontal control points
V	CTRL	IDEN			Control point annotatior
V	CTRL	TRAV			Traverse points
V	CTRL	VCPT			Vertical control points
DITCHES			•		
V	DTCH	BOTD			Bottom of ditch
V	DTCH	CNTR			Centerline of ditch
V	DTCH	EWAT			Edge of water
V	DTCH	IDEN			Ditch annotatior
V	DTCH	TOPD			Top of ditch
DOMESTI	C WATER				
V	DOMW	PIPE		ABND	Abandoned piping
V	DOMW	DEVC			Connectors, faucets, reducers, regulators, vents, intake points, tanks, taps,
V	DOMW	FIRE			backflow preventers, and valves Fire lines
V V	DOMW	FIRE			Caps, cleanouts, crosses, and tees
V V	DOMW	HYDR			
V V	DOMW	IDEN			Hydrants Identifier tags, symbol modifier, and text
V V	DOMW DOMW	MAIN METR			Main domestic water piping Meters
V	DOMW	METR NHYD			
V V	DOMW	NHYD NPOT			Non-potable hydrants/flushing hydrants Non-potable water piping
V V	DOMW	PITS	IDEN		Non-potable water piping Identifier tags, symbol modifier, and text
v	DOMM	F115	IDEN		iucininici tags, symbol mounici, and text

Discipline	Major	Minor1	Minor2	Status	Description
V	DOMW	PUMP			Booster pump stations
V	DOMW	REDC			Pressure reducing stations
V	DOMW	RSVR			Reservoirs
V	DOMW	RSVR	IDEN		Identifier tags, symbol modifier, and text
V	DOMW	SERV			Domestic water service piping
V	DOMW	SIGN			Surface markers/signs
V	DOMW	STNS	IDEN		Identifier tags, symbol modifier, and text
V	DOMW	TANK			Water storage tanks
V	DOMW	VENT			Vent pits
V	DOMW	VLVE			Valve pits/vaults
V	DOMW	WELL			Water well houses
DUCTBAN	KS			I	
V	DUCT	MULT			Ductbank
V	DUCT	MULT	IDEN		Identifier tags, symbol modifier and text
ELECTRIC		1	I	I	<u>, -</u> -
V	ELEC	DEVC			Capacitors, voltage regulators, motors, buses, generators, meters, grounds, and markers
V	ELEC	JBOX			Junction boxes, pull boxes, manholes, handholes, pedestals, splices
V	ELEC	SUBS			Other substation equipment
V	ELEC	SWCH			Fuse cutouts, pole mounted switches, circuit breakers, gang operated
X 7	FLEG	X7AT (D)			disconnects, reclosers, cubicle switches
V	ELEC	VALT			Vaults
LIQUID FU		DIDE	1	ADVD	
V	FUEL	PIPE		ABND	Abandoned piping
V V	FUEL	DEFL			Defueling piping
v	FUEL	DEVC			Air eliminators, filter strainers, hydrant fill points, line vents, markers, oil/water separators, reducers, regulators, and valves
V	FUEL	FLOW			Flow direction arrows
V	FUEL	FTTG			Caps, crosses, and tees
V	FUEL	HYDR			Hydrant control pits
V	FUEL	IDEN			Identifier tags, symbol modifier, and text
V	FUEL	JBOX			Junction boxes, manholes, handholes, test boxes
V	FUEL	MAIN			Main fuel piping
V	FUEL	METR			Meters
V	FUEL	PITS	IDEN		Identifier tags, symbol modifier, and text
V	FUEL	PUMP			Booster pump stations
V	FUEL	SERV			Service piping
V	FUEL	STNS	IDEN		Identifier tags, symbol modifier, and text
V	FUEL	TANK			Fuel tanks
V	FUEL	TRCH			Fuel line trench
V	FUEL	VENT			Vent pits
V	FUEL	VLVE			Valve pits
GRADE LI	INEWORK				
V	GRAD	EXST			Existing grade, ground line
V	GRAD	FNSH			Finished grade
V	GRID	FRAM			Frame
V	GRID	MAJR			Major grid lines
V	GRID	MINR			Minor grid lines
V	GRID	TEXT			Border text, annotation
V	GTHP	EQPM			Equipment

Discipline	Major	Minor1	Minor2	Status	Description
V	GTHP	PIPE	-		Piping (includes fittings, valves)
HIGH TEM			LED WATI	ER	1 6 ()
V	HTCW	PIPE		ABND	Abandoned piping
V	HTCW	CHLL			Main chilled water piping
V	HTCW	CHLP			Chilled water plant
V	HTCW	CHLS			Chilled water service piping
V	HTCW	DEVC			Rigid anchors, anchor guides, rectifiers, reducers, markers, meters, pumps,
					regulators, tanks, and valves
V	HTCW	FLOW			Flow direction arrows
V	HTCW	FTTG			Caps and flanges
V	HTCW	HTPL			Main high temperature piping
V	HTCW	HTPP			High temperature water plant
V	HTCW	HTPS			High temperature service piping
V	HTCW	IDEN			Identifier tags, symbol modifier, and text
V	HTCW	JBOX			Junction boxes, manholes, handholes, test boxes
V	HTCW	LTPL			Main low temperature piping
V	HTCW	LTPS			Low temperature service piping
V	HTCW	PITS			Valve pits/vaults, steam pits
V	HTCW	PLNT	IDEN		Identifier tags, symbol modifier, and text
V	HTCW	PUMP			Pump stations
V	HTCW	RTRN			Return for all HTCW lines
V	HTCW	STML			Main steam piping
V	HTCW	STMS			Steam service piping
V	HTCW	STNS	IDEN		Identifier tags, symbol modifier, and text
INDUSTRI	-	-	1	•	
V	INDW	PIPE		ABND	Abandoned piping
V	INDW	DEVC			Grit chambers, meters, flumes, neutralizers, oil/water separators, ejectors, tanks,
V	INDW	FLOW			and valves Flow direction arrows
V	INDW	FTTG			Caps and cleanouts
V	INDW	IDEN			Identifier tags, symbol modifier, and text
V	INDW	JBOX			Junction boxes and manholes
V	INDW	LAGN			Lagoons
V	INDW	LIFT			Lift stations
V	INDW	MAIN			Main industrial waste water piping
V	INDW	PLNT			Treatment plants
V	INDW	RSVR	IDEN		Identifier tags, symbol modifier, and text
V	INDW	SERV			Industrial waste water service piping
V	INDW	SIGN			Surface markers/signs
V	INDW	STOR	IDEN		Identifier tags, symbol modifier, and text
LIGHTS					······································
V	LITE	APPR			Approach lights
V	LITE	DIST			Distance and arresting gear markers
V	LITE	FIXT			Exterior Lights
V	LITE	FIXT	IDEN		Identifier tags, symbol modifier, and text
V	LITE	LANE			Hoverlane, taxilane, and helipad lights
V	LITE	OBST			Obstruction lights
V	LITE	RUNW			Runway lights
V	LITE	RUNW	TDZN		Runway Touchdown Zone lights
V	LITE	RUNW	CNTL		Runway Centerline lights
•	DITE	ROIW	CIVIL		Kunwuj Conornito ngito

Discipline	Major	Minor1	Minor2	Status	Description
V	LITE	SIGN			Taxiway guidance signs
V	LITE	TAXI			Taxiway lights
V	LITE	THRS			Threshold lights
NATURAL	GAS				
V	NGAS	PIPE		ABND	Abandoned piping
V	NGAS	DEVC			Hydrant fill points, lights, vents, markers, rectifiers, reducers, regulators, sources, tanks, drip pots, taps, and valves
V	NGAS	DEVC	IDEN		Identifier tags, symbol modifier, and text
V	NGAS	FLOW			Flow direction arrows
V	NGAS	FTTG			Caps, crosses, and tees
V	NGAS	IDEN			Identifier tags, symbol modifier, and text
V	NGAS	MAIN			Main natural gas piping
V	NGAS	METR			Meters
V	NGAS	PITS	IDEN		Identifier tags, symbol modifier, and text
V	NGAS	PUMP			Compressor stations
V	NGAS	REDC			Reducing stations
V	NGAS	SERV			Service piping
V	NGAS	SIGN			Surface markers/signs
V	NGAS	STNS	IDEN		Identifier tags, symbol modifier, and text
V	NGAS	VENT			Vent pits
V	NGAS	VLVE			Valve pits/boxes
POLES				I	
V	POLE	GUYS			Guying equipment
V	POLE	GUYS	IDEN		Guying equipment identifier tags, symbol modifiers, and text
V	POLE	IDEN			Utility pole identifier tags, symbol modifier, and text
V	POLE	UTIL			Utility poles
POWER					
V	POWR	XFMR	PADM		Pad mounted transformers
V	POWR	XFMR	POLM		Pole mounted transformers
PRIMARY	ELECTR	CAL CAB	LES		
V	PRIM	OVHD			Overhead electrical utility lines
V	PRIM	OVHD	IDEN		Identifier tags, symbol modifier, and text
V	PRIM	UNDR			Underground electrical utility lines
V	PRIM	UNDR	IDEN		Identifier tags, symbol modifier, and text
PROFILES	5				
V	PROF	CUID			Existing grade and grading cuts - annotation
V	PROF	FILL			New work, grading fills
V	PROF	INLT			Curb and surface inlets, catch basins
V	PROF	MHOL			Manholes
V	PROF	PIPE			Piping
V	PROF	ROAD			Roads
PROPERT	Y				
V	PROP	BRNG			Bearings and distance labels
V	PROP	CNTY			County Boundary
V	PROP	ESMT			Government easements/property lines
V	PROP	IDEN			Property annotation
V	PROP	LEAS			Lease line (surveyed)
V	PROP	LINE			Property lines (Existing recorded plats)
V	PROP	LUSE			Land Use Area

Discipline	Major	Minor1	Minor2	Status	Description
V	PROP	MUNI			Municipal Boundary
V	PROP	QTRS			Quarter lines
V	PROP	RWAY			Right of ways
V	PROP	SECT			Section lines
V	PROP	STAT			State Boundary
V	PROP	SXTS			Sixteenth lines (40 lines)
V	PROP	ZONG			Zoning Areas
PAVEMEN	Т				
V	PVMT	IDEN			Road, parking lot, railroad, airfield pavement annotation
V	PVMT	MRKG			Pavement markings
V	PVMT	PATT			Joint patterns, text and dimensions
V	PVMT	ROAD			Roads, parking lots, railroads, airfield pavements
ROADS, ST	FREETS A	ND HIGHV	VAYS		
V	ROAD	ASPH			Road outlines-asphalt surface
V	ROAD	CNTR			Road centerlines
V	ROAD	CNTR			Road centerlines annotatior
V	ROAD	CONC			Road outlines-concrete surface
V	ROAD	CURB			Curbs and gutters
V	ROAD	GRAL			Guard rails
V	ROAD	GRVL			Road outlines-gravel surface
V	ROAD	IDEN			Road, street, highway annotatior
V	ROAD	MRKG			Pavement markings
V	ROAD	OTLN			Road outlines
V	ROAD	PATT			Joint patterns, text and dimensions
V	ROAD	SHLD			Roadway shoulders
V	ROAD	SIGN			Signs
V	ROAD	UPVD			Road outlines-unpaved surface
RUNWAYS	5				
V	RUNW	BLST	MRKG		Blast pad markings
V	RUNW	CNTR	MRKG		Centerline markings
V	RUNW	DISP	MRKG		Displaced threshold markings
V	RUNW	DIST	MRKG		Fixed distance markings
V	RUNW	EDGE	MRKG		Edge markings
V	RUNW	IDEN	MRKG		Runway identifier markings
V	RUNW	SHLD	MRKG		Shoulder markings
V	RUNW	TDZM	MRKG		Touchdown zone markers
V	RUNW	THRS	MRKG		Threshold markers
SECONDA	RY ELEC	TRICAL C	ABLES		
V	SECD	OVHD			Overhead electrical utility lines
V	SECD	OVHD	IDEN		Identifier tags, symbol modifier, and text
V	SECD	UNDR			Underground electrical utility lines
V	SECD	UNDR	IDEN		Identifier tags, symbol modifier, and text
SECTIONS	5				•
V	SECT	IDEN			Component identification numbers
V	SECT	MBND			Material beyond section cut
V	SECT	MCUT			Material cut by section
V	SECT	PATT			Textures and hatch patterns
SITE FEAT	TURES				
V	SITE	EROS			Riprap, revetments/stone protection, breakwaters, dikes, jetties, and drains
	1	1	1	I	

Discipline	Major	Minor1	Minor2	Status	Description
V	SITE	EWAT			Water features
V	SITE	FENC			Fences and handrails
V	SITE	FENC	IDEN		Fence, handrail, ramp, and trail annotation
V	SITE	IDEN			Existing site feature/structure annotation
V	SITE	OTLN			Existing site features (play structures, bike racks, benches, recreational
					equipment)
V	SITE	STRC			Structures (bridges, sheds, foundation pads, footings, etc.)
V	SITE	STRS			Stairs and ramps
V	SITE	VEGE			Existing treelines and vegetation
V	SITE	WALK			Walks, trails, and bicycle paths
V	SITE	WATR			Water features
SPECIAL S	-	1		1	
V	SPCL	IDEN			Special systems (UMCS, EMCS, CATV, etc.) identifier tags, symbol modifier, and text
V	SPCL	SYST			Special systems (UMCS, EMCS, CATV, etc.)
V	SPCL	TRAF			Traffic signal system
V	SPCL	TRAF	IDEN		Traffic signal identifier tags, symbol modifier, and text
SANITARY		1		1	
V	SSWR	PIPE		ABND	Abandoned piping
V	SSWR	DEVC			Grease traps, grit chambers, flumes, neutralizers, oil/water separators, ejectors, and valves
V	SSWR	DEVC	IDEN		Identifier tags, symbol modifier, and text
V	SSWR	FILT			Filtration beds
V	SSWR	FILT	IDEN		Identifier tags, symbol modifier, and text
V	SSWR	FLOW			Flow direction arrows
V	SSWR	FTTG			Caps and cleanouts
V	SSWR	IDEN			Identifier tags, symbol modifier, and text
V	SSWR	MHOL			Manholes
V	SSWR	MHOL	IDEN		Identifier tags, symbol modifier, and text
V	SSWR	JBOX			Junction boxes
V	SSWR	JBOX	IDEN		Identifier tags, symbol modifier, and text
V	SSWR	LAGN			Lagoons
V	SSWR	LEAC			Leach field
V	SSWR	MAIN			Sanitary sewer piping
V	SSWR	NITF			Nitrification drain fields
V	SSWR	PLNT			Treatment plants
V	SSWR	PUMP			Booster pump stations
V	SSWR	RSVR	IDEN		Identifier tags, symbol modifier, and text
V	SSWR	SERV			Sanitary sewer service piping
V	SSWR	SIGN			Surface markers/signs
V	SSWR	STNS	IDEN		Identifier tags, symbol modifier, and text
V	SSWR	TANK			Septic tanks
STRUCTU					
V	STRC	IDEN			Bridges, piers, breakwaters, docks, floats, etc annotation
V	STRC	OTLN			Bridges, piers, breakwaters, docks, floats, etc outlines
V	STRC	TOWR			Tower
STORM SH					
V	STRM	PIPE		ABND	Abandoned piping
V	STRM	AFFF			AFFF lagoon/detention pond
V	STRM	CHUT			Chutes and concrete erosion control structures

Discipline	Major	Minor1	Minor2	Status	Description
V	STRM	CULV			Culverts
V	STRM	DEVC			Downspouts, flumes, oil/water separators, and flap gates
V	STRM	DRAN	IDEN		Identifier tags, symbol modifier, and text
V	STRM	EROS			Erosion control (riprap)
V	STRM	FLOW			Flow direction arrows
V	STRM	FMON			Flow monitoring station
V	STRM	FTTG			Caps and cleanouts
V	STRM	HDWL			Headwalls and endwalls
V	STRM	IDEN			Identifier tags, symbol modifier, and text
V	STRM	INLT			Inlets (curb, surface, and catch basins)
V	STRM	LAGN			Lagoons, ponds, watersheds, and basins
V	STRM	MAIN			Storm sewer piping
V	STRM	MHOL			Manholes
V	STRM	PUMP			Pump stations
V	STRM	ROOF			Roof drain line
V	STRM	RSVR	IDEN		Identifier tags, symbol modifier, and text
V	STRM	SERV			Storm sewer service piping
V	STRM	SIGN			Surface markers/signs
V	STRM	STNS	IDEN		Identifier tags, symbol modifier, and text
V	STRM	SUBS			Subsurface drain piping
SURVEY		l	I		
V	SURV	DATA			Survey data (benchmarks and horizontal control points or monuments)
V	SURV	IDEN			Survey, baseline, and control line annotation
V	SURV	LINE			Survey, baseline, and control line
V	SURV	SYMB			Survey line symbol
TAXIWAY	S				
V	TAXI	CNTR			Centerlines
V	TAXI	CNTR	IDEN		Centerline annotatior
V	TAXI	CNTR	MRKG		Centerline markings
V	TAXI	EDGE			Edge markings
V	TAXI	HOLD			Hold lines
V	TAXI	IDEN			Taxiway-annotatior
V	TAXI	OTLN			Taxiway outlines
V	TAXI	SHLD			Taxiway shoulder
1					
TOPOGRA	PHY				
V	TOPO	BKLN			Breaklines
V	TOPO	BORE			Boring locations
V	TOPO	COOR			Coordinate grid ticks and text
V	TOPO	DTCH			Ditches and swales
V	TOPO	DTMP			DTM points
V	TOPO	DTMT			DTM triangles
V	TOPO	MAJR			Major contours
V	TOPO	MAJR	IDEN		Major contours - annotation
V	TOPO	MINR			Minor contours
V	TOPO	MINR	IDEN		Minor contours - annotation
V	TOPO	SHOR			Shorelines, land features, and references
		1		+	
V	TOPO	SLOP	TOPT		Top/toe slopes

Discipline	Major	Minor1	Minor2	Status	Description
V	TOPO	SPEC			Species Site
V	TOPO	SPOT			Spot elevations
V	TOPO	WETL			Wetland
UTILITIES	5				
V	UTIL	ELEC			Power lines, lights, telephone poles, communication lines
V	UTIL	ELEC	IDEN		Power/communication annotation
V	UTIL	IDEN			Utility annotation
V	UTIL	LINE			Utilities
V	UTIL	NGAS			Gas lines, features, and valves
V	UTIL	NGAS	IDEN		Gas annotation
V	UTIL	SSWR			Sanitary lines and manholes
V	UTIL	SSWR	IDEN		Sanitary annotation
V	UTIL	STEM			Steam lines
V	UTIL	STRM			Storm sewer lines, culverts, manholes, and headwalls
V	UTIL	STRM	IDEN		Storm sewer annotation
V	UTIL	WATR			Water lines, hydrants, tanks
V	UTIL	WATR	IDEN		Water annotation

Common Layer Names – Contractor/Shop Drawings (Z)

Follow National CAD Standards.

APPENDIX 2 – SPACE ALLOCATION CODES

Airline Name and Codes	108
Occupant Codes for Airline Tenants	126
Occupant Codes for Other Tenants	127
Usage Codes for Layering Convention	128

3 Digit Code	2 Digit Code	Name	Ticketing Code
	6M	40-MILE AIR	
	VY	A.C.E.	
		A.S. NORVING	
		AARON AIRLINES PTY	
	SM	ABERDEEN AIRWAYS	731
	GB	ABX AIR (CARGO)	832
	VX	ACES	137
	XQ	ACTION AIRLINES	410
	ZY	ADALBANAIR	121
	IN	ADIRONDACK AIRLINES	
	JP	ADRIA AIRWAYS	165
REA	RE	AER ARANN	684
EIN	EI	AER LINGUS	053
		AEREOS SERVICIOS DE TRANSPORTE	278
	DU	AERIAL TRANSIT COMPANY(CARGO)	892
	JR	AERO CALIFORNIA	078
	DF	AERO COACH AVIATION INT	868
	2G	AERO DYNAMICS (CARGO)	
		AERO EJECUTIVOS	681
	YP	AERO LLOYD	633
		AERO SERVICIOS	243
		AERO TRANSPORTES PANAMENOS	155
	QA	AEROCARIBE	723
	Q11	AEROCHAGO AIRLINES	198
	3Q	AEROCHAGO AIREINES	298
	<u> </u>	AEROCOZUMEL	686
AFL	SU	AEROFLOT	555
AIL	FP	AEROLEASING S.A.	555
ARG	AR	AEROLIASING S.A. AEROLINEAS ARGENTINAS	044
AKO	YU	AEROLINEAS DOMINICANAS	044
	VG		680
	VG	AEROLINEAS EL SALVADOR (CARGO) AEROLINEAS URUGUAYAS	966
	P.O.		900
	BQ	AEROMAR (CARGO) AEROMEXICO	139
	AM		722
	VV	AEROMONTERREY	
	XX	AERONAVES DEL PERU (CARGO)	<u>624</u> 127
	RL	AERONICA	127
	PO	AEROPELICAN AIR SERVICES	
	WL	AEROPERLAS	210
	PL	AEROPERU	210
	6P	AEROPUMA, S.A. (CARGO)	201
	AW	AEROQUETZAL	291
	XU	AEROVIAS (CARGO)	316
		AEROVIAS COLOMBIANAS (CARGO)	158
		AFFRETAIR (PRIVATE) (CARGO)	292
		AFRICAN INTERNATIONAL AIRWAYS	648
43.07	ZI	AIGLE AZUR	
AMM	DP	AIR 2000	
	RK	AIR AFRIQUE	092
DAH	AH	AIR ALGERIE	124
	3J	AIR ALLIANCE	188
	4L	AIR ALMA	248
		AIR ALPHA	

3 Digit Code	2 Digit Code	Name	Ticketing Code
		AIR AQUITAINE	
	FQ	AIR ARUBA	276
	9A	AIR ATLANTIC LTD.	
AAG	ES	AIR ATLANTIQUE	
	OU	AIR ATONABEE/CITY EXPRESS	253
	AX	AIR AURORA (CARGO)	386
	ZX	AIR B.C.	742
	AJ	AIR BELGIUM	
	KF	AIR BOTNIA	
	BP	AIR BOTSWANA	636
		AIR BRASIL	853
		AIR BRIDGE CARRIERS (CARGO)	912
	VH	AIR BURKINA	226
	PB	AIR BURUNDI	919
	TY	AIR CALEDONIE	190
	SB	AIR CALEDONIE INTERNATIONAL	063
ACA	AC	AIR CANADA	014
11011	XC	AIR CARIBBEAN	918
	SF	AIR CHARTER	710
	51	AIR CHARTER (CHARTER)	
		AIR CHARTER SYSTEMS	272
CCA	СА	AIR CHINA	999
CCA	CA	AIR CHINA AIR CITY S.A.	999
CNID	CE		
CNB	0.0	AIR COLUMBUS	<0 7
	OR	AIR COMORES	687
	YN	AIR CREEBEC	219
	DJ	AIR DJIBOUTI	611
	EN	AIR DOLOMITI	
	RQ	AIR ENGIADINA	834
		AIR ENTERPRISE INTERNATIONAL	
AEA	AE	AIR EUROPA	803
	UX	AIR EUROPA (AIR ESPANA S.A.)	
	BS	AIR EXCHANGE (CARGO)	595
	VJ	AIR EXEL	900
	DN	AIR EXEL (BELGIQUE)	
	NE	AIR EXEL (UK) LTD.	
	GS	AIR FOYLE	
AFR	AF	AIR FRANCE	057
FUA		AIR FUTURA	
	GN	AIR GABON	185
	IV	AIR GAMBIA	
	OG	AIR GUADELOUPE	937
	GI	AIR GUINEE	093
	ID	AIR GUYANE	694
	ID	AIR HAITI (CARGO)	623
	GG	AIR HOLLAND B.V	023
ATTIZ	00		152
AHK	OV	AIR HONG KONG (CARGO)	152
ATC	OX	AIR HUDIK	000
AIC	AI	AIR INDIA	098
	9J	AIR INTEGRA	
	IT	AIR INTER	279
	3H	AIR INUIT	
	VU	AIR IVOIRE	084
	JM	AIR JAMAICA	

3 Digit Code	2 Digit Code	Name	Ticketing Code
	YH	AIR JET	
	UV	AIR KANGAROO ISLAND	
	QP	AIR KENYA AVIATION	
		AIR KOREA CO. LTD.	
AIS	UE	AIR L.A.	396
ALK	UL	AIR LANKA	603
	VD	AIR LIBERTE	718
	FU	AIR LITTORAL	659
	MD	AIR MADAGASCAR	258
	QM	AIR MALAWI	167
KMC		AIR MALTA	
AMC	KM	AIR MALTA	643
	7N	AIR MANITOBA	268
	NN	AIR MARTINIQUE	606
	MR	AIR MAURITANIE	174
MAU	MK	AIR MAURITIUS	239
		AIR MERCURY INT (CARGO)	
	ZV	AIR MIDWEST	471
		AIR MOLOKAI	437
	OM	AIR MONGOL	289
	QE	AIR MOOREA	067
	SW	AIR NAMIBIA	186
		AIR NATIONAL	417
	ON	AIR NAURU	123
	LW	AIR NEVADA	568
	NZ	AIR NEW ZEALAND	086
	DB	AIR NIAGARA (CARGO)	296
	EL	AIR NIPPON	
	PX	AIR NIUGINI	656
	4N	AIR NORTH	287
	HS	AIR NORTH INTERNATIONAL LTD	935
	QK	AIR NOVA	983
	GX	AIR ONTARIO	368
	QN	AIR OUTRE MER	676
	FJ	AIR PACIFIC	260
	GZ	AIR RAROTONGA	755
	UZ	AIR RESORTS AIRLINES	
	UU	AIR REUNION	760
	ZJ	AIR ROUTING	
	RY	AIR RWANDA	178
	5W	AIR SAN JUAN CHARTAIR	529
	7W	AIR SASK AVIATION	
	QR	AIR SATELLITE	
	9V	AIR SCHEFFERVILLE	
	UJ	AIR SEDONA	
	DS	AIR SENEGAL	223
SEY	HM	AIR SEYCHELLES	061
	4D	AIR SINAI	903
	WV	AIR SOUTH	399
	NY	AIR ST. VINCENT	
	OJ	AIR ST.BARTHELEMY	981
	PJ	AIR ST.PIERRE	638
	10	AIR STORD	000
	YI	AIR SUNSHINE	806

3 Digit Code	2 Digit Code	Name	Ticketing Code
	GK	AIR SWAZI (CARGO)	097
	VT	AIR TAHITI	135
ATC	TC	AIR TANZANIA CORPORATION	197
	HT	AIR TCHAD	095
	CS	AIR TORONTO	777
		AIR TRANSAT (CHARTER)	
	TF	AIR TRANSPORT PYRENEES	655
		AIR TRANSPORT SCHIPHOL	
	VK	AIR TUNGARU CORP	715
	QW	AIR TURKS & CAICOS	254
UKL	UK	AIR UK	130
LEI	ÖK	AIR UK LEISURE	150
LEI	NE		210
	NF	AIR VANUATU	218
	6V	AIR VEGAS	0.02
	VM	AIR VENDEE	982
		AIR VIA BULGARIAN AIRWAYS	699
	8K	AIR VITKOVICE	
	ZW	AIR WISCONSIN	303
AZR	QC	AIR ZAIRE	207
	UM	AIR ZIMBABWE CORPORATION	168
	ZF	AIRBORNE OF SWEDEN	
	4C	AIRES	
	XL	AIR-GLACIERS	
	FL	AIRLEC	
	12	AIR-LIFT INTERNATIONAL (CARGO)	
	CW	AIRLINE OF THE MARSHALL ISLAND	778
	IP	AIRLINES OF TASMANIA	110
	Ir	AIRPAC AIRLINES (CARGO)	856
	5S		830
	22	AIRSPEED AVIATION	
AIH	<u></u>	AIRTOURS INTERNATIONAL	
	3N	AIRVANTAGE (CARGO)	
	HO	AIRWAYS INTERNATIONAL	372
AWD		AIRWORLD	
	6L	AKLAK AIR	709
		ALAS DE TRANSPORTES INT (CARGO)	791
	AS	ALASKA AIRLINES	027
	6D	ALASKA ISLAND AIR	
	2L	ALBERNI AIRWAYS	
		ALIADRIATICA	
	AZ	ALITALIA	055
	TO	ALKAN AIR	751
ANA	NH	ALL NIPPON AIRWAYS	205
		ALL SEASONS AIR PACIFIC	525
		ALLEGHENY COMMUTER AIRLINES	358
	3A	ALLIANCE AIRLINES	317
	QQ	ALLIED AIRLINES INC	446
	LM	ALM	119
	AQ	ALOHA AIRLINES	327
	WP	ALOHA ISLANDAIR	347
LPN		ALPENAIR (CHARTER)	
	7V	ALPHA AIR	895
	5A	ALPINE AVIATION	511
	AL	ALSAIR S.A	
	DY	ALYEMDA-DEMOCRATIC YEMEN AIR	607

3 Digit Code	2 Digit Code	Name	Ticketing Code
AMY		AMBASSADOR	
AWA	HP	AMERICA WEST AIRLINES	401
AAL	AA	AMERICAN AIRLINES	001
AMT	TZ	AMERICAN TRANS AIR INC	366
		AMERIJET INTERNATIONAL (CARGO)	810
		AMTRAK	554
	OB	ANDALUCIA INTERNATIONAL AIRWAY	
	ED	ANDES AIRLINE (CARGO)	215
		ANGLO AIRLINES	
	VF	ANGLO ROMANIAN AIRLINE	
		ANSETT AIR FREIGHT	964
AAA	AN	ANSETT AUSTRALIA AIRLINES	090
11111	WX	ANSETT EXPRESS	187
	ZQ	ANSETT NEW ZEALAND	941
	MV	ANSETT W.A.	181
	1 v1 v	ANSETT W.A. ANSETT WORLDWIDE AVIATION	757
	7P	APA INTERNATIONAL AIR	917
	VZ		917
		AQUATIC AIRWAYS	
FCA	5F	ARCTIC CIRCLE AIR	255
FGA	FG	ARIANA AFGHAN AIRLINES	255
	XA	ARINC	545
	OQ	ARIZONA PACIFIC AIRWAYS	503
	IZ	ARKIA ISRAEL AIRLINES	238
	JW	ARROW AIR (CARGO)	404
	UH	ARUBAIR N.V.	
	OZ	ASIANA AIRLINES	988
	AP	ASPEN AIRWAYS	
		ASTRO AIR INTERNATIONAL	769
	9T	ATHABASKA AIRWAYS	909
	BM	ATI-AERO TRANSPORTI ITALIANI	
		ATLANTIC AIR TRANSPORT	
		ATLANTIC AIRLINES	336
	RC	ATLANTIC AIRWAYS, FAROE ISLES	767
		ATLANTIC ISLAND AIR	
	EV	ATLANTIC SOUTHEAST AIRLINES	862
	PT	ATLAS AIR SERVICE	
	BH	AUGUSTA AIRWAYS	
AUR	GR	AURIGNY AIR SERVICES	924
	NO	AUS-AIR	/=.
	AU	AUSTRAL	143
	IM	AUSTRALIA-ASIA AIRLINES	175
	TN	AUSTRALIA-ASIA AIRLINES	102
	SO	AUSTRIAN AIR SERVICES	102
AVA	OS	AUSTRIAN AIR SERVICES	257
AVA	05	AUSTRIAN AIRLINES	
	CC		663
	CG	AVAIKI AIR	100
	VE	AVENSA	128
	JZ	AVIA AB	752
	5T	AVIACION DEL NOROESTE	661
	AO	AVIACO	110
		AVIAEXPRESS AIRLINES	732
	5V	AVIAIR AVIATION	
	AV	AVIANCA COLOMBIA	134
	RD	AVIANOVA	

3 Digit Code	2 Digit Code	Name	Ticketing Code
	GU	AVIATECA	240
		AVIOGENEX	
	2B	B. AIRWAYS (CARGO)	817
		B0-S-AIRE AIRLINES	871
BHS	UP	BAHAMASAIR	111
	8B	BAKER AVIATION	
		BALAIR	290
LAZ	LZ	BALKAN BULGARIAN AIRLINES	196
	BT	BALTIA AIR LINES	
	TI	BALTIC INTERNATIONAL AIRLINES	
	PG	BANGKOK AIRWAYS CO	829
	10	BANKAIR (CARGO)	
	QO	BAR HARBOR AIRLINES	473
	6Q	BARROW AIR	475
	6B	BAXTER AVIATION	
BYU	DD	BAYU INDONESIA AIR	
DIU	JV	BEARSKIN LAKE AIR SERVICE	632
	JV		986
	T T	BELIZE AIR INT (CARGO)	980
	LL	BELL AIR	
	5B	BELLAIR	072
	CH	BEMIDJI AIRLINES	872
	8E	BERING AIR	
	WZ	BERLIN EUROPEAN U.K.	758
	GQ	BIG SKY AIRLINES	387
BBC	BG	BIMAN BANGLADESH AIRLINES	997
	NT	BINTER CANARIES	
		BIRGENAIR CHARTER GROUP	
	VB	BIRMINGHAM EUROPEAN AIRWAYS	702
		BLACKHAWK (CARGO)	536
	BV	BOPAIR	928
	3B	BORINQUEN AIR (CARGO)	433
	BO	BOURAQ INDONESIA AIRLINES	666
	BU	BRAATHENS S.A.F.E	154
		BRANIFF INTERNATIONAL A/L	577
	JJ	BRASIL CENTRAL LINHA AEREA REG	
DZH	DB	BRIT AIR	750
BAL	BY	BRITANNIA AIRWAYS	754
BAF	21	BRITISH AIR FERRIES LTD	
BAW	BA	BRITISH AIRWAYS	125
DIT	RX	BRITISH INDEPENDENT AIRWAYS	120
BIH	UR	BRITISH INT HELICOPTERS	
BMA	BD	BRITISH MIDLAND AIRWAYS	236
BWL	VF	BRITISH WORLD AIRLINES	762
DWL	V I	BRITT AIRWAYS	565
	BC	BRYMON AVIATION	657
		BURLINGTON AIR EXPRESS	
	FR		934
	II	BUSINESS AIR	
		BUSINESS AIR TRAVEL	664
	HQ	BUSINESS EXPRESS	357
	DR	BUSINESS FLIGHT OF SCANDINAVIA	244
	СТ	C.A.V.E	
		CAICOS CARIBBEAN AIR. (CARGO)	
CKT	KT	CALEDONIAN AIRWAYS	
	MO	CALM AIR INT	622

3 Digit Code	2 Digit Code	Name	Ticketing Code
	3C	CAMAI AIR	451
	UY	CAMEROON AIRLINES	604
CMM		CANADA 3000	
CDN		CANADIAN AIRLINES INT	018
	4A	CANADIAN EAGLE AIRLINES	
	KG	CANAFRICA TRANSPORTES AEREOS	
		CANAIR (CARGO)	
	9K	CAPE AIR	306
	6C	CAPE SMYTHE AIR SERVICE	879
		CARGO AIRLINES	700
	CV	CARGOLUX AIRLINES (CARGO)	172
	OW	CARGOSUR (CARGO)	
		CARIBBEAN AIR CARGO (CARGO)	749
		CARIBBEAN AIRWAYS	
	KW	CARNIVAL AIR LINES	521
	CX	CATHAY PACIFIC AIRWAYS	160
	KX	CAYMAN AIRWAYS	378
		CAYUGA AIR (CARGO)	402
		CC AIR (US AIR COMMUTER)	354
CNA		CENTENIAL AIRLINES	551
eim	GW	CENTRAL AMERICAN AIRLINES	712
	9M	CENTRAL MOUNTAIN AIR	634
	BK	CHALK'S/PARADISE ISLAND AIRWAY	522
	DIX	CHALLENGE AIR CARGO (CARGO)	307
		CHANNEL EXPRESS(AIR SER)(CARGO	507
	NK	CHARTER ONE	487
	INK	CHAUTAUQUA AIRLINES	363
		CHICAGO AIR TAXI	439
CAL	CI	CHILCOTIN-CARIBO AVIATION	116
CAL	CI	CHINA AIRLINES	297
	MU	CHINA EASTERN AIRLINES	781
	GI	CHINA GENERAL AVIATION	702
	CJ	CHINA NORTHERN AIRLINES	782
	WH	CHINA NORTHWEST AIRLINES	783
	CZ	CHINA SOUTHERN AIRLINES	784
	SZ	CHINA SOUTHWEST AIRLINES	785
	JS	CHOSONMINHANG KOREAN AIRWAYS	120
	SX	CHRISTMAN AIR SYSTEM	509
	QI	CIMBER AIR A/S	647
		CIRCLE AIR FREIGHT	
	CC	CISKEI INTERNATIONAL	222
	BX	COAST AIR	970
	DQ	COASTAL AIR TRANSPORT	457
		COASTAL AIRWAYS	819
	LQ	COHLMIA AVIATION (CARGO)	
	7C	COLUMBIA PACIFIC AIRLINES	
	OH	COMAIR	886
	MN	COMMERCIAL AIRWAYS	161
	XK	COMPAGNIE CORSE MEDITERRANEE	146
CFP	CF	COMPANIA DE AVIACION FAUCETT	163
MXA	MX	COMPANIA MEXICANA	132
	YM	COMPASS AIRLINES	612
		CONNECTAIR CHARTERS	
	4S	CONNER AIR LINES	575

3 Digit Code	2 Digit Code	Name	Ticketing Code
	5C	CONQUEST AIRLINES	355
	DD	CONTI-FLUG	
COA	CO	CONTINENTAL AIRLINES	005
	KC	COOK ISLANDS INTERNATIONAL	
	KO	COOK STRAIT SKYFERRY	
	СМ	COPA-COMPANIA PANAMENA DE AVCN	230
		CORDOBA AIR CARGO	660
		CORPORATE AIR (CARGO)	
		CROATIA AIRLINES	
	LX	CROSSAIR	724
		CROWN AIRWAYS	501
	SC	CRUZEIRO DO SUL	049
CSA	OK	CSA CZECHOSLOVAK AIRLINES	064
	CU	CUBANA	136
СҮР	CY	CYPRUS AIRWAYS	048
	YK	CYPRUS TURKISH AIRLINES	056
		DAIRO AIR SERVICES (CARGO)	761
	DX	DANAIR A/S	609
	DA	DAN-AIR SERVICES	062
	2D	DAWN AIR	551
	9D	DELTA AIR CHARTER	689
DAL	DL	DELTA AIR LINES	006
	DI	DELTA AIR REGIONAL FLUGVERKEHR	944
DLH	LH	DEUTSCHE LUFTHANSA AG.	220
	ER	DHL AIRWAYS	423
	UO	DIRECT AIR	418
	DH	DISCOVERY AIRWAYS	438
	DW	DLT DEUTSCHE LUFTVERK.	683
	YU	DOMINAIR	725
	DO	DOMINICANA	113
	DZ	DOUGLAS AIRWAYS	275
	KA	DRAGONAIR	043
	KB	DRUK AIR	787
	8D	DULLES EXPRESS	506
	QG	DYNAMIC AIR	
	EX	EAGLE AVIATION	
	XZ	EASTAIR (ICELAND)	
	UN	EASTERN AUSTRALIA AIRLINES	
	EW	EAST-WEST AIRLINES	088
	EU	ECUATORIANA	341
	3D	EDGARTOWN AIR	
	MS	EGYPTAIR	077
	LY	EL AL ISRAEL AIRLINES	114
	EB	EMERY WORLDWIDE (CARGO)	
	EK	EMIRATES	176
	EM	EMPIRE AIRLINES	464
	BE	ENTERPRISE AIRLINES	409
		ENVIROSALES CORPORATION	959
	3P	EQUATOR AIRLINES	
	GJ	EQUATORIAL INT AIR OF SAO TOME 980	
	7H	ERA AVIATION	808
ETH	ET	ETHIOPIAN AIRLINES	071
	RN	EURALAIR INTERNATIONAL	836
	YQ	EURO AIR HELICOPTER SERVICE AB	

3 Digit Code	2 Digit Code	Name	Ticketing Code
	EE	EURO BERLIN	770
ECA		EUROCYPRAIR	
EUC		EURO-CYPRIA (CHARTER)	
EEZ		EUROFLY	
		EUROFLY (CHARTER)	
	EY	EUROPE AERO SERVICE	546
		EUROPEAN EXPEDITE	256
		EUROWORLD	844
	BR	EVA AIR	
	ОТ	EVERGREEN HELICOPTERS ALASKA	
EXC	EQ	EXCALIBUR AIRWAYS	
	AD	EXEC EXPRESS	504
	NA	EXECUTIVE AIR CHARTER	
	FX	EXPRESS AIR	569
	9E	EXPRESS AIRLINES	430
		EXPRESS ONE INTERNATIONAL INC	450
	IH	FALCON CARGO AB.	759
	EF	FAR EASTERN AIR TRANSPORT	265
	UD	FAST AIR CARRIER (CARGO)	726
FDX	FM	FEDERAL EXPRESS CORP. (CARGO)	023
FDA	PC		677
EIN		FIJI AIR	
FIN	AY	FINNAIR	105
	FA	FINNAVIATION	
	7F	FIRST AIR	245
	9R	FLAGSHIP EXPRESS SERV (CARGO)	359
	FK	FLAMENCO AIRWAYS	580
	IX	FLANDRE AIR	972
	VV	FLEXAIR	
	EC	FLIGHT LINE	452
	YC	FLIGHT WEST AIRLINES	060
	GM	FLITESTAR	805
		FLORIDA EXPRESS	456
	OP	FLYING BOAT	370
	FT	FLYING TIGER LINE (CARGO)	
	GE	FOSHING AIRLINES	
		FOUR STAR AIR CARGO (CARGO)	861
	ZU	FREEDOM AIR	221
	3F	FRESH AIR CORP. (CARGO)	815
	WR	FRIENDLY ISLANDS AIRWAYS	971
	SI	FRIESENFLUG	SI
	4F	FRONTIER AIR	233
	2F	FRONTIER FLYING SERVICE	517
	GO	GAMBIA AIR SHUTTLE	216
	СК	GAMBIA AIRWAYS	866
GIA	GA	GARUDA INDONESIAN AIRWAYS	126
		GAS AIR CARGO	271
		GATEWAY PACE AVIATION	807
GBL	GT	GB AIRWAYS	171
	GP	GEMINI (CARGO)	625
GHA	GH	GHANA AIRWAYS CORPORATION	237
	9C	GILL AVIATION	786
	DC	GOLDEN AIR COMMUTER	700
		GOLDEN STAR AIR CARGO	
	LK	GOLDEN STAK AIK CARGO GOLDFIELDS AIR SERVICES	

3 Digit Code	2 Digit Code	Name	Ticketing Code
	8G	GP EXPRESS AIRLINES INC.	825
	QD	GRAND AIRWAYS	475
	YE	GRAND CANYON AIRLINES	374
		GREAT BARRIER AIRLINES	
		GREAT CHINA AIRLINES	
	ZK	GREAT LAKES AVIATION	846
GRN	WK	GREEN AIR (CHARTER)	
	GL	GREENLANDAIR (GRONLANDSFLY)	631
GFA	GF	GULF AIR	072
	XF	GULF FLITE CENTER	383
	3M	GULFSTREAM INTERNATIONAL A/L	449
	GY	GUYANA AIRWAYS CORPORATION	206
	7A	HAINES AIRWAYS	200
	//1	HAITI AIR FREIGHT INTERNAT.	671
		HAITI NATIONAL AIRLINES	284
	TV	HAITI TRANS AIR	362
			851
TIAC	WD	HAITIAN AVIATION LINE	
HAS	HX	HAMBURG AIRLINES	099
	VN	HANG KHONG VIETNAM	738
	4H	HANNA'S AIR SALTSPRING	
	8H	HARBOR AIR SERVICE	458
	HG	HARBOR AIRLINES	495
	HA	HAWAIIAN AIRLINES	173
	ZL	HAZELTON AIRLINES	
		HEAVYLIFT CARGO AIRL. (CARG0)	
	YO	HELI AIR MONACO	747
	OI	HELI TRANSPORT	764
	MY	HELIFRANCE	
	IU	HELIFRANS AIR SERVICE	860
	CN	HELIJET	
	JB	HELIJET AIRWAYS	613
		HENSON AVIATION	531
	2E	HERMANS/MARKAIR EXPRESS	325
	20	HEX'AIR	848
	ZS	HISPANIOLA AIRWAYS (CARGO)	263
	HJ	HOLMSTROEM AIR AB	205
	115	HONDURAS INTERCARGO AIRLINE	669
	QX	HORIZON AIRLINES	481
	-		481
ABR	AK	HUNTING CARGO AIRLINES	972
	1177	HUTCHAIR	863
	HZ	HUTCHINSON AIR (CARGO)	F < 4
105		I.L.P.O/ARUBA CARGO (CARGO)	564
IBE	IB	IBERIA	075
ICE	FI	ICELANDAIR FLUGLEIDIR	108
	LS	ILIAMNA AIR TAXI	
	IC	INDIAN AIRLINES	058
	ND	INTAIR	330
IEA		INTER EUROPEAN AIRWAYS	
		INTERAMERICANA DE AVIACION	601
	RS	INTERCONTINENTAL DE AVIACION	
	IF	INTERFLUG	107
		INTER-ISLAND AIR	882
		INTERNACIONAL DE AVIACION	420
	IQ	INTEROT AIR SERVICES	614

3 Digit Code	2 Digit Code	Name	Ticketing Code
		IPEC AVIATION (CARGO)	717
IRA	IR	IRAN AIR	096
	IA	IRAQI AIRWAYS	073
	4M	ISLAND AIR	
	AK	ISLAND AIR, SA	
	IS	ISLAND AIRLINES	
	2S	ISLAND EXPRESS	
	2N	ISLANDER AIR/AIR NEWARK	
	WC	ISLENA AIRLINES	282
	FW	ISLES OF SCILLY SKYBUS	
	IL	ISTANBUL AIRLINES	
ITJ		ITALJET (CHARTER)	
	LN	JAMAHIRIYA LIBYAN ARAB AIRLINE	148
		JAMAICA AIR FREIGHTERS	605
		JANAIR (CARGO)	462
	JN	JAPAN AIR COMMUTER	
JAL	JL	JAPAN AIR LINES	131
	JD	JAPAN AIR SYSTEM	234
	EG	JAPAN ASIA AIRWAYS	688
	JT	JARO INTERNATIONAL	
JAT	JU	JAT YUGOSLAV AIRLINES	115
JEA	JY	JERSEY EUROPEAN AIRWAYS	267
	JX	JES AIR	691
		JET AIRWAYS	
	9W	JET AIRWAYS (INDIA) LTD	
		JET ALSACE	716
		JET EXECUTIVE INTERNATIONAL	310
	JI	JET EXPRESS	878
	8J	JETALL	662
	DK	KAMPUCHEA AIRLINES	
	KR	KARAIR	261
	6K	KEEWATIN AIR	157
	KD	KENDELL AIRLINES	678
	5K	KENMORE AIR	
	4K	KENN BOREK AIR	652
	KQ	KENYA AIRWAYS	706
	6S	KETCHIKAN AIR SERVICE	469
	HE	KEYSTONE AIR SERVICE	921
		KING ISLAND AIRLINES	
	2K	KITTY HAWK AIRWAYS (CARGO)	352
	KL	KLM CITYHOPPER (KLM COMMUTER)	
KLM	KL	KLM ROYAL DUTCH AIRLINES	074
KAL	KE	KOREAN AIR	180
	2Y	KOYUKON AIR	
KAC	KU	KUWAIT AIRWAYS	229
	KH	KYRNAIR	
	JF	L.A.B. FLYING SERVICE	510
	7J	L.A.P.S.A	213
LAB		LAB AIRLINES	
	WJ	LABRADOR AIRWAYS	927
	LR	LACSA	133
	LD	LADE (LINEAS AER DEL ESTADO)	177
	UC	LADECO	145
		LAKE UNION AIR	461

3 Digit Code	2 Digit Code	Name	Ticketing Code
	7L	LAKE UNION AIR SERVICE	461
	TM	LAM-LINHAS AEREAS MOCAMBIQUE	068
	LA	LAN-CHILE	045
	QV	LAO AVIATION	627
	PZ	LAP(LINEAS AEREAS PARAGUAYAS)	705
	MJ	LAPA	069
	TH	LAR TRANSREGIONAL	259
	7K	LARRY'S FLYING SERVICE	
	TQ	LAS VEGAS AIRWAYS	540
	NG	LAUDA AIR	231
	LV	LAV LINEA AERO VENEZOLANA	046
	QL	LESOTHO AIRWAYS	721
	4X	L'EXPRESS AIRLINES	534
	LI	LIAT	140
	QB	LIGNES AERIENNES INTER-QUEBEC	968
	GC	LINA CONGO	246
	RT	LINCOLN AIRLINES	240
	LC	LINEAS AER DEL CARIBE (CARGO)	029
	LE	LINJEFLYG	247
	JK	LINK AIRWAYS	247
	LE	LINK AIRWAYS (SOUTH AFRICA)	600
		× /	474
LAL	TE	LINK AMERICA (CARGO) LITHUANIAN AIRLINES	4/4
			051
LLB	LB	LLOYD AEREO BOLIVIANO	051
LOG	LC	LOGANAIR	122
	* **	LOKEN AVIATION INC	
	YL	LONG ISLAND AIRLINES LTD	443
LOT	LO	LOT POLISH AIRLINES	080
	L2	LOVE AIR	
	LT	LTU INTERNATIONAL AIRWAYS	266
LTE		LUFTANSA TRANS ESPANA	
	LG	LUXAIR LUXEMBOURG AIRLINES	149
	CD	M.K. AIRLINES	
	3R	MACAIR	812
	MT	MACKNIGHT AIRLINES	
DMA	DM	MAERSK AIR (DANISH AIRLINES)	349
	2J	MAJESTIC AIRLINES (CARGO)	
		MAKUNG AIRLINES	
MAS	MH	MALAYSIA AIRLINES	232
MAH	MA	MALEV HUNGARIAN AIRLINES	182
	FH	MALI AIRWAYS	
	HB	MALI-TINBOUCTOU AIR SERVICE	679
	6E	MALMO AVIATION	984
MXE	JE	MANX AIRLINES INC.	916
	BF	MARKAIR	478
	MP	MARTINAIR HOLLAND NV	
	MW	MAYA AIRWAYS	
	IG	MERIDIANA	191
	MZ	MERPATI NUSANTARA AIRLINES	621
	YV	MESA AIRLINES	533
	XJ	MESABA AIRLINES	582
	215	METAVIA AIRLINES	873
		METHOW AVIATION	519
	HY	METRO AIRLINES	380

3 Digit Code	2 Digit Code	Name	Ticketing Code
		METRO AIRLINES NORTHEAST	450
		METRO EXPRESS	887
	FY	METROFLIGHT AIRLINES	
	MG	MGM GRAND AIR	558
		MICHIGAN PENINSULA AIRWAYS	574
MEA	ME	MIDDLE EAST AIRLINES	076
	ML	MIDWAY AIRLINES	557
	WV	MIDWEST AVIATION	896
	YX	MIDWEST EXPRESS AIRLINES	453
		MILLON AIR (CARGO)	034
	IW	MINERVE	646
		MISR. OVERSEAS AIRWAYS (CARGO)	931
	FS	MISSIONARY AVIATION FELLOWSHIP	
	ZO	MOHAWK AIRLINES	390
MON	ZB	MONARCH AIRLINES	974
		MONTAIR FLIGHT SERVICE	319
MNT		MONTSERRAT AIRWAYS	
	NM	MOUNT COOK LINE OF NEW ZEALAND	445
	ZR	MUK AIR	796
	UB	MYANMA AIRWAYS CORPORATION	209
	JO	N.V LUCHTVAARTMAATSCHAPPIJ TWN	
	NJ	NAMAKWALAND LUGDIENS	
	DV	NANTUCKET AIRLINES	
	2,	NASA SOYUZ AVIATION (CARGO)	
	8N	NASHVILLE EAGLE	
	HC	NASKE AIR	
NXA	NX	NATIONAIR CANADA	151
11217	YJ	NATIONAL AIRLINES	151
	9L	NATIONAL CAPITAL AIRWAYS	426
	XV	NATURE ISLAND EXPRESS	420
	EJ	NEW ENGLAND AIRLINES	367
		NEW YORK HELICOPTER CORP	814
	HD WA	NEW TORK HELICOPTER CORP	797
	WA	NEWAIK NEWFOUNDLAND/LABRADOR AIR TRAN	
	NC		<u> </u>
NCA	NS	NFD LUFTVERKEHRS	
NGA	WT	NIGERIA AIRWAYS	087
	KZ	NIPPON CARGO AIRLINES	933
	FN	NIUE AIRLINES	107
	HN	NLM DUTCH AIRLINES	195
	HK	NOBLE AIR	
	TTT	NORCANAIR	
	JH	NORDESTA LINHAS AER REG	~~~
	EO	NORDIC & SWEDEN AIRWAYS	650
	UI	NORLANDAIR (ICELAND)	0
	NR	NORONTAIR	066
	NC	NORSKAIR	665
		NORTH CROSS AIRWAYS	
	5N	NORTHCOAST EXECUTIVE AIRLINES	497
	2V	NORTHEAST EXPRESS REGIONAL	463
		NORTHERN AIR CARGO (CARGO)	345
	RU	NORTHERN COMMUTER AIRLINES	
NWA	NW	NORTHWEST AIRLINES	012
	NV	NORTHWEST TERRITORIAL AIRWAYS	668
	3E	NORTHWESTERN AIR LEASE	

3 Digit Code	2 Digit Code	Name	Ticketing Code
	HW	NORTH-WRIGHT AIR	
	JA	NORWAY AIRLINES	
	6N	NUNASI-NORTHLAND AIRLINES	
	LP	NYGE-AERO	
AAN		OASIS INTERNATIONAL AIRLINES	
	5H	ODIN AIR	
	4B	OLSON AIR SERVICE	
	OL	OLT OSTFRIESISCHE LUFTRANSPORT	704
OAL	OA	OLYMPIC AIRWAYS	050
	WY	OMAN AVIATION SERVICES	910
	9X	ONTARIO EXPRESS	940
	VQ	OXLEY AIRLINES	
	RI	P.T MANDALA AIRLINES	
		PACIFIC AIRLINES	
	PQ	PACIFIC COAST AIRLINES	561
	8P	PACIFIC COASTAL AIRLINES	905
	2W	PACIFIC MIDLAND AIRLINES	763
PIA	PK	PAKISTAN INT AIRLINE	214
PAF		PANAF AIRWAYS (CHARTER)	
		PANAMA AIRWAYS	421
	PV	PANORAMA AIR	311
	HI	PAPILLON AIRWAYS	563
PGT		PEGASUS AIRLINES	505
101	9P	PELANGI AIR	
	PD	PEM AIR	329
	KS	PENINSULA AIRWAYS	329
	KS	PENNSULA AIRWATS PENNSYLVANIA AIRLINES	395
	4P	PEOPLES AIR	
	UW	PEOPLES AIR PERIMETER AIRLINES	906
DAI			
PAL	PR	PHILIPPINE AIRLINES	079
	NP	PICCOLO AIRLINES	206
	PU	PLUNA URUGUAYIAN AIRLINES	286
	WO	POLARWING	1.0
	PH	POLYNESIAN AIRLINES	162
	NI	PORTUGALIA	685
	2P	PRAIRIE FLYING SERVICE	094
	RP	PRECISION AIRLINES	544
		PREMIERE AIRLINES	350
		PRIME AIR	514
	FB	PROMAIR AUSTRALIA	
	YS	PROTEUS	
	AG	PROVINCIAL AIRWAYS	967
	PE	PROVINICIAL AIR SERVICES	
	5P	PTARMIGAN AIRWAYS	697
QFA	QF	QANTAS AIRWAYS	081
		QUEBEC AVIATION	911
	QJ	QUEENSLAND PACIFIC AIRLINES	
	QH	QWESTAIR	
		RACE CARGO AIRLINES	765
	4R	RAVEN AIR	
	7R	REDWING AIRWAYS	594
	RV	REEVE ALEUTIAN AIRWAYS	338
	7S	REGION AIR	
		RENTA-JET FLUGDIENST	

3 Digit Code	2 Digit Code	Name	Ticketing Code
		RFG-REGIONALFLUG	637
	WE	RHEINTALFLUG SEEWALD	915
	6R	RICHARDS AVIATION (CARGO)	552
	SL	RIO-SUL SERVICOS AEREOS REGION	293
	IK	ROADAIR FEEDER SERVICE	
	JC	ROCKY MOUNTAIN AIRWAYS	428
	ZD	ROSS AVIATION	
	WI	ROTTNEST AIRBUS	
	5R	ROVER AIRWAYS (CARGO)	376
	RR	ROYAL AIR FORCE	
	AT	ROYAL AIR MAROC	147
	BI	ROYAL BRUNEI AIRLINES	672
RJA	RJ	ROYAL JORDANIAN AIRLINE	512
RNA	RA	ROYAL NEPAL AIRLINES	285
	ZC	ROYAL SWAZI NATIONAL AIRWAYS	141
		RWL-LUFTFAHRT GMBH & CO	801
	XY	RYAN AIR (ALASKA)	251
RYR	FR	RYANAIR	224
		S.A.R. AVIONS TAXIS	
	ZG	SABAIR AIRLINES	
SAB	SN	SABENA WORLD AIRLINES	082
		SABER AVIATION (CARGO)	854
	9S	SABOURIN LAKE AIRWAYS	
	EH	SAETA	156
	KP	SAFAIR	103
	SH	SAHSA	274
	8S	SALAIR (CARGO)	477
	YD	SALAIR AB	947
	TS	SAMOA AVIATION	
	WB	SAN	739
	BB	SANSA	907
	UF	SARO AIRLINES	
	SP	SATA AIA ACORES	737
	ZT	SATENA	
SVA	SV	SAUDI ARABIAN	065
SAS	SK	SCANDINAVIAN AIRLINES	117
	SY	SCANJET	
	YR	SCENIC AIRLINES	398
	ZM	SCIBE AIRLIFT	939
	WW	SCOTTISH EUROPEAN AIRWAYS	626
		SEAGREEN AIR TRANSPORT	308
	RW	SEAIR PACIFIC	
	XT	SECTOR AIRLINES (CARGO)	987
		SERVICE AERIEN FRANCAIS	
	8L	SERVICIO AEREO LEO LOPEZ	
	2Z	SERVICIOS AEREOS LITORAL	642
		SERVICIOS DE CARGA AEREA	641
	VC	SERVIVENSA	985
	SS	SHABAIR	,
	NL	SHAHEEN AIR INTERNATIONAL	740
	38	SHUSWAP FLIGHT CENTRE	7.10
	55	SIERRA PACIFIC AIRLINES	
		SIGI AIR CARGO COMPANY	714
	MI	SILKAIR	/ 17

3 Digit Code	2 Digit Code	Name	Ticketing Code
	MQ	SIMMONS AIRLINES	
	7B	SIMPSON AIR	166
	SQ	SINGAPORE AIRLINES	618
	5U	SKAGWAY AIR SERVICE	
	00	SKY WEST AIRLINES	302
	9F	SKYCRAFT AIR TRANSPORT	973
	8M	SKYMASTER	581
	YT	SKYWEST AIRLINES	674
	HU	SLOV-AIR	
	MM	SOCIEDAD AERONAUTICA MEDELLIN	334
	IE	SOLOMON ISLANDS AIRLINES	193
	HH	SOMALI AIRLINES	089
SAA	SA	SOUTH AFRICAN AIRWAYS	083
5/11	XE	SOUTH CENTRAL AIR	301
	SG	SOUTHEAST AIRLINES LIMITED	501
	50	SOUTHERN AIR	
	SJ	SOUTHERN AIR TRANPORT (CARGO)	351
	NU	SOUTHWEST AIRLINES (JAPAN)	353
CDD	WN	SOUTHWEST AIRLINES (U.S.A.)	526
SPP	X /XX /	SPAN AIR	45.4
	YW	STATESWEST AIRLINES	454
	NB	STERLING AIRWAYS	194
SAY	CB	SUCKLING AIRWAYS	969
	SD	SUDAN AIRWAYS	200
		SULTAN AIR (CHARTER)	
		SUMO AIRLINES (CARGO)	541
	VL	SUN PACIFIC AIRLINES	
	EZ	SUN-AIR OF SCANDINAVIA	
SMB		SUNBEAM AIRLINE (CHARTER)	
	PI	SUNFLOWER AIRLINES	252
	OC	SUNSHINE AVIATION	938
	OF	SUNSTATE AIRLINES	620
	PY	SURINAM AIRWAYS	192
	JG	SWEDAIR	616
SWR	SR	SWISSAIR TRANSPORT COMPANY	085
	FD	SYDNEY AIRLINES	
	RB	SYRIAN ARAB AIRLINES	070
	EQ	T.A.M.E.	269
	DT	TAAG ANGOLA AIRLINES	118
	TA	TACA INTERNATIONAL AIRLINES	202
	CQ	TAHITI CONQUEST AIRLINES	202
		TAIWAN AIRLINES COMPANY	710
	GV	TALAIR	447
	KK	TAM	++ /
			729
	QT TV	TAMPA AIRLINES (CARGO)	
	TX	TAN AIRLINES	208
TAD	4E	TANANA AIR SERVICE	0.47
TAP	TP	TAP AIR PORTUGAL	047
	9Q	TAQUAN AIR SERVICE	
	RO	TAROM ROMANIAN AIR TRANSPORT	281
	TJ	TAS AIRWAYS S.P.A	667
	3K	TATONDUK AIR SERVICE	
	QS	TATRA AIR	904
		TEDDY AIR	

3 Digit Code	2 Digit Code	Name	Ticketing Code
	CL	TEMPLEHOF AIRWAYS U.S.A.	175
	KN	TEMSCO HELICOPTERS	876
	TG	THAI AIRWAYS INTERNATIONAL	217
	LU	THERON AIRWAYS	
TRS		TIA	
		TIKAL JETS (CARGO)	489
		TIME AIR SWEDEN	
		TNT SAVA S.A.	849
	AB	TORRES AIR	
TUR		TOUR EUROPE (CHARTER)	
TOW	NC	TOWER AIR	305
		TPI INTER. AIRWAYS (CARGO)	587
		TRANS AIR	499
		TRANS ARABIAN AIR TRANS(CARGO)	
	YB	TRANS CONTINENTAL A/L (CARGO)	837
	7T	TRANS COTE	037
TEI	/1	TRANS EUROPEAN AIR (CHARTER)	
I LI		TRANS EUROPEAN AIRWAYS (CHART)	
	IO	TRANS LOKOF EAN AIRWATS (CHART)	100
	JQ TL	TRANS JAMAICAN AIRLINES TRANS MEDITERRAREAN AIR(CARGO)	270
			270
	4Q	TRANS NORTH AVIATION	414
	9N	TRANS STATES AIRLINES	414
TWA	TW	TRANS WORLD AIRLINES	015
		TRANS-AIR-LINK (CARGO)	348
TRA	HV	TRANSAVIA AIRLINES	979
	TD	TRANSAVIO	
	TR	TRANSBRASIL S/A LINHAS AEREAS	653
		TRANSCARGO (CARGO)	978
	KV	TRANSKEI AIRWAYS	264
	IO	TRANSPORT AERIEN TRANS EXPORT	153
	IJ	TRANSPORT AERIEN TRANSREGIONAL	936
		TRANSPORT AIR CENTRE	203
	VR	TRANSPORTES AEREOS CABO VERDE	696
	GD	TRANSPORTES AEREOS EJECUTIVOS	838
	VW	TRANSPORTES AEROMAR	942
	YZ	TRANSPORTES DE GUINE BISSAU	241
	8T	TRAVELAIR	
	BW	TRINIDAD & TOBAGO BWIA INT	106
	PM	TROPIC AIR	
	BN	TROPICAL SEA AIRLINES	922
	TB	TRUMP SHUTTLE	857
	UG	TUNINTER	
	TU	TUNIS AIR	199
	TT	TUNISAVIA	720
		TURK HAVA TASIMACILIGI	929
	ТК	TURKISH AIRLINES	235
	KT	TURTLE AIRWAYS	235
	6T	TYEE AIRWAYS	
	VO	TYROLEAN AIRWAYS	734
UGA	QU	UGANDA AIRLINES CORPORATION	673
UUA	PS	UKRAINE INTERNATIONAL AIRLINES	073
TTAT			010
UAL	UA	UNITED AIRLINES	016
	5X	UNITED PARCEL SERVICE (CARGO)	406
	9U	UNIVERSAL AIRLINES (CARGO)	598

3 Digit Code	2 Digit Code	Name	Ticketing Code
		US EXPRESS (CARGO)	
	US	USAIR	037
	UT	UTA	142
		VALLEY AIR SERVICES INC	482
	J7	Valuejet	
	5J	VALUJET	
BRG	RG	VARIG BRAZILIAN AIRLINES	042
	VP	VASP	343
	PF	VAYUDOOT	925
VIA	VA	VENEZUELAN INTL AIRWAYS	164
	VI	VIEQUES AIR LINK	381
	ZP	VIRGIN AIR	315
VIR	VS	VIRGIN ATLANTIC AIRWAYS	932
	FV	VIVA AIR	728
	4V	VOYAGEUR AIRWAYS	908
	3V	WAGLISLA AIR	
	XW	WALKERS CAY AIRLINE	360
		WALLISAIR	
	4W	WARBELOW'S AIR VENTURES	
	KY	WATERWINGS AIRWAYS (TE ANAU)	914
	KJ	WEST AIR EXECUTIVE	
	3L	WEST ISLE AIR	
	OE	WESTAIR COMMUTER AIRLINES	460
	WS	WESTATES AIRLINES	573
	MB	WESTERN AIRLINES	
	FO	WESTERN NEW SOUTH WALES AIR	
		WESTPAC AIRLINES (CARGO)	
	WF	WIDEROE'S FLYVESELSKAP	701
	8F	WILBURS FLIGHT OPERATIONS	442
	6W	WILDERNESS AIRLINE (1975)	
	WM	WINDWARD ISLANDS AIRWAYS	295
	WQ	WINGS AIRWAYS	842
	SE	WINGS OF ALASKA	397
	RM	WINGS WEST AIRLINES	
		WORLD AIRWAYS (CHARTER)	
	WG	WORLDWAYS CANADA LTD	
	8R	WRA	393
		WRANGLER AVIATION (CARGO)	490
	8V	WRIGHT AIR SERVICE	
	MF	XIAMEN AIRLINES	
	XO	XINJIANG AIRLINES	
	ST	YANDA AIRLINES	
IYE	IY	YEMEN AIRWAYS	635
	9Y	YUTANA AIRLINES	
	4Y	YUTE AIR ALASKA	476
ZAC	QZ	ZAMBIA AIRWAYS	169
-		ZANTOP INT AIRLINES (CARGO)	391
	ZA	ZAS AIRLINES OF EGYPT	708
	OD	ZULIANA DE AVIACION (CARGO)	822

Occupant Codes for Airline Tenants

The \$ symbol is used as a placeholder in order to conform to the aforementioned layering convention.

Airline	Y - designation
Air Ghana	\$GH
Air Jamaica	\$JM
Aer Lingus	\$E1
Air Mobility Command	\$MC
Air Ontario/Air Canada	\$AC
American Airlines	\$AA
America West	\$HP
British Airways	\$BA
Continental Airlines	\$CO
Delta Airlines	\$DL
Frontier Airlines	\$F9
Icelandair	\$FI
Northwest Airlines	\$NW
Pro Air	\$P9
Ryan Int'I Airlines	\$XY
Trans World Airlines	\$TW
United Airlines	\$UA
US Airways	\$US
MetroJet	USM
Southwest Airlines	L\$ <u>WN</u>

Occupant Codes for Other Tenants

Baltimore/Washington International Airport lessees and their corresponding layer codes.

Y - designation	Company
AEX	A-1 Express
AGR	United States Department of Agriculture
ALA	Alamo Rent-a-Car
ARC	Arinc
AVS	Avis Car Rental
BUD	Budget Car Rental
CEX	Currency Exchange
CHM	Chimes
CMD	Celebrate Maryland
CUS	U.S. Customs
DEA	Drug Enforcement Agency
DOL	Dollar Car Rental
DUT	Duty Free
MAA	Federal Aviation Administration
GLO	Globe Airport Security
HNT	Huntleigh
HST	Host International, Inc.
HTZ	Herb Car Rental
INS	Immigration and Naturalization Service

Y - designation	Company	
ITS	International Total Services, Inc.	
LHD	Lockheed	
MAA	Maryland Aviation Administration	
MAA	Millar Elevator (MAA)	
MAS	Service Master	
MTA	Maryland Transportation Authority Police	
NAT	National Car Rental	
PHS	Public Health Service	
SIG	Signature Flight Support, Inc.	
SKY	Sky Sites	
SMT	SmarteCarte	
SUS	Super Shuttle	
TRX	Travelex	
TRA	Travelers Aid Society	
USM	U.S. Mail	
USO	USO	
VAC	Vacant	
WAC	Wackenhut Security Services	

Z-Designation	Description	Patterned Hatch	Scale/Angle
DR	Directory	-none-	-
FB	Food and Beverages (retail)	CROSS	96/0°
FD	Flight Information Directory	- none -	-
HR	Holdroom	DASH	00/45°
LS	Lighted Sign	- none -	-
MS	Merchandising Space (retail)	STARS	50/0°
ON	Office, No Public	ANS136	100/0°
OP	Office, Public Access	ANS133	100/90°
PM	Public Meeting/Lounge	ACRD_IS014W100	3/315°
PS	Public Stairs	ANS134	50/90°
PL	Public Elevator	- none -	-
PE	Public Escalator	SACNCR	200/90°
PC	Public Corridor	- none -	-
PC	Restricted Corridor	ANGLE	60/45°
PT	PublicTelephones	- none -	-
RR	Restroom	AN <u>\$132</u>	50/90°
SF	Special, Finished	- matches usage -	
SU	Special, Unfinished	ANS138	120/0°
SC	Security Checkpoint	ANS137	150/0°
SS	Special, Storage	ANS138	120/0°
TC	Ticket Counter	ANS131	100/0°
UM	Utility, Mechanical	SQUARE	100/0°
UE	Utility, Electrical	ZIGZAG	100/0°
UT	Utility, Telecommunications	TRIANG	100/90°
VP	Visual Paging	- none -	

Usage Codes for Layering Convention

APPENDIX 3 – GLOSSARY OF ACRONYMS

Glossary of Acronyms for Use in Airport Documents

Clossury of Actonyms for Ose in Autport Documents			
	A-		
A/C –Aircraft	ARINC - Aeronautical Radio, Inc.		
A/H -Altitude/Height	A/G -Air to Ground		
AAF -Army Air Field	AAC -Mike Monroney Aeronautical Center		
AAP -Advanced Automation Program	AAI -Arrival Aircraft Interval		
ABDIS -Automated Data Interchange System Service B	AAR -Airport Acceptance Rate		
ACAS -Aircraft Collision Avoidance System	ACAIS -Air Carrier Activity Information System		
ACCT -Accounting Records	ACC -Area Control Center		
ACDO -Air Carrier District Office	ACD -Automatic Call Distributor		
ACFO - Aircraft Certification Field Office	ACF -Area Control Facility		
ACID -Aircraft Identification	ACFT - Aircraft		
ACLT -Actual Landing Time Calculated	ACLS -Automatic Carrier Landing System		
ADA -Air Defense Area	ACO -Aircraft Certification Office		
ADAS -AWOS Data Acquisition System	ADAP - Airport Development Aid Program		
ADDA -Administrative Data	ADCCP - Advanced Data Communications Control Procedure		
ADI -Automatic De-Ice and Inhibitor	ADF -Automatic Direction Finding		
ADIZ - Air Defense Identification Zone	ADIN - AUTODIN Service		
ADLY - Arrival Delay	ADL - Aeronautical Data-Link		
ADP - Automated Data Processing	ADO -Airline Dispatch Office		
ADSIM -Airfield Delay Simulation Model	ADS - Automatic Dependent Surveillance		
ADTN -Administrative Data Transmission Network	ADSY -Administrative Equipment Systems		
ADVO - Administrative Voice	ADTN2000 - Administrative Data Transmission Network 2000		
AEIS – Airport Engineering Information System	AEG - Aircraft Evaluation Group		
AERA -Automated En-Route Air Traffic Control	AEX -Automated Execution		
AF -Airway Facilities	AFB -Air Force Base		
AFIS -Automated Flight Inspection System	AFP -Area Flight Plan		
AFRES -Air Force Reserve Station	AFS -Airways Facilities Sector		
AFSFO -AFS Field Office	AFSFU -AFS Field Unit		
AFSOU -AFS Field Office Unit (Standard is AFSFOU)	AFSS -Automated Flight Service Station		
AFTN -Automated Fixed Telecommunications Network	AGL - Above Ground Level		
AID - Airport Information Desk	AIG -Airbus Industries Group		
AIM -Airman's Information Manual	AIP -Airport Improvement Plan		
AIRMET - Airmen's Meteorological Information	AIRNET - Airport Network Simulation Model		
AIS -Aeronautical Information Service	AIT -Automated Information Transfer		
ALP -Airport Layout Plan	ALS -Approach Lighting System		
ALSF1 -ALS with Sequenced Flashers I	ALSF2 -ALS with Sequenced Flashers II		
ALSIP - Approach Lighting System Improvement Plan	ALTRV -Altitude Reservation		
AMASS -Airport Movement Area Safety System	AMCC -ACF/ARTCC Maintenance Control Center		
AMOS - Automated Meteorological Observation Station	AMP -ARINC Message Processor (OR) Airport Master Plan		
AMVER - Automated Mutual Assistance Vessel Rescue System	ANC -Alternate Network Connectivity		
ANG -Air National Guard	ANGB -Air National Guard Base		
ANMS -Automated Network Monitoring System	ANSI - American National Standards Group		
AP -Acquisition Plan	APP -Approach		
APS -Airport Planning Standard	AQAFO - Aeronautical Quality Assurance Field Office		
ARAC -Army Radar Approach Control (AAF)	ARAC -Aviation Rulemaking Advisory Committee		
ARCTR -FAA Aeronautical Center or Academy	ARAC -Aviation Rulemaking Advisory Committee ARF -Airport Reservation Function		
ARLNO - Airline Office ARO - Airport Reservation Office	AWS -Air Weather Station		
ARO - Airport Reservation Office	ARP -Airport Reference Point		
ARSA -Airport Service Radar Area	ARF -Airport Reference Point ARSR -Air Route Surveillance Radar		
ARTCC -Air Route Traffic Control Centre	ARTS - Automated Radar Terminal System		
	AKTS - Automated Radar Terminal System ASC - AUTODIN Switching Center		
ASAS -Aviation Safety Analysis System	ASC - AUTODIN SWICHINg Center		

ASCP - Aviation System Capacity Plan	ASD -Aircraft Situation Display
ASDA -Accelerate - Stop Distance Available	ASLAR -Aircraft Surge Launch And Recovery
ASM -Available Seat Mile	ASP -Arrival Sequencing Program
ASOS - Automatic Surface Observation System	ASQP - Airline Service Quality Performance
ASR -Airport Surveillance Radar	ASTA - Airport Surface Traffic Automation
ASV -Airline Schedule Vendor	AT -Air Traffic
ATA -Air Transport Association of America	ATAS -Airspace and Traffic Advisory Service
ATCAA - Air Traffic Control Assigned Airspace	AT&T - American Telephone and Telegraph
AT&T ASDC - AT&T Agency Service Delivery Center	AT&T CSA -AT&T Customer Support Associate
ATC -Air Traffic Control	ATCBI - Air Traffic Control Beacon Indicator
ATCCC - Air Traffic Control Command Center	ATCO - Air Taxi Commercial Operator
ATCRB - Air Traffic Control Radar Beacon	ATCRBS - Air Traffic Control Radar Beacon System
ATCSCC - Air Traffic Control Systems Command Center	ATCT - Airport Traffic Control Tower
ATIS -Automated Terminal Information Service	ATISR -ATIS Recorder
ATM -Air Traffic Management	ATM -Asynchronous Transfer Mode
ATMS -Advanced Traffic Management System	ATN -Aeronautical Telecommunications Network
ATODN - AUTODIN Terminal (FUS)	ATOVN - AUOTVON (Facility)
ATOMS -Air Traffic Operations Management System	ATS -Air Traffic Service
ATSCCP - ATS Contingency Command Post	ATTIS -AT&T Information Systems
AUTODIN -DoD Automatic Digital Network	AUTOVON -DoD Automatic Voice Network
AVON -AUTOVON Service	AVN -Aviation Standards National Field Office, Oklahoma City
AWIS - Airport Weather Information	AWOS -Automated Weather Observation System
AWP -Aviation Weather Processor	AWPG -Aviation Weather Products Generator
	B-
BANS-BRITE Alphanumeric System	BART -Billing Analysis Reporting Tool (GSA software tool)
BASIC -Basic Contract Observing Station	BASOP -Military Base Operations
BCA -Benefit/Cost Analysis	BCR -Benefit/Cost Ratio
BDAT -Digitized Beacon Data	BMP -Best Management Practices
BOC -Bell Operating Company	bps -bits per second
BRI -Basic Rate Interface	BRITE -Bright Radar Indicator Terminal Equipment
BRL -Building Restriction Line	BUEC -Back-up Emergency Communications
BUECE -Back-up Emergency Communications Equipment	
	C-
CAA -Civil Aviation Authority	CAB -Civil Aeronautics Board
CARF -Central Altitude Reservation Facility	CASFO -Civil Aviation Security Office
CAT –Category	CAT -Clear - Air Turbulence
CAU -Crypto Ancillary Unit	CBI -Computer Based Instruction
CCC -Communications Command Center	CCCC -Staff Communications
CCCH -Central Computer Complex Host	CC&O -Customer Cost and Obligation
CCSD -Command Communications Service Designator	CCS7-NI -Communication Channel Signal-7 - Network
	Interconnect
CCU -Central Control Unit	CD -Common Digitizer
CDR -Cost Detail Report	CDT -Controlled Departure Time
CDTI -Cockpit Display of Traffic Information	CENTX -Central Telephone Exchange
CEQ -Council on Environmental Quality	CERAP -Central Radar Approach
CFC -Central Flow Control	CFCF -Central Flow Control Facility
CFCS -Central Flow Control Service	CFWP -Central Flow Weather Processor
CFWU -Central Flow Weather Unit	CGAS -Coast Guard Air Station
CLC -Course Line Computer	CLIN -Contract Line Item
CLT -Calculated Landing Time	CM -Commercial Service Airport
CNMPS -Canadian Minimum Navigation Performance	CNS -Consolidated NOTAM System
Specification Airspace	
CNSP -Consolidated NOTAM System Processor	CO -Central Office
COE -U.S. Army Corps of Engineers	COMCO -Command Communications Outlet
COE -U.S. Army Corps of Engineers CONUS -Continental United States	COMCO -Command Communications Outlet CORP -Private Corporation other than ARINC or MITRE
CONUS -Continental United States	CORP -Private Corporation other than ARINC or MITRE
CONUS -Continental United States CPE -Customer Premise Equipment	CORP -Private Corporation other than ARINC or MITRE CPMIS -Consolidated Personnel Management Information System
CONUS -Continental United States CPE -Customer Premise Equipment CRA -Conflict Resolution Advisory	CORP -Private Corporation other than ARINC or MITRE CPMIS -Consolidated Personnel Management Information System CRDA -Converging Runway Display Aid
CONUS -Continental United States CPE -Customer Premise Equipment	CORP -Private Corporation other than ARINC or MITRE CPMIS -Consolidated Personnel Management Information System

CSR -Communications Service Request	CSS -Central Site System
CTA -Controlled Time of Arrival	CTA -Control Area
CTA/FIR -Control Area/Flight Information Region	CTAF -Common Traffic Advisory Frequency
CTAS -Center - Tracon Automation System	CTMA -Center Traffic Management Advisor
CUPS -Consolidated Uniform Payroll System	CVFR -Controlled Visual Flight Rules
CVTS -Compressed Video Transmission Service	CW -Continuous Wave
CWSU -Central Weather Service Unit	CWY -Clearway
	off I olda way
-	D-
DA-Direct Access	DA -Decision Altitude/Decision Height
DA -Descent Advisor	DABBS -DITCO Automated Bulletin Board System
DAIR -Direct Altitude and Identity Readout	DAR -Designated Agency Representative
DARC -Direct Access Radar Channel	dBA -Decibels A-weighted
DBCRC -Defense Base Closure and Realignment Commission	DBMS -Data Base Management System
DBRITE -Digital Bright Radar Indicator Tower Equipment	DCA -Defense Communications Agency
DCAA -Dual Call, Automatic Answer Device	DCCU -Data Communications Control Unit
DCE -Data Communications Equipment	DDA -Dedicated Digital Access
DDD -Direct Distance Dialing	DDM -Difference in Depth of Modulation
DDS -Digital Data Service	DEA -Drug Enforcement Agency
DEDS -Data Entry and Display System	DEIS -Draft Environmental Impact Statement
DEP – Departure	DEWIZ -Distance Early Warning Identification Zone
DF -Direction Finder	DFAX -Digital Facsimile
DFI -Direction Finding Indicator	DGPS -Differential Global Positioning Satellite (System)
DH -Decision Height	DID -Direct Inward Dial
DIP -Drop and Insert Point	DIRF -Direction Finding
DITCO -Defense Information Technology Contracting Office	DME -Distance Measuring Equipment
Agency	
DME/P -Precision Distance Measuring Equipment	DMN -Data Multiplexing Network
DNL -Day-Night Equivalent Sound Level (Also called Ldn)	DOD -Direct Outward Dial
DoD -Department of Defense DOS -Department of State	DOI -Department of Interior
DOTS -Department of State	DOT -Department of Transportation DOTCC -Department of Transportation Computer Center
DSCS -Digital Satellite Compression Service	DSUA -Dynamic Special Use Airspace
DTS -Dedicated Transmission Service	DUAT -Direct User Access Terminal
DVFR -Defense Visual Flight Rules	DVFR -Day Visual Flight Rules
DVOR -Doppler Very High Frequency Omni-Directional Range	DYSIM -Dynamic Simulator
	E-
E-MSAW -En-Route Automated Minimum Safe Altitude Warning	EARTS -En Route Automated Radar Tracking System
ECOM -En Route Communications	ECVFP -Expanded Charted Visual Flight Procedures
EDCT -Expedite Departure Path	EFAS -En Route Flight Advisory Service
EFC -Expect Further Clearance	EFIS -Electronic Flight Information Systems
EIAF -Expanded Inward Access Features	EIS - Environmental Impact Statement
ELT -Emergency Locator Transmitter	ELWRT -Electrowriter
EMPS -En Route Maintenance Processor System	ENAV -En Route Navigational Aids
EPA -Environmental Protection Agency	EPS -Engineered Performance Standards
EOF -Emergency Operating Facility	EPSS -Enhanced Packet Switched Service
ERAD -En Route Broadband Radar	ESEC -En Route Broadband Secondary Radar
ESP -En Route Spacing Program	ESYS -En Route Equipment Systems
ESF -Extended Superframe Format	ETA -Estimated Time of Arrival
ETE -Estimated Time En Route	ETG -Enhanced Target Generator
ETMS -Enhanced Traffic Management System	ETN -Electronic Telecommunications Network
EVAS -Enhanced Vortex Advisory System	EVCS -Emergency Voice Communications System
FAA-Federal Aviation Administration	F&E -Facility and Equipment
FAAAC -FAA Aeronautical Center	FAACIS -FAA Communications Information System
FAATC -FAA Technical Center	FAC -Facility
FAF -Final Approach Fix	FAP -Final Approach Point
FAPM -FTS2000 Associate Program Manager	FAR -Federal Aviation Regulation
FAATSAT -FAA Telecommunications Satellite	FAST -Final Approach Spacing Tool

FAX -Facsimile Equipment	FBO -Fixed Base Operator
FBS -Fall Back Switch	FCC -Federal Communications Commission
FCLT -Freeze Calculated Landing Time	FCOM -FSS Radio Voice Communications
FCPU -Facility Central Processing Unit	FDAT -Flight Data Entry and Printout (FDEP) and Flight Data Service
FDE -Flight Data Entry	FDEP -Flight Data Entry and Printout
FDIO -Flight Data Input/Output	FDIOC -Flight Data Input/Output Center
FDIOR -Flight Data Input/Output Remote	FDM -Frequency Division Multiplexing
FDP -Flight Data Processing	FED -Federal
FEIS -Final Environmental Impact Statement	FEP -Front End Processor
FFAC -From Facility	FIFO -Flight Inspection Field Office
FIG -Flight Inspection Group	FINO -Flight Inspection National Field Office
FIPS -Federal Information Publication Standard	FIR -Flight Information Region
FIRE -Fire Station	FIRMR -Federal Information Resource Management Regulation
FL -Flight Level FMA -Final Monitor Aid	FLOWSIM -Traffic Flow Planning Simulation FMF -Facility Master File
FMIS -FTS2000 Management Information System	FMF -Facility Master File FMS -Flight management System
FNMS -FTS2000 Network Management System	FOIA -Freedom Of Information Act
FP -Flight Plan	FRC -Request Full Route Clearance
FSAS -Flight Service Automation System	FSDO -Flight Standards District Office
FSDPS -Flight Service Data Processing System	FSEP -Facility/Service/Equipment Profile
FSP -Flight Strip Printer	FSPD -Freeze Speed Parameter
FSS -Flight Service Station	FSSA -Flight Service Station Automated Service
FSTS -Federal Secure Telephone Service	FSYS -Flight Service Station Equipment Systems
FTS -Federal Telecommunications System	FTS2000 -Federal Telecommunications System 2000
FUS -Functional Units or Systems	FWCS -Flight Watch Control Station
· · · · · ·	-G-
GA-General Aviation	GAA -General Aviation Activity
GAAA -General Aviation Activity and Avionics	GADO -General Aviation District Office
GCA -Ground Control Approach	GNAS -General National Airspace System
GNSS -Global Navigation Satellite System	GOES -Geostationary Operational Environmental Satellite
GOESF -GOES Feed Point	GOEST -GOES Terminal Equipment
GPS -Global Positioning Satellite	GPWS -Ground Proximity Warning System
GRADE -Graphical Airspace Design Environment	GS -Glide Slope Indicator
GSA -General Services Administration	
	-H-
H-Non-Directional Radio Homing Beacon (NDB)	HAA -Height Above Airport
HAL -Height Above Landing HAT -Height Above Touchdown	HARS -High Altitude Route System HAZMAT -Hazardous Materials
HCAP -High Capacity Carriers	HLDC -High Level Data Link Control
HDME -NDB with Distance Measuring Equipment	HDQ -FAA Headquarters
HELI –Heliport	HF -High Frequency
HH -NDB, 2kw or More	HI-EFAS -High Altitude EFAS
HOV -High Occupancy Vehicle	HSI -Horizontal Situation Indicators
HUD -Housing and Urban Development	HWAS -Hazardous In-Flight Weather Advisory
Hz –HERTZ	
	-I-
IA-Indirect Access	IAF -Initial Approach Fix
I/AFSS -International AFSS	IAP -Instrument Approach Procedures
IAPA -Instrument Approach Procedures Automation	IBM -International Business Machines
IBP -International Boundary Point	IBR -Intermediate Bit Rate
ICAO -International Civil Aviation Organization	ICSS -International Communications Switching Systems
IDAT -Interfacility Data	IF -Intermediate Fix
IFCP -Interfacility Communications Processor	IFDS -Interfacility Data System
IFEA -In-Flight Emergency Assistance	IFO -International Field Office
IFR -Instrument Flight Rules	IFSS -International Flight Service Station
ILS -Instrument Landing System	IM -Inner Marker
IMC -Instrument Meteorological Conditions	INM -Integrated Noise Model
INS -Inertial Navigation System	IRMP - Information Resources Management Plan

ISDN -Integrated Services Digital Network	ISMLS -Interim Standard Microwave Landing System
ITI -Interactive Terminal Interface	IVRS -Interim Voice Response System
IW -Inside Wiring	
	-J-
	-K-
Kbps-Kilobits Per Second	KHz -Kilohertz
KVDT -Keyboard Video Display Terminal	
	-L-
LAA-Local Airport Advisory	LAAS -Low Altitude Alert System
LABS -Leased A B Service	LABSC -LABS GS-200 Computer
LABSR -LABS Remote Equipment	LABSW -LABS Switch System
LAHSO -Land and Hold Short Operation LATA -Local Access and Transport Area	LAN -Local Area Network
LCF -Local Control Facility	LAWRS -Limited Aviation Weather Reporting System LCN -Local Communications Network
LDA -Localizer Directional Aid	LDA -Landing Directional Aid
LDA -Localizer Directional Ald	LEC -Local Exchange Carrier
LF -Low Frequency	LINCS -Leased Interfacility NAS Communications System
LIS -Logistics and Inventory System	LLWAS -Low Level Wind Shear Alert System
LM/MS -Low/Medium Frequency	LMM -Locator Middle Marker
LMS -LORAN Monitor Site	LOC -Localizer
LOCID -Location Identifier	LOI -Letter of Intent
LOM -Compass Locator at Outer Marker	LORAN -Long Range Aid to Navigation
LRCO -Limited Remote Communications Outlet	LRNAV -Long Range Navigation
LRR -Long Range Radar	
	-M-
FAA-Maximum Authorized Altitude	MALS -Medium Intensity Approach Lighting System
MALSF -MALS with Sequenced Flashers	MALSR -MALS with Runway Alignment Indicator Lights
MAP -Modified Access Pricing	MAP -Military Airport Program
MAP -Missed Approach Point	MAP - Maintenance Automation Program
Mbps -Megabits Per Second	MCA -Minimum Crossing Altitude
MCAS -Marine Corps Air Station	MCC -Maintenance Control Center
MCL -Middle Compass Locator	MCS -Maintenance and Control System
MDA -Minimum Descent Altitude	MDT -Maintenance Data Terminal
MEA -Minimum En Route Altitude	METI - Meteorological Information
MF - Middle Frequency	MFJ -Modified Final Judgement
MFT -Meter Fix Crossing Time/Slot Time	MHA -Minimum Holding Altitude
MHz –Megahertz	MIA -Minimum IFR Altitudes
MIDO - Manufacturing Inspection District Office	MIS -Meteorological Impact Statement
MISC –Miscellaneous MIT -Miles In Trail	MISO -Manufacturing Inspection Satellite Office MITRE -Mitre Corporation
MLS -Microwave Landing System	MM -Middle Marker
MMC -Maintenance Monitoring Console	MMS -Maintenance Monitoring System
MNPS -Minimum Navigation Performance Specification	MNPSA -Minimum Navigation Performance Specifications
in the specification	Airspace
MOA -Memorandum of Agreement	MOA -Military Operations Area
MOCA -Minimum Obstruction Clearance Altitude	MODE C -Altitude-Encoded Beacon Reply
MODE C -Altitude Reporting Mode of Secondary Radar	MODE S -Mode Select Beacon System
MOU -Memorandum of Understanding	MPO -Metropolitan Planning Organization
MPS -Maintenance Processor Subsystem (OR) Master Plan	MRA -Minimum Reception Altitude
Supplement	_
MRC -Monthly Recurring Charge	MSA -Minimum Safe Altitude
MSAW -Minimum Safe Altitude Warning	MSL -Mean Sea Level
MSN -Message Switching Network	MTCS -Modular Terminal Communications System
MTI -Moving Target Indicator	MUX -Multiplexer
MVA -Minimum Vectoring Altitude	MVFR -Marginal Visual Flight Rules
	-N-
NAAQS-National Ambient Air Quality Standards	NADA -NADIN Concentrator
NADIN -National Airspace Data Interchange Network	NADSW -NADIN Switches
NAILS -National Airspace Integrated Logistics Support	NAMS -NADIN IA

NAPRS -National Airspace Performance Reporting System	NAS -National Airspace System or Naval Air Station
NASDC -National Aviation Safety Data	NASP -National Airspace System Plan
NASPAC -National Airspace System Performance Analysis	NATCO -National Communications Switching Center
Capability	
NAVAID -Navigation Aid	NAVMN -Navigation Monitor and Control
NAWAU -National Aviation Weather Advisory Unit	NAWPF -National Aviation Weather Processing Facility
NCAR -National Center for Atmospheric Research; Boulder, CO	NCF -National Control Facility
NCIU -NEXRAD Communications Interface Unit	NCS -National Communications System
NDB -Non-Directional Radio Homing Beacon	NDNB -NADIN II NEXRAD -Next Generation Weather Radar
NEPA -National Environmental Policy Act NFAX -National Facsimile Service	NFDC -National Flight Data Center
NFIS -NAS Facilities Information System	NFDC -National Flight Data Center
NICS -National Interfacility Communications System	NPIAS -National Plan of Integrated Airport Systems
NM -Nautical Mile	NMAC -Near Mid Air Collision
NMC -National Meteorological Center	NMCE -Network Monitoring and Control Equipment
NMCS -Network Monitoring and Control System	NOAA -National Oceanic and Atmospheric Administration
NOC -Notice Of Completion	NOTAM -Notice to Airmen
NPDES -National Pollutant Discharge Elimination System	NPIAS -National Plan of Integrated Airport Systems
NRC -Non-Recurring Charge	NRCS -National Radio Communications Systems
NSAP -National Service Assurance Plan	NSSFC -National Severe Storms Forecast Center
NSSL -National Severe Storms Laboratory; Norman, OK	NTAP -Notices To Airmen Publication
NTP -National Transportation Policy	NTSB -National Transportation Safety Board
NTZ -No Transgression Zone	NWS -National Weather Service
NWSR -NWS Weather Excluding NXRD	NSWRH -NWS Regional Headquarters
NXRD -Advanced Weather Radar System	
OAG-Official Airline Guide	0-
OAW -Off-airway Weather Station	OALT -Operational Acceptable Level of Traffic ODAL -Omni directional Approach Lighting System
ODAPS -Oceanic Display and Processing Station	OFA -Object Free Area
OFDPS -Offshore Flight Data Processing System	OFT -Outer Fix Time
OFZ -Obstacle Free Zone	OM -Outer Marker
OMB -Office of Management and Budget	ONER -Oceanic Navigational Error Report
OPLT -Operational Acceptable Level of Traffic	OPSW -Operational Switch
OPX -Off Premises Exchange	ORD -Operational Readiness Demonstration
OTR -Oceanic Transition Route	OTS -Organized Track System
	P-
PABX-Private Automated Branch Exchange	PAD -Packet Assembler/Disassembler
PAM -Peripheral Adapter Module	PAPI -Precision Approach Path Indicator
PAR -Precision Approach Radar	PAR -Preferential Arrival Route
PATWAS -Pilots Automatic Telephone Weather Answering	PBCT -Proposed Boundary Crossing Time
Service DDDE Dilot Briefing	DBV Drivata Dranah Evahanga
PBRF -Pilot Briefing PCA -Positive Control Airspace	PBX -Private Branch Exchange PCM -Pulse Code Modulation
PDAR -Preferential Arrival And Departure Route	PCM -Pulse Code Modulation PDC -Pre-Departure Clearance
PDC -Program Designator Code	PDC -Preferential Departure Route
PDN -Public Data Network	PFC -Passenger Facility Charge
PHONE –Telephone	PIC -Principal Interexchange Carrier
PIDP -Programmable Indicator Data Processor	PIREP -Pilot Weather Report
PMS -Program Management System	POLIC -Police Station
POP -Point Of Presence	POT -Point Of Termination
PPIMS -Personal Property Information Management System	PR -Primary Commercial Service Airport
PRI -Primary Rate Interface	PRM -Precision Runway Monitor
PSDN -Public Switched Data Network	PSN -Packet Switched Network
PSS -Packet Switched Service	PSTN -Public Switched Telephone Network
PUB –Publication	PUP -Principal User Processor
PVC -Permanent Virtual Circuit	PVD -Plan View Display
	Q
	R-
RAIL-Runway Alignment Indicator Lights	RAPCO -Radar Approach Control (USAF)

RAPCON -Radar Approach Control	DATCC Dates Air Traffic Control Control
	RATCC -Radar Air Traffic Control Center
RATCF -Radar Air Traffic Control Facility (USN)	RBC -Rotating Beam Ceilometer
RBDPE -Radar Beacon Data Processing Equipment	RBSS -Radar Bomb Scoring Squadron
RCAG -Remote Communications Air/Ground	RCC -Rescue Coordination Center
RCF -Remote Communication Facility	RCCC -Regional Communications Control Centers
RCIU -Remote Control Interface Unit	RCL -Radio Communications Link
RCLR -RCL Repeater	RCLT -RCL Terminal
RCO -Remote Communications Outlet	RCU -Remote Control Unit
RDAT -Digitized Radar Data	RDP -Radar Data Processing
RDSIM -Runway Delay Simulation Model	REIL -Runway End Identification Lights
RF -Radio Frequency	RL -General Aviation Reliever Airport
RMCC -Remote Monitor Control Center	RMCF -Remote Monitor Control Facility
RML -Radio Microwave Link	RMLR -RML Repeater
RMLT -RML Terminal	RMM -Remote Maintenance Monitoring
RMMS -Remote Maintenance Monitoring System	RMS -Remote Monitoring Subsystem
RMSC -Remote Monitoring Subsystem Concentrator	RNAV - Area Navigation
RNP -Required Navigation Performance	ROD -Record of Decision
ROSA -Report of Service Activity	ROT -Runway Occupancy Time
RP -Restoration Priority	RPC -Restoration Priority Code
RPG -Radar Processing Group	RPZ -Runway Protection Zone
RRH -Remote Reading Hygrothermometer	RRHS -Remote Reading Hydrometer
RRWDS -Remote Radar Weather Display	RRWSS -RWDS Sensor Site
RSS -Remote Speaking System	RT -Remote Transmitter
RT & BTL -Radar Tracking And Beacon Tracking Level	RTAD -Remote Tower Alphanumeric Display
RTCA -Radio Technical Commission for Aeronautics	RTR -Remote Transmitter/Receiver
RTRD -Remote Tower Radar Display	RVR -Runway Visual Range
RW –Runway	RWDS -Same as RRWDS
RWP -Realtime Weather Processor	
	-S-
S/S - Sector Suite	SAC -Strategic Air Command
SAFI -Semi Automatic Flight Inspection	SALS -Short Approach Lighting System
SATCOM -Satellite Communications	SAWRS -Supplementary Aviation Weather Reporting System
SCC -System Command Center	SCVTS -Switched Compressed Video Telecommunications Service
SDF -Simplified Direction Finding	SDF -Software Defined Network
SDIS -Switched Digital Integrated Service	SDP -Service Delivery Point
SDS -Switched Data Service	SEL -Single Event Level
SELF -Simplified Short Approach Lighting System With	SFAR-38 -Special Federal Aviation Regulation 38
Sequenced Flashing Lights	SFAR-58 -Special Federal Aviation Regulation 58
SHPO -State Historic Preservation Officer	SIC -Service Initiation Charge
SID -Station Identifier	SID -Standard Instrument Departure
SIGMET -Significant Meteorological Information	SIMMOD -Airport and Airspace Simulation Model
SIGMET -Significant Meteorological information SIP -State Implementation Plan	SM -Statute Miles
	SMPS -Sector Maintenance Processor Subsystem
	NARES - SOCIOF MUSIPHONSPOOL PROCOCOT SUBCORDAM
SMGC -Surface Movement Guidance and Control	
SMS -Simulation Modeling System	SNR -Signal-to-Noise Ratio, also: S/N
SMS -Simulation Modeling System SOC -Service Oversight Center	SNR -Signal-to-Noise Ratio, also: S/N SOIR -Simultaneous Operations On Intersecting Runways
SMS -Simulation Modeling System SOC -Service Oversight Center SOIWR -Simultaneous Operations on Intersecting Wet Runways	SNR -Signal-to-Noise Ratio, also: S/N SOIR -Simultaneous Operations On Intersecting Runways SRAP -Sensor Receiver and Processor
SMS -Simulation Modeling SystemSOC -Service Oversight CenterSOIWR -Simultaneous Operations on Intersecting Wet RunwaysSSALF -SSALS with Sequenced Flashers	SNR -Signal-to-Noise Ratio, also: S/N SOIR -Simultaneous Operations On Intersecting Runways SRAP -Sensor Receiver and Processor SSALR -Simplified Short Approach Lighting System
SMS -Simulation Modeling System SOC -Service Oversight Center SOIWR -Simultaneous Operations on Intersecting Wet Runways SSALF -SSALS with Sequenced Flashers SSB -Single Side Band	SNR -Signal-to-Noise Ratio, also: S/N SOIR -Simultaneous Operations On Intersecting Runways SRAP -Sensor Receiver and Processor SSALR -Simplified Short Approach Lighting System STAR -Standard Terminal Arrival Route
SMS -Simulation Modeling System SOC -Service Oversight Center SOIWR -Simultaneous Operations on Intersecting Wet Runways SSALF -SSALS with Sequenced Flashers SSB -Single Side Band STD –Standard	SNR -Signal-to-Noise Ratio, also: S/N SOIR -Simultaneous Operations On Intersecting Runways SRAP -Sensor Receiver and Processor SSALR -Simplified Short Approach Lighting System STAR -Standard Terminal Arrival Route STMUX -Statistical Data Multiplexer
SMS -Simulation Modeling System SOC -Service Oversight Center SOIWR -Simultaneous Operations on Intersecting Wet Runways SSALF -SSALS with Sequenced Flashers SSB -Single Side Band STD –Standard STOL -Short Takeoff and Landing	SNR -Signal-to-Noise Ratio, also: S/N SOIR -Simultaneous Operations On Intersecting Runways SRAP -Sensor Receiver and Processor SSALR -Simplified Short Approach Lighting System STAR -Standard Terminal Arrival Route STMUX -Statistical Data Multiplexer SURPIC -Surface Picture
SMS -Simulation Modeling System SOC -Service Oversight Center SOIWR -Simultaneous Operations on Intersecting Wet Runways SSALF -SSALS with Sequenced Flashers SSB -Single Side Band STD –Standard STOL -Short Takeoff and Landing SVCA -Service A	SNR -Signal-to-Noise Ratio, also: S/NSOIR -Simultaneous Operations On Intersecting RunwaysSRAP -Sensor Receiver and ProcessorSSALR -Simplified Short Approach Lighting SystemSTAR -Standard Terminal Arrival RouteSTMUX -Statistical Data MultiplexerSURPIC -Surface PictureSVCB -Service B
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SMS -Simulation Modeling System SOC -Service Oversight Center SOIWR -Simultaneous Operations on Intersecting Wet Runways SSALF -SSALS with Sequenced Flashers SSB -Single Side Band STD -Standard STOL -Short Takeoff and Landing SVCA -Service A SVCC -Service C SVFO -Interphone Service F (A)	SNR -Signal-to-Noise Ratio, also: S/NSOIR -Simultaneous Operations On Intersecting RunwaysSRAP -Sensor Receiver and ProcessorSSALR -Simplified Short Approach Lighting SystemSTAR -Standard Terminal Arrival RouteSTMUX -Statistical Data MultiplexerSURPIC -Surface PictureSVCB -Service BSVCO -Service OSVFB -Interphone Service F (B)
SMS -Simulation Modeling System SOC -Service Oversight Center SOIWR -Simultaneous Operations on Intersecting Wet Runways SSALF -SSALS with Sequenced Flashers SSB -Single Side Band STD -Standard STOL -Short Takeoff and Landing SVCA -Service A SVCC -Service C SVFO -Interphone Service F (A) SVFC -Interphone Service F (C)	SNR -Signal-to-Noise Ratio, also: S/NSOIR -Simultaneous Operations On Intersecting RunwaysSRAP -Sensor Receiver and ProcessorSSALR -Simplified Short Approach Lighting SystemSTAR -Standard Terminal Arrival RouteSTMUX -Statistical Data MultiplexerSURPIC -Surface PictureSVCB -Service BSVCO -Service O
SMS -Simulation Modeling System SOC -Service Oversight Center SOIWR -Simultaneous Operations on Intersecting Wet Runways SSALF -SSALS with Sequenced Flashers SSB -Single Side Band STD -Standard STOL -Short Takeoff and Landing SVCA -Service A SVCC -Service C SVFO -Interphone Service F (A)	SNR -Signal-to-Noise Ratio, also: S/NSOIR -Simultaneous Operations On Intersecting RunwaysSRAP -Sensor Receiver and ProcessorSSALR -Simplified Short Approach Lighting SystemSTAR -Standard Terminal Arrival RouteSTMUX -Statistical Data MultiplexerSURPIC -Surface PictureSVCB -Service BSVCO -Service OSVFB -Interphone Service F (B)
SMS -Simulation Modeling SystemSOC -Service Oversight CenterSOIWR -Simultaneous Operations on Intersecting Wet RunwaysSSALF -SSALS with Sequenced FlashersSSB -Single Side BandSTD -StandardSTOL -Short Takeoff and LandingSVCA -Service ASVCC -Service CSVFO -Interphone Service F (A)SVFC -Interphone Service F (C)SVFR -Special Visual Flight Rules	SNR -Signal-to-Noise Ratio, also: S/N SOIR -Simultaneous Operations On Intersecting Runways SRAP -Sensor Receiver and Processor SSALR -Simplified Short Approach Lighting System STAR -Standard Terminal Arrival Route STMUX -Statistical Data Multiplexer SURPIC -Surface Picture SVCB -Service B SVCO -Service O SVFB -Interphone Service F (B) SVFD -Interphone Service F (D)
SMS -Simulation Modeling System SOC -Service Oversight Center SOIWR -Simultaneous Operations on Intersecting Wet Runways SSALF -SSALS with Sequenced Flashers SSB -Single Side Band STD -Standard SVCA -Service A SVCC -Service C SVFO -Interphone Service F (A) SVFC -Interphone Service F (C) SVFR -Special Visual Flight Rules	SNR -Signal-to-Noise Ratio, also: S/NSOIR -Simultaneous Operations On Intersecting RunwaysSRAP -Sensor Receiver and ProcessorSSALR -Simplified Short Approach Lighting SystemSTAR -Standard Terminal Arrival RouteSTMUX -Statistical Data MultiplexerSURPIC -Surface PictureSVCB -Service BSVCO -Service OSVFB -Interphone Service F (B)SVFD -Interphone Service F (D)-T-TAAS -Terminal Advance Automation System
SMS -Simulation Modeling System SOC -Service Oversight Center SOIWR -Simultaneous Operations on Intersecting Wet Runways SSALF -SSALS with Sequenced Flashers SSB -Single Side Band STD -Standard STOL -Short Takeoff and Landing SVCA -Service A SVCC -Service C SVFO -Interphone Service F (A) SVFC -Interphone Service F (C) SVFR -Special Visual Flight Rules	SNR -Signal-to-Noise Ratio, also: S/N SOIR -Simultaneous Operations On Intersecting Runways SRAP -Sensor Receiver and Processor SSALR -Simplified Short Approach Lighting System STAR -Standard Terminal Arrival Route STMUX -Statistical Data Multiplexer SURPIC -Surface Picture SVCB -Service B SVCO -Service O SVFB -Interphone Service F (B) SVFD -Interphone Service F (D)
SMS -Simulation Modeling System SOC -Service Oversight Center SOIWR -Simultaneous Operations on Intersecting Wet Runways SSALF -SSALS with Sequenced Flashers SSB -Single Side Band STD -Standard STOL -Short Takeoff and Landing SVCA -Service A SVFC -Interphone Service F (A) SVFC -Interphone Service F (C) SVFR -Special Visual Flight Rules	SNR -Signal-to-Noise Ratio, also: S/N SOIR -Simultaneous Operations On Intersecting Runways SRAP -Sensor Receiver and Processor SSALR -Simplified Short Approach Lighting System STAR -Standard Terminal Arrival Route STMUX -Statistical Data Multiplexer SURPIC -Surface Picture SVCB -Service B SVCO -Service O SVFB -Interphone Service F (B) SVFD -Interphone Service F (D) -T- TAAS -Terminal Advance Automation System

TAS -True Air Speed	TATCA -Terminal Air Traffic Control Automation
TAVT - Terminal Airspace Visualization Tool	TCA -Traffic Control Airport or Tower Control Airport
TCA -Terminal Control Area	TCACCIS -Transportation Coordinator Automated Command and
	Control Information System
TCAS -Traffic Alert And Collision Avoidance System	TCC -DOT Transportation Computer Center
TCCC -Tower Control Computer Complex	TCE -Tone Control Equipment
TCLT -Tentative Calculated Landing Time	TCO -Telecommunications Certification Officer
TCOM -Terminal Communications	TCS -Tower Communications System
TDLS -Tower Data-Link Services	TDMUX -Time Division Data Multiplexer
TDWR -Terminal Doppler Weather Radar	TELCO -Telephone Company
TELMS -Telecommunications Management System	TERPS -Terminal Instrument Procedures
TFAC -To Facility	TH -Threshold
TIMS -Telecommunications Information Management System	TIPS -Terminal Information Processing System
TL –Taxilane	TMA -Traffic Management Advisor
TMC -Traffic Management Coordinator	TMC/MC -Traffic Management Coordinator/Military Coordinator
TMCC -Terminal Information Processing System	TMCC -Traffic Management Computer Complex
TMF -Traffic Management Facility	TML -Television Microwave Link
TMLI - Television Microwave Link Indicator	TMLR - Television Microwave Link Repeater
TMLT - Television Microwave Link Terminal	TM&O -Telecommunications Management and Operations
TMP - Traffic Management Processor	TMS -Traffic Management System
TMSPS - Traffic Management Specialists	TMU -Traffic Management Unit
TODA -Takeoff Distance Available	TOF -Time Of Flight
TOFMS -Time of Flight Mass Spectrometer	TOPS -Telecommunications Ordering and Pricing System (GSA
	software tool)
TORA -Take-off Run Available	TNAV -Terminal Navigational Aids
TR -Telecommunications Request	TRACAB - Terminal Radar Approach Control in Tower Cab
TRACON - Terminal Radar Approach Control Facility	TRAD - Terminal Radar Service
TRNG –Training TSEC -Terminal Secondary Radar Service	TSA -Taxiway Safety Area TSP -Telecommunications Service Priority
TSR -Telecommunications Service Request	TSYS -Terminal Equipment Systems
TTMA -TRACON Traffic Management Advisor	TTY -Teletype
TVOR -Terminal VHF Omnidirectional Range	TW -Taxiway
TWEB -Transcribed WeatherBroadcastTWR-Tower (non-	TY -Type (FAACIS)
controlled)	
· · · · · · · · · · · · · · · · · · ·	U-
UAS -Uniform Accounting System	UHF -Ultra High Frequency
URA -Uniform Relocation Assistance and Real Property	USAF -United States Air Force
Acquisition Policies Act of 1970	
USOC -Uniform Service Order Code	
-	V-
VASI-Visual Approach Slope Indicator	VDME -VOR with Distance Measuring Equipment
VF -Voice Frequency	VFR -Visual Flight Rules
VHF -Very High Frequency	VLF -Very Low Frequency
VMC -Visual Meteorological Conditions	VNAV -Visual Navigational Aids
VNTSC -Volpe National Transportation System Center	VON -Virtual On-net
VOR -VHF Omnidirectional Range	VOR/DME -VHF Omnidirectional Range/Distance Measuring
	Equipment
VORTAC -VOR collocated with TACAN	VOT -VOR Test Facility
VRS -Voice Recording System	VSCS - Voice Switching and Control System
VTA -Vertex Time of Arrival	VTAC -VOR collocated with TACAN
VTOL -Vertical Takeoff and Landing	VTS -Voice Telecommunications System
	W-
WAAS-Wide Area Augmentation System	WAN -Wide Area Network
WC -Work Center	WCP -Weather Communications Processor
WECO -Western Electric Company	WESCOM -Western Electric Satellite Communications
WMSC -Weather Message Switching Center	WMSCR -Weather Message Switching Center Replacement
WSCMO - Weather Service Contract Meteorological Observatory	WSFO -Weather Service Forecast Office
WSMO -Weather Service Meteorological Observatory	WSO -Weather Service Office
WTHR -"Weather"	WX -Weather

-X-	
-Z-	

APPENDIX 4 – CROSSWALK RELATIONSHIPS

CADD to GIS Crosswalk

This appendix lists CADD layers defined in MAA's CADD Standards Manual, Version 4.0 and their associated GIS layers. The CADD layers are ordered by category (i.e. Airfield, Airspace, Environmental, etc.) and then by CADD layer name. The first character of the CADD layer name, which indicates the discipline, has been replaced with an asterisk ('*') meaning that any discipline code applies. CADD layers that are not relevant for GIS are excluded from this appendix.

CADD Layer Name	Category	Feature Class	Geometry
*-AFLD-AHOA	Airfield	AirOperationsArea	Polygon
*-AFLD-DSRF-BLDR	Airfield	RunwayHelipadDesignSurface	Polygon
*-AFLD-DSRF-KEYH	Airfield	RunwayHelipadDesignSurface	Polygon
*-AFLD-DSRF-NMOV	Airfield	RunwayHelipadDesignSurface	Polygon
*-AFLD-DSRF-OFA_	Airfield	RunwayHelipadDesignSurface	Polygon
*-AFLD-DSRF-OFZ_	Airfield	RunwayHelipadDesignSurface	Polygon
*-AFLD-DSRF-POFA	Airfield	RunwayHelipadDesignSurface	Polygon
*-AFLD-DSRF-RPZ_	Airfield	RunwayHelipadDesignSurface	Polygon
*-AFLD-DSRF-RSA_	Airfield	RunwayHelipadDesignSurface	Polygon
*-AFLD-FREQ	Airfield	FrequencyArea	Polygon
*-AFLD-LITE-APPR	Airfield	AirfieldLight	Point
*-AFLD-LITE-DIST	Airfield	AirfieldLight	Point
*-AFLD-LITE-LANE	Airfield	AirfieldLight	Point
*-AFLD-LITE-OBST	Airfield	AirfieldLight	Point
*-AFLD-LITE-RUNW	Airfield	AirfieldLight	Point
*-AFLD-LITE-SIGN	Airfield	AirfieldLight	Point
*-AFLD-LITE-TAXI	Airfield	AirfieldLight	Point
*-AFLD-LITE-THRS	Airfield	AirfieldLight	Point
*-AFLD-SECR-RSTR	Airfield	RestrictedAccessBoundary	Line
*-APRN-ACPK-BRDG	Airfield	PassengerLoadingBridge	Polygon
*-APRN-ANOM	Airfield	AircraftNonMovementArea	Line
*-APRN-CNTR	Airfield	MarkingLine	Line
*-APRN-DEIC	Airfield	DeicingArea	Polygon
*-APRN-GRND	Airfield	Apron	Polygon
*-APRN-HOLD	Airfield	MarkingLine	Line
*-APRN-MRKG	Airfield	MarkingLine	Line
*-APRN-OTLN	Airfield	Apron	Polygon
*-APRN-SECU	Airfield	MarkingLine	Line
*-APRN-SHLD	Airfield	MarkingLine	Line
*-APRN-SHLD-MRKG	Airfield	MarkingLine	Line
*-APRN-SIGN	Airfield	AirportSign	Point

CADD Layer Name	Category	Feature Class	Geometry
*-ELEV-SIGN	Airfield	AirportSign	Point
*-EQPM-JETB	Airfield	PassengerLoadingBridge	Polygon
*-FLOR-SIGN	Airfield	AirportSign	Point
*-HELI-BLST	Airfield	MarkingLine	Line
*-HELI-CNTR-MARK	Airfield	MarkingLine	Line
*-HELI-DIST	Airfield	MarkingLine	Line
*-HELI-DSRF	Airfield	RunwayHelipadDesignSurface	Polygon
*-HELI-IDEN	Airfield	MarkingArea	Polygon
*-HELI-SHLD	Airfield	Shoulder	Polygon
*-HELI-SIDE	Airfield	MarkingLine	Line
*-HELI-TDZM	Airfield	MarkingArea	Polygon
*-HELI-TLOF	Airfield	TouchdownLiftOff	Polygon
*-LITE-DIST	Airfield	AirportSign	Point
*-LITE-SIGN	Airfield	AirportSign	Point
*-OVRN-CNTR	Airfield	MarkingLine	Line
*-OVRN-IDEN	Airfield	RunwayHelipadDesignSurface	Polygon
*-OVRN-OTLN	Airfield	RunwayHelipadDesignSurface	Polygon
*-OVRN-SHLD-MRKG	Airfield	MarkingLine	Line
*-PADS-CNTR	Airfield	MarkingLine	Line
*-PADS-OTLN	Airfield	MarkingLine	Line
*-PADS-SHLD	Airfield	Shoulder	Polygon
*-PRKG-SIGN	Airfield	AirportSign	Point
*-PVMT-MRKG	Airfield	MarkingLine	Line
*-PVMT-MRKG-WHIT	Airfield	MarkingLine	Line
*-PVMT-MRKG-YELO	Airfield	MarkingLine	Line
*-ROAD-SIGN	Airfield	AirportSign	Point
*-RUNW-ARST	Airfield	RunwayArrestingArea	Polygon
*-RUNW-BLST	Airfield	RunwayBlastPad	Polygon
*-RUNW-CLRW	Airfield	RunwayHelipadDesignSurface	Polygon
*-RUNW-CNTR	Airfield	RunwayCenterline	Line
*-RUNW-CNTR-MARK	Airfield	MarkingLine	Line
*-RUNW-CNTR-MRKG	Airfield	MarkingArea	Polygon
*-RUNW-DISP	Airfield	MarkingArea	Polygon
*-RUNW-DIST	Airfield	MarkingArea	Polygon
*-RUNW-EDGE	Airfield	Runway	Polygon
*-RUNW-ENDP	Airfield	RunwayEnd	Point
*-RUNW-ENDP-MARK	Airfield	RunwayLabel	Point
*-RUNW-IDEN	Airfield	MarkingArea	Polygon
*-RUNW-LAHS	Airfield	RunwayLAHSO	Line
*-RUNW-SAFT	Airfield	RunwaySafetyAreaBoundary	Polygon

CADD Layer Name	Category	Feature Class	Geometry
*-RUNW-SEGM	Airfield	RunwayElement	Polygon
*-RUNW-SHLD	Airfield	MarkingLine	Line
*-RUNW-SIDE	Airfield	MarkingArea	Polygon
*-RUNW-SIGN	Airfield	AirportSign	Point
*-RUNW-STWY	Airfield	Stopway	Polygon
*-RUNW-TDZM	Airfield	MarkingArea	Polygon
*-RUNW-THRS	Airfield	MarkingArea	Polygon
*-SIGN-EXTN	Airfield	AirportSign	Point
*-SIGN-FRMG	Airfield	AirportSign	Point
*-SIGN-GAGE	Airfield	AirportSign	Point
*-SIGN-PANL	Airfield	AirportSign	Point
*-SIGN-SPRT	Airfield	AirportSign	Point
*-SPCL-TRAF	Airfield	AirportSign	Point
*-TAXI-CNTR-MARK	Airfield	MarkingLine	Line
*-TAXI-CNTR-MRKG	Airfield	MarkingLine	Line
*-TAXI-EDGE	Airfield	MarkingLine	Line
*-TAXI-HOLD	Airfield	TaxiwayHoldingPosition	Line
*-TAXI-INTS	Airfield	TaxiwayIntersection	Polygon
*-TAXI-OTLN	Airfield	TaxiwayElement	Polygon
*-TAXI-SHLD	Airfield	MarkingLine	Line
*-TAXI-SIGN	Airfield	AirportSign	Point
*-AIRS-LNDM	Airspace	LandmarkSegment	Line
*-AIRS-OBSC	Airspace	Obstacle	Point
*-AIRS-OBST-LINE	Airspace	ObstructionArea	Polygon
*-AIRS-OBST-POLY	Airspace	ObstructionArea	Polygon
*-AIRS-OBST-PPNT	Airspace	Obstacle	Point
*-AIRS-OTHR	Airspace	ObstructionIdSurface	Polygon
*-AIRS-PART-APRC	Airspace	ObstructionIdSurface	Polygon
*-AIRS-PART-CONL	Airspace	ObstructionIdSurface	Polygon
*-AIRS-PART-HORZ	Airspace	ObstructionIdSurface	Polygon
*-AIRS-PART-PRIM	Airspace	ObstructionIdSurface	Polygon
*-AIRS-PART-TRNS	Airspace	ObstructionIdSurface	Polygon
*-AIRS-TERP	Airspace	ObstructionIdSurface	Polygon
*-OBST-AIRS	Airspace	Obstacle	Point
*-AFLD-FAAR	Cadastral	FaaRegionArea	Polygon
*-AFLD-PROP	Cadastral	AirportBoundary	Polygon
*-PROP-CNTY	Cadastral	County	Polygon
*-PROP-ESMT	Cadastral	EasementsAndRightsofWay	Polygon
*-PROP-LEAS	Cadastral	LeaseZone	Polygon
*-PROP-LINE	Cadastral	Parcel	Polygon

CADD Layer Name	Category	Feature Class	Geometry
*-PROP-LUSE	Cadastral	LandUse	Polygon
*-PROP-LUSE-FUTR	Cadastral	LandUse	Polygon
*-PROP-MUNI	Cadastral	Municipality	Polygon
*-PROP-QTRS	Cadastral	Parcel	Polygon
*-PROP-RWAY	Cadastral	EasementsAndRightsofWay	Polygon
*-PROP-RWAY-ACQU	Cadastral	EasementsAndRightsofWay	Polygon
*-PROP-SECT	Cadastral	Parcel	Polygon
*-PROP-STAT	Cadastral	State	Polygon
*-PROP-SXTS	Cadastral	Parcel	Polygon
*-PROP-ZONG	Cadastral	Zoning	Polygon
*-BORE-CONE	Environmental	SampleCollectionPoint	Point
*-BORE-GENL-LOCN	Environmental	SampleCollectionPoint	Point
*-BORE-GPRO-LOCN	Environmental	SampleCollectionPoint	Point
*-BORE-HOLE	Environmental	SampleCollectionPoint	Point
*-BORE-LINE	Environmental	SampleCollectionPoint	Point
*-BORE-PUSH	Environmental	SampleCollectionPoint	Point
*-BORE-STRK	Environmental	SampleCollectionPoint	Point
*-BORE-UNDS-LOCN	Environmental	SampleCollectionPoint	Point
*-BORE-VCOR-LOCN	Environmental	SampleCollectionPoint	Point
*-BORW-IDEN	Environmental	FaunaHazardArea	Polygon
*-BORW-LINE	Environmental	FaunaHazardArea	Polygon
*-CHAN-BANK-TOP~	Environmental	Shoreline	Polygon
*-CHAN-DACL	Environmental	Shoreline	Polygon
*-CHAN-DACL-IDEN	Environmental	Shoreline	Polygon
*-CHAN-LIMT	Environmental	Shoreline	Polygon
*-CHAN-LIMT-IDEN	Environmental	Shoreline	Polygon
*-DRED-OHWM	Environmental	Shoreline	Polygon
*-ECCO-BURR	Environmental	FaunaHazardArea	Polygon
*-ECCO-DENS	Environmental	FaunaHazardArea	Polygon
*-ECCO-GATR	Environmental	FaunaHazardArea	Polygon
*-ECCO-HUMK	Environmental	FaunaHazardArea	Polygon
*-ECCO-NEST	Environmental	FaunaHazardArea	Polygon
*-ECCO-PRCH	Environmental	FaunaHazardArea	Polygon
*-FLHA-025Y	Environmental	FloodZone	Polygon
*-FLHA-050Y	Environmental	FloodZone	Polygon
*-FLHA-100Y	Environmental	FloodZone	Polygon
*-FLHA-200Y	Environmental	FloodZone	Polygon
*-FLHA-500Y	Environmental	FloodZone	Polygon
*-FLHA-IDEN	Environmental	FloodZone	Polygon
*-MNST-AIRQ	Environmental	SampleCollectionPoint	Point

CADD Layer Name	Category	Feature Class	Geometry
*-MNST-GWTR	Environmental	Shoreline	Polygon
*-MNST-SWTR	Environmental	Shoreline	Polygon
*-PLNT-BEDS	Environmental	ForestStandArea	Polygon
*-PLNT-BUSH	Environmental	ForestStandArea	Polygon
*-PLNT-BUSH-LINE	Environmental	ForestStandArea	Polygon
*-PLNT-CTNR	Environmental	FloraSpeciesSite	Point
*-PLNT-GRND	Environmental	ForestStandArea	Polygon
*-PLNT-MLCH	Environmental	ForestStandArea	Polygon
*-PLNT-PLTS	Environmental	FloraSpeciesSite	Point
*-PLNT-SPRG	Environmental	ForestStandArea	Polygon
*-PLNT-TREE	Environmental	FloraSpeciesSite	Point
*-PLNT-TREE-LINE	Environmental	ForestStandArea	Polygon
*-PLNT-TURF	Environmental	ForestStandArea	Polygon
*-POLL-CONC	Environmental	EnvironmentalContaminationArea	Polygon
*-POLL-POTN	Environmental	EnvironmentalContaminationArea	Polygon
*-RIVR-BANK-TOP~	Environmental	Shoreline	Polygon
*-RIVR-EDGE	Environmental	Shoreline	Polygon
*-SAMP-AIRS	Environmental	SampleCollectionPoint	Point
*-SAMP-AUGR	Environmental	SampleCollectionPoint	Point
*-SAMP-BIOL	Environmental	SampleCollectionPoint	Point
*-SAMP-CORE	Environmental	SampleCollectionPoint	Point
*-SAMP-DRVE	Environmental	SampleCollectionPoint	Point
*-SAMP-GRAB	Environmental	SampleCollectionPoint	Point
*-SAMP-GWTR	Environmental	SampleCollectionPoint	Point
*-SAMP-IDEN	Environmental	SampleCollectionPoint	Point
*-SAMP-MAGN	Environmental	SampleCollectionPoint	Point
*-SAMP-PERC	Environmental	SampleCollectionPoint	Point
*-SAMP-PITS	Environmental	SampleCollectionPoint	Point
*-SAMP-SEDI	Environmental	SampleCollectionPoint	Point
*-SAMP-SOIL	Environmental	SampleCollectionPoint	Point
*-SAMP-SOLI	Environmental	SampleCollectionPoint	Point
*-SAMP-SWTR	Environmental	SampleCollectionPoint	Point
*-SAMP-VERT	Environmental	SampleCollectionPoint	Point
*-SAMP-WASH	Environmental	SampleCollectionPoint	Point
*-SAMP-WAST	Environmental	SampleCollectionPoint	Point
*-SITE-EWAT	Environmental	Shoreline	Polygon
*-SITE-VEGE	Environmental	ForestStandArea	Polygon
*-SITE-VEGE-AREA	Environmental	ForestStandArea	Polygon
*-SITE-VEGE-HZRD	Environmental	FaunaHazardArea	Polygon
*-SITE-VEGE-PONT	Environmental	FloraSpeciesSite	Point

CADD Layer Name	Category	Feature Class	Geometry
*-SITE-WATR	Environmental	Shoreline	Polygon
*-STOR-HAZM	Environmental	HazMatStorageSite	Point
*-STOR-HAZW	Environmental	HazMatStorageSite	Point
*-TOPO-AUCO	Environmental	NoiseIncident	Point
*-TOPO-AUST	Environmental	NoiseMonitoringPoint	Point
*-TOPO-AUZN	Environmental	NoiseContour	Polygon
*-TOPO-BORE	Environmental	SampleCollectionPoint	Point
*-TOPO-FLZN	Environmental	FloodZone	Polygon
*-TOPO-SHOR	Environmental	Shoreline	Polygon
*-TOPO-SPEC	Environmental	FaunaHazardArea	Polygon
*-TOPO-WATR	Environmental	Shoreline	Polygon
*-TOPO-WETL	Environmental	Wetland	Polygon
*-WELL-ASR~	Environmental	SampleCollectionPoint	Point
*-WELL-MONT	Environmental	SampleCollectionPoint	Point
*-WELL-PIZO	Environmental	SampleCollectionPoint	Point
*-WETL-BOGS	Environmental	Wetland	Polygon
*-WETL-FENS	Environmental	Wetland	Polygon
*-WETL-MRSH	Environmental	Wetland	Polygon
*-WETL-MRSH-SALT	Environmental	Wetland	Polygon
*-WETL-MRSH-TIDL	Environmental	Wetland	Polygon
*-WETL-PCSN	Environmental	Wetland	Polygon
*-WETL-PHOL	Environmental	Wetland	Polygon
*-WETL-RPRN	Environmental	Wetland	Polygon
*-WETL-SLGH	Environmental	Wetland	Polygon
*-WETL-SWMP	Environmental	Wetland	Polygon
*-AERI-BNDY	Geodetic	ImageArea	Polygon
*-AERI-PHOT	Geodetic	ImageArea	Polygon
*-AERI-PNPT	Geodetic	ImageArea	Polygon
*-CTRL-BMRK	Geodetic	AirportControlPoint	Point
*-CTRL-GRID	Geodetic	CoordinateGridCell	Polygon
*-CTRL-HCPT	Geodetic	AirportControlPoint	Point
*-CTRL-HVPT	Geodetic	AirportControlPoint	Point
*-CTRL-TRAV	Geodetic	AirportControlPoint	Point
*-CTRL-VCPT	Geodetic	AirportControlPoint	Point
*-DETL-GRPH	Geodetic	CoordinateGridCell	Polygon
*-GRAD-AFTR	Geodetic	ElevationContour	Line
*-GRAD-EXST	Geodetic	ElevationContour	Line
*-GRAD-EXST-BASE	Geodetic	ElevationContour	Line
*-GRAD-EXST-SYR1	Geodetic	ElevationContour	Line
*-GRAD-EXST-SYR2	Geodetic	ElevationContour	Line

CADD Layer Name	Category	Feature Class	Geometry
*-GRAD-EXST-SYR3	Geodetic	ElevationContour	Line
*-GRAD-EXST-SYR4	Geodetic	ElevationContour	Line
*-GRAD-FNSH	Geodetic	ElevationContour	Line
*-GRAD-PRED	Geodetic	ElevationContour	Line
*-GRAD-SCLN	Geodetic	ElevationContour	Line
*-GRID-COOR	Geodetic	CoordinateGridCell	Polygon
*-GRID-COOR-IDEN	Geodetic	CoordinateGridCell	Polygon
*-GRID-EXTR	Geodetic	CoordinateGridCell	Polygon
*-GRID-FRAM	Geodetic	CoordinateGridCell	Polygon
*-GRID-HORZ	Geodetic	CoordinateGridCell	Polygon
*-GRID-IDEN	Geodetic	CoordinateGridCell	Polygon
*-GRID-INTR	Geodetic	CoordinateGridCell	Polygon
*-GRID-MAJR	Geodetic	CoordinateGridCell	Polygon
*-GRID-MINR	Geodetic	CoordinateGridCell	Polygon
*-GRID-VERT	Geodetic	CoordinateGridCell	Polygon
*-IMAG-BDRY-QUAD	Geodetic	ImageArea	Polygon
*-PROJ-LALO-COOR	Geodetic	CoordinateGridCell	Polygon
*-PROJ-STAT-COOR	Geodetic	CoordinateGridCell	Polygon
*-SURV-DATA	Geodetic	AirportControlPoint	Point
*-TOPO-BKLN	Geodetic	ElevationContour	Line
*-TOPO-COOR	Geodetic	CoordinateGridCell	Polygon
*-TOPO-COOR-LALO	Geodetic	CoordinateGridCell	Polygon
*-TOPO-COOR-STAT	Geodetic	CoordinateGridCell	Polygon
*-TOPO-DTMP	Geodetic	ElevationContour	Line
*-TOPO-DTMT	Geodetic	ElevationContour	Line
*-TOPO-MAJR	Geodetic	ElevationContour	Line
*-TOPO-MAJR-IDEN	Geodetic	ElevationContour	Line
*-TOPO-MINR	Geodetic	ElevationContour	Line
*-TOPO-MINR-IDEN	Geodetic	ElevationContour	Line
*-TOPO-MINR-ONEF	Geodetic	ElevationContour	Line
*-TOPO-MINR-TWOF	Geodetic	ElevationContour	Line
*-TOPO-RNYE	Geodetic	AirportControlPoint	Point
*-TOPO-SLOP-FILL	Geodetic	ElevationContour	Line
*-TOPO-SLOP-IDEN	Geodetic	ElevationContour	Line
*-TOPO-SLOP-TOPT	Geodetic	ElevationContour	Line
*-TOPO-SOUN	Geodetic	ElevationContour	Line
*-TOPO-SPOT	Geodetic	AirportControlPoint	Point
*-TOPO-SPOT-BLDG	Geodetic	AirportControlPoint	Point
*-WATR-SURF	Geodetic	ElevationContour	Line
*-ACCS-EVTR	Interior	Elevator	Polygon

CADD Layer Name	Category	Feature Class	Geometry
*-ACCS-STRS	Interior	Stair	Polygon
*-ACCS-STRS-FRMG	Interior	Stair	Polygon
*-ALRM-EQPM-SECU	Interior	Door	Line
*-BAGS-CARR	Interior	BaggageCarousel	Polygon
*-BAGS-CVRI	Interior	BaggageConveyor	Polygon
*-BAGS-CVRO	Interior	BaggageConveyor	Polygon
*-COLS-CNTR	Interior	BuildingColumn	Polygon
*-COLS-ENCL	Interior	BuildingColumn	Polygon
*-COLS-POST	Interior	BuildingColumn	Polygon
*-COLS-PRIM	Interior	BuildingColumn	Polygon
*-COLS-RBAR	Interior	BuildingColumn	Polygon
*-COLS-SECD	Interior	BuildingColumn	Polygon
*-DOOR-FULL	Interior	Door	Line
*-DOOR-PRHT	Interior	Door	Line
*-DOOR-SECR	Interior	Door	Line
*-FLOR-ECSL	Interior	Escalator	Polygon
*-FLOR-EVTR	Interior	Elevator	Polygon
*-FLOR-HRAL	Interior	Stair	Polygon
*-FLOR-LEVL	Interior	Floor	Polygon
*-FLOR-MWLK	Interior	MovingSidewalk	Polygon
*-FLOR-OTLN	Interior	Floor	Polygon
*-FLOR-OTLN-RPRM	Interior	Room	Polygon
*-FLOR-SPCE	Interior	Space	Polygon
*-FLOR-STRS	Interior	Stair	Polygon
*-FNDN-ANCH	Interior	Wall	Line
*-FNDN-CNTR	Interior	Wall	Line
*-FNDN-FTNG	Interior	BuildingColumn	Polygon
*-FNDN-GRBM	Interior	Wall	Line
*-FNDN-PEDS	Interior	BuildingColumn	Polygon
*-FNDN-PILE	Interior	BuildingColumn	Polygon
*-FURN-ACCS	Interior	Furnishing	Point
*-FURN-ADPC	Interior	Furnishing	Point
*-FURN-ARTW	Interior	Furnishing	Point
*-FURN-FLOR	Interior	Furnishing	Point
*-FURN-FREE	Interior	Furnishing	Point
*-FURN-GRID	Interior	Furnishing	Point
*-FURN-IDEN	Interior	Furnishing	Point
*-FURN-PLNT	Interior	Furnishing	Point
*-FURN-SEAT	Interior	Furnishing	Point
*-FURN-STOR	Interior	Furnishing	Point

CADD Layer Name	Category	Feature Class	Geometry
*-GLAZ-FULL	Interior	Window	Line
*-GLAZ-PRHT	Interior	Window	Line
*-GLAZ-SILL	Interior	Window	Line
*-HVAC-ACCS	Interior	Door	Line
*-OTLN-FLOR	Interior	Floor	Polygon
*-OTLN-OPNG	Interior	Door	Line
*-OTLN-ROOF	Interior	Floor	Polygon
*-PENE-WALL	Interior	Wall	Line
*-SITE-STRS	Interior	Stair	Polygon
*-WALL-ABUT	Interior	Wall	Line
*-WALL-CAVI	Interior	Wall	Line
*-WALL-CELL	Interior	Wall	Line
*-WALL-CNTR	Interior	Wall	Line
*-WALL-COFF	Interior	Wall	Line
*-WALL-CURT	Interior	Wall	Line
*-WALL-CWMG	Interior	Wall	Line
*-WALL-FULL	Interior	Wall	Line
*-WALL-FULL-EXTR	Interior	Wall	Line
*-WALL-FULL-INTR	Interior	Wall	Line
*-WALL-GARD	Interior	Wall	Line
*-WALL-HEAD	Interior	Wall	Line
*-WALL-JAMB	Interior	Wall	Line
*-WALL-LOAD	Interior	Wall	Line
*-WALL-MONO	Interior	Wall	Line
*-WALL-MOVE	Interior	Wall	Line
*-WALL-MSE~	Interior	Wall	Line
*-WALL-NONL	Interior	Wall	Line
*-WALL-OPEN-LVRS	Interior	Wall	Line
*-WALL-PCST	Interior	Wall	Line
*-WALL-PRHT	Interior	Wall	Line
*-WALL-RBAR	Interior	Wall	Line
*-WALL-RTWL	Interior	Wall	Line
*-WALL-SHEA	Interior	Wall	Line
*-WALL-SPCL	Interior	Wall	Line
*-WALL-STUD	Interior	Wall	Line
*-AFLD-AIDS-COMM	Navigational Aids	NavaidEquipment	Point
*-AFLD-AIDS-CRIT	Navigational Aids	NavaidEquipment	Point
*-AFLD-AIDS-GPS_	Navigational Aids	NavaidEquipment	Point
*-AFLD-AIDS-ILS_	Navigational Aids	NavaidEquipment	Point
*-AFLD-AIDS-MCWV	Navigational Aids	NavaidEquipment	Point

CADD Layer Name	Category	Feature Class	Geometry
*-AFLD-AIDS-OTHR	Navigational Aids	NavaidEquipment	Point
*-AFLD-AIDS-RADI	Navigational Aids	NavaidEquipment	Point
*-AFLD-AIDS-RADR	Navigational Aids	NavaidEquipment	Point
*-AFLD-AIDS-RMTE	Navigational Aids	NavaidEquipment	Point
*-AFLD-AIDS-SITE	Navigational Aids	NavaidEquipment	Point
*-AFLD-AIDS-SYST	Navigational Aids	NavaidEquipment	Point
*-AFLD-AIDS-WTHR	Navigational Aids	NavaidEquipment	Point
*-AFLD-BCNS-IDEN	Navigational Aids	NavaidEquipment	Point
*-AFLD-BCNS-MISC	Navigational Aids	NavaidEquipment	Point
*-AFLD-BCNS-STRB	Navigational Aids	NavaidEquipment	Point
*-SEAP-BUOY	SeaPlane	NavigationBuoy	Point
*-SEAP-RAMP	SeaPlane	SeaplaneRampSite	Polygon
*-SEAP-RAMP-CNTR	SeaPlane	SeaplaneRampCenterline	Line
*-SIGN-BUOY	SeaPlane	NavigationBuoy	Point
*-AFLD-SECR-SECA	Security	SecurityArea	Polygon
*-AFLD-SECR-SIDA	Security	SecurityIdDisplayArea	Polygon
*-AFLD-SECR-STER	Security	SterileArea	Polygon
*-CCTV-EQPM	Security	SurveillanceCamera	Point
*-BLDG-DECK	Structures	Building	Polygon
*-BLDG-DOCK	Structures	Building	Polygon
*-BLDG-OTLN	Structures	Building	Polygon
*-BLDG-OVHD	Structures	Building	Polygon
*-BLDG-PRCH	Structures	Building	Polygon
*-DECK-FLOR	Structures	Building	Polygon
*-DECK-ROOF	Structures	Building	Polygon
*-DETL-FENC-SECU	Structures	Fence	Line
*-DETL-GATE	Structures	Gate	Line
*-ELEV-OTLN	Structures	Building	Polygon
*-EXST-BLDG	Structures	Building	Polygon
*-GATE-AXIS	Structures	Gate	Line
*-GATE-MISC	Structures	Gate	Line
*-OTLN-BLDG	Structures	Building	Polygon
*-OTLN-STRC	Structures	Building	Polygon
*-PLAN-OTLN	Structures	Building	Polygon
*-PROP-CONS	Structures	ConstructionArea	Polygon
*-SAFE-FENC	Structures	Fence	Line
*-SITE-FENC	Structures	Fence	Line
*-SITE-GATE	Structures	Gate	Line
*-SITE-OTLN	Structures	ConstructionArea	Polygon
*-STRC-TOWR	Structures	Tower	Point

CADD Layer Name	Category	Feature Class	Geometry
*-ACCS-TUNL	Surface Transportation	Tunnel	Polygon
*-BRDG-BEAR	Surface Transportation	Bridge	Polygon
*-BRDG-CNTR	Surface Transportation	Bridge	Polygon
*-BRDG-CURB	Surface Transportation	Sidewalk	Polygon
*-BRDG-DECK	Surface Transportation	Bridge	Polygon
*-BRDG-OTLN	Surface Transportation	Bridge	Polygon
*-FNDN-TUNL	Surface Transportation	Tunnel	Polygon
*-GATE-WALK	Surface Transportation	Sidewalk	Polygon
*-MATL-CRAN	Surface Transportation	Bridge	Polygon
*-PRKG-OTLN	Surface Transportation	ParkingLot	Polygon
*-RAIL-BRDG	Surface Transportation	Bridge	Polygon
*-RAIL-BRDG-CNTR	Surface Transportation	RailroadCenterline	Line
*-RAIL-CNTR	Surface Transportation	RailroadCenterline	Line
*-RAIL-TRAK	Surface Transportation	RailroadCenterline	Line
*-RAIL-YARD	Surface Transportation	RailroadYard	Polygon
*-ROAD-ASPH	Surface Transportation	RoadSegment	Polygon
*-ROAD-CNTR	Surface Transportation	RoadCenterline	Line
*-ROAD-CONC	Surface Transportation	RoadSegment	Polygon
*-ROAD-CURB	Surface Transportation	RoadSegment	Polygon
*-ROAD-DRIV	Surface Transportation	DrivewayArea	Polygon
*-ROAD-DRIV-CNTR	Surface Transportation	DrivewayCenterline	Line
*-ROAD-GRVL	Surface Transportation	RoadSegment	Polygon
*-ROAD-OTLN	Surface Transportation	RoadSegment	Polygon
*-ROAD-POIN	Surface Transportation	RoadPoint	Point
*-ROAD-SHLD	Surface Transportation	RoadSegment	Polygon
*-ROAD-UPVD	Surface Transportation	RoadSegment	Polygon
*-SITE-BRDG	Surface Transportation	Bridge	Polygon
*-SITE-STRC	Surface Transportation	Bridge	Polygon
*-SITE-TUNL	Surface Transportation	Tunnel	Polygon
*-SITE-WALK	Surface Transportation	Sidewalk	Polygon
*-CMPA-AIRD	Utilities Air	CompressedAirDrainSeparator	Point
*-CMPA-FTTG	Utilities Air	CompressedAirFitting	Point
*-CMPA-PIPE	Utilities Air	CompressedAirPipeLine	Line
*-CMPA-VLVE	Utilities Air	CompressedAirValve	Point
*-CMPA-VLVP	Utilities Air	CompressedAirValvePit	Point
*-COMM-ACCS	Utilities Communications	CommAccessPoint	Point
*-COMM-AIRP	Utilities Communications	CommAirLine	Line
*-COMM-AMPL	Utilities Communications	CommAmplifier	Point
*-COMM-ANTL	Utilities Communications	CommAntennaLine	Line
*-COMM-ANTS	Utilities Communications	CommAntenna	Point

CADD Layer Name	Category	Feature Class	Geometry
*-COMM-APDP	Utilities Communications	CommAirPressureDevice	Point
*-COMM-ATTN	Utilities Communications	CommAttenuator	Point
*-COMM-BOTH	Utilities Communications	CommTelephoneBooth	Point
*-COMM-CABL-CBRL	Utilities Communications	CommCableBridgeLine	Line
*-COMM-CABL-CLAD	Utilities Communications	CommCableLadder	Point
*-COMM-CABL-COAX	Utilities Communications	CommCoaxialLine	Line
*-COMM-CABL-CRCK	Utilities Communications	CommCableRackLine	Line
*-COMM-CABL-TRAY	Utilities Communications	CommCableTrayLine	Line
*-COMM-CABL-TRGH	Utilities Communications	CommCableTroughLine	Line
*-COMM-COVR	Utilities Communications	CommAccessCoverageArea	Polygon
*-COMM-DSPL	Utilities Communications	CommDbsplice	Point
*-COMM-DUCT	Utilities Communications	CommDuctbank	Line
*-COMM-DVPT	Utilities Communications	CommDevice	Point
*-COMM-EQPT	Utilities Communications	CommEquipment	Point
*-COMM-FIBR	Utilities Communications	CommFiberopticLine	Line
*-COMM-GPNT	Utilities Communications	CommGroundPoint	Point
*-COMM-GPPA	Utilities Communications	CommGroundplaneArea	Polygon
*-COMM-GWAV	Utilities Communications	CommGroundwaveArea	Polygon
*-COMM-IMPD	Utilities Communications	CommImpedanceMatchingPoint	Point
*-COMM-INET	Utilities Communications	CommInternetCenter	Point
*-COMM-JBOX	Utilities Communications	CommJunction	Point
*-COMM-LCAP	Utilities Communications	CommLoadCapacitor	Point
*-COMM-LCOL	Utilities Communications	CommLoadCoilPoint	Point
*-COMM-LOOP	Utilities Communications	CommServiceLoopPoint	Point
*-COMM-LOSL	Utilities Communications	CommLineOfSightLine	Line
*-COMM-MCNV	Utilities Communications	CommMediaConverter	Point
*-COMM-MHOP	Utilities Communications	CommMultihopArea	Polygon
*-COMM-NETS	Utilities Communications	CommNetworkSystemsSite	Point
*-COMM-OTCL	Utilities Communications	CommOtherCable	Line
*-COMM-PATH	Utilities Communications	CommPathNode	Point
*-COMM-PEDS	Utilities Communications	CommPedestal	Point
*-COMM-PULB	Utilities Communications	CommPullbox	Point
*-COMM-RADP	Utilities Communications	CommRadio	Point
*-COMM-RADR	Utilities Communications	CommRadarSite	Point
*-COMM-RDRS	Utilities Communications	CommRadioReceiver	Point
*-COMM-RDTS	Utilities Communications	CommRadioTransmitter	Point
*-COMM-RELY	Utilities Communications	CommRelayStation	Point
*-COMM-RISR	Utilities Communications	CommRiser	Point
*-COMM-RPTR	Utilities Communications	CommRepeater	Point
*-COMM-SATP	Utilities Communications	CommSatellitePoint	Point

CADD Layer Name	Category	Feature Class	Geometry
*-COMM-SEGL	Utilities Communications	CommSegmentedCable	Line
*-COMM-SEGS	Utilities Communications	CommSegmentedCable	Line
*-COMM-SENS	Utilities Communications	CommSensor	Point
*-COMM-SIGN	Utilities Communications	CommElectronicMarker	Point
*-COMM-SLIN	Utilities Communications	CommPathSegmentLine	Line
*-COMM-SPKR	Utilities Communications	CommSpeaker	Point
*-COMM-SPLC	Utilities Communications	CommSplice	Point
*-COMM-SPLT	Utilities Communications	CommSplitter	Point
*-COMM-TELE	Utilities Communications	CommTelephone	Point
*-COMM-TERM	Utilities Communications	CommTerminator	Point
*-COMM-TRML	Utilities Communications	CommTerminal	Point
*-COMM-TWIS	Utilities Communications	CommTwistedPairLine	Line
*-COMM-VALT	Utilities Communications	CommVaultSite	Point
*-COMM-VIDS	Utilities Communications	CommVideoSite	Point
*-COMM-VOIC	Utilities Communications	CommVoiceSwitch	Point
*-COMM-VSIT	Utilities Communications	CommVerticalSite	Point
*-COMM-WAVG	Utilities Communications	CommWaveguideLine	Line
*-GLYC-CLVL	Utilities Deicing	DeicingCulvertCenterline	Line
*-GLYC-CLVS	Utilities Deicing	DeicingCulvertEnd	Point
*-GLYC-COUT	Utilities Deicing	DeicingLineCleanOut	Point
*-GLYC-DBAS	Utilities Deicing	DeicingDrainageBasin	Polygon
*-GLYC-DDIV	Utilities Deicing	DeicingDrainageDivide	Line
*-GLYC-DSCH	Utilities Deicing	DeicingDischargePoint	Point
*-GLYC-FLOW	Utilities Deicing	DeicingFlowControlPoint	Point
*-GLYC-FTTG	Utilities Deicing	DeicingFitting	Point
*-GLYC-INLT	Utilities Deicing	DeicingInlet	Point
*-GLYC-JBOX	Utilities Deicing	DeicingJunction	Point
*-GLYC-LIFT	Utilities Deicing	DeicingLiftStation	Point
*-GLYC-LINE	Utilities Deicing	DeicingLine	Line
*-GLYC-MARK	Utilities Deicing	DeicingMarker	Point
*-GLYC-PUMP	Utilities Deicing	DeicingPump	Point
*-GLYC-RESV	Utilities Deicing	DeicingReservoir	Point
*-GLYC-REVR	Utilities Deicing	DeicingGlycolRecoveryPit	Point
*-GLYC-STAT	Utilities Deicing	DeicingPumpStation	Point
*-GLYC-TANK	Utilities Deicing	DeicingTank	Point
*-GLYC-VALT	Utilities Deicing	DeicingVault	Point
*-GLYC-VLVE	Utilities Deicing	DeicingValve	Point
*-ELEC-BLIN	Utilities Electrical	ElectricalBusLine	Line
*-ELEC-CAPP	Utilities Electrical	ElectricalCapacitor	Point
*-ELEC-CLIN	Utilities Electrical	ElectricalCable	Line

CADD Layer Name	Category	Feature Class	Geometry
*-ELEC-DUCT	Utilities Electrical	ElectricalDuctbank	Line
*-ELEC-GENP	Utilities Electrical	ElectricalGenerator	Point
*-ELEC-GRPT	Utilities Electrical	ElectricalGround	Point
*-ELEC-HBLT	Utilities Electrical	ElectricalHeadBoltOutlet	Point
*-ELEC-JBOX	Utilities Electrical	ElectricalPedestal	Point
*-ELEC-LITE	Utilities Electrical	ElectricalLight	Point
*-ELEC-METR	Utilities Electrical	ElectricalMeter	Point
*-ELEC-MKPT	Utilities Electrical	ElectricalMarker	Point
*-ELEC-MTPT	Utilities Electrical	ElectricalMotor	Point
*-ELEC-PEDS	Utilities Electrical	ElectricalPedestal	Point
*-ELEC-REGP	Utilities Electrical	ElectricalRegulator	Point
*-ELEC-RISR	Utilities Electrical	ElectricalRiser	Point
*-ELEC-SITE	Utilities Electrical	ElectricalUtilitySite	Point
*-ELEC-SPLC	Utilities Electrical	ElectricalSplice	Point
*-ELEC-SUBS	Utilities Electrical	ElectricalSubstation	Polygon
*-ELEC-SWCH	Utilities Electrical	ElectricalSwitch	Point
*-ELEC-TRBP	Utilities Electrical	ElectricalTransformerBank	Point
*-ELEC-VALT	Utilities Electrical	ElectricalTransformerVault	Point
*-POLE-GUYL	Utilities Electrical	ElectricalPoleGuyLine	Line
*-POLE-GUYP	Utilities Electrical	ElectricalPoleGuyConnectionPoint	Point
*-POLE-TOWS	Utilities Electrical	ElectricalPoleTower	Point
*-EMCS-CABL	Utilities EMCS	EnergyCtrlMonCable	Line
*-EMCS-DUCT	Utilities EMCS	EnergyCtrlMonDuctbank	Line
*-EMCS-DVPT	Utilities EMCS	EnergyCtrlMonDevice	Point
*-EMCS-JBOX	Utilities EMCS	EnergyCtrlMonJunction	Point
*-EMCS-SIGN	Utilities EMCS	EnergyCtrlMonMarker	Point
*-FUEL-AEPT	Utilities Fuel	FuelAirEliminator	Point
*-FUEL-ANOD	Utilities Fuel	FuelAnode	Point
*-FUEL-ANOT	Utilities Fuel	FuelAnodeTestStation	Point
*-FUEL-FILT	Utilities Fuel	FuelFilterStrainer	Point
*-FUEL-FTTG	Utilities Fuel	FuelFitting	Point
*-FUEL-HYDR	Utilities Fuel	FuelHydrant	Point
*-FUEL-JBOX	Utilities Fuel	FuelJunction	Point
*-FUEL-MAIN	Utilities Fuel	FuelLine	Line
*-FUEL-METR	Utilities Fuel	FuelMeter	Point
*-FUEL-MKPT	Utilities Fuel	FuelMarker	Point
*-FUEL-OILW	Utilities Fuel	FuelOilWaterSeparator	Point
*-FUEL-PBSP	Utilities Fuel	FuelPumpBoosterStation	Point
*-FUEL-PIPL	Utilities Fuel	FuelTransPipeline	Line
*-FUEL-PIPS	Utilities Fuel	FuelTransPipelineSegmentLine	Line

CADD Layer Name	Category	Feature Class	Geometry
*-FUEL-PUMP	Utilities Fuel	FuelPump	Point
*-FUEL-RECT	Utilities Fuel	FuelRectifier	Point
*-FUEL-REDC	Utilities Fuel	FuelRegulatorReducer	Point
*-FUEL-REFN	Utilities Fuel	FuelTransRefinery	Point
*-FUEL-SRCE	Utilities Fuel	FuelSource	Point
*-FUEL-TANK	Utilities Fuel	FuelTank	Point
*-FUEL-VLVE	Utilities Fuel	FuelValve	Point
*-NGAS-ANOD	Utilities Gas	GasAnode	Point
*-NGAS-ANOT	Utilities Gas	GasAnodeTestStation	Point
*-NGAS-FILL	Utilities Gas	GasFillPoint	Point
*-NGAS-FTTG	Utilities Gas	GasFitting	Point
*-NGAS-GASL	Utilities Gas	GasLine	Line
*-NGAS-JBOX	Utilities Gas	GasJunction	Point
*-NGAS-LITE	Utilities Gas	GasLight	Point
*-NGAS-MARK	Utilities Gas	GasMarker	Point
*-NGAS-METR	Utilities Gas	GasMeter	Point
*-NGAS-MHOL	Utilities Gas	GasJunction	Point
*-NGAS-PMPS	Utilities Gas	GasPumpStation	Point
*-NGAS-PUMP	Utilities Gas	GasPump	Point
*-NGAS-RECT	Utilities Gas	GasRectifier	Point
*-NGAS-REDC	Utilities Gas	GasReducer	Point
*-NGAS-SITE	Utilities Gas	GasJunction	Point
*-NGAS-SRCE	Utilities Gas	GasSource	Point
*-NGAS-TANK	Utilities Gas	GasTank	Point
*-NGAS-VLVE	Utilities Gas	GasValve	Point
*-HVAC-ANCH	Utilities HCS	HeatCoolAnchorPoint	Point
*-HVAC-ANOD	Utilities HCS	HeatCoolAnode	Point
*-HVAC-ANOT	Utilities HCS	HeatCoolAnodeTestStation	Point
*-HVAC-FTTG	Utilities HCS	HeatCoolFitting	Point
*-HVAC-HCPA	Utilities HCS	HeatCoolPlantArea	Polygon
*-HVAC-JBOX	Utilities HCS	HeatCoolJunction	Point
*-HVAC-LINE	Utilities HCS	HeatCoolLine	Line
*-HVAC-METR	Utilities HCS	HeatCoolMeter	Point
*-HVAC-PUMP	Utilities HCS	HeatCoolPump	Point
*-HVAC-RECT	Utilities HCS	HeatCoolRectifier	Point
*-HVAC-REGL	Utilities HCS	HeatCoolRegulator	Point
*-HVAC-SIGN	Utilities HCS	HeatCoolMarker	Point
*-HVAC-VALT	Utilities HCS	HeatCoolVault	Polygon
*-HVAC-VLVE	Utilities HCS	HeatCoolValve	Point
*-INDW-ANOD	Utilities Industrial Waste	IndustrialWasteAnode	Point

CADD Layer Name	Category	Feature Class	Geometry
*-INDW-ANOT	Utilities Industrial Waste	IndustrialWasteAnodeTestSta	Point
*-INDW-DISC	Utilities Industrial Waste	IndustrialWasteDischargePoint	Point
*-INDW-EJEC	Utilities Industrial Waste	IndustrialWastePumpstnEjector	Point
*-INDW-FTTG	Utilities Industrial Waste	IndustrialWasteFitting	Point
*-INDW-GRIT	Utilities Industrial Waste	IndustrialWasteGritChamber	Point
*-INDW-HWLN	Utilities Industrial Waste	IndustrialWasteHeadwallLine	Line
*-INDW-HWPT	Utilities Industrial Waste	IndustrialWasteHeadwallPoint	Point
*-INDW-INLT	Utilities Industrial Waste	IndustrialWasteInlet	Point
*-INDW-JBOX	Utilities Industrial Waste	IndustrialWasteJunction	Point
*-INDW-LAGN	Utilities Industrial Waste	IndustrialWasteLagoon	Polygon
*-INDW-MAIN	Utilities Industrial Waste	IndustrialWasteLine	Line
*-INDW-METR	Utilities Industrial Waste	IndustrialWasteMeter	Point
*-INDW-NEUT	Utilities Industrial Waste	IndustrialWasteNeutralizer	Point
*-INDW-OILW	Utilities Industrial Waste	IndustrialWasteOilWatSep	Point
*-INDW-PLNT	Utilities Industrial Waste	IndustrialWasteTreatmentPlant	Polygon
*-INDW-PUMP	Utilities Industrial Waste	IndustrialWastePump	Point
*-INDW-RECT	Utilities Industrial Waste	IndustrialWasteRectPoint	Point
*-INDW-SERV	Utilities Industrial Waste	IndustrialWasteLine	Line
*-INDW-SIGN	Utilities Industrial Waste	IndustrialWasteMarker	Point
*-INDW-STOR	Utilities Industrial Waste	IndustrialWasteStorageArea	Polygon
*-INDW-TANK	Utilities Industrial Waste	IndustrialWasteTank	Point
*-INDW-VLVE	Utilities Industrial Waste	IndustrialWasteValve	Point
*-STRM-BASN	Utilities Storm	StormDrainageBasin	Polygon
*-STRM-CPTR	Utilities Storm	StormCeptor	Point
*-STRM-DISC	Utilities Storm	StormDischargePoint	Point
*-STRM-DIVL	Utilities Storm	StormDrainageDivideLine	Line
*-STRM-DWNS	Utilities Storm	StormDownspout	Point
*-STRM-FLCD	Utilities Storm	StormFlowControlDevice	Point
*-STRM-FLTR	Utilities Storm	StormFilter	Point
*-STRM-FTTG	Utilities Storm	StormFitting	Point
*-STRM-GATE	Utilities Storm	StormGate	Point
*-STRM-HDWL	Utilities Storm	StormHeadwallLine	Line
*-STRM-HDWP	Utilities Storm	StormHeadwallPoint	Point
*-STRM-INLT	Utilities Storm	StormInlet	Point
*-STRM-JBOX	Utilities Storm	StormJunction	Point
*-STRM-LINE	Utilities Storm	StormLine	Line
*-STRM-MARK	Utilities Storm	StormMarker	Point
*-STRM-MHOL	Utilities Storm	StormJunction	Point
*-STRM-OILW	Utilities Storm	StormOilWaterSeparator	Point
*-STRM-OPEN	Utilities Storm	StormOpenDrainageArea	Polygon

CADD Layer Name	Category	Feature Class	Geometry
*-STRM-OWDV	Utilities Storm	StormOWSDiversionVault	Polygon
*-STRM-PSTA	Utilities Storm	StormPumpStation	Point
*-STRM-PUMP	Utilities Storm	StormPump	Point
*-STRM-RPNT	Utilities Storm	StormReservoir	Point
*-STRM-STIL	Utilities Storm	StormStillingBasin	Point
*-STRM-TRDL	Utilities Storm	StormTrenchDrainLine	Line
*-STRM-VLVE	Utilities Storm	StormValve	Point
*-SSWR-ANOD	Utilities Wastewater	WastewaterAnode	Point
*-SSWR-ANOT	Utilities Wastewater	WastewaterAnodeTestStation	Point
*-SSWR-DFLD	Utilities Wastewater	WastewaterDrainField	Polygon
*-SSWR-DSCH	Utilities Wastewater	WastewaterDischargePoint	Point
*-SSWR-DWNS	Utilities Wastewater	WastewaterDownspout	Point
*-SSWR-EJEC	Utilities Wastewater	WastewaterPumpEjectorStation	Point
*-SSWR-FLTR	Utilities Wastewater	WastewaterFiltrationBed	Polygon
*-SSWR-FTTG	Utilities Wastewater	WastewaterFitting	Point
*-SSWR-GRIT	Utilities Wastewater	WastewaterGritChamber	Point
*-SSWR-GRSE	Utilities Wastewater	WastewaterGreaseTrap	Point
*-SSWR-INLT	Utilities Wastewater	WastewaterInlet	Point
*-SSWR-JBOX	Utilities Wastewater	WastewaterJunction	Point
*-SSWR-LAGN	Utilities Wastewater	WastewaterLagoon	Polygon
*-SSWR-METR	Utilities Wastewater	WastewaterMeter	Point
*-SSWR-MHOL	Utilities Wastewater	WastewaterJunction	Point
*-SSWR-NEUT	Utilities Wastewater	WastewaterNeutralizer	Point
*-SSWR-OILW	Utilities Wastewater	WastewaterOilWaterSeparator	Point
*-SSWR-PIPE	Utilities Wastewater	WastewaterLine	Line
*-SSWR-PLNT	Utilities Wastewater	WastewaterTreatmentPlant	Polygon
*-SSWR-PUMP	Utilities Wastewater	WastewaterPump	Point
*-SSWR-RECT	Utilities Wastewater	WastewaterRectifier	Point
*-SSWR-SBED	Utilities Wastewater	WastewaterSludgeBed	Polygon
*-SSWR-SERV	Utilities Wastewater	WastewaterLine	Line
*-SSWR-SIGN	Utilities Wastewater	WastewaterMarker	Point
*-SSWR-TANK	Utilities Wastewater	WastewaterDisposalTank	Point
*-SSWR-TRET	Utilities Wastewater	WastewaterTreatmentUnit	Point
*-SSWR-VLVE	Utilities Wastewater	WastewaterValve	Point
*-DOMW-ANOD	Utilities Water	WaterAnode	Point
*-DOMW-ANOT	Utilities Water	WaterAnodeTestStation	Point
*-DOMW-DWSP	Utilities Water	WaterDrinkingWaterSamplePoint	Point
*-DOMW-FCPT	Utilities Water	WaterFireConnectionPoint	Point
*-DOMW-FTTG	Utilities Water	WaterFitting	Point
*-DOMW-HYDR	Utilities Water	WaterHydrant	Point

CADD Layer Name	Category	Feature Class	Geometry
*-DOMW-INTL	Utilities Water	WaterIntakeLine	Line
*-DOMW-INTP	Utilities Water	WaterIntake	Point
*-DOMW-JBOX	Utilities Water	WaterJunction	Point
*-DOMW-MAIN	Utilities Water	WaterLine	Line
*-DOMW-METR	Utilities Water	WaterMeter	Point
*-DOMW-MHOL	Utilities Water	WaterJunction	Point
*-DOMW-PIGP	Utilities Water	WaterPigLaunchPoint	Point
*-DOMW-PLNT	Utilities Water	WaterTreatmentPlant	Polygon
*-DOMW-PSTA	Utilities Water	WaterPumpStation	Polygon
*-DOMW-PUMP	Utilities Water	WaterPump	Point
*-DOMW-RECT	Utilities Water	WaterRectifier	Point
*-DOMW-REDC	Utilities Water	WaterPressureReducingStation	Point
*-DOMW-RSVR	Utilities Water	WaterReservoirArea	Polygon
*-DOMW-SERV	Utilities Water	WaterLine	Line
*-DOMW-SIGN	Utilities Water	WaterMarker	Point
*-DOMW-SRCE	Utilities Water	WaterSourceSite	Point
*-DOMW-TANK	Utilities Water	WaterTank	Point
*-DOMW-TRET	Utilities Water	WaterTreatmentUnit	Polygon
*-DOMW-VENT	Utilities Water	WaterVent	Point
*-DOMW-VLVE	Utilities Water	WaterValve	Point

APPENDIX I

AIRPORT ENGINEERING INFORMATION SYSTEM GIS DATA STANDARD





Maryland Aviation Administration

Office of Design & Construction

GEOGRAPHIC INFORMATION SYSTEM DATA STANDARD

Version 2.0

July 2013

Geographic Information System Data Standard For the Maryland Aviation Administration Version 2.0, July 2013

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- **Appendix 1 GIS Feature Types**
- Appendix 2 Cross Reference of CADD and GIS
- **Appendix 3 Utilities Supplement**

1 INTRODUCTION

1.1 Purpose

This GIS Data Standard provides guidance for developing geospatially-referenced data to be submitted to, maintained by, or provided by the Maryland Aviation Administration (MAA). This includes geospatial vector data, related attributes, and metadata (i.e. information about the data). This standard is required so providers and receivers of MAA data have an understanding of the requirements for the GIS data they submit and use.

1.2 Scope

This document defines 125 of the 393 features covered by MAA's GIS Data Standard. The remaining 268 feature classes are covered in the MAA GIS Data Standard – Appendix 3 - Utilities Supplement.

1.3 Organization of this Document

This document is a reference document that defines the requirements of GIS data submitted to, maintained for, or provided by MAA. The sections that make up the body of this document define the geometry, attributes, and metadata requirements at a general level that applies to all GIS data submitted to MAA. Specific definitions and requirements for each feature class and attribute are provided in Appendix 1. In this appendix, the geometry type, required accuracy, sensitivity levels, attribute definitions and any applicable attribute domain lists are defined. A list of acceptable domain values for each attribute domain list is also provided in Appendix 1.

This document also provides a basis to convert GIS to a CADD format and vice versa. Since GIS layering and CADD layering are traditionally different, a crosswalk is necessary to identify one or more CADD layers that correlate to each GIS layer. This crosswalk is provided in Appendix 2.

Other topics covered in this document include a definition of the Maryland State Plane coordinate system to be used for all MAA GIS and CADD data in Section 5. Finally, Section 6 describes the GIS data delivery formats acceptable to MAA.

1.4 Intended Audience

This standard is intended for Geographic Information Systems (GIS) data developers, database designers, and other providers and recipients of geospatial data that depict Baltimore-Washington International (BWI) and Martin State (MTN) airports and their surrounds, as well as other facilities owned and operated by MAA. This standard assumes basic familiarity with GIS concepts and terminology. A glossary of acronyms and key terms is provided below.

1.5 Application of this Standard

All GIS data prepared for or used, maintained, and distributed by MAA should conform to this standard. This includes Esri shapefiles and file geodatabases prepared by MAA staff, consultants, or contractors. The extent and specifications for GIS data to be delivered will be further specified in contracts with consultants and contractors.

Some of the data submitted to MAA will also be submitted to the FAA in compliance with the FAA's Airports GIS Program requirements. This data must conform with the requirements defined by the latest versions of FAA Advisory Circulars (ACs) 150/5300-16, 17 and 18. The structure of the data required by these ACs is reflected in this document, although the FAA requirements take precedence for data that is to be submitted to the FAA.

To be in conformance with this standard, all geographic features such as runways, buildings, wetlands, obstruction and identification surfaces should be grouped into features classes (i.e. map layers) as defined in Appendix 1 or in the Appendix 3 - Utilities Supplement. Features should be of the proper geometry type (i.e. point, line or polygon) as further defined in Section 2.1, should meet or exceed the accuracy limits specified (unless otherwise stipulated in writing) and adhere to the topological constraints described in Section 2.2. Attributes should be populated to the extent possible (or as otherwise stipulated in writing) and carry the names and be of the types specified in Appendix 1. Attributes that are bound to domains must contain values listed in Appendix 1. All data must be in the Maryland State Plane coordinate system as defined in Section 5. This data is to be submitted along with the metadata specified in Section 4 in one of the formats specified in Section.

1.6 Related Material

The following documents are related to this GIS Data Standard and must be followed to be compliant with this standard.

The primary normative references (i.e. references that must be complied with) are those related to the FAA's Airports GIS Program. MAA is required to submit GIS data in a format that complies with the FAA requirements on any project funded through federal grant monies and/or changes what the FAA defines as safety critical information. As a matter of policy, MAA follows the FAA's Airports GIS Requirements on all projects that develop GIS data regardless of whether data is to be submitted to the FAA or not. It is relevant to note that the feature class, attribute, and domain definitions in AC150/5300-18B have been incorporated into MAA's GIS Standard. If, however, there are any differences or clarifications necessary, the FAA advisory circulars shall prevail over this document.

- AC 150/5300-16A "General Guidance and Specifications for Aeronautical Surveys: Establishment of Geodetic Control and Submission to the National Geodetic Survey", Sept. 15, 2007
- AC 150/5300-17C "Standards for Using Remote Sensing Technologies in Airport Surveys", Sept. 30, 2011
- AC 150/5300-18B "General Guidance and Specifications for Aeronautical Surveys: Airport Survey Data Collection and Geographic Information System Standards", May 21, 2009
- MAA GIS Data Standard Appendix 3 Utilities Supplement, Version 2.0, November 2012
- MAA Naming, Identification & Addressing Standard, Version 1.3, April 2009
- MAA Data Security Standard, Version 1.1, July 2007
- MAA Design Standards, 2011

1.7 Change Control

Following is a chronological list of changes made to this document since it was first released. A version number and the date of release are indicated for each revision.

Version	Date of	Changes Addressed	
Number	Release		
1.0	12/22/2005	Original release	
1.1	7/9/2007	Section 1.7 added for change control.	
		Section formatting adjusted to be consistent with other AEIS standards.	
		Utility and communications features moved to a supplement to this document.	
1.2	9/20/2007	Section 1.3 - CADD technicians removed from primary audience	
		Section 1.4 - Rewritten to be more specific to the intended audience	
		Section 6 - Clarification that a File Geodatabase is required as opposed to a Personal Geodatabase or SDE Geodatabase	
1.3	6/3/2008	Updated to incorporate utility feature and attribute definitions required for utility data collection and maintenance being carried out by MAA's Office of Maintenance & Utilities	
2.0	7/1/2013	Major revision to address the needs of MAA's Runway Safety Area Program and to re-align MAA's standards with those of the FAA Airports GIS Program.	

Readers are encouraged to suggest additional changes to this document. Accepted changes will be reflected in a subsequent version of this document.

2 FEATURES & ATTRIBUTES

The focus of this standard is on the definition of 353 geographic features required to depict an airport and its surrounding environment. These include features unique to airports, such as runways and taxiways, as well as more generic features, such as roads and buildings. Each of these 353 types of geographic features is referred to as a feature type. A specific instance of a feature type is referred to as a Feature. For example, Runways is a feature type, but Runway 10/28 at BWI is a specific Feature.

2.1 Allowable Geometry Types

There are three basic types of geometry (i.e., points, lines, and polygons). For simplicity in data development and transfer, this standard associates a single geometry type (i.e. point, line or polygon) with each feature type.

1. Point: a single location represented by X and Y (and in some cases Z) coordinates on a reference coordinate system, as shown below in Figure 1.



Figure 1. Example of Point Features

2. Line: straight line connections between two or more discrete locations represented by X and Y (and in some cases Z) coordinates on a reference coordinate system, as shown below in Figure 2. Note that line segments (i.e., a straight line connecting two points) and polylines (i.e., one or more connected line segments) are both included in this definition but that arcs (i.e., a curve joining two points) are not.



Figure 2. Example of Line Features

3. Polygon: A closed connection between three or more discrete locations represented by X and Y (and in some cases Z) coordinates on a reference coordinate system, as shown below in Figure 3. Polygons with interior portions excluded (i.e. doughnut holes) are acceptable, but multipart polygons (i.e. separate polygonal shapes represented by a common database record) are not.



Figure 3. Example of Polygon Features

4. Complex Geometry Types: Arcs, circles, and ellipses are not included in this standard. This is intended to facilitate data exchange between software that processes these complex data types differently. However, these shapes may be represented by polylines or polygons as appropriate. For example, if arcs are used in a CADD drawing, they must first be broken into a line with vertices placed at intervals that are sufficient to maintain the accuracy requirements described in Appendix 1.

2.2 Topology Rules

The placement of geometric features in juxtaposition to one another (i.e., next to, connected to, or on top of) is referred to as a topology. Topology rules establish requirements for the placement of features in relation to one another and in relation to features in other feature types. Unless stated otherwise, this standard requires the following topological rules:

1. Line Feature Types: Lines should contain one or more line segments with vertices placed at required intervals so the line feature does not stray from the actual feature by more than half the accuracy limit defined in Appendix 1 for the feature type, as shown below in Figure 4.

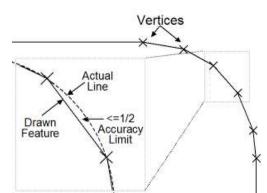


Figure 4. Placement of Vertices Along a Curve

Lines should begin and end at vertices collocated (i.e., exactly at the same coordinate) with features (often point feature types) designed to join two or more linear features, as shown in Figure 5. An example is electrical conduit lines that are joined only at junction boxes and other similar point features. For lines not naturally joined by physical features (e.g., marking lines), beginning and ending nodes should be placed where an attribute or other property change occurs.

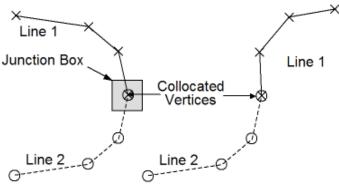


Figure 5. Collocation of Line End Points

2. **Polygon Feature Types:** Polygons must always be closed, meaning all vertices must be shared by two adjacent line segments forming the edges of the polygon, as shown in Figure 6.

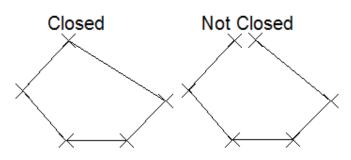


Figure 6. Examples of Closed and Unclosed Polygons

Unless otherwise stated, polygons must not overlap other polygons of the same feature type, as shown in Figure 7. This includes polygons placed on top of other polygons, as well as small overlapping splices because one or more vertices of adjacent sides are not matched. Polygons placed within (e.g., a 'doughnut hole') a larger polygon (e.g., the 'doughnut') which do not overlap are acceptable, because they describe a physically different space from the surrounding polygon.

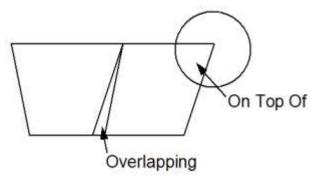


Figure 7. Overlapping Polygons

Polygons must share vertices with adjacent polygons where the real-world features they represent are adjacent, as shown below in Figure 8. This rule applies to polygons in the same feature type as well as polygons of different but related feature types.

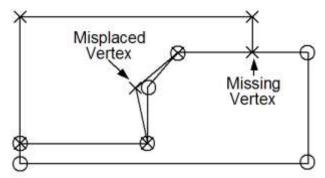


Figure 8. Placement of Vertices of Adjacent Polygons

2.3 Relationship of GIS & CADD Layers

Because many more CADD layers can be used to represent the same features represented on far fewer GIS layers, there is a natural many-to-one matching of CADD to GIS layers. The specific relationship of CADD layers that correspond to GIS layers is shown in the CADD-to-GIS crosswalk in Appendix 2.

3 ATTRIBUTES & DOMAINS

Attributes add descriptors to the geometry of a feature. Attributes can contain information such as the name, type, or condition of a feature. For example, the attributes of a runway include its designator (e.g., 15R/33L), material type (e.g., concrete), and length (e.g., 6,500 feet). Figure 9 below shows a typical list of attributes associated with a Feature type.

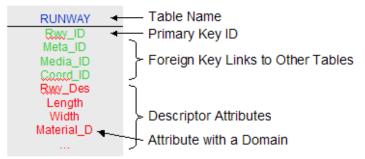


Figure 9. Sample Attribute Table for a Feature Type

3.1 Common Attributes

Several attributes are common to all feature classes in this standard. Some of these are used for naming and identification purposes. Others provide a reference to the project that installed or first recorded the location of the feature. Other attributes provide additional information about the data. Following is a list of these common attributes (with the exception of common metadata attributes that are described in the next section:

• guid - A globally unique identifier (GUID) applied to each feature in the database for reference by GIS and other information systems. When GIS data are submitted to MAA and uploaded into the GIS Data Repository, each record will also be assigned a GUID, which means that no other records have the same identifier. Application modules will use this GUID to track features as they are modified. If users who download data encounter such GUIDs, they are required to retain the GUIDs and submit them, unaltered, with subsequent revisions, to the features they downloaded.

The format of the GUIDs to be used is described in Figure 11 below. A numeric ID is used that contains the FAA region, airport location ID, feature type, date, and a timestamp. Since FAA region, airport location, and feature type are text values, corresponding numeric values have been assigned in the domain tables found in Appendix 1.

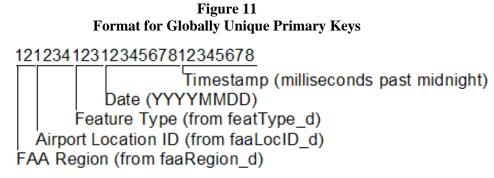


Figure 10. Format for Globally Unique Primary Keys

- maaId A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value). Refer to MAA's Naming, Identification and Addressing Standard for additional requirements that may apply to the assignment of identifiers.
- maaAlias An alternative or former name by which the feature is referred.
- status A temporal description of the operational status of the feature.
- alternative Discriminator used to tie features of a plan or proposal together into a version.
- projectType The type of project or work activity that installed or first recorded the location of this feature. At MAA, projects can be carried out under Contracts, Tasks, Subtasks, Building Permits, and Installation Permits.
- projectId A unique identifier associated with the project or work activity that installed or first recorded the location of this feature. These project IDs should conform to the following conventions.
 - Currently MAA contracts are assigned numbers formatted as ORG-TY-YY-NNN, where ORG is a three digit identifier for the originating organization. In most but not all cases, this is "MAA". TY is a two character indicator of the contract type. Key examples include "AE" for design contracts and "CO" for construction contracts. YY is a two digit representation of the year (e.g. 96 for 1996 and 02 for 2002). NNN is a unique sequential number that starts at 001 for the first contract of that type issues for a given fiscal year and is incremented by 1.
 - AE Contracts can have zero, one or more tasks, tasks can have zero, one or more Subtasks. CO contracts can have zero, one or more tasks but do not have subtasks.
 - Tasks under design contracts (referred to as design tasks) are assigned four digit task numbers that are unique to the design contract (e.g. 2412). Subtasks under design contracts carry the four digit task number and then a two digit sequential number after a decimal point (e.g. 2412.12). These task numbers were assigned sequentially starting at 1 in the early 1990s. Blocks of numbers are assigned to certain contracts, but not all may end up being used, so there is a possibility that task numbers have been skipped.
 - Tasks under construction contracts (referred to as construction tasks) are assigned a sequential number that starts with 1 for each contract and is therefore not unique. These are not widely used outside of construction at MAA.
- userFlag This attribute can be used for any purpose desired by the end user Often, this attribute is used to store relevant identifiers, notes or metadata that is accommodated elsewhere. The

FAA's Airports GIS also accommodates this attribute, so values entered into this attribute will be retained upon upload of required feature classes to the FAA.

3.2 Domain Values

The values assigned to an attribute are sometimes limited. The range of acceptable values is referred to as the domain for that attribute. Domains that limit attribute values to a range of numeric or date values are referred to as range domains. List domains limit values to a selection of choices. If users can add values to a list of acceptable values and still be compliant with the standard, the list is referred to as a code list. A list that users cannot add to is referred to as an enumeration. In this standard, all of the list domains are enumerations. To distinguish attributes that are limited to a domain, the name of each attribute ends with "_D". For each such attribute, there is an associated table in Appendix 1 listing the acceptable values and their definitions.

3.3 Foreign Key Identifiers

Attributes containing primary key values of related records in other feature type tables are called foreign key identifiers. Foreign key identifiers provide a link between different types of features with logical relationships. For example, the data for a taxiway leading to a runway might contain a foreign key to the runway table that is populated with the primary key value for that runway.

4 METADATA

Metadata is information about the data, such as the data source, accuracy, and the dates during which the data are valid. As described below, metadata can be created at several different levels. Per this standard, metadata is required at the collection level when data are submitted. However, the standard accommodates metadata elements at the feature type and feature level. More detailed metadata increases the usefulness and longevity of the data provided. Accordingly, data providers are encouraged to submit metadata at the most detailed level possible.

4.1 Collection Level Metadata

Collection level metadata is used to describe a collection of data submitted at one time. A collection may comprise of one or more drawings that contain several layers such as those that make up an ALP, several individual shapefiles that each represent a layer, a single layer stored in a shapefile, or any other combination of allowable data sets.

4.2 Feature Type Metadata

Feature type metadata, also known as layer level metadata, is used to describe geometry and attributes for a single layer or feature type. This is the case with metadata that is compliant with the FGDC Content Standard for Digital Geospatial Metadata (CSDGM). This level of metadata applies if different layers within a collection have different metadata.

4.3 Feature Level Metadata

Feature level metadata is handled by storing metadata in attributes associated with specific features. All feature classes in the standard carry the following metadata elements (as attributes) for this purpose.

- metaId An identifier used to refer to a metadata record that provides additional information about the data in this record. This is a foreign key link to a database table that can be used to store additional metadata relevant to this feature.
- sourceStatement A statement providing additional details about the source of the data.
- editorName The name of the individual who last edited this data.
- lastUpdate The date upon which any data associated with this record was last updated.

4.4 ISO 19915

This standard uses metadata elements defined by the ISO Geographic Information – Metadata Standard (ISO 19115). Of the 409 elements defined in ISO 19115, only 25 are used by this standard, because many of the elements defined in ISO are classified as optional or conditional and do not apply to this standard. Furthermore, some of the mandatory elements in the ISO standard are redundant with the specifications of this standard and are therefore not necessary for data exchange. Figure 11 lists each metadata element used in this standard along with the level of applicability.

List of Metadata Elements Required by MAA

	Collection	<u>Set</u>	<u>Feature</u>
Overview abstract status geometricObjectCount	1 1 1	* * *	* *
Scope dataset features attributes	* *	*	✓
Useage specificUsage BegusageDateTime endUsageDateTime	* * *	* * *	* * *
Source statement individualName organizationName positionName deliveryPoint city administrativeArea postalCode electronicMailAddress voicePhoneLine	********		
Coordinate System projection horizontalDatum ∨erticalDatum code	* * * *	* * * *	
Data Quality horizontalAccuracy verticalAcuracy evaluationMethodName evalutionMethodDescription pass groundSampleDistance	* * * * *	* * * * * *	* * * * * *

Figure 11. List of Metadata Elements Required by MAA

Figure 12 provides a description of the metadata elements required per this standard. These elements have been extracted from ISO 19115.

Metadata Element	Definition
Overview	
abstract	Description of the contents of the data collection being submitted
status	Status of the the data being submitted. Acceptable values are (completed, historical, archive, obsolete, onGoing, planned, required, under development)
geometricObjectCount	Number of feature instances being transmitted
Scope	
dataset	List of feature classes to which the metadata pertains (separated by commas)
features	List of feature names to which the metadata pertains (separated by commas)
attributes	List of attribute names to which the metadata pertains (separated by commas)
Usage	
specificUsage	Description of how the data should be used
BegUsageDateTime	The first dateltime for which the data described by the scope is valid
EndUSageDateTime	The last dateltime for which the data described by the scope is valid
Source	
statement	Description of the source of the data
individualName	Name of the person submitting the data
organizationName	Organization of the person submitting the data
positionName	Title of the person submitting the data
deliveryPoint	Street address of the person submitting the data
city	City of the location
administrativeArea	State
postalCode	Zip Code
electronicMailAddress	E-mail address
voicePhoneLine	Telephone number by which individuals can speak to the responsible organization or individual
Coordinate System	
projection	Name of the projection used (SPCS, LL)
horizontalDatum	Horizontal datum of submitted data
verticalDatum	Vertical datum of submitted data

Metadata Element	Definition
	Four digit code for the state place coordinate system used. A list of codes can
code	be found in NOAA manual NOS NGS 5.
Data Quality	
horizontalAccuracy	Horizontal accuracy of the dataset
verticalAccuracy	Vertical accuracy of the dataset
evaluationMethodName	Name of the evaluation method used
evaluationMethodDescription	Description of the evaluation method used
pass	Indicatation of whether data described by the scope passed or failed in evaluation
groundSampleDistance	The distance of the ground sample

Figure 12. Description of the Metadata Elements Required by MAA

4.5 Temporal Relevance

One of the most critical metadata elements to the aviation industry is time. The frequency with which airport infrastructure changes requires spatial data to possess an indication of the time period for which the data are valid. For example, the existence of a runway may be valid from the time it was authorized for use until further notice. This standard defines the beginning and ending date and time for which each feature instance is valid. All features must have a beginning date (i.e., data are valid until further notice), an ending date (i.e., the data expire at a specified time), or both (i.e., the data are valid only during the period specified). These values are held in the begUsageDateTime and endUsageDateTime metadata elements defined in Figure 12.

4.6 Accuracy

Accuracy is one metadata element that is particularly important to airport GIS applications. Accuracy is broadly defined as *the quality of nearness to the true value*. For the exchange of data as specified in this standard, it is important to be more specific. This standard, therefore, provides limits for the absolute horizontal positional accuracy of each feature type. These limits are described as a maximum number of feet between a feature's actual position and the position indicated in the data provided. The actual position is defined as the feature's true location on the specified geoid. Since the earth's surface has many variations, it is approximated by a geoid. The difference between a feature's true and recorded positions is required at a 95% confidence level. This means that statistically, 95% or more of the features provided fall within the required accuracy limit.

For some feature classes, particularly for FAA required feature classes, vertical accuracy limits are also provided. These accuracies are expressed as the maximum number of feet a feature's recorded elevation can differ from its actual elevation. Again, the actual elevation is measured from the geoid elevation at that location. Elevations are also to be provided at a 95% confidence level.

Accuracy requirements are driven by the way the data are to be used. The location of an airport on a map used for aircraft navigation must be much more accurate than its location on a national map of airports provided for general information purposes.

The accuracy guidelines provided in this standard have been derived from several sources, including FAA AC 150/5300-18B, RTCA User Requirements for Aerodrome Mapping Information, FGDC Geospatial Positioning Accuracy Standards-Part 4 (sources are indicated in order of precedence). Further information on accuracy definitions and methods to assess the accuracy of existing data can be found in the FGDC Geospatial Positioning Accuracy Standards-Part 3: National Standard for Spatial Data Accuracy (FGDC-STD-007.3-1998).

4.7 Security Sensitivity Levels

Sensitivity level is another important metadata element. Because spatial data can be used for nefarious purposes, the data must be protected from unauthorized users. The Code of Federal Regulations (49 CFR 1520) defines Sensitive Security Information (SSI) and methods for protecting the information. Protecting sensitive spatial data is therefore not just good practice, it is the law. However, overly protecting data limits the information's usefulness, in many cases needlessly. The challenge is to restrict data to users having an *operational need to know* and whose credentials the data provider has qualified. Relative to spatial data, this challenge is particularly complex because of the wide variety of data users and ways in which they need to use the data. An efficient way to restrict access to spatial data is to apply specific restrictions at the feature type level. This standard applies one of the following sensitivity levels to each feature type. The sensitivity levels are based on the MAA Spatial Data Security Standard and conform to the classifications listed in the MD_ClassificationCode list in ISO 19115.

- Unclassified data are available for general disclosure.
- **Restricted** data are not available for general disclosure.
- Confidential data are available for users that can be trusted with the information.
- **Secret** data are to be kept or intended to be kept private, unknown, or hidden from all but a select group of people.
- **Top Secret** data are of the highest secrecy. At MAA, this classification is reserved for SSI. MAA defines SSI as data that depicts the location of Controlled Access Security System (CASS), Closed Circuit Television (CCTV), Flex Response System, and Computer Aided Dispatch (CAD) system and their components. Individuals who require or are provided with this type of information must abide by the requirements of Section 2.2 of the MAA Design Standards.

Since sensitivity levels are established for each feature type by this standard (See Appendix 1), it is not necessary to include this information (i.e., a classification code in ISO terminology) in the metadata.

5 COORDINATE SYSTEM

Horizontal spatial data shall be submitted to, maintained by, and provided by MAA in the Maryland Coordinate System of 1987, also referred to as Maryland State Plane. Following are the parameters of the Maryland Coordinate System of 1987:

Map Projection:	Lambert conic conformal projection of the geodetic reference system of 1980
Horizontal Datum:	NAD83 (2001)
Latitude of Origin*:	37°40 North latitude
Central Meridian:	77°00' West longitude
Standard Parallel 1:	38°18' North latitude
Standard Parallel 2:	39°27' North latitude
False Easting*:	400,000 meters
False Northing*:	0 meters
Latitude**:	37°34' 38.14264" N
Longitude**:	81°31' 45.07877" W

* at the 77th meridian ** at artificial origin (0,0)

Vertical spatial data shall be submitted to, maintained by, and provided by MAA based on the National Geodetic Vertical Datum of 1988 (NGVD88).

All units for both horizontal and vertical data will be the U.S. Survey Foot (1200/3937 meters).

6 ELECTRONIC DELIVERABLES

6.1 General

MAA requires GIS data and associated metadata to be submitted with the "Conformed" and "As-Built" submittals for all construction projects at BWI Marshall and MTN airports unless otherwise specified by the MAA Project Manager.

6.2 Delivery of Data to MAA

GIS data should be submitted to MAA in an Esri File Geodatabase or shapefile (.shp) format. Geodatabase feature classes and shapefiles must be named for the feature type they represent (e.g., RunwayElement). They must also contain relevant attributes for the feature type they represent. Attributes that are covered in this standard must be named as they are in Appendix 1. Attributes defined in this standard that are not used need not be included. Attributes that a data submitter uses but which are not defined in this standard may be included.

Shapefiles or collections of shapefiles should be submitted on CD-R, CD-R/W, or DVD with the session closed to ensure maximum cross platform readability. Electronic delivery via a secure FTP site, on-line document repository, or other system must be approved by the MAA Project Manager. All electronic deliverables must be virus free.

CD/DVD Labels: Each CD/DVD shall include a CD/DVD label with the following information (sample files for the standard CD/DVD label are provided with this Design Standard distribution):

•	Construction Contract Title:	Insert Complete Contract Title
٠	Construction Contract No.:	MAA-CO-XX-XXX (Insert Complete Contract Number)
٠	Construction Task No.:	Insert if Applicable
٠	Construction Contract Task Title:	Insert Complete Task Title (If Applicable)
٠	Design Task Number:	Insert A/E Task Number
٠	Airport Logo:	Insert BWI Marshall or MTN AIRPORT as Applicable
٠	Consultant Logo:	Insert Consultant Logo
٠	SSI Notice:	Insert SSI Warning Notice on all disks containing SSI
٠	Submission Status:	Insert "Advertisement", "Addendum Number XX", "Conformed Documents", etc. as applicable
٠	Date:	Insert MONTH, DAY, YEAR
٠	CD/DVD Number	X of XX (Insert Data)

The root directory of the delivered CD/DVD should contain a text file named ReadMe.txt that repeats the information contained on the label as well as the following:

- Contact information for the individual responsible for submitting the document(s);
- Brief explanation of CD directory structure if subdirectories are used;
- Any other comments necessary to convey the contents of the CD.

Data provided via FTP, e-mail, or uploaded to MAA or designated consultant repositories maintained on MAA's behalf should contain the same structure and information as data submitted on CDs/DVDs with the exception of the cover and label, as explained above.

If data delivered on DVD or CD contains SSI (i.e. information about or depicting Controlled Access Security System, Closed Circuit Television, Flex Response System, Computer Aided Dispatch Systems), the following should be added to the CD/DVD cover and label.

This statement should also be included in the ReadMe.txt file described above, which should be renamed MustRead(Contains SSI).txt.

Sensitive Security Information

Warning: This media contains Sensitive Security Information that is controlled under 49 CFR 1520. No part of this record may be disclosed to persons without a need to know, as defined in CFR 1520, except with the written permission of the TSA Administrator, Washington, D.C.. Unauthorized release may result in civil penalty or other action. For U.S. government agencies, public disclosure is governed by 5 U.S.C. 552.

6.3 Delivery to be Submitted to the FAA

Esri shapefiles that comply with AC150/5300-18B must be provided when data is to be submitted to the FAA Airports GIS System. This requirement will be defined in the project scope if relevant. The shapefiles to be submitted to the FAA should be provided in a compressed ZIP file that is ready for upload to the FAA Airports GIS web site. If consultants who submit data are authorized FAA Airports GIS users, they should perform a test upload of this zip file to the FAA Airports GIS and ensure that any critical errors identified are resolved and all non-critical errors are either resolved or that a valid explanation for each type of error is provided (e.g. "out of scope"). Where required by the FAA, the consultant shall prepare a project final report and supporting data as defined in AC150/5300-18B and supporting documentation published by the FAA and NGS. The designated Airport Sponsor at MAA will perform the final upload of the data to the FAA Airports GIS site. The process for performing this upload, which is very similar to the process of performing a test upload is described below:

- 1. Log onto at <u>https://airports-gis.faa.gov/</u>
- 2. Click "My Survey Projects" or, if performing a test upload, "Test Survey File".
- 3. Select the desired project or, if performing a test upload, enter the airport code.
- 4. If uploading data for final submittal to the FAA, click the "Survey" tab.
- 5. Specify that the feature schema is AC150/5300-18B compliant.
- 6. Point to the ZIP file stored on a local or network drive.
- 7. Specify that the file format is ESRI SHP.
- 8. Specify the coordinate system is MD83F.
- 9. Check the box indicating that the data meets AC150/5300-18 accuracy requirements or indicate alternative horizontal and vertical accuracies that were achieved at the 95% confidence level.
- 10. If uploading the data for final submittal, add a relevant description that would help the FAA or NGS understand what data is being provided.
- 11. Click submit.
- 12. After the data is uploaded, which can take several minutes, translation, and automated validation will commence. After validation is compete, an error report will be provided. If no critical errors are found then the data can be submitted (except in the case of a test upload where data is not retained by the FAA). If a final report is required, it must be uploaded as well before the data can be submitted. Simply uploading the data does not constitute submitting it to

the FAA. The Airport Sponsor must first click the Submit button before the FAA and/or NGS will take further action.

13. If errors are found, they should be addressed and this process should be repeated.

After data is submitted, safety critical data will be verified by the FAA and/or NGS. If issues are found, the data submittal will be rejected and a detailed Quality Review Report (QRR) will be provided indicating the issues that must be resolved. Once resolved, the data should be resubmitted as described above. Once accepted, the data will be available for use in eALP and other FAA Airports GIS modules by authorized FAA personnel, as well as, airport staff and consultants that the Airport Sponsor has authorized.

7 GLOSSARY OF ACRONYMS AND TERMS

The following acronyms have been used in this standard:

AC	Advisory Circular
ADCAT	Airport Data Collection and Analysis Tool
A/E/C	Architecture Engineering and Construction
AIA	American Institute of Architects
AIS	Aeronautical Information Services
AIXM	Aeronautical Information Exchange Model
ALP	Airport Layout Plan
ANSI	American National Standards Institute
AOC	Airport Obstruction Chart
ASTM	American Society for Testing and Materials
CADD	Computer Automated Drafting & Design
CSDGM	Content Standard for Digital Geospatial Metadata
DGN	Microstation Design File
DOD	U.S. Department of Defense
DOT	U.S. Department of Transportation
DWG	Autodesk Drawing File
FAA	Federal Aviation Administration
FGDC	Federal Geographic Data Committee
GIS	Geographic Information System
GML	Geographic Markup Language
ICAO	International Civil Aviation Organization
ISO	International Organization for Standards
NAD	North American Datum
NGA	National Geospatial Intelligence Agency
NGS	National Geodetic Survey
NGVD	National Geodetic Vertical Datum
RTCA	Radio Technical Commission for Aeronautics
SDSFIE	Spatial Data Standards for Facilities,
	Infrastructure and Environment
SSI	Sensitive Security Information
USGS	U.S. Geological Survey

The key terms and phrases used in this standard are defined below:

Attributes or attribute data are alphabetical and/or numeric information that describes particular characteristics of a geospatial feature, such as its type, dimensions, usage, occupant, etc.

A collection is any combination of data that are submitted by a provider at a given time.

Geospatial data or **geospatially-referenced data** are data that depict natural or manmade elements that occupy a specific location on the face of the earth. Examples include a runway, building, river, or underground pipe. Geospatial features or a particular type (i.e., all runways) are often referred to as a feature type, data set, or layer of spatial data.

A **feature** is a manmade or natural object such as a building, runway, navigational aid, or river that appears in the real world. A **feature type** refers to a collection of all features of a given type, such as all runways or all buildings. feature types are analogous to layers in many GIS applications and are also referred to as Entity Types and Feature Classes in other standards.

Metadata is information about the data, such as source, accuracy, dates for which the data are valid, and security classification. Metadata is essential in helping users determine the extent to which they can rely on a given data item to make decisions.

An **orthophoto** is an aerial image that has been taken from above (either from an aircraft or a satellite) and has been spatially corrected so that features shown on the photo are displayed in their actual geographic position within a specified range of tolerance.

Photogrammetric refers to the process of creating vector data, such as building outlines and elevation contours, from stereo imagery, or pairs of images taken of the same location but at different angles.

Positional accuracy refers to the difference between a geospatial feature's displayed position and its actual position. Absolute positional accuracy is the difference between a geospatial feature's displayed position and its actual position on the face of the earth. Relative positional accuracy is the difference between a geospatial feature's displayed position and that of other geospatial features in the same data set.

Spatial data are data that depict a real world feature such as a road, building, or runway on a map. The most basic types of spatial data are points, lines, and polygons, but spatial data can also include orthophotos and other more complex forms of locational information **Maryland Aviation Administration**

Office of Design & Construction

GEOGRAPHIC INFORMATION SYSTEM DATA STANDARD

Appendix 1 – GIS Feature Types

Version 2.0

July 2013

APPENDIX 1- GIS Feature Types

This appendix lists each of the 88 GIS feature types defined by this document. MAA's GIS Data Standard also includes 271 utility feature types, which are defined in the MAA GIS Data Standard – Utilities Supplement.

The feature types defined in this document are grouped into categories (i.e., Airfield, Airspace, Environmental, etc.) for ease of use. For each feature type, the class name, geometry type, sensitivity level, and a definition are provided. Suggested accuracies are also provided. Accuracies are indicated at a reasonable level that will meet a broad range of end user requirements. Individual project scopes, technical limitations and other factors may require data to be of a higher or lower level of accuracy. Attributes are also provided along with their type and definition. The following figure provides a key to the information provided within this Appendix.

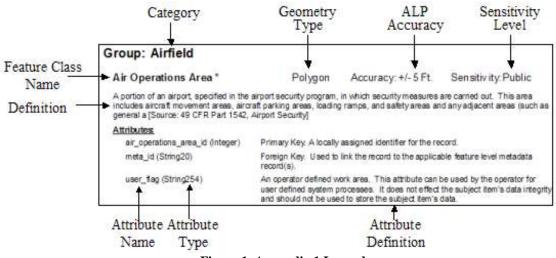


Figure 1. Appendix 1 Legend

DATA SET: AIRFIELD	
AIRFIELD : AIRCRAFT GATE STAND	
AIRFIELD : AIRCRAFT NON MOVEMENT AREA	
AIRFIELD : AIRFIELD LIGHT	
AIRFIELD : AIR OPERATIONS AREA	
AIRFIELD : AIRPORT SIGN	
AIRFIELD : APRON	
AIRFIELD : ARRESTING GEAR	
AIRFIELD : DEICING AREA	
AIRFIELD : FREQUENCY AREA	
AIRFIELD : MARKING AREA	
AIRFIELD : MARKING LINE	
AIRFIELD : MOVEMENT AREA	
AIRFIELD : PASSENGER LOADING BRIDGE	
AIRFIELD : RESTRICTED ACCESS BOUNDARY	
AIRFIELD : RUNWAY	
AIRFIELD : RUNWAY ARRESTING AREA	
AIRFIELD : BLAST PAD	
AIRFIELD : RUNWAY CENTERLINE	
AIRFIELD : RUNWAY ELEMENT	
AIRFIELD : RUNWAY END	
AIRFIELD : RUNWAY HELIPAD DESIGN SURFACE	
AIRFIELD : RUNWAY INTERSECTION	
AIRFIELD : RUNWAY LABEL	
AIRFIELD : LAND AND HOLD SHORT LINE	
AIRFIELD : RUNWAY SAFETY AREA BOUNDARY	
AIRFIELD : SHOULDER	
AIRFIELD : STOPWAY	
AIRFIELD : TAXIWAY ELEMENT	
AIRFIELD : TAXIWAY HOLDING POSITION	
AIRFIELD : TAXIWAY INTERSECTION	
AIRFIELD : TOUCHDOWN LIFT OFF	

DATA SET: AIRSPACE	30
AIRSPACE : LANDMARK SEGMENT	30
AIRSPACE : OBSTACLE	31
AIRSPACE : OBSTRUCTION AREA	32
AIRSPACE : OBSTRUCTION IDENTIFICATION SURFACE	33
AIRSPACE : RUNWAY PROTECTION AREA	34
DATA SET: CADASTRAL	35
CADASTRAL : AIRPORT BOUNDARY	35
CADASTRAL : AIRPORT PARCEL	
CADASTRAL : COUNTY	36
CADASTRAL : EASEMENTS AND RIGHTS OF WAY	37
CADASTRAL : FAA REGION	38
CADASTRAL : LAND USE	38
CADASTRAL : LEASE AREA	39
CADASTRAL : LEASE AREA	40
CADASTRAL : MUNICIPALITY	40
CADASTRAL : PARCEL	41
CADASTRAL : STATE	
CADASTRAL : ZONING	42
DATA SET: ENVIRONMENTAL	43
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Data Set: Airfield

Airfield : Aircraft Gate Stand

(Database Feature Class Name = AircraftGateStand; FAA=AircraftGateStand)Geometry Type: PointAccuracy: +/-3Ft.Sensitivity: RestrictedGeographic position of painted stand positions on the stand guidance line usually marked by a yellow
crossbar according to aircraft type (e.g., for B-747, A-340).Sensitivity: Restricted

ames and Identifiers:	
id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String50)	The name of the feature.
alias (String60)	An alternative or former name by which the feature is referred.
tributes:	
description (String255)	Description of the feature.
gateStandType (<u>CodeGateStandType</u>)	The type of aircraft gate/stand.
wingspan (Integer)	The quantity representing the maximum wingspan which can be accommodated at the aircraft gate stand.
length (Integer)	The overall length of the aircraft gate stand.
width (Integer)	The overall width of the aircraft gate stand.
pavementClassificationNumber (String10)	A number which expresses the relative load carrying capacity of a pavement in terms of a standard single wheel load.[AC 150/5335-5A].
jetwayAvailability (<u>CodeBoolean</u>)	Indicates if a jetway or passenger loading bridge is available for use at the designated location.
towingAvailability (CodeBoolean)	Indicates if towing is available at the designated location.
dockingAvailability (CodeBoolean)	Indicates if docking light system is available at the designated location.
groundPowerAvailability (CodeBoolean)	Indicates the availability of ground power at the designated location.
surfaceType (CodeSurfaceType)	A classification of airfield pavement surfaces for Airport Obstruction Charts[NGS].
surfaceCondition (CodeSurfaceCondition)	A description of the serviceability of the pavement[NFDC].
tadata:	
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (CodeStatus)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user define system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
dataSource (CodeDataSource)	The source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
stem Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Airfield : Aircraft Non Movement Area

(Database Feature Class Name = AircraftNonMovementArea; FAA=AircraftNonMovementArea)Geometry Type: LineAccuracy: +/-3Ft.Taxiways and apron (ramp) areas not under the control of air traffic.

Names and Identifiers:

id (String40)

A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)

	name (String50)	The name of the feature.
	alias (String60)	An alternative or former name by which the feature is referred.
A	ttributes:	
	description (String255)	Description of the feature.
\mathbf{M}	letadata:	
	projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
	projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
	status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
	Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
	userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
	dataSource (CodeDataSource)	The source of the data in this record.
	sourceStatement (String255)	A statement providing additional details about the source of the data.
	editorName (String50)	The name of the individual who last edited this data.
	lastUpdate (Date)	The date upon which any data associated with this record was last updated.
<u>S</u>	ystem Keys:	
	guid (String60)	A globally unique identifier applied to each feature in the database for reference.
	metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Airfield : Airfield Light

(Database Feature Class Name = AirfieldLight; FAA=AirfieldLight)

Geometry Type: Point Accuracy: +/-3Ft. Sensitivity: Restricted Any lighting located within or near an airport boundary that provides guidance for airborne and ground maneuvering of aircraft. [AIM, AC 150/5340-24].

id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String50)	Use this attribute to identify the use of the light such as Runway Edge Light, Taxiway Edge Light, Taxiway Centerline Light, etc.
alias (String60)	An alternative or former name by which the feature is referred.
ttributes:	
description (String255)	Description of the feature
lightingType (CodeLightingConfigura	A description of the lighting system. Lighting system classifications are Approach; Airport; Runway; Taxiway; and Obstruction
color (<u>CodeColor</u>)	The color of the airfield light.
luminescence (Integer)	The luminescence of the airfield light specified in candellas (cd).
pilotControlFrequency (Real)	The radio frequency used by pilots to control various airport lighting systems
<u>letadata:</u>	
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (CodeStatus)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
dataSource (CodeDataSource)	The source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
ystem Keys:	

guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Airfield : Air Operations Area

(Database Feature Class Name = AirOperationsArea; FAA=AirOperationsArea)

Geometry Type: Polygon Accuracy: +/-3Ft. Sensitivity: Unclassified Air Operations Area is where security measures are enforced as specified in the airport security program. This area includes aircraft movement areas, aircraft parking areas, loading ramps, and safety areas and any adjacent areas (such as general aviation [49 CFR Part 1542, Airport Security*].

A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
The name of the feature.
An alternative or former name by which the feature is referred.
Description of the feature
The type of project or work activity that installed or first recorded the location of this feature.
A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
A temporal description of the operational status of the feature.
Discriminator used to tie features of a plan or proposal together into a version.
An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
The source of the data in this record.
A statement providing additional details about the source of the data.
The name of the individual who last edited this data.
The date upon which any data associated with this record was last updated.
A globally unique identifier applied to each feature in the database for reference.
An identifier used to refer to a metadata record that provide additional information about the data in this record.

Airfield : Airport Sign

(Database Feature Class Name = Airpor	rtSign; FAA=AirportSign)	
Geometry Type: Point	Accuracy: +/-3Ft.	Sensitivity: Restricted
Signs at an airport other than surface pa	inted signs. [AC 150/5340-18].	
Names and Identifiers:		
id (String40)	A unique identifier used by people to refer to the primary or foreign key value)	is feature (note: this is not a system
name (String50)	The name of the feature.	
alias (String60)	An alternative or former name by which the feature is referred.	
Attributes:		
description (String255)	A description of the improvement feature.	
signType (CodeSignTypeCode)	The type of sign.	
height (Real)	The overall height of the feature.	
message (String254)	The text message that appears on the sign.	
Metadata:		
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installe feature.	ed or first recorded the location of this
projectId (String20)	A unique identifier associated with the project or recorded the location of this feature.	or work activity that installed or first

status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
dataSource (CodeDataSource)	The source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
<u>System Keys:</u>	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Airfield : Apron

(Database Feature Class Name = Apron; FAA=Apron)Geometry Type: PolygonAccuracy: +/-3Ft.A defined area on an airport or heliport, paved or unpaved, intended to accommodate aircraft for purposesof loading or unloading passengers or cargo, refueling, parking, or maintenance. [FAA].

Names and Identifiers:	
id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String50)	The name of the feature.
alias (String60)	An alternative or former name by which the feature is referred.
Attributes:	
description (String255)	Description of the feature
apronType (<u>CodeApronType</u>)	A classification of the typical use for the apron
numberOfTiedowns (Integer)	The approximate number of tiedowns in the surface.
surfaceType (CodeSurfaceType)	A classification of airfield pavement surfaces for Airport Obstruction Charts[NGS].
surfaceMaterial (CodeSurfaceMaterial)	A code indicating the composition of the related surface[NFDC].
surfaceCondition (CodeSurfaceCondition)	A description of the serviceability of the pavement[NFDC].
pavementClassificationNumber (String10)	A number that expresses the relative load-carrying capacity of a pavement in terms of a standard single wheel load[AC 150/5335-5A].
fuel (<u>CodeFuel</u>)	Code indicating the types of fuel available at the apron or deliverable to the apron.
<u>Aetadata:</u>	
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
dataSource (<u>CodeDataSource</u>)	The source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Airfield : Arresting Gear

(Database Feature Class Name = ArrestingGear; FAA=ArrestingGear)

Geometry Type: Line Accuracy: +/-3Ft. S Location of the arresting gear cable across the runway. [RTCA DO-272].

Names and Identifiers:	
id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String50)	The name of the feature.
alias (String60)	An alternative or former name by which the feature is referred.
Attributes:	
description (String255)	Description of the feature
airportFacilityType (<u>CodeOperationsType</u>)	Type of airfield.
owner (Enumeration60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
<u>Metadata:</u>	
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
dataSource (CodeDataSource)	The source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Airfield : Deicing Area

(Database Feature Class Name = DeicingArea; FAA=DeicingArea)

Geometry Type: Polygon Accuracy: +/-3Ft. Sensitivity: Unclassified An aircraft deicing facility is a facility where: (1) frost, ice, or snow is removed (deicing) from the aircraft in order to provide clean surfaces and/or (2) clean surfaces of the aircraft receive protection (anti-icing) against the formation of frost or [AC 150/5300-13*].

Names and Identifiers:	
id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String50)	The name of the feature.
alias (String60)	An alternative or former name by which the feature is referred.
Attributes:	
description (String255)	A brief description of the area and any special characteristics.
<u>Metadata:</u>	
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
dataSource (CodeDataSource)	The source of the data in this record.

sourceStatement (String255) editorName (String50)	A statement providing additional details about the source of the data. The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Airfield : Frequency Area

(Database Feature Class Name = FrequencyArea; FAA=FrequencyArea)

Geometry Type: Polygon Accuracy: +/-3Ft. Sensitivity: Unclassified Area specifying the designated part of the surface movement area where a specific frequency is required by ATC or ground control. If there is only one frequency area for the airport, the polygon must cover the total air operations area. [RTCA DO-272].

id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String50)	The name of the feature.
alias (String60)	An alternative or former name by which the feature is referred.
tributes:	
description (String255)	Description of the feature
station (String30)	Service or Station assigned to primary frequency (e.g., ATC Tower, Ground Control)[RTCA DO-272].
frequency (Real)	Primary frequency used on frequency area (in MHZ).[RTCA DO-272].
etadata:	
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (CodeStatus)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user define system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
dataSource (<u>CodeDataSource</u>)	The source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
stem Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Airfield : Marking Area

(Database Feature Class Name = MarkingArea; FAA=MarkingArea)

Geometry Type: Polygon Accuracy: +/-2Ft. Sensitivity: Unclassified Markings used on runway and taxiway surfaces to identify a specific runway, a runway threshold, a centerline, a hold line, etc. An element of marking whose geometry is a polygon. [AC 150/5340-1 and RTCA DO-272].

Names and Identifiers:	
id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String50)	Name of the feature.
alias (String60)	An alternative or former name by which the feature is referred.

Attributes:

A description of the feature.		
markingFeatureType (<u>CodeMarkingFeatureType</u>) The type of the marking		
The color of the marking		
The type of project or work activity that installed or first recorded the location of this feature.		
A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.		
A temporal description of the operational status of the feature.		
Discriminator used to tie features of a plan or proposal together into a version.		
An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].		
The source of the data in this record.		
A statement providing additional details about the source of the data.		
The name of the individual who last edited this data.		
The date upon which any data associated with this record was last updated.		
A globally unique identifier applied to each feature in the database for reference.		
An identifier used to refer to a metadata record that provide additional information about the data in this record.		

Airfield : Marking Line

(Database Feature Class Name = MarkingLine; FAA=MarkingLine)

Geometry Type: Line Accuracy: +/-2Ft. Sensitivity: Restricted Markings used on runway and taxiway surfaces to identify a specific runway, a runway threshold, a centerline, a hold line, etc. An element of marking whose geometry is a line. [AC 150/5340-1, RTCA/DO-272].

A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
Name of the feature.
An alternative or former name by which the feature is referred.
A description of the feature.
<u>eType</u>) The type of the marking
The color of the marking
The type of project or work activity that installed or first recorded the location of this feature.
A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
A temporal description of the operational status of the feature.
Discriminator used to tie features of a plan or proposal together into a version.
An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
The source of the data in this record.
A statement providing additional details about the source of the data.
The name of the individual who last edited this data.
The date upon which any data associated with this record was last updated.
A globally unique identifier applied to each feature in the database for reference.
An identifier used to refer to a metadata record that provide additional information about the data in this record.

Airfield : Movement Area

(Database Feature Class Name = MovementArea; FAA=MovementArea)

Geometry Type: Polygon Accuracy: +/-3Ft. Sensitivity: Restricted Runways, taxiways, and other areas of an airport used for taxiing or hover taxiing, air taxiing, takeoff, and landing of aircraft, exclusive of loading ramps and aircraft parking areas. [14 CFR Part 139].

A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
An alternative or former name by which the feature is referred.
Name of the feature
Description of the feature
The type of project or work activity that installed or first recorded the location of this feature.
A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
A temporal description of the operational status of the feature.
Discriminator used to tie features of a plan or proposal together into a version.
An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
The source of the data in this record.
A statement providing additional details about the source of the data.
The name of the individual who last edited this data.
The date upon which any data associated with this record was last updated.
A globally unique identifier applied to each feature in the database for reference.
An identifier used to refer to a metadata record that provide additional information about the data in this record.

Airfield : Passenger Loading Bridge

(Database Feature Class Name = PassengerLoadingBridge; FAA=PassengerLoadingBridge)Geometry Type: PolygonAccuracy: +/-3Ft.Sensitivity: RestrictedA bridge for loading/unloading access to airplanes for passengers and crew.

Names and Identifiers:	
id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String50)	Name, code or identifier used to identify the loading bridge.
alias (String60)	An alternative or former name by which the feature is referred.
Attributes:	
description (String255)	Description of the feature
loadingBridgeType (CodeLoadingBridg	geType) Code indicating the type of loading bridge.
<u>Metadata:</u>	
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (CodeStatus)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
dataSource (<u>CodeDataSource</u>)	The source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.

editorName (String50) lastUpdate (Date)	The name of the individual who last edited this data. The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Airfield : Restricted Access Boundary

(Database Feature Class Name = RestrictedAccessBoundary; FAA=RestrictedAccessBoundary)		
Geometry Type: Line	Accuracy: +/-3Ft.	Sensitivity: Confidential
A restricted area boundary identifies areas strictly reserved for use by authorized personnel only. [NGS*].		

Names and Identifiers:

id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String50)	A common name for the restricted area.
alias (String60)	An alternative or former name by which the feature is referred.
Attributes:	
description (String255)	A description of the restricted area.
Metadata:	
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (CodeStatus)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
dataSource (<u>CodeDataSource</u>)	The source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Airfield : Runway

(Database Feature Class Name = Runway; FAA=Runway) Geometry Type: Polygon Accuracy: +/-3Ft. Sensitivity: Restricted A rectangular area on a airport prepared for the landing and takeoff run of aircraft. [AC 150/5300-13*].

Names and Identifiers:	
id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String50)	Name of the feature.
alias (String60)	An alternative or former name by which the feature is referred.
runwayDesignator (String7)	Designator of the runway based on the magnetic bearing and position in relation to parallel runways (e.g. 33R/15L)[AC 150/5340-1].
Attributes:	
description (String255)	Description of the feature
width (Real)	A perpendicular line to the surface centerline, extending to the edge of the runway pavement on both sides of the runway, through a runway end-point. If the runway width is less than 100 feet, the width is rounded up to the nearest 5 feet. If the runway w[NGS].
length (Real)	The straight line distance between runway end points. This line does not account for surface undulations between points. Official runway lengths are normally computed from

	runway end coordinates and elevations.
surfaceType (<u>CodeSurfaceType</u>)	A classification of airfield pavement surfaces for Airport Obstruction Charts[NGS].
surfaceMaterial (CodeSurfaceMaterial)	A code indicating the composition of the related surface[NFDC].
pavementClassificationNumber (String10)	A number that expresses the relative load carrying capacity of a pavement in terms of a standard single wheel load[AC 150/5335-5A].
surfaceCondition (CodeSurfaceCondition)	A description of the serviceability of the pavement[NFDC].
Metadata:	
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
dataSource (CodeDataSource)	The source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metald (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Airfield : Runway Arresting Area

(Database Feature Class Name = RunwayArrestingArea; FAA=RunwayArrestingArea) Geometry Type: Polygon Accuracy: +/-3Ft. Sensitivity: Restricted Any FAA-approved high energy absorbing material of a specific strength that will reliably and predictably bring an aircraft to a stop without imposing loads that exceed the aircraft's design limits, cause major structural damage, or impose excessive force [AC 150/5220-22*].

Names and Identifiers:	
id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String50)	A common name for the arresting area.
alias (String60)	An alternative or former name by which the feature is referred.
Attributes:	
description (String255)	A description of the arresting area.
length (Real)	The overall length of the feature.
width (Real)	The overall width of the feature.
surfaceMaterial (CodeSurfaceMaterial)	A code indicating the composition of the related surface[NFDC].
surfaceCondition (CodeSurfaceCondition)	A description of the serviceability of the pavement[NFDC].
Setback (Integer)	The distance the EMAS begins beyond the end of the runway.
Metadata:	
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
dataSource (CodeDataSource)	The source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.

lastUpdate (Date)	The date upon which any data associated with this record was last updated.
<u>System Keys:</u>	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Airfield : Blast Pad

(Database Feature Class Name = RunwayBlastPad; FAA=RunwayBlastPad)

Geometry Type: Polygon Accuracy: +/-2Ft. Sensitivity: Restricted A specially prepared surface placed adjacent to the ends of runways to eliminate the erosive effect of the high wind forces produced by airplanes at the beginning of their takeoff rolls. [AC 150/5300-13].

Names and Identifiers:	
id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String50)	Name of the feature.
alias (String60)	An alternative or former name by which the feature is referred.
Attributes:	
description (String255)	Description of the feature
length (Integer)	The length of clearway as measured. Compare the measure value to the value reported in the government flight information publications.
pavementClassificationNumber (String10)	A number that expresses the relative load carrying capacity of a pavement in terms of a standard single wheel load[AC 150/5335-5A].
runwayEndDesignator (String3)	Specify runwayEnd designator to identify which runway end the Blast Pad is on.
surfaceCondition (CodeSurfaceCondition)	A description of the serviceability of the pavement[NFDC].
surfaceMaterial (CodeSurfaceMaterial)	A code indicating the composition of the related surface[NFDC].
surfaceType (<u>CodeSurfaceType</u>)	A classification of airfield pavement surfaces for Airport Obstruction Charts[NGS].
<u>Aetadata:</u>	
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (CodeStatus)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
dataSource (CodeDataSource)	The source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Airfield : Runway Centerline

(Database Feature Class Name = RunwayCenterline; FAA=RunwayCenterline) Geometry Type: Line Accuracy: +/-1Ft. Sensitivity: Restricted Continuous line along the painted centerline of a runway connecting the middle-points of the two outermost thresholds. Centerline is composed of many centerline points (see RunwayControlPoint). It is used to calculate grade and line-of-sight criteria. [AC 150/5300-13].

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Names and Identifiers:	
id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String50)	The name of the feature.

runwayDesignator (String7)	Designator of the runway based on the magnetic bearing and position in relation to parallel runways (e.g. 33R/15L)[AC 150/5340-1].
alias (String60)	An alternative or former name by which the feature is referred.
Attributes:	
description (String255)	Description of the feature
<u>Metadata:</u>	
isDerived (CodeBoolean)	Indicates whether the centerline is derived or photo determined.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user define system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
dataSource (<u>CodeDataSource</u>)	The source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Airfield : Runway Element

(Database Feature Class Name = RunwayElement; FAA=RunwayElement)

Geometry Type: PolygonAccuracy: +/-3Ft.Sensitivity: RestrictedA section of the runway surface. The runway surface can be defined by a set of non-overlappingRunwaySegment polygons for pavement management purposes. RunwayElements may overlap Runwayand RunwayIntersection features. Use RunwayElement to model the physi [AC 150/5335-5, AC150/5320-12, AC 150/5320-17, AC 150/5320-6].

Names and Identifiers:	
id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String50)	The name of the feature.
alias (String60)	An alternative or former name by which the feature is referred.
Attributes:	
description (String255)	Description of the feature
runwayDesignator (String7)	Specify runway designator.
surfaceType (<u>CodeSurfaceType</u>)	A classification of airfield pavement surfaces for Airport Obstruction Charts[NGS].
surfaceMaterial (CodeSurfaceMaterial)	A code indicating the composition of the related surface[NFDC].
pavementClassificationNumber (String10)	A number which expresses the relative load carrying capacity of a pavement in terms of a standard single wheel load.[AC 150/5335-5A].
surfaceCondition (CodeSurfaceCondition)	A description of the serviceability of the pavement[NFDC].
<u>Metadata:</u>	
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
dataSource (CodeDataSource)	The source of the data in this record.

sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Airfield : Runway End

(Database Feature Class Name = RunwayEnd; FAA=RunwayEnd)

Geometry Type: Point Accuracy: +/-1Ft. Sensitivity: Restricted The end of the runway surface suitable for landing or takeoff runs of aircraft. Runway Ends describe the approach and departure procedure characteristics of a runway threshold. The Runway End is the same as the runway threshold when the threshold is not [NGS*].

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d or first
on.
or user defined

	system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
dataSource (CodeDataSource)	The source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Airfield : Runway Helipad Design Surface

(Detebace Feature Class Name – Punu	(Database Feature Class Name = RunwayHelipadDesignSurface; FAA=RunwayHelipadDesignSurface)		
-	• • •		
Geometry Type: Polygon	Accuracy: +/-Ft.	Sensitivity: Restricted	
A three-dimensional surface that is used in runway or heliport/helipad design. [AC 150/5300-1 Names and Identifiers:			
name (String50)	The name of the feature.[SDSFIE Feature Table	le].	
alias (String60)	An alternative or former name by which the feature	ature is referred.	
<u>Attributes:</u>			
description (String255)	Description of the feature		
designSurfaceType (CodeDesignSurfaceTy	(pe) A description of the design surface		
zoneUse (String50)	A description of the use of the zone.		
determination (String255)	A formal declaration of the runway/helipad/hel		
determinationDate (String8)	The date the safety area determination was app 150/5390-2B].	proved[FAA Order 5200.8 and AC	
zoneInnerWidth (Real)	The width of the narrow end of a trapezoidal sl normally the end that is closest to the landing s 2B].		
zoneOuterWidth (Real)	The width of the wide end of a trapezoidal shap normally the end that is furthest from the landi		
zoneLength (Real)	The length of a trapezoidal shaped DesignSurf	ace feature.	
slope (Real)	The low to high gradient within the airspace.		
<u>Metadata:</u>			
projectType (CodeProjectType)	The type of project or work activity that install feature.	ed or first recorded the location of this	
projectId (String20)	A unique identifier associated with the project recorded the location of this feature.	or work activity that installed or first	
status (<u>CodeStatus</u>)	A temporal description of the operational statu	s of the feature.	
Alternative (Integer)	Discriminator used to tie features of a plan or p	proposal together into a version.	
userFlag (String254)	An operator defined work area. This attribute c system processes. It does not affect the subject used to store the subject items data.[SDSFIE].		
dataSource (CodeDataSource)	The source of the data in this record.		
sourceStatement (String255)	A statement providing additional details about	the source of the data.	
editorName (String50)	The name of the individual who last edited this	s data.	
lastUpdate (Date)	The date upon which any data associated with	this record was last updated.	
<u>System Keys:</u>			
guid (String60)	A globally unique identifier applied to each fea	ature in the database for reference.	
metaId (Integer)	An identifier used to refer to a metadata record the data in this record.	that provide additional information about	

Airfield : Runway Intersection

(Database Feature Class Name = RunwayIntersection; FAA=RunwayIntersection)

Geometry Type: Polygon Accuracy: +/-3Ft. The area in which two or more runways intersect.

area in which two or more runways	Intersect.
Names and Identifiers:	
id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String50)	The name of the feature.
alias (String60)	An alternative or former name by which the feature is referred.
runwayDesignator1 (String7)	Designator of the 1st intersecting runway based on the magnetic bearing and position in relation to parallel runways (e.g. 33R/15L).
runwayDesignator2 (String7)	Designator of the 2nd intersecting runway based on the magnetic bearing and position in relation to parallel runways (e.g. 33R/15L).
runwayDesignator3 (String7)	Designator of the 3rd intersecting runway based on the magnetic bearing and position in relation to parallel runways (e.g. 33R/15L).
Attributes:	
description (String255)	Description of the feature
pavementClassificationNumber (String10)	A number which expresses the relative load carrying capacity of a pavement in terms of a standard single wheel load.[AC 150/5335-5A].
<u>Aetadata:</u>	
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
dataSource (CodeDataSource)	The source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
ystem Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Airfield : Runway Label

(Database Feature Class Name = RunwayLabel; FAA=RunwayLabel) Geometry Type: Point Accuracy: +/-3Ft. Sensitivity: Secret The bottom center position of the runway designation marking. [NGS]. <u>Names and Identifiers:</u> id (String40) A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)

	primary or foreign key value)	
name (String50)	The name of the feature.	
alias (String60)	An alternative or former name by which the feature is referred.	
runwayEndDesignator (String3)	The designator of the associated runway	
Attributes:		
description (String255)	Description of the feature.	
<u>Metadata:</u>		
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.	
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.	
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.	
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.	
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined	

	system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
dataSource (CodeDataSource)	The source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Airfield : Land and Hold Short Line

(Database Feature Class Name = RunwayLAHSO; FAA=RunwayLAHSO) Geometry Type: Line Accuracy: +/-3Ft. Sensitivity: Restricted Markings installed on a runway where an aircraft is to stop when the runway is normally used as a taxiway or used for Land and Hold Short Operations (LAHSO) as identified in a letter of agreement with the Air Traffic Control Tower (ATCT). A runway should [Order 7110.118*].

Names and Identifiers:	
id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String50)	The name of the feature.
alias (String60)	An alternative or former name by which the feature is referred.
Attributes:	
description (String255)	Description of the feature
protectedRunwayDesignator (String7)	Unique runway identifier for the airport of the runway, if any, being protected by the LAHSO (when the LAHSO precedes a runway intersection). Example 17L/35R.
markingFeatureType (CodeMarkingFeatu	<u>ireType</u>) The type of the marking
color (<u>CodeColor</u>)	The color of the marking
Metadata:	
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
dataSource (<u>CodeDataSource</u>)	The source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Airfield : Runway Safety Area Boundary

(Database Feature Class Name = RunwaySafetyAreaBoundary; FAA=RunwaySafetyAreaBoundary)Geometry Type: PolygonAccuracy: +/-3Ft.Sensitivity: RestrictedThe boundary of the Runway Safety Area (RSA). [AC 150/53XX-XX (Vol. C)].

Names and Identifiers:	
id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String50)	The name of the feature.

<u>Attributes:</u>	
description (String255)	Description of the feature.
runwayEndDesignator (String3)	Specific runway end designator.[FAA AC150/5300-18b].
determinationDate (String8)	Date the RSA determination was approved[FAA Order 5200.8].
determination (String255)	A formal declaration of the runway safety area condition with respect to standards and any requirement improvements [FAA Order 5200.8].
Metadata:	
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
dataSource (CodeDataSource)	The source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
<u>System Keys:</u>	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

An alternative or former name by which the feature is referred.

Airfield : Shoulder

alias (String60)

(Database Feature Class Name = Shoulder; FAA=Shoulder)

Geometry Type: Polygon Accuracy: +/-3Ft. Sensitivity: Restricted An area adjacent to the edge of paved runways, taxiways, or aprons providing a transition between the pavement and the adjacent surface; support for aircraft running off the pavement; enhance drainage; and blast protection. [AC 150/5300-13].

N	ames and Identifiers:	
	id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
	name (String50)	The name of the feature.[AC 150/5300-18b].
	alias (String60)	An alternative or former name by which the feature is referred.
A	<u>.ttributes:</u>	
	description (String255)	Description of the feature.[AC 150/5300-18b].
	shoulderType (CodeShoulderType)	Code for whether this is a runway shoulder or taxiway shoulder[SDSFIE Attribute Table].
	length (Real)	The overall length of the airfield surface.[SDSFIE Attribute Table].
	width (Real)	The overall width of the airfield surface. [SDSFIE Feature Table].
	restricted (CodeBoolean)	An indicator as to whether access to the feature is restricted.
	surfaceMaterial (CodeSurfaceMaterial)	A code indicating the composition of the related surface[NFDC].
	sequence (String5)	Sequential number of the element.
	surfaceCondition (CodeSurfaceCondition)	A description of the serviceability of the pavement[NFDC].
	surfaceType (<u>CodeSurfaceType</u>)	A classification of airfield pavement surfaces for Airport Obstruction Charts[NGS].
N	<u>Ietadata:</u>	
	projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
	projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
	status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
	Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.

userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
dataSource (<u>CodeDataSource</u>)	The source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Airfield : Stopway

(Database Feature Class Name = Stopway; FAA=Stopway) Geometry Type: Polygon Accuracy: +/-3Ft. Sensitivity: Restricted An area beyond the takeoff runway, no less wide than the runway and centered upon the extended centerline of the runway, able to support the airplane during an aborted takeoff without causing structural damage to the airplane. It is designated by the airp

Names and Identifiers:	
id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String50)	The name of the feature.
alias (String60)	An alternative or former name by which the feature is referred.
Attributes:	
description (String255)	Description of the feature
length (Real)	The length of the designated stopway from the end of the runway
width (Real)	The overall width of the feature
runwayEndDesignator (String3)	Specify runwayEnd designator to identify which runway end the Stopway is on.
surfaceType (<u>CodeSurfaceType</u>)	A classification of airfield pavement surfaces for Airport Obstruction Charts[NGS].
surfaceMaterial (CodeSurfaceMaterial)	A code indicating the composition of the related surface[NFDC].
surfaceCondition (CodeSurfaceCondition)	A description of the serviceability of the pavement[NFDC].
<u>Metadata:</u>	
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
dataSource (CodeDataSource)	The source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
<u>System Keys:</u>	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Airfield : Taxiway Element

(Database Feature Class Name = TaxiwayElement; FAA=TaxiwayElement) Geometry Type: Polygon Accuracy: +/-3Ft. Sensitivity: Restricted Defined paths on an airport established for the taxiing of aircraft (excluding apron taxilanes) and intended to provide a link between one part of the airport and another. [AC 150-5300-13].

Names and Identifiers:

ames and Identifiers:	
id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String50)	Name of the feature.
taxiwayId (String50)	Taxiway element name. The name should be identical to the corresponding taxiway name. Multiple taxiway elements can have the same name. If two or more taxiways intersect the taxiway element intersection will be named after the predominant taxiway. If two[FAA Airports GIS].
alias (String60)	An alternative or former name by which the feature is referred.
ttributes:	
description (String255)	Description of the feature.[FGDC].
taxiwayType (<u>CodeTaxiwayType</u>)	The type of taxiway.
surfaceMaterial (CodeSurfaceMaterial)	A code indicating the composition of the related surface[NFDC].
pavementClassificationNumber (String10)	A number which expresses the relative load carrying capacity of a pavement in terms of a standard single wheel load.[AC 150/5335-5A].
surfaceCondition (CodeSurfaceCondition)	A description of the serviceability of the pavement[NFDC].
directionality (CodeDirectionality)	Code used to define the directionality of traffic on the element.
sequence (String5)	Sequential number of the taxiway element.
surfaceType (CodeSurfaceType)	Type of different materials used to construct the surface.[NGS].
designGroup (<u>CodeDesignGroup</u>)	Identifies the design group used in the design of the taxiway[AC 150/5300-13].
length (Real)	Provides the length of the taxiwayElement polygon as measured along the centerline.[SDSFIE Feature Table].
width (Real)	Width of the taxiway.[SDSFIE Feature Table].
maximumSpeed (Integer)	Identifies the maximum speed for the taxiwayElement.
wingspan (Real)	Identifies the maximum aircraft wingspan which can traverse the taxiwayElement.[SDSFIE Feature Table].
etadata:	
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
dataSource (CodeDataSource)	The source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
vstem Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
	An identifier used to refer to a metadata record that provide additional information about

Airfield : Taxiway Holding Position

(Database Feature Class Name = TaxiwayHoldingPosition; FAA=TaxiwayHoldingPosition) Geometry Type: Line Accuracy: +/-3Ft. Sensitivity: Restricted A designated position at which taxiing aircraft and vehicles shall stop and hold position, unless otherwise authorized by the aerodrome control tower. [RTCA DO-272].

Nan	nes and Identifiers:	
	id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
	name (String50)	The name of the feature.
	alias (String60)	An alternative or former name by which the feature is referred.
	runwayDesignator (String7)	The designator for the approaching runway.

taxiwayDesignator (String4) The designator for the taxiway. Attributes: description (String255) A description of the feature. lowVisibilityCategory (CodeLowVisibilityCategory) Code describing the Low visibility operation category of the TaxiwayHoldingPosition. Metadata: The type of project or work activity that installed or first recorded the location of this projectType (CodeProjectType) feature. A unique identifier associated with the project or work activity that installed or first projectId (String20) recorded the location of this feature. status (CodeStatus) A temporal description of the operational status of the feature. Alternative (Integer) Discriminator used to tie features of a plan or proposal together into a version. userFlag (String254) An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE]. dataSource (CodeDataSource) The source of the data in this record. sourceStatement (String255) A statement providing additional details about the source of the data. editorName (String50) The name of the individual who last edited this data. lastUpdate (Date) The date upon which any data associated with this record was last updated. System Keys: A globally unique identifier applied to each feature in the database for reference. guid (String60) metaId (Integer) An identifier used to refer to a metadata record that provide additional information about the data in this record.

Airfield : Taxiway Intersection

(Database Feature Class Name = TaxiwayIntersection; FAA=TaxiwayIntersection) Geometry Type: Polygon Accuracy: +/-3Ft. Sensitivity: Restricted A junction of two or more taxiways (Source: ICAO Annex 14, Volume 1, Aerodromes, Chapter 1, page 5). [ICAO Annex 14 (Aerodromes), Chapter 1, page 5].

Names and Identifiers:	
id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String40)	The name of the feature.
alias (String60)	An alternative or former name by which the feature is referred.
<u>Attributes:</u>	
description (String255)	Description of the feature.
Metadata:	
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
dataSource (CodeDataSource)	The source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Airfield : Touchdown Lift Off

(Database Feature Class Name = TouchdownLiftOff; FAA=TouchDownLiftOff)

Geometry Type: Polygon Accuracy: +/-1Ft. Sensitivity: Unclassified A load-bearing, generally paved area, normally centered in the Final Approach and Takeoff Area (FATO), on which a helicopter lands or takes off. The Touchdown and Lift-off Area (TLOF) is frequently called a helipad or helideck.

Names and Identifiers:	
id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String50)	The name of the feature.
alias (String60)	An alternative or former name by which the feature is referred.
Attributes:	
description (String255)	A brief description of the area and any special characteristics.
length (Real)	The overall length of the TLOF.
width (Real)	The overall width of the TLOF.
surfaceType (<u>CodeSurfaceType</u>)	A classification of airfield pavement surfaces for Airport Obstruction Charts[NGS].
surfaceMaterial (CodeSurfaceMaterial)	A code indicating the composition of the related surface[NFDC].
surfaceCondition (CodeSurfaceCondition)	A description of the serviceability of the pavement[NFDC].
designHelicopter (String20)	A generic helicopter that reflects the maximum weight, maximum contact load/minimum contact area, overall length, rotor diameter, etc. of all helicopters expected to operate at the heliport.[AC 150/5390-2].
gradient (Real)	The gradient of the TLOF surface designed to provide positive drainage.
Metadata:	
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
dataSource (CodeDataSource)	The source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Data Set: Airspace

Airspace : Landmark Segment

(Database Feature Class Name = LandmarkSegment; FAA=LandmarkSegment)

Geometry Type: Line Accuracy: +/-5Ft. Sensitivity: Unclassified Features providing geographic orientation near the airport vicinity. The features may or may not have obstruction value. Collect geographic features of landmark value aiding in geographic orientation as individual polyline objects. [NGS*].

Names and Identifiers:	
id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String40)	The name of the feature.
alias (String60)	An alternative or former name by which the feature is referred.

Attributes:

Attibutes.	
description (String255)	Description of the feature.
landmarkType (<u>CodeLandmarkType</u>)	Type of landmark feature
<u>Metadata:</u>	
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (CodeStatus)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
dataSource (CodeDataSource)	The source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
<u>System Keys:</u>	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metald (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Airspace : Obstacle

(Database Feature Class Name = Obstacle; FAA=Obstacle)

Geometry Type: Point Accuracy: +/-20Ft. Sensitivity: Restricted All fixed (whether temporary or permanent) and mobile objects, or parts thereof, that are located on an area intended for the surface movement of aircraft, penetrating an Obstruction Identification Surface (OIS), or selected as representative object. Use [NGS].

nes and Identifiers:	
id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String50)	Name of the feature.
alias (String60)	An alternative or former name by which the feature is referred.
obstructionNumber (String30)	Provide the Aeronautical Study Number assigned by the FAA in the appropriate format (if known).
ributes:	
description (String255)	Description of the feature.
obstacleType (<u>CodeObstacleType</u>)	The type of object.
obstacleSource (CodeObstacleSource)	Identify how or where the object was identified.
aboveGroundLevel (Real)	The vertical distance from the ground to the highest point of the object.
distanceFromDisplacedThreshold (Real)	Distance measured along runway centerline or centerline extended from a Displaced Threshold to point abeam the object. A negative distance indicates that the object is on the touchdown side of the runway approach end. This data is not provided for objects
distanceFromRunwayCenterline (Real)	Shortest distance from the runway centerline or centerline extended to the object. L (LEFT) or R (RIGHT) is relative to an observer facing forward in a landing aircraft. Th data is not provided for objects penetrating the horizontal, conical and runway
distanceFromRunwayEnd (Real)	Distance measured along runway centerline or centerline extended from the physical er to point abeam the object. A negative distance indicates that the object is on the touchdown side of the runway approach end. This data is not provided for objects pene
groupCode (String75)	A text code indicating that the object consists of a group of objects of the same type. For example, a group of trees, a group of buildings, a group of antennas, etc[AIXM].
heightAboveAirport (Integer)	Height above airport the official airport elevation point[NGS].
heightAboveRunway (Real)	Height above runway physical end for objects located underneath the approach surface
heightAboveTouchdownZone (Real)	Height above touchdown zone elevation for objects located underneath the approach surface.
lightCode (CodeBoolean)	A code indicating that the obstacle is lighted[AIXM].
markingFeatureType (CodeMarkingFeatur	The type of the marking

penValSpecified (Integer)	The elevation difference between the height of the object and the specified surface. Used to identify the amount of penetration of the main OIS.
penValSupplemental (Integer)	The elevation difference between the height of the object and the supplemental surface. Used to identify the amount of penetration to a secondary OIS.
ellipsoidHeight (Real)	The height above the reference ellipsoid, measured along the ellipsoidal outer normal through the point in question.
disposition (String16)	What was done to obstruction[Airport].
oisSurfaceCondition (CodeOisSurfaceCo	ndition) The Obstruction Identification Surface that Obstructing Area represents
frangible (CodeBoolean)	A Boolean indicating whether the object is frangible.
faaCoordinationCode (CodeBoolean)	A Boolean indicating whether the obstruction has received FAA coordination or review.
Metadata:	
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
dataSource (<u>CodeDataSource</u>)	The source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record

Airspace : Obstruction Area

(Database Feature Class Name = ObstructionArea; FAA=ObstructionArea)

Geometry Type: PolygonAccuracy: +/-20Ft.Sensitivity: RestrictedPolygon features penetrating the plane of the obstruction identification surface (OIS) or selected asrepresentative objects. Determine the type of obstructing area by the predominant feature within thegrouped area. Penetrating groups of trees, ground, b

Names and Identifiers:	
id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String50)	Name of the feature.
alias (String60)	An alternative or former name by which the feature is referred.
obstructionNumber (String30)	Provide the Aeronautical Study Number assigned by the FAA in the appropriate format (if known).
Attributes:	
description (String255)	Description of the feature
obstacleType (<u>CodeObstacleType</u>)	The type of object.
obstacleSource (<u>CodeObstacleSource</u>)	Identify how or where the object was identified.
aboveGroundLevel (Real)	The vertical distance from the ground to the highest point of the object.
distanceFromDisplacedThreshold (Real)	Distance measured along runway centerline or centerline extended from a Displaced Threshold to point abeam the object. A negative distance indicates that the object is on the touchdown side of the runway approach end. This data is not provided for objects
distanceFromRunwayCenterline (Real)	Shortest distance from the runway centerline or centerline extended to the object. L (LEFT) or R (RIGHT) is relative to an observer facing forward in a landing aircraft. This data is not provided for objects penetrating the horizontal, conical and runway
distanceFromRunwayEnd (Real)	Distance measured along runway centerline or centerline extended from the physical end to point abeam the object. A negative distance indicates that the object is on the touchdown side of the runway approach end. This data is not provided for objects pene
groupCode (String75)	A text code indicating that the object consists of a group of objects of the same type. For

	example, a group of trees, a group of buildings, a group of antennas, etc[AIXM].
heightAboveAirport (Integer)	Height above airport the official airport elevation point[NGS].
heightAboveRunway (Real)	Height above runway physical end for objects located underneath the approach surface.
heightAboveTouchdownZone (Real)	Height above touchdown zone elevation for objects located underneath the approach surface[NGS].
lightCode (<u>CodeBoolean</u>)	A code indicating that the obstacle is lighted[AIXM].
markingFeatureType (CodeMarkingFeatur	reType) The type of the marking
penValSpecified (Integer)	The elevation difference between the height of the object and the specified surface. Used to identify the amount of penetration of the main OIS.
penValSupplemental (Integer)	The elevation difference between the height of the object and the supplemental surface. Used when to identify the amount of penetration to a secondary OIS.
obstructionAreaType (CodeObstructionAr	<u>eaType</u>) Type of obstructing area.
disposition (String255)	The disposition of the airspace obstruction.
oisSurfaceCondition (CodeOisSurfaceCon	dition) The Obstruction Identification Surface that Obstructing Area represents
length (Real)	The overall length of the obstruction.
width (Real)	The overall width of the obstruction.
frangible (<u>CodeBoolean</u>)	A Boolean indicating whether the object is frangible.
faaCoordinationCode (CodeBoolean)	A Boolean indicating whether the obstruction has received FAA coordination or review.
ellipsoidHeight (Real)	The height above the reference ellipsoid, measured along the ellipsoidal outer normal through the point in question.
<u>Metadata:</u>	
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
dataSource (CodeDataSource)	The source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Airspace : Obstruction Identification Surface

(Database Feature Class Name = ObstructionIdSurface; FAA=ObstructionIdSurface)Geometry Type: PolygonAccuracy: +/-Ft.Sensitivity: RestrictedA derived imaginary Obstruction Identification Surface defined by the FAA. [NGS].

A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
A commonly used name for the zone.
An alternative or former name by which the feature is referred.
Description of the feature
Specify runway designator for the Vertically Guided Runway Primary Surface (VGRPS), for the Vertically Guided Primary Connection Surface (VGPCS), and for the Vertically Guided Approach Transitional Surface (VGATS).
Specify runwayEnd designator for the Vertically Guided Approach Surface (VGAS) and for the Vertically Guided Protection Surface (VGPS).[FAA AC150/5300-18b].
Surface Type refers to the general type of surface used to analyze features. Surfaces of the same type usually are similar in nature with respect to certain aspects of the surface

	definition or may merely be representative of different programs within the
oisZoneType (CodeOisZoneType)	Specifies zones within Obstruction Identification Surfaces (OIS)
oisSurfaceCondition (CodeOisSurfaceCondi	tion) The Obstruction Identification Surface that Obstructing Area represents
safetyRegulation (String20)	An identifier for the safety regulations in effect within the zone.
zoneUse (String50)	A description of the use of the zone.
approachGuidance (CodeApproachGuidance	e) Defines the type of approach guidances the OIS is meant to protect.
slope (Real)	The low to high gradient within the airspace expressed as a ratio x:1, where X is the slope value. For example 40:1 for departures.
<u>Metadata:</u>	
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (CodeStatus)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
dataSource (CodeDataSource)	The source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Airspace : Runway Protection Area

(Database Feature Class Name = RunwayProtectArea; FAA=RunwayProtectArea)

Geometry Type: Polygon Accuracy: +/-Ft. Sensitivity: Confidential An area beyond the takeoff runway under control of airport authorities within which terrain or fixed obstacles may not extend above specified limits. These areas may be required for certain turbine-powered operations, and the size and upward slope of the

	F
Names and Identifiers:	
id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String50)	The name of the feature.
alias (String60)	An alternative or former name by which the feature is referred.
Attributes:	
description (String255)	Description of the feature
length (Real)	The length of clearway as reported by the FAA Airport/Facility Directory and the Aeronautical Information Publication (AIP) for international airports
type (<u>CodeRunwayProtectionAreaType</u>)	Code indicating the type of runway protection area being classified.
<u>Ietadata:</u>	
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
dataSource (<u>CodeDataSource</u>)	The source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.

lastUpdate (Date)	The date upon which any data associated with this record was last updated.
<u>System Keys:</u>	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Data Set: Cadastral

Cadastral : Airport Boundary

(Database Feature Class Name = AirportBoundary; FAA=AirportBoundary)Geometry Type: PolygonAccuracy: +/-3Ft.Sensiti

Geometry Type: Polygon Accuracy: +/-3Ft. Sensitivity: Restricted A polygon, or a set of polygons, that encompasses all property owned or controlled by the airport for aviation purposes. [AC 150/5300-13, Appendix 7, Order 5190.6A, Section 5].

mes and Identifiers:	
id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String50)	The name of the feature.
faaSiteNumber (String8)	This is a number that contains a one-letter suffix. The number is assigned to the airport in ascending order, depending on the state and the associated city. If you do not know or have access to the appropriate site number contact your airports district/r[FAA AC 150/5200-35].
alias (String60)	An alternative or former name by which the feature is referred.
faaLocationId (String4)	The location identifier assigned to the feature by FAA
iataCode (String4)	The location identifier assigned to the feature by International Air Transport Association (IATA)
icaoCode (String4)	The location identifier assigned to the airport by the ICAO
ributes:	
description (String255)	Description of the feature
airportFacilityType (CodeAirportFacility]	Type) The type of airfield.
operationsType (<u>CodeOperationsType</u>)	The type of operations permitted on the airfield
owner (Enumeration60)	The type of owner of the airfield
tadata:	
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user define system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
dataSource (CodeDataSource)	The source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
tem Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Cadastral : Airport Parcel

(Database Feature Class Name = Airport	rtParcel; FAA=AirportParcel)	
Geometry Type: Polygon	Accuracy: +/-Ft.	Sensitivity: Restricted

A tract of land within the airport boundary acquired from surplus property, Federal funds, local funds, etc. Include easement interests in areas outside the fee property line as an airport parcel. [FAA Order 5190.6, Chapter 5].

Names and Identifiers:

id (String40)

name (String50) alias (String60) grantProjectNumber (String30) parcelNumber (String12)

Attributes:

description (String255) authority (String75) acquisitionType (<u>CodeAcquisitionType</u>) costToAcquire (Real) dateAcquired (String8)

howAcquired (<u>CodeHowAcquired</u>)

marketValue (Real) yearAssessed (Integer) yearBuilt (Integer) useOfParcel (String16) acquisitionPurpose (String50) area (Real) assessedValue (Real) deedReference (String30)

legalDescription (String240) passengerChargeNumber (String30) previousOwner (String75)

Metadata:

projectType (<u>CodeProjectType</u>)

projectId (String20)

status (<u>CodeStatus</u>) Alternative (Integer) userFlag (String254)

dataSource (<u>CodeDataSource</u>) sourceStatement (String255) editorName (String50) lastUpdate (Date) <u>System Keys:</u> guid (String60) metaId (Integer)

A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value) Name of the feature. An alternative or former name by which the feature is referred. The grant number if Federal funds were used to acquire the parcel Any locally used number to identify the parcel. Description of the feature The owner of the airport parcel The type of acquisition used to acquire the parcel The amount paid to the owner in U.S. dollars for the parcel The date the parcel was acquired. Format for date is YYYYMMDD (i.e. September 15, 1994 = 19940915). The manner in which the parcel was acquired The assessed market value of the parcel in U.S. dollars when it was acquired The year in which the market value assessment was made The year in which the most recent structure(s) were built on the parcel The current primary use of the airport parcel. Acquisition purpose The size of the area, zone, or polygon in square units. The most recent assessed value of the airport parcel. Reference to where the deed to the airport parcel is recorded in such information as Plat Book and Page. The complete legal description of the property as it appears in the deed. Passenger Facility Charge Number Previous owner of the airport parcel The type of project or work activity that installed or first recorded the location of this feature A unique identifier associated with the project or work activity that installed or first recorded the location of this feature. A temporal description of the operational status of the feature. Discriminator used to tie features of a plan or proposal together into a version. An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE]. The source of the data in this record. A statement providing additional details about the source of the data.

The name of the individual who last edited this data.

The date upon which any data associated with this record was last updated.

A globally unique identifier applied to each feature in the database for reference. An identifier used to refer to a metadata record that provide additional information about the data in this record.

Cadastral : County

(Database Feature Class Name = County; FAA=County)Geometry Type: PolygonAccuracy: +/-Ft.Sensitivity: RestrictedBoundary line of the land and water under the right, power, or authority of the county government.[SDSFIE].

Names and Identifiers:

id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String50)	Name of the feature.
politicalName (String30)	The common name associated with the property area.
alias (String60)	An alternative or former name by which the feature is referred.
Attributes:	
description (String255)	The description of the area.
Metadata:	
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
dataSource (CodeDataSource)	The source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Cadastral : Easements And Rights of Way

(Database Feature Class Name = EasementsAndRightsofWay; FAA=EasementsAndRightsofWay)Geometry Type: PolygonAccuracy: +/-Ft.Sensitivity: ConfidentialA parcel of land for which formal or informal deed easement rights exist.[SDSFIE (modified)].

Names and Identifiers:	
id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String50)	Name of the feature.
alias (String60)	An alternative or former name by which the feature is referred.
Attributes:	
status (CodeStatus)	The status of the parcel. (Active, inactive, terminated)
description (String255)	A brief description of the feature.
purpose (String30)	Project purpose for which the easement was acquired.
<u>Metadata:</u>	
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (CodeStatus)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
dataSource (<u>CodeDataSource</u>)	The source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about

the data in this record.

Cadastral : FAA Region

(Database Feature Class Name = FaaRegionArea; FAA=FAARegionArea)

Geometry Type: Polygon Accuracy: +/-Ft.

Sensitivity: Unclassified

This feature depicts the FAA regions. [SDSFIE].

Names and Identifiers:	
id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String50)	Name of the FAA region.
alias (String60)	An alternative or former name by which the feature is referred.
Attributes:	
description (String255)	Description of the FAA region.
Metadata:	
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
dataSource (<u>CodeDataSource</u>)	The source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Cadastral : Land Use

 (Database Feature Class Name = LandUse; FAA=LandUse)

 Geometry Type: Polygon
 Accuracy: +/-Ft.

 A description of the human use of land and water. [SDSFIE].

 Names and Identifiers:

Names and Identifiers.	
id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String50)	Name of the land use area.
alias (String60)	An alternative or former name by which the feature is referred.
Attributes:	
description (String255)	Description of the land use area.
useType (<u>CodeLandUseType</u>)	The way in which the land is being used.
Metadata:	
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
dataSource (CodeDataSource)	The source of the data in this record.

sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Cadastral : Lease Area

 (Database Feature Class Name = LeaseZone; FAA=LeaseZone)

 Geometry Type: Polygon
 Accuracy: +/-Ft.
 Sensitivity: Unclassified

 A parcel of land or area within a building that is leased by an individual, agency, or organization for their use. [SDSFIE].
 Sensitivity: Unclassified

Names and Identifiers:	
id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String50)	Name of the feature.
floorLevel (CodeFloorLevel)	The level of a building on which the feature exists.
tenantName (String75)	The current name of the tenant occupying the leased parcel.
alias (String60)	An alternative or former name by which the feature is referred.
cadPage (String10)	Reference to the hard copy page which this data has traditionally be plotted on.
Attributes:	
lmsId (String10)	A foreign key link to the airports lease management system.
description (String255)	A brief description of the feature.
class (CodeSpaceClass)	The class of space utilization.
type (<u>CodeSpaceType</u>)	The type of space utilization.
permitUse (String20)	Permitted use of the leased parcel.
leasedArea (Real)	Area accounted for in the lease for a parcel.
actualArea (Real)	Actual measured area of the leased parcel.
expectedLeaseExpirationDate (String8)	The date the lease is expected to expire. Format for date is YYYYMMDD (i.e. September 15, 1994 = 19940915).
legalDescription (String240)	The complete legal description of the property as it appears in the deed.
status (<u>CodeStatus</u>)	The status of the parcel. (Active, inactive, terminated)
subtenantName (String75)	The current name of the subtenant occupying the leased parcel or interior space.
tenantId (Integer)	A unique numeric ID assigned to the tenant occupying this space.
classId (Integer)	A unique numeric ID assigned to the space class.
typeId (Integer)	A unique numeric ID assigned to the space type.
Metadata:	
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
dataSource (CodeDataSource)	The source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
<u>System Keys:</u>	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
levelIdentifier (Integer)	A numeric identifier assigned to the building level.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about

the data in this record.

Cadastral : Lease Area

(Database Feature Class Name = LeaseZone; FAA=LeaseZone)Geometry Type: PolygonAccuracy: +/-Ft.A parcel of land or area within a building that is leased by an individual, agency, or organization for theiruse. [SDSFIE].

id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String50)	Name of the feature.
floorLevel (<u>CodeFloorLevel</u>)	The level of a building on which the feature exists.
tenantName (String75)	The current name of the tenant occupying the leased parcel.
alias (String60)	An alternative or former name by which the feature is referred.
cadPage (String10)	Reference to the hard copy page which this data has traditionally be plotted on.
ttributes:	Reference to the nard copy page which this data has traditionary be proted on.
lmsId (String10)	A foreign key link to the airports lease management system.
description (String255)	A brief description of the feature.
class (CodeSpaceClass)	The class of space utilization.
type (<u>CodeSpaceType</u>)	The type of space utilization.
permitUse (String20)	Permitted use of the leased parcel.
leasedArea (Real)	Area accounted for in the lease for a parcel.
actualArea (Real)	Actual measured area of the leased parcel.
expectedLeaseExpirationDate (String8)	The date the lease is expected to expire. Format for date is YYYYMMDD (i.e.
expected Lease Expiration Date (Strings)	September 15, $1994 = 19940915$).
legalDescription (String240)	The complete legal description of the property as it appears in the deed.
status (<u>CodeStatus</u>)	The status of the parcel. (Active, inactive, terminated)
subtenantName (String75)	The current name of the subtenant occupying the leased parcel or interior space.
tenantId (Integer)	A unique numeric ID assigned to the tenant occupying this space.
classId (Integer)	A unique numeric ID assigned to the space class.
typeId (Integer)	A unique numeric ID assigned to the space type.
letadata:	
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
dataSource (<u>CodeDataSource</u>)	The source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
vstem Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
levelIdentifier (Integer)	A numeric identifier assigned to the building level.
metald (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Cadastral : Municipality

(Database Feature Class Name =	Municipality; FAA=Municipality)	
Geometry Type: Polygon	Accuracy: +/-Ft.	Se

Sensitivity: Restricted

Boundary line of the land and water under the right, power, or authority of the municipal government. [SDSFIE].

Names and Identifiers:	
id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String50)	The common name associated with the property area.
alias (String60)	An alternative or former name by which the feature is referred.
Attributes:	
description (String255)	The description of the area.
<u>Metadata:</u>	
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
dataSource (<u>CodeDataSource</u>)	The source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
<u>System Keys:</u>	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Cadastral : Parcel

(Database Feature Class Name = Parcel; FAA=Parcel)Geometry Type: PolygonAccuracy: +/-Ft.Sensitivity: RestrictedA single cadastral unit, which is the spatial extent of the past, present, and future rights and interests inreal property and the geographic framework to support the description of the spatial extent. [SDSFIE].

Na	mes and Identifiers:	
	id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
	alias (String60)	An alternative or former name by which the feature is referred.
	parcelNumber (String12)	Any locally used number to identify the parcel.
	grantProjectNumber (String30)	The grant number if Federal funds were used to acquire the parcel
At	tributes:	
	area (Real)	The size of the area, zone, or polygon in square units.
	useOfParcel (String16)	The current primary use of the parcel.
	name (String50)	The common name associated with the property area.
	description (String255)	The description of the area.
	legalDescription (String240)	The complete legal description of the property as it appears in the deed.
	dateAcquired (String8)	The date the parcel was acquired by the current owner. Format for date is YYYYMMDD (i.e. September 15, 1994 = 19940915).
	assessedValue (Real)	The most recent assessed value of the parcel.
	deedReference (String30)	Reference to where the deed to the parcel is recorded in such information as Plat Book and Page.
	authority (String75)	The owner of the parcel
	previousOwner (String75)	Previous owner of the parcel
	acquisitionType (CodeAcquisitionType)	The type of acquisition used to acquire the parcel
	acquisitionPurpose (String50)	Acquisition purpose
	costToAcquire (Real)	The amount paid to the owner in U.S. dollars for the parcel

howAcquired (<u>CodeHowAcquired</u>) marketValue (Real) yearAssessed (Integer) yearBuilt (Integer)

<u>Metadata:</u>

projectType (CodeProjectType)

projectId (String20)

status (<u>CodeStatus</u>) Alternative (Integer) userFlag (String254)

editorName (String50)

dataSource (CodeDataSource)

sourceStatement (String255)

lastUpdate (Date)

System Keys:

guid (String60) metaId (Integer) A statement providing additional details about the source of the data. The name of the individual who last edited this data. The date upon which any data associated with this record was last updated. A globally unique identifier applied to each feature in the database for reference. An identifier used to refer to a metadata record that provide additional information about the data in this record.

An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be

Cadastral : State

(Database Feature Class Name = State; FAA=State)Geometry Type: PolygonAccuracy: +/-Ft.Boundary line of the land and water under the right, power, or authority of the state government.[SDSFIE].

feature.

The manner in which the parcel was acquired

recorded the location of this feature.

The source of the data in this record.

used to store the subject items data.[SDSFIE].

The year in which the market value assessment was made

A temporal description of the operational status of the feature.

The assessed market value of the parcel in U.S. dollars when it was acquired

The type of project or work activity that installed or first recorded the location of this

A unique identifier associated with the project or work activity that installed or first

Discriminator used to tie features of a plan or proposal together into a version.

The year in which the most recent structure(s) were built on the parcel

Names and Identifiers:	
id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String50)	The common name associated with the property area.
alias (String60)	An alternative or former name by which the feature is referred.
Attributes:	
description (String255)	The description of the area.
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (CodeStatus)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
dataSource (CodeDataSource)	The source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
<u>System Keys:</u>	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Cadastral : Zoning

(Database Feature Class Name = Zoning; FAA=Zoning)

Geometry Type: Polygon Accuracy: +/-Ft. Sensitivity: Restricted A parcel of land zoned specifically for real estate and land management purposes; more specifically for commercial, residential, or industrial use. [SDSFIE].

Names and Identifiers:	
id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String50)	Name of the feature.
alias (String60)	An alternative or former name by which the feature is referred.
<u>Attributes:</u>	
description (String255)	A brief description of the feature.
status (<u>CodeStatus</u>)	The status of the parcel. (Active, inactive, terminated)
landOwnerRestriction (String60)	Codes determining the land owner restriction for the parcel.[SDSFIE Feature Table].
zoningClassification (CodeZoningClass)	The zoning classification of the parcel.
<u>Metadata:</u>	
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (CodeStatus)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
dataSource (CodeDataSource)	The source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
<u>System Keys:</u>	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Data Set: Environmental

Environmental : Environmental Contamination Area

(Database Feature Class Name = EnvironmentalContaminationArea;FAA=EnvironmentalContaminationArea)Geometry Type: PolygonAccuracy: +/-5Ft.Sensitivity: Restricted

A facility or other locational entity, (as designated by the Environmental Protection Agency) that is regulated or monitored because of environmental concerns. [SDSFIE].

Names and Identifiers:	
id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String50)	The name of a specific facility.
alias (String60)	An alternative or former name by which the feature is referred.
Attributes:	
description (String255)	A description of the source of the pollution.
environmentalHazardCategory (String16)	Indicates the broad category or type of the most prevalent or serious environmental hazard present at the site.
pollutantReleaseType (String16)	A descriptor for the type of pollutant release experienced.
severity (String16)	A descriptor for the severity of the pollution.
remediationUrgency (String16)	A code indicating the urgency for accomplishing a site remediation project.
toxicStatusOfPollutant (String16)	A descriptor for the toxic status of the pollution.
status (CodeStatus)	The code indicating whether the facility status is Active or Inactive.
dateFound (String8)	The date the pollution was discovered. Format for date is YYYYMMDD (i.e. September

	15, 1994 = 19940915)
cause (String16)	A code indicating the cause of the pollution.
pollutantSource (String16)	The actual or suspected source of the pollutant.
Metadata:	
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (CodeStatus)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
dataSource (CodeDataSource)	The source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
<u>System Keys:</u>	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Environmental : Fauna Hazard Area

(Database Feature Class Name = FaunaHazardArea; FAA=FaunaHazardArea)

Geometry Type: Polygon Accuracy: +/-5Ft. Sensitivity: Restricted An area where there are hazards due to wildlife activities. This includes bird aircraft strike hazard (BASH) areas, and deer strike areas. [SDSFIE].

Names and Identifiers:		
id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)	
name (String50)	Name of the feature.	
alias (String60)	An alternative or former name by which the feature is referred.	
Attributes:		
description (String255)	A description or other unique information concerning the subject item, limited to 240 characters.	
hazardType (<u>CodeHazardType</u>)	A descriptor of the type of the hazard.	
<u>Metadata:</u>		
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.	
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.	
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.	
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.	
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].	
dataSource (CodeDataSource)	The source of the data in this record.	
sourceStatement (String255)	A statement providing additional details about the source of the data.	
editorName (String50)	The name of the individual who last edited this data.	
lastUpdate (Date)	The date upon which any data associated with this record was last updated.	
System Keys:		
guid (String60)	A globally unique identifier applied to each feature in the database for reference.	
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.	

Environmental : Flood Plain

(Database Feature Class Name = FloodZone; FAA=FloodZone)

Geometry Type: Polygon Accuracy: +/-5Ft.

Sensitivity: Unclassified

Areas subject to 100-year, 500-year and minimal flooding. [SDSFIE].

A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)	
Name of the feature.	
An alternative or former name by which the feature is referred.	
Description of the feature.	
The zoning classification of the area	
The type of project or work activity that installed or first recorded the location of this feature.	
A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.	
A temporal description of the operational status of the feature.	
Discriminator used to tie features of a plan or proposal together into a version.	
An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].	
The source of the data in this record.	
A statement providing additional details about the source of the data.	
The name of the individual who last edited this data.	
The date upon which any data associated with this record was last updated.	
A globally unique identifier applied to each feature in the database for reference.	
An identifier used to refer to a metadata record that provide additional information about the data in this record.	

Environmental : Flora Species Site

(Database Feature Class Name = FloraSpeciesSite; FAA=FloraSpeciesSite)Geometry Type: PointAccuracy: +/-5Ft.Sensitivity: UnclassifiedThe specific location where an individual flora species or an aggregate of flora species has been
identified. [SDSFIE].Sensitivity: Unclassified

Names and Identifiers:		
id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)	
name (String50)	Name of the feature.	
alias (String60)	An alternative or former name by which the feature is referred.	
Attributes:		
description (String255)	Any brief description of the feature.	
plantType (String16)	A descriptor of the type of flora.	
plantHeight (Real)	The average height of the flora species.	
endangeredSpeciesActSite (<u>CodeBoolean</u>)	Defines if the habitat has been designated as a critical habitat under (C) the Endangered species Act or has not been so designated (N).	
<u>Metadata:</u>		
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.	
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.	
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.	
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.	
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined	

	system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
dataSource (CodeDataSource)	The source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
<u>System Keys:</u>	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Environmental : Flora Habitat Area

 (Database Feature Class Name = ForestStandArea; FAA=ForestStandArea)

 Geometry Type: Polygon
 Accuracy: +/-5Ft.
 Sensitivity: Confidential

 A forest flora community with similar characteristics. [SDSFIE].

 Names and Identifiers:
 id (String40)

 A unique identifier used by people to refer to this feature (note: this is not a system

id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)	
name (String50)	Name of the feature.	
alias (String60)	An alternative or former name by which the feature is referred.	
Attributes:		
description (String255)	A description of the flora species.	
habitatCategory (String16)	Discriminator - The designation or type of the special wildlife habitat.	
<u>Metadata:</u>		
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.	
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.	
status (CodeStatus)	A temporal description of the operational status of the feature.	
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.	
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].	
dataSource (CodeDataSource)	The source of the data in this record.	
sourceStatement (String255)	A statement providing additional details about the source of the data.	
editorName (String50)	The name of the individual who last edited this data.	
lastUpdate (Date)	The date upon which any data associated with this record was last updated.	
System Keys:		
guid (String60)	A globally unique identifier applied to each feature in the database for reference.	
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.	

Environmental : Hazardous Material Storage Site

(Database Feature Class Name = HazMatStorageSite; FAA=HazardousMaterialStorageSite)Geometry Type: PointAccuracy: +/-5Ft.Sensitivity: UnclassifiedA defined or bounded geographical area designated and used for the storage of contained hazardousmaterials. [SDSFIE].

Names and Identifiers:	
id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String50)	Name of the feature.
alias (String60)	An alternative or former name by which the feature is referred.
<u>Attributes:</u>	
description (String255)	A description or other unique information concerning the subject item, limited to 240 characters.

storeHazardousMaterialCategory (<u>CodeHazardCategory</u>) stored. The general type or category of contained hazardous material

Metadata:

projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.	
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.	
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.	
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.	
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].	
dataSource (<u>CodeDataSource</u>)	The source of the data in this record.	
sourceStatement (String255)	A statement providing additional details about the source of the data.	
editorName (String50)	The name of the individual who last edited this data.	
lastUpdate (Date)	The date upon which any data associated with this record was last updated.	
<u>System Keys:</u>		
guid (String60)	A globally unique identifier applied to each feature in the database for reference.	
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.	

Environmental : Noise Contour

(Database Feature Class Name = NoiseContour; FAA=NoiseContour) Geometry Type: Polygon Accuracy: +/-Ft.

Geometry Type: Polygon Accuracy: +/-Ft. Sensitivity: Confidential An area that describes the noise attributed to operations. For aircraft operations, the Day/Night average sound level (Ldn) descriptor is typically used to categorize noise levels. [14 CFR Part 150].

A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)	
Name of the feature.	
An alternative or former name by which the feature is referred.	
A description for the noise zone.	
The decibel level of the contour line	
The type of project or work activity that installed or first recorded the location of this feature.	
A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.	
A temporal description of the operational status of the feature.	
Discriminator used to tie features of a plan or proposal together into a version.	
An operator defined work area. This attribute can be used by the operator for user define system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].	
The source of the data in this record.	
A statement providing additional details about the source of the data.	
The name of the individual who last edited this data.	
The date upon which any data associated with this record was last updated.	
A globally unique identifier applied to each feature in the database for reference.	
An identifier used to refer to a metadata record that provide additional information about the data in this record.	

Environmental : Noise Incident

(Database Feature Class Name = NoiseIncident; FAA=NoiseIncident)

Accuracy: +/-50Ft.

Sensitivity: Restricted

A formal complaint by an individual or group regarding excessive noise resulting from airport operations.

1 2		
Names and Identifiers:		
id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)	
name (String50)	Name of the feature.	
alias (String60)	An alternative or former name by which the feature is referred.	
Attributes:		
description (String255)	A general description of the complete incident, including any reference material.	
reporter (String50)	The name of the individual or organization reporting the incident.	
Metadata:		
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.	
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.	
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.	
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.	
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user define system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].	
dataSource (CodeDataSource)	The source of the data in this record.	
sourceStatement (String255)	A statement providing additional details about the source of the data.	
editorName (String50)	The name of the individual who last edited this data.	
lastUpdate (Date)	The date upon which any data associated with this record was last updated.	
System Keys:		
guid (String60)	A globally unique identifier applied to each feature in the database for reference.	
metald (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.	

Environmental : Noise Monitoring Point

Geometry Type: Point

(Database Feature Class Name = NoiseMonitoringPoint; FAA=NoiseMonitoringPoint)Geometry Type: PointAccuracy: +/-5Ft.Sensitivity: RestrictedThe location of noise sensing equipment or where a noise sample is taken. [SDSFIE].

Names and Identifiers:		
id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)	
name (String50)	Name of the feature.	
alias (String60)	An alternative or former name by which the feature is referred.	
Attributes:		
description (String255)	Description of the feature.	
Metadata:		
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.	
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.	
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.	
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.	
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].	
dataSource (<u>CodeDataSource</u>)	The source of the data in this record.	
sourceStatement (String255)	A statement providing additional details about the source of the data.	
editorName (String50)	The name of the individual who last edited this data.	
lastUpdate (Date)	The date upon which any data associated with this record was last updated.	
System Keys:		

guid (String60) metaId (Integer)	A globally unique identifier applied to each feature in the database for reference. An identifier used to refer to a metadata record that provide additional information about the data in this record.		
Environmental : Sample Collectio	n Point		
(Database Feature Class Name = Sa	mpleCollectionPoint; FAA=SampleCollectionPoint)		
Geometry Type: Point	Accuracy: +/-1Ft. Sensitivity: Confidential		
	or more environmental hazards field samples are collected. [SDSFIE].		
Names and Identifiers:			
id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)		
name (String50)	Name of the feature.		
alias (String60)	An alternative or former name by which the feature is referred.		
companyName (String60)	The name of the company that took the sample.		
Attributes:			
description (String255)	Descriptor providing any additional information to describe the sampling location in text format (e.g., monitoring well located 10 feet northeast of building 624 within spill area). IRPIMS.[SDSFIE Feature Table].		
collectionPointLocation (CodeSample	<u>PointLocation</u>) Code describing the type of location which is undergoing sampling (e.g., bh= borehole, wl=well).		
coordX (Real)	The coordinate in the east-west plane, expressed in decimal degrees.		
coordY (Real)	The coordinate in the north-south plane, expressed in decimal degrees.		
elevation (Real)	Elevation of the point relative to the selected vertical datum.		
Metadata:			
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.		
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.		
dateSampleTaken (Date)	The date on which the sample was taken.		
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.		
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.		
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].		
dataSource (CodeDataSource)	The source of the data in this record.		
sourceStatement (String255)	A statement providing additional details about the source of the data.		
editorName (String50)	The name of the individual who last edited this data.		
lastUpdate (Date)	The date upon which any data associated with this record was last updated.		
<u>System Keys:</u>			
guid (String60)	A globally unique identifier applied to each feature in the database for reference.		
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.		

Environmental : Shoreline

(Database Feature Class Name = Shore)	line; FAA=Shoreline)		
Geometry Type: Polygon	Accuracy: +/-5Ft.	Sensitivity: Restricted	
The boundary where land meets the edge of a large body of fresh or salt water.			
Names and Identifiers:			
id (String40)	A unique identifier used by people to refer to this	s feature (note: this is not a system	
	primary or foreign key value)		

		primary or foreign key value)
	name (String50)	A commonly used name for the shoreline.
	alias (String60)	An alternative or former name by which the feature is referred.
At	tributes:	
	description (String255)	A local description for the shoreline.
	shorelineType (CodeShorelineType)	Discriminator - A value indicating the type or kind of shoreline.

Metadata:

projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
dataSource (<u>CodeDataSource</u>)	The source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Environmental : Wetland

(Database Feature Class Name = Wetland; FAA=Wetland)

Geometry Type: Polygon Accuracy: +/-5Ft. Sensitivity: Restricted Transitional lands between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water. The soils are predominantly saturated with water and the plants and animals that live there are spe

Names and Identifiers:	
id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String50)	Any commonly used name for the wetland.
alias (String60)	An alternative or former name by which the feature is referred.
Attributes:	
description (String255)	A description of the wetland.
featureType (String16)	A descriptor of how the wetland is depicted graphically.
Metadata:	
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
dataSource (CodeDataSource)	The source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metald (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Data Set: Geodetic

Geodetic : Airport Control Point

(Database Feature Class Name = AirportControlPoint; FAA=AirportControlPoint)Geometry Type: PointAccuracy: +/-Ft.Sensitivity: RestrictedA control station established in the vicinity of, and usually on, an airport and tied to the National SpatialReference System (NSRS). [NGS].

rence bystem (ribitb). [ribb].	
Names and Identifiers:	
id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
permanentId (String6)	Permanent point identifier assigned by NGS to PACS and SACS[NGS].
name (String50)	Any commonly used name for the control point.
alias (String60)	An alternative or former name by which the feature is referred.
stampedDesignation (String50)	The designation stamped onto the monument.
Attributes:	
pointType (<u>CodePointType</u>)	Contains the allowable values of a point type used by the ControlPoint feature. The point types may be supplementally provided as subtypes of ControlPoints for ease of use and clarification.
runwayDesignator (String7)	Not applicable to this point type
runwayEndDesignator (String3)	Not applicable to this point type
monumentType (<u>CodeMonumentType</u>)	The type of monument as defined by the Corps of Engineers EM 110-1-1002.
description (String255)	The monument description.
ellipsoidHeight (Real)	The height above the reference ellipsoid, measured along the ellipsoidal outer normal through the point in question. Also called the geodetic height.[NGS].
yearOfSurvey (Integer)	The year of the most recent runway end survey used to compute the ARP
dateRecovered (String8)	The date the monument was last field recovered. Format for date is YYYYMMDD (i.e. September 15, 1994 = 19940915).
recoveredCondition (CodeRecoveredCond	ition) The condition and type of the marker (witness post) used to identify the location of the monument.
fieldBook (String254)	The field book.
globalPositionSystemSuitable (CodeBoole	an) A Boolean indicating GPS suitability.
<u>Aetadata:</u>	
coordinateZone (CodeCoordinateZone)	The State Plane Coordinate System Code for where the airport is primarily located.
epoch (String10)	Survey epoch used to establish the control point.
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (CodeStatus)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
dataSource (CodeDataSource)	The source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
····	
ystem Keys:	
System Keys: guid (String60)	A globally unique identifier applied to each feature in the database for reference.

Geodetic : Reference Grid Line

(Database Feature Class Name = CoordinateGridArea; FAA=CoordinateGridArea)			
Geometry Type: Line	Accuracy: +/-Ft.	Sensitivity: Restricted	

A regular pattern of horizontal and vertical lines used to represent regular coordinate intervals along the x and y axis. This grid line can be used to generate an arbitrary grid system which is common on locator maps.

Names and Identifiers:	
id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String50)	The name, code or identifier used to refer to an individual grid cell.
alias (String60)	An alternative or former name by which the feature is referred.
Attributes:	
description (String255)	Description of the feature.
gridType (<u>CodeGridType</u>)	Code indicating the type of grid.
Metadata:	
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (CodeStatus)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
dataSource (CodeDataSource)	The source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Geodetic : Reference Grid Cell

(Database Feature Class Name = CoordinateGridCell)

Geometry Type: Polygon Accuracy: +/-1Ft. Sensitivity: Restricted A regular pattern of horizontal and vertical lines used to represent regular coordinate intervals along the x and y axis. This grid line can be used to generate an arbitrary grid system which is common on locator maps. [SDSFIE].

Names and Identifiers:	
id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
alias (String60)	An alternative or former name by which the feature is referred.
<u>Metadata:</u>	
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
dataSource (CodeDataSource)	The source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
<u>System Keys:</u>	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.

metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.	
Geodetic : Elevation Contour		
(Database Feature Class Name = Elevat	ionContour; FAA=ElevationContour)	
Geometry Type: Line	Accuracy: +/-Ft. Sensitivity: Restricted	
Connecting points on the surface of the	earth of equal vertical elevation representing some fixed elevation	
interval. [SDSFIE].		
Names and Identifiers:		
id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)	
name (String50)	Name of the feature.	
alias (String60)	An alternative or former name by which the feature is referred.	
Attributes:		
description (String255)	Description of the feature.	
length (Real)	The overall length of the feature.	
contourValue (Real)	The elevation of the contour line.[SDSFIE Feature Table].	
<u>Metadata:</u>		
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.	
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.	
status (CodeStatus) A temporal description of the operational status of the feature.		
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.	
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].	
dataSource (<u>CodeDataSource</u>)	The source of the data in this record.	
sourceStatement (String255)	A statement providing additional details about the source of the data.	
editorName (String50)	The name of the individual who last edited this data.	
lastUpdate (Date)	The date upon which any data associated with this record was last updated.	
System Keys:		
guid (String60)	A globally unique identifier applied to each feature in the database for reference.	
metald (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.	
Geodetic : Image Area		
(Database Feature Class Name = Image.	Area; FAA=ImageArea)	
Geometry Type: Polygon	Accuracy: +/-Ft. Sensitivity: Confidential	
The image foot print or coverage area. [
Names and Identifiers:		
id (String40) A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)		

	primary or foreign key value)
name (String50)	Name of the feature.
frameID (String20)	Image identification number of the covered area.
alias (String60)	An alternative or former name by which the feature is referred.
Attributes:	
description (String255)	A description or other unique information concerning the subject item, limited to 255 characters.
photoDate (String8)	Date the aerial photography was flown. Format for date is YYYYMMDD (i.e. September 15, 1994 = 19940915)
<u>Metadata:</u>	
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first

	recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
dataSource (CodeDataSource)	The source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
<u>System Keys:</u>	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Geodetic : Image Location

(Database Feature Class Name = ImageLocation) Sensitivity: Confidential Geometry Type: Point Accuracy: +/-5Ft. The location where an image was taken. Names and Identifiers: id (String40) A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value) alias (String60) An alternative or former name by which the feature is referred. Attributes: caption (String255) A textual title or short description used to define the primary subject of the image. description (String255) Textual details that provide further information about the primaery subject of the image. heading (Real) The heading (with 0 as true north) in which the camera was pointed when the image was taken inclination (Real) The degrees off he horizon (with 90 pointing straight up) at which the camera was pointed when the image was taken. latitude (Real) The latitude of the location of the camera when the image was taken. longitude (Real) The longitude of the location of the camera when the image was taken. dateTaken (Date) The date on which the image was taken. timeTaken (Integer) The time at which the image was taken. fileDirectory (String255) The local file directory in which the image file is located. fileName (String40) The name of the image file. fileType (CodeImageType) The type of image file format Metadata: projectType (CodeProjectType) The type of project or work activity that installed or first recorded the location of this feature. projectId (String20) A unique identifier associated with the project or work activity that installed or first recorded the location of this feature. status (CodeStatus) A temporal description of the operational status of the feature. Alternative (Integer) Discriminator used to tie features of a plan or proposal together into a version. userFlag (String254) An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE]. dataSource (CodeDataSource) The source of the data in this record. sourceStatement (String255) A statement providing additional details about the source of the data. editorName (String50) The name of the individual who last edited this data. lastUpdate (Date) The date upon which any data associated with this record was last updated. System Keys: guid (String60) A globally unique identifier applied to each feature in the database for reference. metaId (Integer) An identifier used to refer to a metadata record that provide additional information about the data in this record.

Data Set: Interior

Interior : Baggage Carousel

(Database Feature Class Name = BaggageCarousel) Geometry Type: Polygon Accuracy: +/-0.5Ft. Sensitivity: Restricted Baggage system carousels Names and Identifiers: id (String40) A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value) carouselId (String60) Common name associated with the feature.[Airport]. tenantName (CodeAirline) The name of the current tenant using the baggage carousel. alias (String60) An alternative or former name by which the feature is referred. floorLevel (CodeFloorLevel) The level of a building on which the feature exists. buildingNumber (String30) An alphanumeric code indicating the number of the building. buildingName (String60) The name of the building associated with this feature. Attributes: direction (CodeDirection) The direction of flow of baggage on the conveyor. fromLevel (CodeFloorLevel) The level of a building on which the feature starts. toLevel (CodeFloorLevel) The level of a building on which the feature ends. elevRefLow (Integer) A reference to the lowest floor elevation served by this feature. elevRefHigh (Integer) A reference to the highest floor elevation served by this feature. Metadata: projectType (CodeProjectType) The type of project or work activity that installed or first recorded the location of this feature. A unique identifier associated with the project or work activity that installed or first projectId (String20) recorded the location of this feature. status (CodeStatus) A temporal description of the operational status of the feature. Alternative (Integer) Discriminator used to tie features of a plan or proposal together into a version. userFlag (String254) An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE]. dataSource (CodeDataSource) The source of the data in this record. sourceStatement (String255) A statement providing additional details about the source of the data. editorName (String50) The name of the individual who last edited this data. lastUpdate (Date) The date upon which any data associated with this record was last updated. metadata (Integer) Foreign Key. Used to link the record to the applicable feature level metadata record(s). System Keys: guid (String60) A globally unique identifier applied to each feature in the database for reference. levelIdentifier (Integer) A numeric identifier assigned to the building level. metaId (Integer) An identifier used to refer to a metadata record that provide additional information about the data in this record.

Interior : Baggage Conveyor

(Database Feature Class Name = BaggageConveyor)				
Accuracy: +/-0.5Ft.	Sensitivity: Restricted			
A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)				
Common name associated with the feature.[Airport].				
The name of the current tenant using the baggage conveyor.				
The level of a building on which the feature exists.				
An alphanumeric code indicating the number of t	the building.			
The name of the building associated with this fea	ture.			
	Accuracy: +/-0.5Ft. A unique identifier used by people to refer to this primary or foreign key value) Common name associated with the feature.[Airp The name of the current tenant using the baggage The level of a building on which the feature exist An alphanumeric code indicating the number of			

Attributes:

fromLevel (CodeFloorLevel) toLevel (CodeFloorLevel) elevRefLow (Integer) elevRefHigh (Integer) direction (CodeDirection)

Metadata:

projectType (<u>CodeProjectType</u>)

projectId (String20)

status (<u>CodeStatus</u>) Alternative (Integer) userFlag (String254)

dataSource (<u>CodeDataSource</u>) sourceStatement (String255)

editorName (String50) lastUpdate (Date) metadata (Integer)

System Keys:

guid (String60) levelIdentifier (Integer) metaId (Integer)

Interior : Column

An alternative or former name by which the feature is referred.

The level of a building on which the feature starts. The level of a building on which the feature ends. A reference to the lowest floor elevation served by this feature. A reference to the highest floor elevation served by this feature. The direction of flow of baggage on the conveyor.

The type of project or work activity that installed or first recorded the location of this feature.

A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.

A temporal description of the operational status of the feature.

Discriminator used to tie features of a plan or proposal together into a version.

An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].

The source of the data in this record.

A statement providing additional details about the source of the data.

The name of the individual who last edited this data.

The date upon which any data associated with this record was last updated. Foreign Key. Used to link the record to the applicable feature level metadata record(s).

A globally unique identifier applied to each feature in the database for reference.

A numeric identifier assigned to the building level.

An identifier used to refer to a metadata record that provide additional information about the data in this record.

(Database Feature Class Name = Bu	uldingColumn)		
Geometry Type: Polygon	Accuracy: +/-0.5Ft.	Sensitivity: Restricted	
Structural columns of a building			
Names and Identifiers:			
id (String40)	A unique identifier used by people to r primary or foreign key value)	efer to this feature (note: this is not a system	
columnId (String10)	A unique identifier assigned to the Column.		
floorLevel (CodeFloorLevel)	The level of a building on which the feature exists.		
buildingNumber (String30)	An alphanumeric code indicating the number of the building.		
buildingName (String60)	The name of the building associated with this feature.		
alias (String60)	An alternative or former name by which the feature is referred.		
<u>Attributes:</u>			
columnShape (CodeShape)	The shape of the horizontal cross section	on of the column.	
elevRefLow (Integer)	A reference to the lowest floor elevation served by this feature.		
elevRefHigh (Integer)	A reference to the highest floor elevation served by this feature.		
material (CodeMaterialType)	The type of material the column is made of.		
<u>Metadata:</u>			
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.		
projectId (String20)	A unique identifier associated with the recorded the location of this feature.	project or work activity that installed or first	
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.		
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.		
userFlag (String254)	1	tribute can be used by the operator for user defined subject items data integrity and should not be SFIE].	
dataSource (CodeDataSource)	The source of the data in this record.		

sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
metadata (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).
<u>System Keys:</u>	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
levelIdentifier (Integer)	A numeric identifier assigned to the building level.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Interior : Building Zone

(Database Feature Class Name = Bui	ldingZone)	
Geometry Type: Polygon	Accuracy: +/-5Ft.	Sensitivity: Confidential
A subsection of a building used for reference purposes.		

Names and Identifiers: id (String40) A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value) floorLevel (CodeFloorLevel) The level of a building on which the feature exists. buildingNumber (String30) An alphanumeric code indicating the number of the building. buildingName (String60) The name of the building associated with this feature. alias (String60) An alternative or former name by which the feature is referred. Attributes: description (String255) Any brief description of the feature. Metadata: metadata (Integer) Foreign Key. Used to link the record to the applicable feature level metadata record(s). projectType (CodeProjectType) The type of project or work activity that installed or first recorded the location of this feature projectId (String20) A unique identifier associated with the project or work activity that installed or first recorded the location of this feature. status (CodeStatus) A temporal description of the operational status of the feature. Alternative (Integer) Discriminator used to tie features of a plan or proposal together into a version. An operator defined work area. This attribute can be used by the operator for user defined userFlag (String254) system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE]. dataSource (CodeDataSource) The source of the data in this record. sourceStatement (String255) A statement providing additional details about the source of the data. editorName (String50) The name of the individual who last edited this data. lastUpdate (Date) The date upon which any data associated with this record was last updated. System Keys: guid (String60) A globally unique identifier applied to each feature in the database for reference. levelIdentifier (Integer) A numeric identifier assigned to the building level. metaId (Integer) An identifier used to refer to a metadata record that provide additional information about the data in this record.

Interior : Ceiling Tile

buildingName (String60)

(Database Feature Class Name = Ceiling	gTile)	
Geometry Type: Line	Accuracy: +/-1Ft.	Sensitivity: Confidential
The edge of tiles used to form a ceiling of	over an interior space.	
Names and Identifiers:		
id (String40)	A unique identifier used by people to refer to this primary or foreign key value)	feature (note: this is not a system
name (String80)	The name of the pumping station.[HSIP].	
alias (String60)	An alternative or former name by which the feature	re is referred.
buildingNumber (String30)	An alphanumeric code indicating the number of the	ne building.

Attributes:

type (String40) description (String255) metadata (Integer)

Metadata:

projectType (<u>CodeProjectType</u>)

projectId (String20)

status (<u>CodeStatus</u>) Alternative (Integer) userFlag (String254)

dataSource (<u>CodeDataSource</u>)

sourceStatement (String255)

editorName (String50) lastUpdate (Date)

System Keys:

guid (String60) levelIdentifier (Integer) metaId (Integer)

metaId (Integer)

Interior : Chase

 (Database Feature Class Name = Chase)
 Geometry Type: Polygon
 Accuracy: +/-0.5Ft.
 Sensitivity: Restricted

 Area of a building used for passing utilities from one floor to another.
 Names and Identifiers:
 Sensitivity: Restricted

the data in this record.

Type of feature[AC 150/5300-18b].

recorded the location of this feature.

The source of the data in this record.

used to store the subject items data.[SDSFIE].

The name of the individual who last edited this data.

A numeric identifier assigned to the building level.

feature.

Textual description of the feature.[FGDC].

Foreign Key. Used to link the record to the applicable feature level metadata record(s).

The type of project or work activity that installed or first recorded the location of this

A unique identifier associated with the project or work activity that installed or first

An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be

Discriminator used to tie features of a plan or proposal together into a version.

A temporal description of the operational status of the feature.

A statement providing additional details about the source of the data.

The date upon which any data associated with this record was last updated.

A globally unique identifier applied to each feature in the database for reference.

An identifier used to refer to a metadata record that provide additional information about

id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
chaseId (String10)	A unique identifier assigned to the Chase.
alias (String60)	An alternative or former name by which the feature is referred.
Attributes:	
fromLevel (CodeFloorLevel)	The level of a building on which the feature starts.
toLevel (CodeFloorLevel)	The level of a building on which the feature ends.
elevRefLow (Integer)	A reference to the lowest floor elevation served by this feature.
elevRefHigh (Integer)	A reference to the highest floor elevation served by this feature.
<u>Metadata:</u>	
metadata (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (CodeStatus)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
dataSource (<u>CodeDataSource</u>)	The source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
<u>System Keys:</u>	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about

the data in this record.

Interior : Column Grid

(Database Feature Class Name = ColumnGrid) Geometry Type: Polygon Accuracy: +/-1Ft. Sensitivity: Confidential An area inside of a building between three or more building columns that is used for identification and referencing purposes.

Names and Identifiers:	
id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
buildingNumber (String30)	An alphanumeric code indicating the number of the building.
buildingName (String60)	The name of the building associated with this feature.
floorLevel (CodeFloorLevel)	The level of a building on which the feature exists.
alias (String60)	An alternative or former name by which the feature is referred.
Attributes:	
description (String255)	Description of the feature.
<u>Metadata:</u>	
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
dataSource (CodeDataSource)	The source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
<u>System Keys:</u>	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Interior : Column Line

(Database Feature Class Name = ColumnLine) Geometry Type: Line Accuracy: +/-5Ft. Sensitivity: Confidential A line conncting two or more columns within a building that is used for reference purposes. Names and Identifiers: id (String40) A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value) buildingNumber (String30) An alphanumeric code indicating the number of the building. buildingName (String60) The name of the building associated with this feature. floorLevel (CodeFloorLevel) The level of a building on which the feature exists. alias (String60) An alternative or former name by which the feature is referred. Attributes: description (String255) Description of the feature. Metadata: projectType (CodeProjectType) The type of project or work activity that installed or first recorded the location of this feature projectId (String20) A unique identifier associated with the project or work activity that installed or first recorded the location of this feature. status (CodeStatus) A temporal description of the operational status of the feature. Alternative (Integer) Discriminator used to tie features of a plan or proposal together into a version.

userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
dataSource (CodeDataSource)	The source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Interior : Display Case

(Database Feature Class Name = DisplayCase) Geometry Type: Polygon Accuracy: +/-1Ft. Sensitivity: Restricted Leasable items that are not represented in the InteriorExteriorSpace feature class. These items typically overlap with polygons in the InteriorExteriorSpace feature class, and represent other leasable assets as represented in the Authority's property/leas Names and Identifiers:

tames and fucilities.	
id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
alias (String60)	An alternative or former name by which the feature is referred.
<u>Metadata:</u>	
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
dataSource (<u>CodeDataSource</u>)	The source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Interior : Door

(Database Feature Class Name = Door)		
Geometry Type: Line	Accuracy: +/-0.5Ft.	Sensitivity: Restricted
Line where door is located within a wall		
Names and Identifiers:		
id (String40)	A unique identifier used by people to refer to this primary or foreign key value)	s feature (note: this is not a system
name (String40)	The name of the feature.	
alias (String60)	An alternative or former name by which the feature	re is referred.
buildingNumber (String30)	An alphanumeric code indicating the number of the building.	
buildingName (String60)	The name of the building associated with this feature.	
floorLevel (CodeFloorLevel)	The level of a building on which the feature exist	s.
roomId (String20)	An identifier assigned to the room to which this d	loor leads
spaceId (String20)	An identifier that is uniquely assigned to this feat	ture for identification purposes.

Attributes:

doorType (<u>CodeDoorType</u>)	The type of door.
fireRated (CodeBoolean)	Boolean to indicate whether door is a fire door or not[SDSFIE Attribute Table].
fireTime (Integer)	Time in hours for which a fire door is rated[SDSFIE Attribute Table].
isSecure (CodeBoolean)	Boolean for whether door provides access to a secure area[SDSFIE Attribute Table].
accessedArea (CodeAccess)	The area which is accessed to / from the door.
accessRestriction (CodeRestrictionType)	Type of equipment installed to restrict access[SDSFIE Attribute Table].
isAlarmed (<u>CodeBoolean</u>)	Boolean for whether door is connected to an alarm that will sound if it is openned without authorization.
description (String255)	Description of the feature.
<u>Metadata:</u>	
metadata (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
dataSource (CodeDataSource)	The source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
levelIdentifier (Integer)	A numeric identifier assigned to the building level.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record

Interior : Elevator

(Database Feature Class Name = Ele	evator)	
Geometry Type: Polygon	Accuracy: +/-0.5Ft.	Sensitivity: Restricted
Area of a floor where an elevator sh	aft is located	
Names and Identifiers:		
id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)	
elevatorId (String25)	A unique identifier assigned to the Ele	evator.

	primary of foreign key value)
elevatorId (String25)	A unique identifier assigned to the Elevator.
alias (String60)	An alternative or former name by which the feature is referred.
buildingNumber (String30)	An alphanumeric code indicating the number of the building.
buildingName (String60)	The name of the building associated with this feature.
Attributes:	
elevType (String20)	Code for the type of elevator[SDSFIE Attribute Table].
accessRestriction (CodeRestrictionType)	Type of equipment installed to restrict access.[SDSFIE Attribute Table].
fromLevel (CodeFloorLevel)	The lowest level of the building served by the elevator.
toLevel (CodeFloorLevel)	The highest level of the building served by the elevator.
fromLevelRestricted (CodeFloorLevel)	The lowest level of the building served by the elevator, where access is restricted.
toLevelRestricted (CodeFloorLevel)	The highest level of the building served by the elevator, where access is restricted.
elevRefLow (Integer)	A reference to the lowest floor elevation served by this feature.
elevRefHigh (Integer)	A reference to the highest floor elevation served by this feature.
floors (Integer)	The number of floors served by the elevator.[SDSFIE Attribute Table].
secure (<u>CodeBoolean</u>)	Boolean for whether elevator provides access to a secure area[SDSFIE Attribute Table].
description (String255)	Description of the feature.
Metadata:	

Foreign Key. Used to link the record to the applicable feature level metadata record(s).
The type of project or work activity that installed or first recorded the location of this feature.
A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
A temporal description of the operational status of the feature.
Discriminator used to tie features of a plan or proposal together into a version.
An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
The source of the data in this record.
A statement providing additional details about the source of the data.
The name of the individual who last edited this data.
The date upon which any data associated with this record was last updated.
A globally unique identifier applied to each feature in the database for reference.
An identifier used to refer to a metadata record that provide additional information about the data in this record.

Interior : Escalator

(Database Feature Class Name = Escalator) Geometry Type: Polygon Accuracy: +/-0.5Ft. Area of a floor occupied by escalators

Names and Identifiers: id (String40)

escalatorId (String25) alias (String60) buildingNumber (String30) buildingName (String60)

Attributes:

fromLevel (<u>CodeFloorLevel</u>) toLevel (<u>CodeFloorLevel</u>) elevRefLow (Integer) elevRefHigh (Integer) manufacturerName (String60) modelNumber (String20)

Metadata:

metadata (Integer) projectType (<u>CodeProjectType</u>)

projectId (String20)

status (<u>CodeStatus</u>) Alternative (Integer) userFlag (String254)

dataSource (<u>CodeDataSource</u>) sourceStatement (String255) editorName (String50) lastUpdate (Date)

System Keys:

guid (String60) metaId (Integer) A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value) A unique identifier assigned to the Escalator.

Sensitivity: Restricted

An alternative or former name by which the feature is referred. An alphanumeric code indicating the number of the building. The name of the building associated with this feature.

The level of a building on which the feature starts.

The level of a building on which the feature ends.

A reference to the lowest floor elevation served by this feature.

A reference to the highest floor elevation served by this feature.

The coomon name used to refer to the manufacturer.

The model number assigned by the manufacturer.

Foreign Key. Used to link the record to the applicable feature level metadata record(s). The type of project or work activity that installed or first recorded the location of this feature.

A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.

A temporal description of the operational status of the feature.

Discriminator used to tie features of a plan or proposal together into a version. An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].

The source of the data in this record.

A statement providing additional details about the source of the data.

The name of the individual who last edited this data.

The date upon which any data associated with this record was last updated.

A globally unique identifier applied to each feature in the database for reference. An identifier used to refer to a metadata record that provide additional information about the data in this record.

Interior : Floor

(Database Feature Class Name = Floor) Geometry Type: Polygon Floor outline of a building

Names and Identifiers:

id (String40)

floorName (String50) alias (String60) floorLevel (CodeFloorLevel) buildingNumber (String30) buildingName (String60)

Attributes:

usableArea (Real)

Metadata:

metadata (Integer) projectType (CodeProjectType)

projectId (String20)

status (CodeStatus) Alternative (Integer) userFlag (String254)

dataSource (CodeDataSource) sourceStatement (String255)

editorName (String50) lastUpdate (Date)

System Keys:

guid (String60) levelIdentifier (Integer) metaId (Integer)

Sensitivity: Restricted

A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)

Name of the building floor.[SDSFIE Feature Table].

An alternative or former name by which the feature is referred.

The level of a building on which the feature exists.

An alphanumeric code indicating the number of the building.

The name of the building associated with this feature.

Usable or net area of the building floor. The sum of usable areas on the building floor (i.e., business and common) which can vary over the life of a building as corridors expand and contract as floors are remodeled.[SDSFIE Feature Table].

Foreign Key. Used to link the record to the applicable feature level metadata record(s). The type of project or work activity that installed or first recorded the location of this feature.

A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.

A temporal description of the operational status of the feature.

Discriminator used to tie features of a plan or proposal together into a version. An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be

used to store the subject items data.[SDSFIE].

The source of the data in this record.

A statement providing additional details about the source of the data.

The name of the individual who last edited this data.

The date upon which any data associated with this record was last updated.

A globally unique identifier applied to each feature in the database for reference. A numeric identifier assigned to the building level. An identifier used to refer to a metadata record that provide additional information about the data in this record.

Interior : Flooring Material

projectType (CodeProjectType)

projectId (String20)

8		
(Database Feature Class Name $=$ F	looringMaterial)	
Geometry Type: Polygon	Accuracy: +/-3Ft.	Sensitivity: Restricted
Are of floor with a common materi	al type.	
Names and Identifiers:		
id (String40)	A unique identifier used by people to primary or foreign key value)	refer to this feature (note: this is not a system
alias (String60)	An alternative or former name by wh	ich the feature is referred.
floorLevel (CodeFloorLevel)	The level of a building on which the	feature exists.
buildingNumber (String30)	An alphanumeric code indicating the	number of the building.
buildingName (String60)	The name of the building associated with this feature.	
Attributes:		
type (String60)	Common name associated with the fe	ature.[Airport].
<u>Metadata:</u>		
metadata (Integer)	Foreign Key. Used to link the record	to the applicable feature level metadata record(

ata record(s). to link the record to the applicable feature level metad The type of project or work activity that installed or first recorded the location of this feature.

A unique identifier associated with the project or work activity that installed or first

system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].dataSource (CodeDataSource)The source of the data in this record.sourceStatement (String255)A statement providing additional details about the source of the data.editorName (String50)The name of the individual who last edited this data.lastUpdate (Date)The date upon which any data associated with this record was last updated.System Keys:guid (String60)guid (String60)A globally unique identifier applied to each feature in the database for reference.levelIdentifier (Integer)A numeric identifier assigned to the building level.		recorded the location of this feature.
userFlag (String254) An operator defined work area. This attribute can be used by the operator for user define system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE]. dataSource (CodeDataSource) The source of the data in this record. sourceStatement (String255) A statement providing additional details about the source of the data. editorName (String50) The name of the individual who last edited this data. lastUpdate (Date) The date upon which any data associated with this record was last updated. System Keys: guid (String60) guid (String60) A globally unique identifier applied to each feature in the database for reference. levelIdentifier (Integer) An umeric identifier assigned to the building level. metaId (Integer) An identifier used to refer to a metadata record that provide additional information about	status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE]. dataSource (CodeDataSource) The source of the data in this record. sourceStatement (String255) A statement providing additional details about the source of the data. editorName (String50) The name of the individual who last edited this data. lastUpdate (Date) The date upon which any data associated with this record was last updated. System Keys: guid (String60) guid (String60) A globally unique identifier applied to each feature in the database for reference. levelIdentifier (Integer) A numeric identifier assigned to the building level. metaId (Integer) An identifier used to refer to a metadata record that provide additional information about	Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
sourceStatement (String255) A statement providing additional details about the source of the data. editorName (String50) The name of the individual who last edited this data. lastUpdate (Date) The date upon which any data associated with this record was last updated. System Keys: guid (String60) guid (String60) A globally unique identifier applied to each feature in the database for reference. levelIdentifier (Integer) A numeric identifier assigned to the building level. metaId (Integer) An identifier used to refer to a metadata record that provide additional information about	userFlag (String254)	
editorName (String50) The name of the individual who last edited this data. lastUpdate (Date) The date upon which any data associated with this record was last updated. System Keys: guid (String60) guid (String60) A globally unique identifier applied to each feature in the database for reference. levelIdentifier (Integer) A numeric identifier assigned to the building level. metaId (Integer) An identifier used to refer to a metadata record that provide additional information about	dataSource (CodeDataSource)	The source of the data in this record.
Instruction (charger) The date upon which any data associated with this record was last updated. System Keys: guid (String60) guid (String60) A globally unique identifier applied to each feature in the database for reference. levelIdentifier (Integer) A numeric identifier assigned to the building level. metaId (Integer) An identifier used to refer to a metadata record that provide additional information about	sourceStatement (String255)	A statement providing additional details about the source of the data.
System Keys: guid (String60) A globally unique identifier applied to each feature in the database for reference. levelIdentifier (Integer) A numeric identifier assigned to the building level. metaId (Integer) An identifier used to refer to a metadata record that provide additional information about	editorName (String50)	The name of the individual who last edited this data.
guid (String60)A globally unique identifier applied to each feature in the database for reference.levelIdentifier (Integer)A numeric identifier assigned to the building level.metaId (Integer)An identifier used to refer to a metadata record that provide additional information about	lastUpdate (Date)	The date upon which any data associated with this record was last updated.
levelIdentifier (Integer)A numeric identifier assigned to the building level.metaId (Integer)An identifier used to refer to a metadata record that provide additional information about	System Keys:	
metaId (Integer) An identifier used to refer to a metadata record that provide additional information about	guid (String60)	A globally unique identifier applied to each feature in the database for reference.
	levelIdentifier (Integer)	A numeric identifier assigned to the building level.
	metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Interior : Furnishing

(Database Feature Class Name	= Furnishing)	
Geometry Type: Point	Accuracy: +/-3Ft.	Sensitivity: Restricted
The location of various interior	furnishings	
Names and Identifiers:		

Names and Identifiers

id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
alias (String60)	An alternative or former name by which the feature is referred.
floorLevel (CodeFloorLevel)	The level of a building on which the feature exists.
buildingNumber (String30)	An alphanumeric code indicating the number of the building.
buildingName (String60)	The name of the building associated with this feature.
Attributes:	
type (String60)	Common name associated with the feature.[Airport].
modelNumber (String20)	The model number assigned by the manufacturer.
manufacturerName (String60)	The coomon name used to refer to the manufacturer.
<u>Metadata:</u>	
metadata (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
dataSource (CodeDataSource)	The source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
<u>System Keys:</u>	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
levelIdentifier (Integer)	A numeric identifier assigned to the building level.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Interior : Interior Sign

(Database Feature Class Name = Interio	orSign)	
Geometry Type: Point	Accuracy: +/-3Ft.	Sensitivity: Restricted

Signs located inside of a building.

Names and Identifiers:

id (String40)

interiorSignId (String10) alias (String60) floorLevel (<u>CodeFloorLevel</u>) buildingNumber (String30) buildingName (String60) spaceId (String20)

Attributes:

messageA (String255) messageB (String255) modelNumber (String20) manufacturerName (String60) dateInstalled (Date)

Metadata:

metadata (Integer) projectType (<u>CodeProjectType</u>)

projectId (String20)

status (<u>CodeStatus</u>) Alternative (Integer) userFlag (String254)

dataSource (<u>CodeDataSource</u>) sourceStatement (String255)

editorName (String50) lastUpdate (Date)

System Keys:

guid (String60) levelIdentifier (Integer) metaId (Integer) A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value) A unique identifier assigned to the InteriorSign. An alternative or former name by which the feature is referred. The level of a building on which the feature exists. An alphanumeric code indicating the number of the building. The name of the building associated with this feature. An identifier that is uniquely assigned to this feature for identification purposes.

The primary text message which appears on the sign. A secondary text message which appears on the sign. The model number assigned by the manufacturer. The coomon name used to refer to the manufacturer. The date on which the feature was originally installed.

Foreign Key. Used to link the record to the applicable feature level metadata record(s). The type of project or work activity that installed or first recorded the location of this feature.

A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.

A temporal description of the operational status of the feature.

Discriminator used to tie features of a plan or proposal together into a version. An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].

The source of the data in this record.

A statement providing additional details about the source of the data.

The name of the individual who last edited this data.

The date upon which any data associated with this record was last updated.

A globally unique identifier applied to each feature in the database for reference. A numeric identifier assigned to the building level. An identifier used to refer to a metadata record that provide additional information about the data in this record.

Interior : Ladder

 (Database Feature Class Name = Ladder)

 Geometry Type: Polygon
 Accuracy: +/-0.5Ft.

 The location of a ladder for accessing another floor or roof of a building.

 Names and Identifiers:

Names and Identifiers:	
id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
ladderId (String10)	A unique identifier assigned to the Ladder.
buildingNumber (String30)	An alphanumeric code indicating the number of the building.
buildingName (String60)	The name of the building associated with this feature.
spaceID (String20)	An identifier that is uniquely assigned to this feature for identification purposes.
alias (String60)	An alternative or former name by which the feature is referred.
Attributes:	
fromLevel (CodeFloorLevel)	The level of a building on which the feature starts.
toLevel (CodeFloorLevel)	The level of a building on which the feature ends.
elevRefLow (Integer)	A reference to the lowest floor elevation served by this feature.
elevRefHigh (Integer)	A reference to the highest floor elevation served by this feature.
<u>Metadata:</u>	

metadata (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
dataSource (<u>CodeDataSource</u>)	The source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
levelIdentifier (Integer)	A numeric identifier assigned to the building level.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Interior : Maintenance Responsibility Area

(Database Feature Class Name = MaintenanceResponsibilityArea)			
Geometry Type: Polygon	Accuracy: +/-5Ft.	Sensitivity: Confidential	
An area on interior space assigned to a single enity to maintain.			

Names and Identifiers:	
id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String50)	The name of the feature.
floorLevel (CodeFloorLevel)	The level of a building on which the feature exists.
buildingNumber (String30)	An alphanumeric code indicating the number of the building.
buildingName (String60)	The name of the building associated with this feature.
alias (String60)	An alternative or former name by which the feature is referred.
Attributes:	
responsibleParty (String60)	A code representing the party who is responsible for performing maintenance in the designated area.
<u>Metadata:</u>	
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
dataSource (<u>CodeDataSource</u>)	The source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
levelIdentifier (Integer)	A numeric identifier assigned to the building level.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Interior : Moving Sidewalk

Interior . Moving Side wank		
(Database Feature Class Name = Mov	ingSidewalk)	
Geometry Type: Polygon	Accuracy: +/-0.5Ft.	Sensitivity: Restricted
Area of a floor occupied by a moving	sidewalk	
Names and Identifiers:		
id (String40)	A unique identifier used by people to reprimary or foreign key value)	efer to this feature (note: this is not a system
sidewalkId (String60)	Common name associated with the feat	ture.[Airport].
buildingNumber (String30)	An alphanumeric code indicating the nu	umber of the building.
buildingName (String60)	The name of the building associated wi	th this feature.
floorLevel (CodeFloorLevel)	The level of a building on which the fea	ature exists.
alias (String60)	An alternative or former name by which	h the feature is referred.
Attributes:		
fromLevel (CodeFloorLevel)	The level of a building on which the fea	ature starts.
toLevel (CodeFloorLevel)	The level of a building on which the fea	ature ends.
elevRefLow (Integer)	A reference to the lowest floor elevation	n served by this feature.
elevRefHigh (Integer)	A reference to the highest floor elevation	on served by this feature.
modelNumber (String20)	The model number assigned by the manufacturer.	
manufacturerName (String60)	The coomon name used to refer to the r	manufacturer.
Metadata:		
metadata (Integer)	Foreign Key. Used to link the record to	the applicable feature level metadata record(s).
projectType (<u>CodeProjectType</u>)	The type of project or work activity tha feature.	t installed or first recorded the location of this
projectId (String20)	A unique identifier associated with the recorded the location of this feature.	project or work activity that installed or first
status (CodeStatus)	A temporal description of the operation	hal status of the feature.
Alternative (Integer)	Discriminator used to tie features of a p	plan or proposal together into a version.
userFlag (String254)		tribute can be used by the operator for user defined subject items data integrity and should not be SSFIE].
dataSource (<u>CodeDataSource</u>)	The source of the data in this record.	
sourceStatement (String255)	A statement providing additional detail	s about the source of the data.
editorName (String50)	The name of the individual who last edited this data.	
lastUpdate (Date)	The date upon which any data associate	ed with this record was last updated.
<u>System Keys:</u>		
guid (String60)	A globally unique identifier applied to	each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata the data in this record.	a record that provide additional information about

Interior : Passenger Gate

(Database Feature Class Name = Pas	sengerGate)	
Geometry Type: Point	Accuracy: +/-5Ft.	Sensitivity: Unclassified
The location of a passenger boarding	gate.	
Names and Identifiers:		
id (String40)	A unique identifier used by people to primary or foreign key value)	p refer to this feature (note: this is not a system
alias (String60)	An alternative or former name by wh	nich the feature is referred.
buildingNumber (String30)	An alphanumeric code indicating the number of the building.	
buildingName (String60)	The name of the building associated with this feature.	
floorLevel (CodeFloorLevel)	The level of a building on which the feature exists.	
<u>Attributes:</u>		
description (String255)	A description or other unique inform	nation concerning the subject item.
isCommonUse (<u>CodeBoolean</u>)	An indicator as to whether the passes airline.	nger gate is common used or assigned to a signle

<u>Metadata:</u>

metadata (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (CodeStatus)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
dataSource (CodeDataSource)	The source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Interior : Room

(Detabase Festure Class Name Deam	`	
(Database Feature Class Name = Room	·	
Geometry Type: Polygon	Accuracy: +/-0.5Ft.	Sensitivity: Restricted
Room outline within a building		
Names and Identifiers:		
id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)	
roomName (String60)	Name of the building room.[SDSFIE Feature Ta	ble].
alias (String60)	An alternative or former name by which the feat	ure is referred.
floorLevel (<u>CodeFloorLevel</u>)	The level of a building on which the feature exist	sts.
buildingNumber (String30)	An alphanumeric code indicating the number of the building.	
buildingName (String60)	The name of the building associated with this fe	ature.
Attributes:		
SaulaCode (String16)	The Successor Airport-Airline Use and Lease A spaces, rooms and lease areas at H-JAIA.	greement (SAULA) code assigned to
area (Real)	The size of the area, zone, or polygon in square units.[SDSFIE Feature Table].	
height (Real)	Height dimension of the building room, measured from floor to ceiling.[SDSFIE Feature Table].	
length (Real)	Length dimension of a building room, measured from inside of wall to inside of wall.[SDSFIE Feature Table].	
width (Real)	Width dimension of a building room, measured from inside of wall to inside of wall.[SDSFIE Feature Table].	
<u>Metadata:</u>		
metadata (Integer)	Foreign Key. Used to link the record to the appl	icable feature level metadata record(s).
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed feature.	d or first recorded the location of this
projectId (String20)	A unique identifier associated with the project o recorded the location of this feature.	r work activity that installed or first
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.	
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.	
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].	
dataSource (<u>CodeDataSource</u>)	The source of the data in this record.	
sourceStatement (String255)	A statement providing additional details about the	ne source of the data.
editorName (String50)	The name of the individual who last edited this of	lata.
lastUpdate (Date)	The date upon which any data associated with the	is record was last updated.

System Keys:

guid (String60) levelIdentifier (Integer) metaId (Integer) A globally unique identifier applied to each feature in the database for reference. A numeric identifier assigned to the building level. An identifier used to refer to a metadata record that provide additional information about the data in this record.

Interior : Space

(Database Feature Class Name $=$ S	Space)			
Geometry Type: Polygon	Accuracy: +/-0.5Ft.	Sensitivity: Restricted		
A space not elsewhere classified within a building				
Names and Identifiers:				

id (String40) A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value) spaceId (String50) Name of the building space.[SDSFIE Feature Table]. alias (String60) An alternative or former name by which the feature is referred. floorLevel (CodeFloorLevel) The level of a building on which the feature exists. buildingNumber (String30) An alphanumeric code indicating the number of the building. buildingName (String60) The name of the building associated with this feature. Attributes: saulaCode (String16) The Successor Airport-Airline Use and Lease Agreement (SAULA) code assigned to spaces, rooms and lease areas at H-JAIA. area (Real) The size of the area, zone, or polygon in square units.[SDSFIE Feature Table]. Height of building space, or distance from floor to ceiling.[SDSFIE Feature Table]. height (Real) length (Real) Length dimension of building space, from inside of wall or partition to inside of wall or partition.[SDSFIE Feature Table]. width (Real) Width dimension of building space, from inside wall or partition to inside of wall or partition.[SDSFIE Feature Table]. description (String255) Description of the feature. Metadata: metadata (Integer) Foreign Key. Used to link the record to the applicable feature level metadata record(s). projectType (CodeProjectType) The type of project or work activity that installed or first recorded the location of this feature. A unique identifier associated with the project or work activity that installed or first projectId (String20) recorded the location of this feature. status (CodeStatus) A temporal description of the operational status of the feature. Alternative (Integer) Discriminator used to tie features of a plan or proposal together into a version. userFlag (String254) An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE]. dataSource (CodeDataSource) The source of the data in this record. sourceStatement (String255) A statement providing additional details about the source of the data. editorName (String50) The name of the individual who last edited this data. lastUpdate (Date) The date upon which any data associated with this record was last updated. System Keys: guid (String60) A globally unique identifier applied to each feature in the database for reference. levelIdentifier (Integer) A numeric identifier assigned to the building level. An identifier used to refer to a metadata record that provide additional information about metaId (Integer) the data in this record. FkEcaiId (String7) Foreign Key identifier used to link to Electrical Closet Asset Inventory **Interior : Stair**

(Database Feature Class Name = Stair) Geometry Type: Polygon Area of a floor where stairs are located <u>Names and Identifiers:</u>

Accuracy: +/-0.5Ft.

Sensitivity: Restricted

id (String40)

buildingNumber (String30) buildingName (String60) alias (String60)

Attributes:

escRoute (<u>CodeBoolean</u>)

fromLevel (<u>CodeFloorLevel</u>) toLevel (<u>CodeFloorLevel</u>) elevRefLow (Integer) elevRefHigh (Integer) description (String255)

Metadata:

metadata (Integer) projectType (<u>CodeProjectType</u>)

projectId (String20)

status (CodeStatus)

Alternative (Integer) userFlag (String254)

dataSource (<u>CodeDataSource</u>) sourceStatement (String255) editorName (String50) lastUpdate (Date)

System Keys:

guid (String60) metaId (Integer)

Interior : Wall

(Database Feature Class Name = Wall) Geometry Type: Line Wall within a floor <u>Names and Identifiers:</u>

id (String40)

alias (String60) buildingNumber (String30) floorLevel (<u>CodeFloorLevel</u>) buildingName (String60)

Attributes:

description (String255) isStructural (<u>CodeBoolean</u>) structuralMaterial (<u>CodeMaterialType</u>) surfaceMaterial (<u>CodeWallMaterial</u>) thickness (Real) isFire (<u>CodeBoolean</u>)

Metadata:

metadata (Integer) projectType (<u>CodeProjectType</u>) A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value) An alphanumeric code indicating the number of the building. The name of the building associated with this feature. An alternative or former name by which the feature is referred.

Boolean indicator for whether stairs are a part of an approved escape route[SDSFIE Attribute Table].

The level of a building on which the feature starts.

The level of a building on which the feature ends.

A reference to the lowest floor elevation served by this feature.

A reference to the highest floor elevation served by this feature.

Description of the feature.

Foreign Key. Used to link the record to the applicable feature level metadata record(s). The type of project or work activity that installed or first recorded the location of this feature.

A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.

A temporal description of the operational status of the feature.

Discriminator used to tie features of a plan or proposal together into a version. An operator defined work area. This attribute can be used by the operator for user defined

system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].

The source of the data in this record.

A statement providing additional details about the source of the data.

The name of the individual who last edited this data.

The date upon which any data associated with this record was last updated.

A globally unique identifier applied to each feature in the database for reference. An identifier used to refer to a metadata record that provide additional information about the data in this record.

Accuracy: +/-0.5Ft.

Sensitivity: Restricted

A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value) An alternative or former name by which the feature is referred. An alphanumeric code indicating the number of the building. The level of a building on which the feature exists. The name of the building associated with this feature.

Description of the feature. Indicator for whether the wall is a structural wall or not[SDSFIE Attribute Table].

The material used for the structural or inner composition of the wall.

The material used for the surface or outer face of the wall.

Thickness in inches of the wall[SDSFIE Attribute Table].

An indicator as to whether the feature is design to restrain fire[SDSFIE Attribute Table].

Foreign Key. Used to link the record to the applicable feature level metadata record(s). The type of project or work activity that installed or first recorded the location of this feature.

projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (CodeStatus)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
dataSource (CodeDataSource)	The source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
levelIdentifier (Integer)	A numeric identifier assigned to the building level.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Interior : Window

(Database Feature Class Name = Window)Geometry Type: LineAccuracy: +/-0.5Ft.Line where window is located on an exterior wallSensitivity: Restricted

Names	and	Identifiers:

id (String40)

alias (String60) floorLevel (<u>CodeFloorLevel</u>) buildingNumber (String30) buildingName (String60)

Attributes:

glassType (String20) description (String255)

Metadata:

metadata (Integer) projectType (<u>CodeProjectType</u>)

projectId (String20)

status (<u>CodeStatus</u>) Alternative (Integer) userFlag (String254)

dataSource (<u>CodeDataSource</u>) sourceStatement (String255) editorName (String50) lastUpdate (Date)

System Keys:

guid (String60) levelIdentifier (Integer) metaId (Integer) A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value) An alternative or former name by which the feature is referred. The level of a building on which the feature exists.

An alphanumeric code indicating the number of the building.

The name of the building associated with this feature.

Code for the type of glass installed in the window[SDSFIE Attribute Table]. Description of the feature.

Foreign Key. Used to link the record to the applicable feature level metadata record(s). The type of project or work activity that installed or first recorded the location of this feature.

A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.

A temporal description of the operational status of the feature.

Discriminator used to tie features of a plan or proposal together into a version. An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].

The source of the data in this record.

A statement providing additional details about the source of the data.

The name of the individual who last edited this data.

The date upon which any data associated with this record was last updated.

A globally unique identifier applied to each feature in the database for reference. A numeric identifier assigned to the building level.

An identifier used to refer to a metadata record that provide additional information about the data in this record.

Data Set: Navigational_Aids

Navigational_Aids : Navigational Aid Critical Area

(Database Feature Class Name = NavaidCriticalArea; FAA=NavaidCriticalArea)

Geometry Type: Polygon Accuracy: +/-3Ft. Sensitivity: Restricted A zone encompassing a specific ground area in the vicinity of a radiating antenna array which must be protected from parking and unlimited movement of surface and air traffic. The drawings included in this table are representative, be sure to refer to the [FAA Order 6750.16C].

Names and Identifiers:	
id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String50)	Name of the feature.
alias (String60)	An alternative or former name by which the feature is referred.
Attributes:	
description (String255)	Description of the feature.
dimensionX (Integer)	The linear dimension of the critical area in the X axis.
dimensionY (Integer)	The linear dimension of the critical area in the Y axis.
Metadata:	
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
dataSource (CodeDataSource)	The source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
<u>System Keys:</u>	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Navigational_Aids : Navigational Aid Equipment

(Database Feature Class Name = NavaidEquipment; FAA=NavaidEquipment)

Geometry Type: Point Accuracy: +/-Ft. Sensitivity: Unclassified Any ground-based visual or electronic device that provides point to point guidance information or position to aircraft in flight. [FAA Specification 405].

Names and Identifiers:	
id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String50)	Name of the feature
faaFacilityId (String4)	Enter the identifier. When reporting on a glide slope, enter the identifier of the associated localizer. Do not enter the prefix I for ILS or M used with the MLS systems. Where more than one ASR is in operation at the same location or at an associated loc[FAA Order 8250-42].
alias (String60)	An alternative or former name by which the feature is referred.
runwayEndId (String3)	Identify the primary instrument runway served by the facility. When more than one runway is served by a precision approach aid (such as a PAR), provide a separate feature for each runway. This attribute is only required for ILS, MLS, TLS, and PAR.
Attributes:	
description (String255)	A description or other unique information concerning the subject item, limited to 255

	characters.
navaidEquipmentType (CodeNavaidEquip	mentType) Specifies the type of NAVAID
	System Type) Identifies the navigational aid equipment as part of an overall system. For example the localizer and glideslope together make up the Instrument landing system (ILS) or the MLS Azimuth and MLS Elevation make up a Microwave Landing System.
useCode (<u>CodeUseCode</u>)	The code that represents the airspace structure in which the aeronautical navigational aid is utilized.
antennaToThresholdDistance (Real)	The distance in feet that the antenna is from the runway threshold. Provide the distance to the nearest tenth of a foot.
centerlineDistance (Real)	Distance from the centerline perpendicular point to the physical runway end. This should be the same distance as the antenna to threshold distance unless the runway end the navigational aid serves has a displaced threshold. Provide this distance to the ne
stopEndDistance (Real)	Provide the distance the from the antenna along the centerline to the stop end of the runway.
offsetDistance (Real)	The distance in feet that the feature is offset from the runway centerline. Provide this distance to the nearest tenth of a foot.
offsetDirection (CodeOffsetDirection)	Enter the direction (right, left, or on centerline) the navigational aid is offset from the runway. Determine the appropriate direction from the approach threshold down the runway.
lightingType (CodeLightingConfiguration)	
owner (Enumeration60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
referencePointEllipsoidHeight (Real)	Provide the height above the ellipsoid (HAE) for the referencePoint.
referencePointThreshold (Real)	Distance from the runway reference point to the threshold. Provide this distance to the nearest tenth of a foot.[FAA AAS-100].
thresholdCrossingHeight (Real)	The designated crossing height of the flight path angle above the Landing Threshold Point (or Fictitious Threshold Point).
highAngle (Real)	Maximum approach light vertical angle[FAA AAS-100].
ellipsoidElevation (Real)	The Base Elevation for most NAVAIDs. For ILS DME, the elevation is the center of the antenna cover. For MLSAZ, MLSEL, and End Fire Type Glide Slope Antennas, the elevation is the phase center of the reference point.
<u>Metadata:</u>	
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
dataSource (CodeDataSource)	The source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
<u>System Keys:</u>	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Navigational_Aids : Navigational Aid Site

(Database Feature Class Name = Navai	dSite; FAA=NavaidSite)		
Geometry Type: Polygon	Accuracy: +/-5Ft.	Sensitivity: Unclassified	
The parcel, lease, or right-of-way boundary for a navaid facility that is located off airport property.			
Names and Identifiers:			
id (String40)	A unique identifier used by people to refer to this primary or foreign key value)	s feature (note: this is not a system	

	name (String50)	Name of the feature
	faaFacilityId (String4)	The location identifier assigned to the feature by FAA
	alias (String60)	An alternative or former name by which the feature is referred.
A	ttributes:	
	description (String255)	A brief description of the facility and any special characteristics.
	facilityType (String16)	The type of facility or feature related to airfield operations.
	propertyCustodian (String50)	The regional property management office responsible for ownership of the site
N	<u>letadata:</u>	
	projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
	projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
	status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
	Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
	userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
	dataSource (<u>CodeDataSource</u>)	The source of the data in this record.
	sourceStatement (String255)	A statement providing additional details about the source of the data.
	editorName (String50)	The name of the individual who last edited this data.
	lastUpdate (Date)	The date upon which any data associated with this record was last updated.
S	ystem Keys:	
	guid (String60)	A globally unique identifier applied to each feature in the database for reference.
	metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Data Set: SeaPlane

SeaPlane : AnchorageArea

Seur fune (Timenorugern eu			
(Database Feature Class Name = AnchorageArea; FAA=AnchorageArea)			
Geometry Type: Polygon	Accuracy: +/-5Ft.	Sensitivity: Restricted	
An area designated specifically for th	ne parking of seaplanes.		
Names and Identifiers:			
id (String40)	A unique identifier used by people to re primary or foreign key value)	fer to this feature (note: this is not a system	
alias (String60)	An alternative or former name by which	the feature is referred.	
Attributes:			
name (String50)	Name of the feature.		
description (String255)	Description of the feature.		
mooringLocations (Integer)	Specify the number of mooring location	is provided in the AnchorageArea.	
length (Integer)	Specify the overall length available for	the AnchorageArea	
width (Integer)	Specify the overall length available for	the floating dock	
depth (Integer)	Specify the depth of the turning basin w 0.5 foot.	vith respect to mean lowest low tide to the nearest	
bottomConditions (String240)	Specify the type of bottom conditions in	1 the AnchorageArea.	
restriction (String240)	Any restrictions or cautions associated	with the AnchorageArea	
<u>Metadata:</u>			
projectType (<u>CodeProjectType</u>)	The type of project or work activity that feature.	t installed or first recorded the location of this	
projectId (String20)	A unique identifier associated with the precorded the location of this feature.	project or work activity that installed or first	
status (<u>CodeStatus</u>)	A temporal description of the operation	al status of the feature.	
Alternative (Integer)	Discriminator used to tie features of a p	lan or proposal together into a version.	
userFlag (String254)		ribute can be used by the operator for user defined subject items data integrity and should not be SFIE].	

dataSource (<u>CodeDataSource</u>)	The source of the data in this record.		
sourceStatement (String255)	A statement providing additional details about the source of the data.		
editorName (String50)	The name of the individual who last edited this data.		
lastUpdate (Date)	The date upon which any data associated with this record was last updated.		
System Keys:			
guid (String60)	A globally unique identifier applied to each feature in the database for reference.		
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.		

SeaPlane : Dock

(Database Feature Class Name = DockArea; FAA=DockArea)Geometry Type: PolygonAccuracy: +/-5Ft.A defined area on a seaplane base either fixed or floating, intended to accommodate aircraft for purposesof loading or unloading passengers or cargo, refueling, parking, or maintenance.

Names and Identifiers:	
id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String50)	Name of the feature.
alias (String60)	An alternative or former name by which the feature is referred.
Attributes:	
description (String255)	Description of the feature.
Pier (<u>CodeBoolean</u>)	Specify if a pier is available in the dockArea
PierLength (Integer)	Specify the overall length available for the pier
PierWidth (Integer)	Specify the overall length available for the pier
PierMaterial (CodeVerticalStructureMateria	al) Specify the materials used in the construction of the pier.
HoistingCapability (Integer)	Specify the hoisting capability in pounds
MarineRailwayPlatformLength (Integer)	Specify the length of the marine railway platform
MarineRailwayPlatformWidth (Integer)	Specify the width of the marine railway platform
MarineRailwayPlatformCapacity (Integer)	Specify the capacity of the marine railway platform in pounds
Gangway (CodeBoolean)	Specify if a gangway is available
GangwayLength (Integer)	Specify the overall length available for the gangway
GangwayWidth (Integer)	Specify the overall length available for the gangway
GangwayMaterial (CodeVerticalStructureM	(aterial) Specify the material used to construct the gangway
FloatingDock (CodeBoolean)	Specify if a floating dock is available
FloatingDockLength (Integer)	Specify the overall length available for the floating dock
FloatingDockWidth (Integer)	Specify the overall length available for the floating dock
FloatingDockMaterial (CodeVerticalStruct	ureMaterial) Specify the material used in constructing the dockArea
FloatingBarge (CodeBoolean)	Specify if a floating barge is available
FloatingBargeLength (Integer)	Specify the overall length available for the floating barge
FloatingBargeWidth (Integer)	Specify the overall length available for the floating barge
FloatingBargeMaterial (CodeVerticalStruct	tureMaterial)Specify the material used in constructing the floatingBarge
Metadata:	
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
dataSource (CodeDataSource)	The source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.

System Keys:

guid (String60) metaId (Integer) A globally unique identifier applied to each feature in the database for reference. An identifier used to refer to a metadata record that provide additional information about the data in this record.

SeaPlane : Navigation Buoy

(Database Feature Class Name = NavigationBuoy; FAA=NavigationBuoy)

Geometry Type: Point Accuracy: +/-5Ft. Sensitivity: Unclassified A floating marker which is moored to the bottom at a specific known location, which is used as an aid to navigation or for other special purpose. [SDSFIE].

Names and Identifiers:	
id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String50)	Any commonly used name associated with the buoy.
alias (String60)	An alternative or former name by which the feature is referred.
<u>Attributes:</u>	
description (String255)	A description or other unique information concerning the buoy limited to 255 characters. Use this to describe navigational requirements or warnings.
designator (String20)	The official number of the buoy.
Type (<u>CodeBuoyType</u>)	Discriminator - The type of the buoy or marker.
lightingType (CodeLightingConfiguration)	ationType) Type of lighting available at the location (if any)
color (<u>CodeColor</u>)	Code used to indicate the navigational color of the buoy.
owner (Enumeration60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
<u>letadata:</u>	
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (CodeStatus)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user define system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
dataSource (CodeDataSource)	The source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
ystem Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

SeaPlane : Seaplane Ramp Centerline

(Database Feature Class Name = SeaplaneRampCenterline; FAA=SeaplaneRampCenterline)Geometry Type: LineAccuracy: +/-5Ft.Sensitivity: RestrictedThe centerline of ramps specifically designed to transit seaplanesto or from land or water. [SDSFIE].Names and Identificant

<u>n</u>	ames and Identifiers:	
	id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
	name (String50)	Name of the feature.
	alias (String60)	An alternative or former name by which the feature is referred.
A	<u>Attributes:</u>	
	description (String255)	Description of the feature.
	Length (Integer)	Specify the length of the seaplane ramp centerline from the water to the shoreline

Metadata:

projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.		
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.		
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.		
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.		
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].		
dataSource (<u>CodeDataSource</u>)	The source of the data in this record.		
sourceStatement (String255)	A statement providing additional details about the source of the data.		
editorName (String50)	The name of the individual who last edited this data.		
lastUpdate (Date)	The date upon which any data associated with this record was last updated.		
<u>System Keys:</u>			
guid (String60)	A globally unique identifier applied to each feature in the database for reference.		
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.		

SeaPlane : Seaplane Ramp Site

(Database Feature Class Name = SeaplaneRampSite; FAA=SeaplaneRampSite)Geometry Type: PolygonAccuracy: +/-5Ft.Sensitivity: RestrictedRamps specifically designed to transit seaplanes from land to or from land to water. [SDSFIE].

id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String50)	Name of the feature.
alias (String60)	An alternative or former name by which the feature is referred.
Attributes:	
description (String255)	Description of the feature.
Width (Integer)	Identify the width of the seaplane ramp site
Slope (Integer)	The slope of the ramp specified as an integer value.
<u>Metadata:</u>	
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (CodeStatus)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user define system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
dataSource (CodeDataSource)	The source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information abou the data in this record.

SeaPlane : Taxi Channel

(Database Feature Class Name = TaxiChannel; FAA=TaxiChannel) Geometry Type: Polygon Accuracy: +/-5Ft.

Sensitivity: Restricted

A water channel used for the movement of aircraft between shore facilities and the water lane. [AC 150/5395-1].

Mames and Identifiers: id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system
id (String40)	primary or foreign key value)
Name (String50)	Any commonly used name associated with the taxi channel.
alias (String60)	An alternative or former name by which the feature is referred.
Attributes:	
Description (String255)	Description of the feature.
Restriction (String240)	Any restrictions or cautions associated with the taxi channel
Length (Integer)	Specify the overall length of the taxi channel
Width (Integer)	Specify the overall width of the taxi channel
Depth (Integer)	Specify the depth of the taxi channel with respect to mean lowest low tide
<u>Aetadata:</u>	
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (CodeStatus)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
dataSource (CodeDataSource)	The source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
ystem Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

SeaPlane : Turning Basin

(Database Feature Class Name = TurningBasin; FAA=TurningBasin)

Geometry Type: Polygon Accuracy: +/-5Ft. Sensitivity: Restricted A water area used for the maneuvering of aircraft where the use of water surface is restricted. Turning basins should be located adjacent to shoreline facilities and at each end of the water operating area. [AC 150/5395-1].

Names and Identifiers:			
id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)		
Name (String50)	A commonly used name for the turning basin		
alias (String60)	An alternative or former name by which the feature is referred.		
Attributes:			
Restriction (String240)	Any restrictions or cautions associated with the turning basin		
Length (Integer)	Specify the overall length of the turning basin to the nearest 5 feet.		
Width (Integer)	Specify the overall width of the turning basin to the nearest 5 feet		
Depth (Integer)	Specify the depth of the turning basin with respect to mean lowest low tide to the nearest 0.5 foot.		
Diameter (Integer)	The diameter of the turning basin available for use by aircraft to the nearest 5 feet.		
CompassLocation (CodeCompassLocation)	Code indicating the cardinal compass location of the turning basin from centroid of the WaterLaneEnd		
<u>Metadata:</u>			
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.		

projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.		
status (CodeStatus)	A temporal description of the operational status of the feature.		
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.		
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].		
dataSource (CodeDataSource)	The source of the data in this record.		
sourceStatement (String255)	A statement providing additional details about the source of the data.		
editorName (String50)	The name of the individual who last edited this data.		
lastUpdate (Date)	The date upon which any data associated with this record was last updated.		
System Keys:			
guid (String60)	A globally unique identifier applied to each feature in the database for reference.		
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.		

SeaPlane : Water Lane End

(Database Feature Class Name = WaterLaneEnd; FAA=WaterLaneEnd)

Geometry Type: PointAccuracy: +/-5Ft.Sensitivity: RestrictedThe end of the water land (typically located at the furthest end of a turning basin) suitable for landing or
takeoff runs of aircraft. WaterLandEnds define the water lane and describe the approach/departure
procedure characteristics of a water land.

Names and Identifiers:		
id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)	
Name (String50)	Name of the feature.	
alias (String60)	An alternative or former name by which the feature is referred.	
Attributes:		
Description (String255)	Description of the feature.	
MagneticBearing (Integer)	Compute and specify the magnetic bearing of the primary water lane to the nearest degree based on the location of the reciprocal WaterLaneEnd points. This is similar to the runway magnetic bearing for a land based airport.	
CompassLocation (CodeCompassLocation)	Code indicating the cardinal compass location of the turning basin from centroid of the WaterLaneEnd. This feature is similar to the land based airport RunwayEnd.	
Restriction (String240)	Any restrictions or cautions associated with the sea plane landing area.	
AirMarker (<u>CodeBoolean</u>)	Code specifying if a standard air maker is used to indicate if a standard air marker is in use at the location.	
Type (<u>CodeBoolean</u>)	Identifies the WaterLaneEnd as the primary or alternate. Primary = Y, alternate=N	
Color (<u>CodeColor</u>)	The color of the air marker at the location (if any)	
LightingType (CodeLightingConfiguration	Type of lighting available at the location (if any)	
ApproachGuidance (CodeApproachGuidane		
	operating area.	
Length (Integer)	Specify the overall length of the primary water lane	
Width (Integer)	Specify the overall width of the primary water lane	
Depth (Integer)	Specify the depth of the primary water lane with respect to mean lowest low tide	
Centroid (Integer)	The geographic location of the primary water centroid, used to determine the primary and alternate water lanes within the water operating area.	
<u>Metadata:</u>		
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.	
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.	
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.	
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.	
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].	

dataSource (<u>CodeDataSource</u>)	The source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
<u>System Keys:</u>	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

SeaPlane : Water Operations Area

(Database Feature Class Name = WaterOperatingArea; FAA=WaterOperatingArea)Geometry Type: PolygonAccuracy: +/-5Ft.Sensitivity: RestrictedAn area designated and marked for the takeoff and landing of aircraft.This is equivalent to the AirportOperating Area of a land based airport.

Names and Identifiers:	
id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
Name (String50)	Name of the feature water body (river/lake).
alias (String60)	An alternative or former name by which the feature is referred.
Attributes:	
Description (String255)	Description of the feature.
SurfaceMaterial (CodeSurfaceMaterial)	Code used to indicate the type of water the water operating area is on or planned to use.
Length (Integer)	Specify the overall length of the WaterOperatingArea to the nearest 5 feet
Width (Integer)	Specify the overall width of the waterOperatingArea to the nearest 5 feet
	Measure and specify the rate of the current flow in the WaterOperatingArea in miles per hour
CompassLocation (CodeCompassLocation)	Specify the magnetic bearing of the current flow direction
TidalRange (Integer)	Specify (in feet) the height difference in height from mean low mean high tide
CoordinatedUseType (CodeCoordinatedUse	Type) Specify the primary coordinated use of the waterway. If no single activity comprises the majority of the coordinated use then specify multiple.
	Provide the amount of activity based on percentage of daily use of the primary coordinated use type. If coordinated use type is multiple provide the largest activity level of the single most expected activity.
Metadata:	
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
dataSource (<u>CodeDataSource</u>)	The source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
<u>System Keys:</u>	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Data Set: Security

Security : Security Area

(Database Feature Class Name = SecurityArea; FAA=SecurityArea)Geometry Type: PolygonAccuracy: +/-5Ft.Sensitivity: SecretAn area of the airport in which security measures required by 49CFR1542.201 must be carried out.[49CFR1542].

Names and Identifiers:	
id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String50)	Name of the feature.
alias (String60)	An alternative or former name by which the feature is referred.
Attributes:	
description (String255)	Description of the feature.
Metadata:	
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
dataSource (<u>CodeDataSource</u>)	The source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Security : Security Identification Display Area

(Database Feature Class Name = SecurityIdDisplayArea; FAA=SecurityIdDisplayArea)Geometry Type: PolygonAccuracy: +/-5Ft.Sensitivity: SecretPortions of an airport, specified in the airport security program, in which security measures required by
regulation must be carried out. This area includes the security area and may include other areas of the
airport. [DHS].

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	system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
dataSource (CodeDataSource)	The source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Security : Security Perimeter Line

. . .

(Database Feature Class Name = SecurityPerimeterLine; FAA=SecurityPerimeterLine)Geometry Type: PolygonAccuracy: +/-5Ft.Sensitivity: ConfidentialAny type of perimeter, such as barbed wire, high fences, motion detectors and armed guards at gates, thatensure no unauthorized visitors can gain entry. [SDSFIE].

Names and Identifiers:	
id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String50)	Name of the feature.
alias (String60)	An alternative or former name by which the feature is referred.
Attributes:	
description (String255)	A description or other unique information concerning the subject item, limited to 255 characters.[SDSFIE Attribute Table].
<u>Metadata:</u>	
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
dataSource (CodeDataSource)	The source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
<u>System Keys:</u>	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Security : Sterile Area

(Database Feature Class Name = SterileArea; FAA=SterileArea)

Geometry Type: Polygon Accuracy: +/-5Ft. Sensitivity: Secret Portions of an airport defined in the airport security program that provide passengers access to boarding aircraft and to which the access is generally controlled by TSA, an aircraft operator, or a foreign air carrier. [DHS].

Names and Identifiers:	
id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String50)	Name of the feature.
alias (String60)	An alternative or former name by which the feature is referred.
Attributes:	

description (String255)	Description of the feature.
Metadata:	
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (CodeStatus)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
dataSource (CodeDataSource)	The source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
<u>System Keys:</u>	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Security : Surveillance Camera

 (Database Feature Class Name = SurveillanceCamera)

 Geometry Type: Point
 Accuracy: +/-1Ft.

 Sensitivity: Top Secret

 The location of a video camera used for surveillance purposes. [SDSFIE Tinker Air Force Base].

Names and Identifiers:	
id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
alias (String60)	An alternative or former name by which the feature is referred.
<u>Metadata:</u>	
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
dataSource (CodeDataSource)	The source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
<u>System Keys:</u>	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Data Set: Structures

Structures : Building

(Database Feature Class Name = Buildi	ng; FAA=Building)	
Geometry Type: Polygon	Accuracy: +/-3Ft.	Sensitivity: Restricted
A three-dimensional structure (i.e. hangars, terminals, etc.) modeled with a bounding polygon.		
Names and Identifiers:		
id (String40)	A unique identifier used by people to refer to thi primary or foreign key value)	s feature (note: this is not a system

	name (String50)	Name of the feature.
	buildingNumber (String16)	The code indicating the number of the building.
	alias (String60)	An alternative or former name by which the feature is referred.
At	tributes:	
	description (String255)	A description or other unique information concerning the subject item, limited to 255 characters.
	structureType (CodeStructureType)	The type of structure.
	numberOfCurrentOccupants (Integer)	Number of persons currently occupying the structure
	areaInside (Real)	Total inside area of structure
	structureHeight (Real)	Maximum height of structure; i.e. AGL height
	areaFloor (Real)	Total inside floor area
	lightingType (CodeLightingConfigurationT	ype) A description of the lighting system.
	markingFeatureType (CodeMarkingFeature	Type) The color of the marking(s)
	color (<u>CodeColor</u>)	The type of the marking(s)
Me	etadata:	
	projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
	projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
	status (CodeStatus)	A temporal description of the operational status of the feature.
	Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
	userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
	dataSource (CodeDataSource)	The source of the data in this record.
	sourceStatement (String255)	A statement providing additional details about the source of the data.
	editorName (String50)	The name of the individual who last edited this data.
	lastUpdate (Date)	The date upon which any data associated with this record was last updated.
Sys	stem Keys:	
	guid (String60)	A globally unique identifier applied to each feature in the database for reference.
	metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Structures : Project Area

(Database Feature Class Name = ConstructionArea; FAA=ConstructionArea)

Geometry Type: Polygon Accuracy: +/-3Ft. Sensitivity: Restricted A defined area that is under construction, not intended for active use until authorized by the concerned authority. The area defines a boundary for personnel, material, and equipment engaged in the construction activity. [FAA].

Names and Identifiers:	
id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String50)	Name of the feature.
projectName (String60)	The name of the construction project
alias (String60)	An alternative or former name by which the feature is referred.
Attributes:	
description (String255)	A description or other unique information concerning the subject item, limited to 255 characters.
projectStatus (<u>CodeProjectStatus</u>)	The status of the construction project
coordinationContact (String75)	Airport, emergency, airline, tenant, and contractor personnel who are responsible for coordinating on-airport construction work
<u>Metadata:</u>	
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.

status (<u>CodeStatus</u>)	A temporal description of the operation	onal status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.	
userFlag (String254)	1	attribute can be used by the operator for user defined he subject items data integrity and should not be SDSFIE].
dataSource (<u>CodeDataSource</u>)	The source of the data in this record.	
sourceStatement (String255)	A statement providing additional deta	ails about the source of the data.
editorName (String50)	The name of the individual who last e	edited this data.
lastUpdate (Date)	The date upon which any data associa	ated with this record was last updated.
System Keys:		
guid (String60)	A globally unique identifier applied t	o each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadate the data in this record.	ata record that provide additional information about
Structures : Fence		
(Database Feature Class Name =	Fence; FAA=Fence)	
Geometry Type: Line	Accuracy: +/-3Ft.	Sensitivity: Restricted
Any fencing (chain-link, razor wi	re, PVC, etc.). [FAA].	5
Names and Identifiers:		
id (String40)	A unique identifier used by people to primary or foreign key value)	refer to this feature (note: this is not a system
name (String50)	Name of the feature.	
alias (String60)	An alternative or former name by wh	ich the feature is referred.
Attributes:		
description (String255)	A description or other unique information of the characters.	ation concerning the subject item, limited to 255
height (Real)	The overall distance from the surface	of the ground to the top of the fence.

height (Real)

Metadata: projectType (CodeProjectType)

projectId (String20)

status (CodeStatus) Alternative (Integer) userFlag (String254)

dataSource (CodeDataSource)

sourceStatement (String255) editorName (String50) lastUpdate (Date) System Keys:

guid (String60) metaId (Integer)

A globally unique identifier applied to each feature in the database for reference. An identifier used to refer to a metadata record that provide additional information about the data in this record.

The type of project or work activity that installed or first recorded the location of this

A unique identifier associated with the project or work activity that installed or first

An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be

Discriminator used to tie features of a plan or proposal together into a version.

A temporal description of the operational status of the feature.

A statement providing additional details about the source of the data.

The date upon which any data associated with this record was last updated.

Structures : Gate

(Database Feature Class Name = Gate; I	FAA=Gate)		
Geometry Type: Line	Accuracy: +/-3Ft.	Sensitivity: Restricted	
A gate is an opening in a fence or other type of barrier between areas. [SDSFIE].			
Names and Identifiers:			
id (String40)	A unique identifier used by people to refer to this primary or foreign key value)	feature (note: this is not a system	
name (String50)	Name, code or identifier used to identify the gate.		
alias (String60)	An alternative or former name by which the feature	re is referred.	

feature.

recorded the location of this feature.

The source of the data in this record.

used to store the subject items data.[SDSFIE].

The name of the individual who last edited this data.

Attributes:

description (String255)

type (String50) length (Real) height (Real) attended (CodeBoolean)

Metadata:

projectType (CodeProjectType)

projectId (String20)

status (CodeStatus) Alternative (Integer) userFlag (String254)

editorName (String50)

lastUpdate (Date)

guid (String60)

metaId (Integer)

dataSource (CodeDataSource) sourceStatement (String255)

The type of project or work activity that installed or first recorded the location of this feature. A unique identifier associated with the project or work activity that installed or first recorded the location of this feature. A temporal description of the operational status of the feature. Discriminator used to tie features of a plan or proposal together into a version. An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE]. The source of the data in this record. A statement providing additional details about the source of the data. The name of the individual who last edited this data. The date upon which any data associated with this record was last updated.

A globally unique identifier applied to each feature in the database for reference. An identifier used to refer to a metadata record that provide additional information about the data in this record.

A description or other unique information concerning the subject item, limited to 240

A Boolean indicating whether the gate is tended by a guard or other individual.

Structures : Roof

System Keys:

(Database Feature Class Name = Roof; FAA=Roof) Geometry Type: Polygon Accuracy: +/-3Ft. Structure on top of buildings, garages and other similar structures.

characters.

The gate material and method of construction.

The overall distance from one end of the gate to the other.

The overall distance from the surface of the top of the gate.

Sensitivity: Restricted

Names and Identifiers:	
id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String50)	Name of the feature.
alias (String60)	An alternative or former name by which the feature is referred.
buildingNumber (String16)	The code indicating the number of the building
Attributes:	
description (String255)	Description of the feature.
Metadata:	
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
dataSource (<u>CodeDataSource</u>)	The source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Structures : Tower

r; FAA=Tower)	
Accuracy: +/-3Ft.	Sensitivity: Restricted
e an activity at an elevated level abo	ve the ground.
-	-
A unique identifier used by people to refer to th primary or foreign key value)	is feature (note: this is not a system
Name of the feature.	
An alternative or former name by which the fea	ture is referred.
Description of the feature.	
ructureMaterial) Classifies the predomination	nt material of the vertical object
A code indicating that the tower is lighted[AIX]	M].
The type of the marking(s)	
The color of the marking(s)	
Maximum height of structure; i.e. AGL height	
The type of project or work activity that installe feature.	d or first recorded the location of this
A unique identifier associated with the project of recorded the location of this feature.	or work activity that installed or first
A temporal description of the operational status	of the feature.
Discriminator used to tie features of a plan or pa	roposal together into a version.
The source of the data in this record.	
A statement providing additional details about t	he source of the data.
The name of the individual who last edited this	data.
The date upon which any data associated with t	his record was last updated.
A globally unique identifier applied to each fea	ture in the database for reference.
An identifier used to refer to a metadata record the data in this record.	that provide additional information about
	Accuracy: +/-3Ft. e an activity at an elevated level abo A unique identifier used by people to refer to the primary or foreign key value) Name of the feature. An alternative or former name by which the fea Description of the feature. uctureMaterial) Classifies the predominan A code indicating that the tower is lighted[AIXI Type) A description of the lighting system. Approach; Airport; Runway; Taxiway; and Obs eType) The type of the marking(s) The color of the marking(s) Maximum height of structure; i.e. AGL height The type of project or work activity that installe feature. A unique identifier associated with the project of recorded the location of this feature. A temporal description of the operational status Discriminator used to tie features of a plan or pr An operator defined work area. This attribute ca system processes. It does not affect the subject i used to store the subject items data.[SDSFIE]. The source of the data in this record. A statement providing additional details about to The name of the individual who last edited this The date upon which any data associated with the A globally unique identifier applied to each feat An identifier used to refer to a metadata record

Data Set: Surface_Transportation

Surface_Transportation : Bridge

(Database Feature Class Name = 1	Bridge; FAA=Bridge)	
Geometry Type: Polygon	Accuracy: +/-5Ft.	Sensitivity: Restricted
A structure used by vehicles that a	allows passage over or under an ob	stacle such as a river, chasm,
mountain, road or railroad. [SDSF	ĨE].	
Names and Identifiers:		

1	vames and Identifiers:	
	id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
	name (String50)	Name of the feature.
	alias (String60)	An alternative or former name by which the feature is referred.
4	Attributes:	
	description (String255)	Description of the feature.
	surfaceMaterial (CodeSurfaceMaterial)	The material used as a surface for the bridge.
	bridgeType (<u>CodeBridgeType</u>)	The type of bridge.
	verticalStructureMaterial (CodeVerticalStr	uctureMaterial) Classifies the predominant material of the vertical object

directionality (CodeDirectionality)	Code indicating the traffic flow of the bridge being classified.
Metadata:	
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
dataSource (CodeDataSource)	The source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Surface_Transportation : Driveway

(Database Feature Class Name = DrivewayArea; FAA=DrivewayArea)Geometry Type: PolygonAccuracy: +/-5Ft.Sensitivity: RestrictedAn access to a residence or other vehicle parking lot or storage area. [SDSFIE].

Names and Identifiers:	
id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String50)	Name of the feature.
alias (String60)	An alternative or former name by which the feature is referred.
Attributes:	
description (String255)	Description of the feature.
surfaceMaterial (CodeSurfaceMaterial)	The material used as a surface for the driveway.
Metadata:	
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
dataSource (CodeDataSource)	The source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metald (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Surface_Transportation : Driveway Centerline

(Database Feature Class Name = DrivewayCenterline; FAA=DrivewayCenterline)		
Geometry Type: Line	Accuracy: +/-5Ft.	Sensitivity: Restricted

The center of the driveway as measured from the edge of the paved surface. The segments of a driveway centerline will coincide with the road segments in order to provide network connectivity. [SDSFIE].

Names and Identifiers:	
id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String50)	Name of the feature.
alias (String60)	An alternative or former name by which the feature is referred.
Attributes:	
description (String255)	Description of the feature.
Metadata:	
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
dataSource (<u>CodeDataSource</u>)	The source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
<u>System Keys:</u>	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Surface_Transportation : Parking Lot

(Database Feature Class Name = ParkingLot; FAA=ParkingLot)			
Geometry Type: Polygon	Accuracy: +/-5Ft.	Sensitivity: Restricted	
An area of an airport used for parking of	of automobiles, buses, etc. [SDSFIE].		
Names and Identifiers:			
id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)		
name (String50)	Any commonly used name for the parking area.		
alias (String60)	An alternative or former name by which the feature	are is referred.	
<u>Attributes:</u>			
description (String255)	A description of the parking lot.		
parkingLotUse (String16)	The primary use of the parking area.		
totalNumberSpaces (Integer)	The total parking spaces available in the area inc	luding handicapped or reserved spaces.	
numberHandicapSpaces (Integer)	The total number of spaces marked as being handicapped parking.		
owner (Enumeration60)	A person, organization, or agency with legal con utility asset.[Adopted from SDSFIE].	trol or management responsibility of the	
surfaceType (<u>CodeSurfaceType</u>)	Type of different materials used to construct the	surface.	
Metadata:			
projectType (CodeProjectType)	The type of project or work activity that installed feature.	or first recorded the location of this	
projectId (String20)	A unique identifier associated with the project or recorded the location of this feature.	work activity that installed or first	
status (<u>CodeStatus</u>)	A temporal description of the operational status of	of the feature.	
Alternative (Integer)	Discriminator used to tie features of a plan or pro-	pposal together into a version.	
userFlag (String254)	An operator defined work area. This attribute can system processes. It does not affect the subject it used to store the subject items data.[SDSFIE].		
dataSource (CodeDataSource)	The source of the data in this record.		

sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
<u>System Keys:</u>	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Surface_Transportation : Railroad Centerline

 (Database Feature Class Name = RailroadCenterline; FAA=RailroadCenterline)

 Geometry Type: Line
 Accuracy: +/-5Ft.
 Sensitivity: Confidential

 Represents the centerline of each pair of rails. [ANSI: Data Content Standards For Transportation

 Networks: Roads].

Names and Identifiers:	
id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String50)	Any commonly used name for the railroad.
alias (String60)	An alternative or former name by which the feature is referred.
Attributes:	
description (String255)	Any narrative remarks concerning the railroad.
numberOfTracks (Integer)	The number of tracks present
owner (Enumeration60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
isBridge (<u>CodeBoolean</u>)	Indicates given railroad segment is bridge (Y- a is bridge, N- is not a bridge).
isTunnel (<u>CodeBoolean</u>)	Indicates given railroad segment is tunnel (Y- is a tunnel, N- is not a tunnel).
directionality (CodeDirectionality)	Code indicating the traffic flow of the railroad segment being classified.
segmentType (<u>CodeSegmentType</u>)	Code indication the sequence or position of the segment being classified by the feature.
<u>letadata:</u>	
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (CodeStatus)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
dataSource (CodeDataSource)	The source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
ystem Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Surface_Transportation : Railroad Yard

(Database Feature Class Name = RailroadYard; FAA=RailroadYard)		
Accuracy: +/-5Ft.	Sensitivity: Restricted	
Represents a railroad yard. [ANSI: Data Content Standards For Transportation Networks: Roads].		
Names and Identifiers:		
A unique identifier used by people to refer to this primary or foreign key value)	s feature (note: this is not a system	
A name that represent the railroad yard.		
An alternative or former name by which the feat	ure is referred.	
	Accuracy: +/-5Ft. a Content Standards For Transportation A unique identifier used by people to refer to this primary or foreign key value) A name that represent the railroad yard.	

Attributes:

description (String255) owner (Enumeration60)

Metadata:

projectType (<u>CodeProjectType</u>)

projectId (String20)

status (<u>CodeStatus</u>) Alternative (Integer)

userFlag (String254)

dataSource (CodeDataSource)

sourceStatement (String255) editorName (String50)

lastUpdate (Date)

System Keys:

guid (String60) metaId (Integer) Any brief description of the feature.

A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].

The type of project or work activity that installed or first recorded the location of this feature.

A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.

A temporal description of the operational status of the feature.

Discriminator used to tie features of a plan or proposal together into a version. An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].

The source of the data in this record.

A statement providing additional details about the source of the data.

The name of the individual who last edited this data.

The date upon which any data associated with this record was last updated.

A globally unique identifier applied to each feature in the database for reference. An identifier used to refer to a metadata record that provide additional information about the data in this record.

Surface_Transportation : Road Centerline

(Database Feature Class Name = RoadCenterline; FAA=RoadCenterline)

Geometry Type: Line Accuracy: +/-5Ft. Sensitivity: Confidential The center of the roadway as measured from the edge of the paved surface. The segments of a road centerline will coincide with the road segments in order to have similar characteristics. [SDSFIE].

Names and Identifiers:	
id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String50)	Any commonly used name for the road centerline.
alias (String60)	An alternative or former name by which the feature is referred.
Attributes:	
description (String255)	Description of the feature.
color (<u>CodeColor</u>)	The color of the centerline marking.
Metadata:	
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
dataSource (CodeDataSource)	The source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Surface_Transportation : Road Point

(Database Feature Class Name = RoadPoint; FAA=RoadPoint)Geometry Type: PointAccuracy: +/-5Ft.Sensitivity: ConfidentialA point along the roadway which has some special significance either for starting or ending a roadsegment or for representing a significant position along the roadway system such as the start or center of abridge or the center of an intersection. [ANSI: Data Content Standards For Transportation Networks:Roads*].

Names and Identifiers:	
id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String50)	Name of the feature.
alias (String60)	An alternative or former name by which the feature is referred.
Attributes:	
description (String255)	Description of the feature.
<u>Metadata:</u>	
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
dataSource (CodeDataSource)	The source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
<u>System Keys:</u>	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Surface_Transportation : Road Segment

(Database Feature Class Name = RoadSegment; FAA=RoadSegment) Geometry Type: Polygon Accuracy: +/-5Ft. Sensitivity: Confidential Represents a linear section of the physical road system designed for, or the result of, human or vehicular movement; must be continuous (no gaps) and cannot branch; no mandates are provided on how to segment the road system except that data providers adop [ANSI: Data Content Standards For Transportation Networks: Roads*].

Names and Identifiers:	
id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String50)	A common name or street name used to refer to the stretch of road.
alias (String60)	An alternative or former name by which the feature is referred.
alternateName (String30)	The alternate name or second name for the road.
route1Name (String30)	The route number or other identifier that is affiliated with the first route type
route2Name (String30)	The route number or other identifier that is affiliated with the second route type
route3Name (String30)	The number or other identifier that is affiliated with the third route type
Attributes:	
description (String255)	A general description of the road.
route1Type (<u>CodeRouteType</u>)	The first route type for the road (Interstate, US, State, etc.)
route2Type (<u>CodeRouteType</u>)	The second route type for the road (Interstate, US, State, etc.)
route3Type (<u>CodeRouteType</u>)	The third route type for the road (Interstate, US, State, etc.)

numberOfLanes (Integer)	The total number of lanes of traffic, counting both directions, not including turning lanes.[SDSFIE Feature Table].
length (Real)	The length of the road segment measured at the centerline.[SDSFIE Feature Table].
width (Real)	The average width of the road segment.[SDSFIE Feature Table].
isBridge (<u>CodeBoolean</u>)	Indicates given road segment is bridge (Y- a is bridge, N- is not a bridge).[SDSFIE Feature Table].
isTunnel (<u>CodeBoolean</u>)	Indicates given road segment is tunnel (Y- is a tunnel, Nis not a tunnel).[SDSFIE Feature Table].
directionality (CodeDirectionality)	Code indicating the traffic flow on the road segment.
segmentType (<u>CodeSegmentType</u>)	Code indicating the type of segment being classified.
surfaceType (<u>CodeSurfaceType</u>)	Type of material used to construct the surface.
surfaceMaterial (CodeSurfaceMaterial)	Material used to construct the surface of the road.
Metadata:	
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
dataSource (CodeDataSource)	The source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Surface_Transportation : Sidewalk Segment

(Database Feature Class Name = Sidewalk; FAA=Sidewalk)

Geometry Type: Polygon Accuracy: +/-5Ft. Sensitivity: Restricted A paved or concrete pad used as a pedestrian walkway. Usually is composed of one or more SideWalkSegments. [SDSFIE].

Names and Identifiers:	
id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String50)	Name of the feature.
alias (String60)	An alternative or former name by which the feature is referred.
Attributes:	
description (String255)	A brief description of any special characteristics of the sidewalk.
walkUse (String26)	A short description of the primary use of the sidewalk.
AmericanDisabilitiesAct (CodeBoolean)	Boolean indicating whether or not the walkway is in compliance with the American Disabilities Act.
length (Real)	The overall length of the sidewalk section.
width (Real)	The mean width of the sidewalk section.
surfaceMaterial (CodeSurfaceMaterial)	Primary material used in the sidewalk and/or trail.
segmentType (<u>CodeSegmentType</u>)	Code indicating the type of segment being classified.
Metadata:	
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.

Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.	
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].	
dataSource (CodeDataSource)	The source of the data in this record.	
sourceStatement (String255)	A statement providing additional details about the source of the data.	
editorName (String50)	The name of the individual who last edited this data.	
lastUpdate (Date)	The date upon which any data associated with this record was last updated.	
System Keys:		
guid (String60)	A globally unique identifier applied to each feature in the database for reference.	
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.	

Surface_Transportation : Tunnel

(Database Feature Class Name = Tunnel; FAA=Tunnel) Geometry Type: Polygon Accuracy: +/-5Ft. Sensitivity: Restricted The area of a transportation passage, open at both ends, used to provide access through or under a natural obstacle. [SDSFIE].

valles and fuctioners.	
id (String40)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String50)	Name of the feature.
alias (String60)	An alternative or former name by which the feature is referred.
Attributes:	
description (String255)	Description of the feature.
type (String16)	The code that represents the type of tunnel
verticalClearance (Real)	Indicates the actual vertical clearance to the top of the tunnel imposed by any restrictions.
averageHeight (Real)	The average height of the tunnel.
averageWidth (Real)	The average width of the tunnel.
length (Real)	The length of the tunnel.
directionality (CodeDirectionality)	Code indicating the direction of traffic flow in the tunnel.
segmentType (<u>CodeSegmentType</u>)	Code indicating the type of segment being classified.
<u>letadata:</u>	
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
dataSource (CodeDataSource)	The source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
ystem Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Domain Values

Below are acceptable domain values for each of the attributes bound by list domains. Each list of acceptable values is an enumeration, which means that one of the values must be selected in order to be compliant with the standard. For each value, a definition along with any applicable source information is provided.

CodeAccess

Used by Attributes: <u>Door - Accessed Area</u>

Value
Public to Public
Public to Restricted
Public to SIDA
Public to Sterile
Ramp Call
Restricted to Restricted
Restricted to SIDA
SIDA to Public
SIDA to Restricted
Sterile to Restricted
Sterile to SIDA
Sterile to Sterile

Definition (Notes) [Source]

Public to Public Public to Restricted Public to SIDA Public to Sterile Ramp Call Restricted to Restricted Restricted to SIDA SIDA to Public SIDA to Restricted Sterile to Restricted Sterile to SIDA Sterile to SIDA

CodeAcquisitionType

Used by Attributes: <u>Airport Parcel - Acquisition Type</u>; Parcel - Acquisition Type

Value	Definition (Notes) [Source]
EASEMENT	Rights given to use land in a specific manner
FEE_SIMPLE	Purchased real property; absolute ownership
LEASED	Restricted use of land for a specific period of time

CodeAirline

Used by Attributes: Baggage Carousel - Tenant Name; Baggage Conveyor - Tenant Name

Value	Definition (Notes) [Source]
Air Canada	Air Canada
Air Canada Jazz	Air Canada Jazz
Air France	Air France
AirTran Airways	AirTran Airways
American Airlines	American Airlines
American Connection - American Eagle	American Connection - American Eagle
American Connection - Chautauqua Airl	ines American Connection - Chautauqua Airlines
American Connection - Trans States Air	lines American Connection - Trans States Airlines
British Airways	British Airways
Continental Airlines	Continental Airlines
Delta Air Lines	Delta Air Lines
Delta Connection - Atlantic Southeast A	irlines Delta Connection - Atlantic Southeast Airlines
Delta Connection - Comair	Delta Connection - Comair
Delta Connection - Freedom Airlines	Delta Connection - Freedom Airlines
Delta Connection - Pinnacle Airlines	Delta Connection - Pinnacle Airlines
Delta Connection - Shuttle America	Delta Connection - Shuttle America
Delta Connection - SkyWest Airlines	Delta Connection - SkyWest Airlines
Delta Connection / Atlantic Southeast Ai	irlines Delta Connection / Atlantic Southeast Airlines
Delta Connection / Freedom Airlines	Delta Connection / Freedom Airlines
Delta Connection / Pinnacle Airlines	Delta Connection / Pinnacle Airlines

CodeAirportFacilityType

Used by Attributes: Airport Boundary - Airport Facility Type

Value	Definition (Notes) [Source]
AD	Airport only
AH	Airport with helicopter landing area
Н	Helicopter (the stall speed method of calculating aircraft category does not apply)
HP	Heliport only
LS	Landing Site

CodeApproachCategory

Used by Attributes: <u>Runway End - Approach Category</u>

Value Definition (Note	es) [Source]
A Speed less than 91 ki	nots
B Speed 91 knots or me	ore but less than 121 knots
C Speed 121 knots or n	nore but less than 141 knots
D Speed 141 knots or n	nore but less than 166 knots
E Speed 166 knots or n	nore

CodeApproachGuidance

Used by Attributes: Obstruction Identification Surface - Approach Guidance;Runway End - Approach Guidance;Water Lane End - Approach Guidance

Value	Definition (Notes) [Source]
NON_VERTICAL	Runway is used for or planned use is for Non-Vertically Guided operations
PRECISION_CAT_I	Runway is used or or planned use is for Precision Category 1 operations
PRECISION_CAT_II	Runway is used for or planned use is for Precision Category II operations
PRECISION_CAT_IIIA	Runway is used for or planned use is for Precision Category IIIa operations.
PRECISION_CAT_IIIB	Runway is used for or planned use is for Precision Category IIIb operations
PRECISION_CAT_IIIC	Runway is used for or planned use is for Precision Category IIIc operations
VERTICAL	Runway is used for or planned use is for Vertically Guided (other than precision) operations
VISUAL	Runway is used for or planned use is for visual operations only

CodeApronType

Used by Attributes: <u>Apron - Apron Type</u>

Value	Definition (Notes) [Source]
CARGO	Cargo loading area used for the loading/unloading of cargo
DE_ICING	Area used for deicing of aircraft
FUEL	Area used for aircraft fueling
HARDSTAND	Area used for parking a single aircraft. More temporary than parking
LOADING	Passenger loading area used for the loading/unloading of passengers
MAINT	Area used for maintenance of aircraft
MILITARY	Apron used by military
NORMAL	Apron
OTHER	Other
PARKING	Area used to park aircraft
RAMP	Access pavement between maintenance hangars opening to the apron and the apron edge
STAIRS	Stairs
TAXILANE	Area where plane is still under terminal control (airline dispatched) as opposed to tower
	control.
TEMPORARY	Temporary
TURNAROUND	Area used for aircraft to turn around

CodeBoolean

Used by Attributes: Water Lane End - Air Marker;Door - Alarmed;Sidewalk Segment - American with Disabilities Act;Gate - Attended;Passenger Gate - Common Use;Aircraft Gate Stand - Docking Availability;Flora Species Site - Endangered Species Act Site;Stair - Esc Route;Obstacle - FAA Coordination Code;Obstruction Area - FAA Coordination Code;Wall - Fire;Door -Fire Rated;Dock - Floating Barge;Dock - Floating Dock;Obstacle - Frangible;Obstruction Area - Frangible;Dock -Gangway;Airport Control Point - GPS Suitable;Aircraft Gate Stand - Ground Power Availability;Railroad Centerline - Is Bridge;Road Segment - Is Bridge;Runway Centerline - Is Derived;Railroad Centerline - Is Tunnel;Road Segment - Is Tunnel;Aircraft Gate Stand - Jetway Availability;Obstacle - Light Code;Obstruction Area - Light Code;Tank Site - Light Code;Tower - Light Code;Dock - Pier;Shoulder - Restricted;Door - Secure;Elevator - Secure;Wall - Structural;Aircraft Gate Stand - Towing Availability;Water Lane End - Type

Value	Definition (Notes) [Source]
Ν	No
Y	Yes

CodeBridgeType

Used by Attributes: <u>Bridge - Bridge Type</u>

Value	Definition (Notes) [Source]
ROAD	Road or highway bridge
RR	Railroad or Monorail Bridge
RWY	Runway Bridge
TWY	Taxiway Bridge

CodeBuoyType

Used by Attributes: <u>Navigation Buoy - Type</u>

Value	Definition (Notes) [Source]
Bn	Beacon
С	Can Buoy
F	Fixed
J	Junction (S or T Dayboard)
K	Rectangular (Range Dayboard)
Lb	Lighted buoy

М	Octagonal Dayboard
Ν	Nun Buoy
0	Other marking
S	Square Dayboard
Т	Triangle Dayboard

CodeColor

Used by Attributes: <u>Airfield Light - Color;Building - Color;Land and Hold Short Line - Color;Marking Area -</u> <u>Color;Marking Line - Color;Navigation Buoy - Color;Road Centerline - Color;Tank Site - Color;Tower - Color;Water Lane End - Color</u>

Value	Definition (Notes) [Source]
AMBER	Amber [U.S. CADD]
BLACK	Black [U.S. CADD]
BLUE	Blue [U.S. CADD]
BROWN	Brown [U.S. CADD]
GREEN	Green [U.S. CADD]
GREEN-GREEN	Bidirectional (Source AC 150/5345-46C)
GREEN-RED	Bidirectional (Source AC 150/5345-46C)
GREEN-YELLOW	Bidirectional (Source AC 150/5345-46C)
GREY	Grey [U.S. CADD]
LIGHTGREY	LightGrey [U.S. CADD]
MAGENTA	Magenta [U.S. CADD]
ORANGE	Orange [U.S. CADD]
OTHER	Other [U.S. CADD]
PINK	Pink [U.S. CADD]
PURPLE	Purple [AIXM]
RED	Red [U.S. CADD]
RED-GREEN	Bidirectional (Source AC 150/5345-46C)
RED-RED	Bidirectional (Source AC 150/5345-46C)
TBD	To be determined
VIOLET	Violet [U.S. CADD]
WHITE	White [U.S. CADD]
WHITE-RED	Bidirectional (Source AC 150/5345-46C)
WHITE-WHITE	Bidirectional (Source AC 150/5345-46C)
WHITE-YELLOW	Bidirectional (Source AC 150/5345-46C)
YELLOW	Yellow [U.S. CADD]
YELLOW-GREEN	Bidirectional (Source AC 150/5345-46C)
YELLOW-RED	Bidirectional (Source AC 150/5345-46C)
YELLOW-YELLOW	Bidirectional (Source AC 150/5345-46C)

CodeCompassLocation

Used by Attributes: <u>Turning Basin - Compass Location; Water Lane End - Compass Location; Water Operations Area -</u> <u>Compass Location</u>

Value	Definition (Notes) [Source]
E	East (076 to 105 degrees magnetic)
ESE	East Southeast (106 to 135 degrees magnetic)
Ν	North (346 to 015 degrees magnetic)
NE	Northeast (046 to 075 degrees magnetic)
NNE	North Northeast (016 to 045 degrees magnetic)
NW	Northwest (316 to 345 degrees magnetic)
S	South (166 to 195 degrees magnetic)
SE	Southeast (136 to 165 degrees magnetic)
SSW	South Southwest (196 to 225 degrees magnetic)
SW	Southwest (226 to 255 degrees magnetic)
W	West (256 to 285 degrees magnetic)
WNW	West NorthWest (286 to 315 degrees magnetic)

CodeCoordinatedUseType

Used by Attributes: <u>Water Operations Area - Coordinated Use Type</u>

Value	Definition (Notes) [Source]
А	Aeronautical
М	Multiple
R	Recreational boating/fishing
S	Commercial Shipping/Fishing

CodeCoordinateZone

Used by Attributes: Airport Control Point - Coordinate Zone

Value Definition (Notes) [Source] AK-1 NAD27 Alaska State Planes- Zone 1- US Fort (EPSG #26731) AK-10 NAD27 Alaska State Planes- Zone 1- US Fort (EPSG #26730) AK-2 NAD27 Alaska State Planes- Zone 3- US Fort (EPSG #26733) AK-3 NAD27 Alaska State Planes- Zone 3- US Fort (EPSG #26733) AK-4 NAD27 Alaska State Planes- Zone 3- US Fort (EPSG #26733) AK-5 NAD27 Alaska State Planes- Zone 5- US Fort (EPSG #26735) AK-6 NAD27 Alaska State Planes- Zone 5- US Fort (EPSG #26737) AK-8 NAD27 Alaska State Planes- Zone 1- US Fort (EPSG #26736) AK-7 NAD33 Alaska State Planes- Zone 10- US Fort (EPSG #26730) AK83-10 NAD83 Alaska State Planes- Zone 10- US Fort (EPSG #26931) AK83-10 NAD83 Alaska State Planes- Zone 10- US Fort AK83-17 NAD83 Alaska State Planes- Zone 1- US Fort AK83-18 NAD83 Alaska State Planes- Zone 2- US Fort AK83-37 NAD83 Alaska State Planes- Zone 2- US Fort AK83-41 NAD83 Alaska State Planes- Zone 3- US Fort AK83-5 NAD83 Alaska State Planes- Zone 4- US Fort AK83-6 NAD83 Alaska State Planes- Zone 4- US Fort AK83-7 NAD83 Alaska State Planes- Zo	X 7 - L	$\mathbf{D} = \mathbf{C} = \mathbf{C} + \mathbf{C} = \mathbf{C} = \mathbf{C} = \mathbf{C}$
AK-10NAD27 Alaska State Planes- Zone 10: US Foot (EPSG #26740)AK-2NAD27 Alaska State Planes- Zone 2: US Foot (EPSG #26733)AK-3NAD27 Alaska State Planes- Zone 3: US Foot (EPSG #26733)AK-4NAD27 Alaska State Planes- Zone 5: US Foot (EPSG #26733)AK-5NAD27 Alaska State Planes- Zone 5: US Foot (EPSG #2673)AK-6NAD27 Alaska State Planes- Zone 1: US Foot (EPSG #2673)AK-7NAD27 Alaska State Planes- Zone 1: US Foot (EPSG #2673)AK-8NAD27 Alaska State Planes- Zone 1: US Foot (EPSG #2673)AK-8NAD27 Alaska State Planes- Zone 1: US Foot (EPSG #2673)AK-8NAD27 Alaska State Planes- Zone 1: US FootAK83-10NAD83 Alaska State Planes- Zone 1: US FootAK83-17NAD83 Alaska State Planes- Zone 1: US FootAK83-28NAD83 Alaska State Planes- Zone 2: US FootAK83-31FNAD83 Alaska State Planes- Zone 2: US FootAK83-32FNAD83 Alaska State Planes- Zone 2: US FootAK83-33NAD83 Alaska State Planes- Zone 2: US FootAK83-34NAD83 Alaska State Planes- Zone 2: US FootAK83-35NAD83 Alaska State Planes- Zone 2: US FootAK83-4NAD83 Alaska State Planes- Zone 4: Meter (EPSG #2693)AK83-5NAD83 Alaska State Planes- Zone 4: US FootAK83-6NAD83 Alaska State Planes- Zone 5: US FootAK83-7FNAD83 Alaska State Planes- Zone 6: US FootAK83-7FNAD83 Alaska State Planes- Zone 6: US FootAK83-7FNAD83 Alaska State Planes- Zone 7: US FootAK83-7FNAD83 Alaska State Planes- Zone 7: US FootAK83-7FNAD83 Alask		
Ak-2NAD27 Alaska State Planes- Zone 3- US Foot (EPSG #26732)AK-3NAD27 Alaska State Planes- Zone 4- US Foot (EPSG #26733)AK-4NAD27 Alaska State Planes- Zone 4- US Foot (EPSG #26734)AK-5NAD27 Alaska State Planes- Zone 6- US Foot (EPSG #26735)AK-6NAD27 Alaska State Planes- Zone 6- US Foot (EPSG #26737)AK-7NAD27 Alaska State Planes- Zone 7- US Foot (EPSG #26738)AK-8NAD27 Alaska State Planes- Zone 1- Meter (EPSG #26738)AK-8NAD27 Alaska State Planes- Zone 1- Meter (EPSG #26738)AK83-10NAD83 Alaska State Planes- Zone 1- Meter (EPSG #26931)AK83-10FNAD83 Alaska State Planes- Zone 1- Meter (EPSG #26931)AK83-10FNAD83 Alaska State Planes- Zone 2- Meter (EPSG #26932)AK83-1FNAD83 Alaska State Planes- Zone 2- US FootAK83-3FNAD83 Alaska State Planes- Zone 2- US FootAK83-3FNAD83 Alaska State Planes- Zone 3- US FootAK83-3FNAD83 Alaska State Planes- Zone 3- US FootAK83-4FNAD83 Alaska State Planes- Zone 4- US FootAK83-4FNAD83 Alaska State Planes- Zone 4- US FootAK83-4FNAD83 Alaska State Planes- Zone 4- US FootAK83-6NAD83 Alaska State Planes- Zone 5- Meter (EPSG #26935)AK83-6NAD83 Alaska State Planes- Zone 6- Weter (EPSG #26936)AK83-7NAD83 Alaska State Planes- Zone 7- US FootAK83-8FNAD83 Alaska State Planes- Zone 7- US FootAK83-7NAD83 Alaska State Planes- Zone 7- US FootAK83-8FNAD83 Alaska State Planes- Zone 7- US FootAK83-7NAD83 Alaska State Planes- Zone 7- US Foot </td <th></th> <td></td>		
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AK83-10NAD83 Alaska State Planes- Zone 10 - Meter (EPSG #26940)AK83-10FNAD83 Alaska State Planes- Zone 1 - US FootAK83-1FNAD83 Alaska State Planes- Zone 2 - Meter (EPSG #26932)AK83-2NAD83 Alaska State Planes- Zone 2 - Meter (EPSG #26932)AK83-3NAD83 Alaska State Planes- Zone 3 - Meter (EPSG #26933)AK83-3NAD83 Alaska State Planes- Zone 3 - Meter (EPSG #26934)AK83-3NAD83 Alaska State Planes- Zone 4 - Meter (EPSG #26934)AK83-4NAD83 Alaska State Planes- Zone 4 - Meter (EPSG #26935)AK83-5NAD83 Alaska State Planes- Zone 5 - Meter (EPSG #26935)AK83-6NAD83 Alaska State Planes- Zone 5 - US FootAK83-6NAD83 Alaska State Planes- Zone 5 - US FootAK83-7NAD83 Alaska State Planes- Zone 6 - Meter (EPSG #26936)AK83-7NAD83 Alaska State Planes- Zone 7 - US FootAK83-8NAD83 Alaska State Planes- Zone 7 - US FootAK83-7NAD83 Alaska State Planes- Zone 7 - US FootAK83-8NAD83 Alaska State Planes- Zone 8 - US FootAK83-9NAD83 Alaska State Planes- Zone 8 - US FootAK83-9FNAD83 Alaska State Planes- Zone 9 - US Foot (EPSG #26939)AK83-9FNAD83 Alaska State Planes- Zone 9 - US Foot (EPSG #26929)AK83-8FNAD83 Alaska State Planes- Zone 9 - US Foot (EPSG #26929)AK83-9FNAD83 Alaska State Planes- Zone 9 - US Foot (EPSG #26929)AK83-9FNAD83 Alaska State Planes- Zone 9 - US FootAK3-9FNAD83 Alabama State Planes- Zone - Meter (EPSG #26929)AL83-EFNAD83 Alabama State Planes- Western Zone- Meter (EPSG #26929)AL	AK-8	NAD27 Alaska State Planes- Zone 8- US Foot (EPSG #26738)
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AK83-2NAD83 Alaska State Planes- Zone 2- Meter (EPSG #26932)AK83-2FNAD83 Alaska State Planes- Zone 2- US FootAK83-3NAD83 Alaska State Planes- Zone 3- Meter (EPSG #26934)AK83-4FNAD83 Alaska State Planes- Zone 4- Meter (EPSG #26934)AK83-4FNAD83 Alaska State Planes- Zone 4- Meter (EPSG #26934)AK83-5FNAD83 Alaska State Planes- Zone 4- US FootAK83-6NAD83 Alaska State Planes- Zone 5- US FootAK83-6NAD83 Alaska State Planes- Zone 6- Meter (EPSG #26936)AK83-6NAD83 Alaska State Planes- Zone 6- US FootAK83-6NAD83 Alaska State Planes- Zone 6- US FootAK83-7FNAD83 Alaska State Planes- Zone 6- US FootAK83-7FNAD83 Alaska State Planes- Zone 7- US FootAK83-8NAD83 Alaska State Planes- Zone 7- US FootAK83-8NAD83 Alaska State Planes- Zone 8- US FootAK83-9NAD83 Alaska State Planes- Zone 8- US FootAK83-9NAD83 Alaska State Planes- Zone 9- Meter (EPSG #26939)AK83-9NAD83 Alaska State Planes- Zone 9- US FootAK83-9NAD83 Alaska State Planes- Zone 9- US FootAK83-9NAD83 Alaska State Planes- Zone 9- US Foot (EPSG #26929)AK83-FNAD83 Alabama State Planes- Eastern Zone- US FootAL83-FNAD83 Alabama State Planes- Eastern Zone- US FootAL83-WNAD83 Alabama State Planes- Eastern Zone- US FootAL83-WNAD83 Alabama State Planes- Eastern Zone- US FootAL83-WFNAD83 Alabama State Planes- Eastern Zone- US FootAL83-WFNAD83 Alabama State Planes- Eastern Zone- US FootAL83-WFNAD	AK83-10F	NAD83 Alaska State Planes- Zone 10- US Foot
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ARHP-SHARN (HPGN) Arkansas State Planes- Southern Zone- Meter (EPSG #2765)ARHP-SFHARN (HPGN) Arkansas State Planes- Southern Zone- US FootAR-NNAD27 Arkansas State Planes- Northern Zone- US Foot (EPSG #26751)		
ARHP-SFHARN (HPGN) Arkansas State Planes- Southern Zone- US FootAR-NNAD27 Arkansas State Planes- Northern Zone- US Foot (EPSG #26751)		
AR-N NAD27 Arkansas State Planes- Northern Zone- US Foot (EPSG #26751)		
AK-S NAD2/ Arkansas State Planes- Southern Zone- US Foot (EPSG #26752)		
	AK-S	NAD2/ Arkansas State Planes- Southern Zone- US Foot (EPSG #26752)

AZ83-C	NAD83 Arizona State Planes- Central Zone- Meter (EPSG #26949)
AZ83-CCM	NAD83 Arizona State Planes- Central Zone- Centimeter
AZ83-CF	NAD83 Arizona State Planes- Central Zone- US Foot
AZ83-CIF AZ83-E	NAD83 Arizona State Planes- Central Zone- Inthl Foot (EPSG #2223) NAD83 Arizona State Planes- East Zone- Meter (EPSG #26948)
AZ83-EF	NAD83 Arizona State Planes- East Zone- US Foot
AZ83-EIF	NAD83 Arizona State Planes- East Zone- Intril Foot (EPSG #2222)
AZ83-W	NAD83 Arizona State Planes- West Zone- Meter (EPSG #26950)
AZ83-WF	NAD83 Arizona State Planes- West Zone- US Foot
AZ83-WIF	NAD83 Arizona State Planes- West Zone- Intnl Foot (EPSG #2224)
AZ-C	NAD27 Arizona State Planes- Central Zone- US Foot (EPSG #26749)
AZ-E	NAD27 Arizona State Planes- East Zone- US Foot (EPSG #26748)
AZHP-C AZHP-CF	HPGN Arizona State Planes- Central Zone- Meter (EPSG #2762) HPGN Arizona State Planes- Central Zone- US Foot
AZHP-CIF	HPGN Arizona State Planes- Central Zone- US Foot HPGN Arizona State Planes- Central Zone- Intril Foot (EPSG #2868)
AZHP-E	HPGN Arizona State Planes- East Zone- Meter (EPSG #2761)
AZHP-EF	HPGN Arizona State Planes- East Zone- US Foot
AZHP-EIF	HPGN Arizona State Planes- East Zone- Intnl Foot (EPSG #2867)
AZHP-W	HPGN Arizona State Planes- West Zone- Meter (EPSG #2763)
AZHP-WF	HPGN Arizona State Planes- West Zone- US Foot
AZHP-WIF AZ-W	HPGN Arizona State Planes- West Zone- Intril Foot (EPSG #2869)
CA83-I	NAD27 Arizona State Planes- West Zone- US Foot (EPSG #26750) NAD83 California State Planes- Zone I- Meter (EPSG #26941)
CA83-IF	NAD83 California State Planes- Zone I- US Foot (EPSG #20941)
CA83-II	NAD83 California State Planes- Zone II- Meter (EPSG #26942)
CA83-IIF	NAD83 California State Planes- Zone II- US Foot (EPSG #2226)
CA83-III	NAD83 California State Planes- Zone III- Meter (EPSG #26943)
CA83IIIF	NAD83 California State Planes- Zone III- US Foot (EPSG #2227)
CA83-IV CA83-IVF	NAD83 California State Planes- Zone IV- Meter (EPSG #26944)
CA83-IVI CA83-V	NAD83 California State Planes- Zone IV- US Foot (EPSG #2228) NAD83 California State Planes- Zone V- Meter (EPSG #26945)
CA83-VF	NAD83 California State Planes- Zone V- US Foot (EPSG #229)
CA83-VI	NAD83 California State Planes- Zone VI- Meter (EPSG #26946)
CA83-VIF	NAD83 California State Planes- Zone VI- US Foot (EPSG #2230)
CAHP-I	HPGN California State Planes- Zone I- Meter (EPSG #2766)
CAHP-IF	HPGN California State Planes- Zone I- US Foot (EPSG #2870)
CAHP-II CAHP-IIF	HPGN California State Planes- Zone II- Meter (EPSG #2767) HPGN California State Planes- Zone II- US Foot (EPSG #2871)
CAHP-III	HPGN California State Planes- Zone III- Meter (EPSG #2778)
CAHPIIIF	HPGN California State Planes- Zone III- US Foot (EPSG #2872)
CAHP-IV	HPGN California State Planes- Zone IV- Meter (EPSG #2769)
CAHP-IVF	HPGN California State Planes- Zone IV- US Foot (EPSG #2873)
CAHP-V	HPGN California State Planes- Zone V- Meter (EPSG #2770)
CAHP-VF	HPGN California State Planes- Zone V- US Foot (EPSG #2874)
CAHP-VI CAHP-VIF	HPGN California State Planes- Zone VI- Meter (EPSG #2771) HPGN California State Planes- Zone VI- US Foot (EPSG #2875)
CA-I	NAD27 California State Planes- Zone I- US Foot (EPSG #26741)
CA-II	NAD27 California State Planes- Zone II- US Foot (EPSG #26742)
CA-III	NAD27 California State Planes- Zone III- US Foot (EPSG #26743)
CA-IV	NAD27 California State Planes- Zone IV- US Foot (EPSG #26744)
CA-V	NAD27 California State Planes- Zone V- US Foot (EPSG #26745)
CA-VI CA-VI	NAD27 California State Planes- Zone VI- US Foot (EPSG #26746)
CA-VII CO83-C	NAD27 California State Planes- Zone VII- US Foot (EPSG #26747) NAD83 Colorado State Planes- Central Zone- Meter (EPSG #26954)
C083-CF	NAD83 Colorado State Planes- Central Zone- US Foot (EPSG #20)34)
CO83-N	NAD83 Colorado State Planes- Northern Zone- Meter (EPSG #26953)
CO83-NF	NAD83 Colorado State Planes- Northern Zone- US Foot (EPSG #2231)
CO83-S	NAD83 Colorado State Planes- Southern Zone- Meter (EPSG #26955)
CO83-SF	NAD83 Colorado State Planes- Southern Zone- US Foot (EPSG #2233)
CO-C COHP-C	NAD27 Colorado State Planes- Central Zone- US Foot (EPSG #26754) HPGN Colorado State Planes- Central Zone- Meter (EPSG #2773)
COHP-CF	HPGN Colorado State Planes- Central Zone- IN Foot (EPSG #2775) HPGN Colorado State Planes- Central Zone- US Foot (EPSG #2877)
COHP-N	HPGN Colorado State Planes- Northern Zone- Meter (EPSG #2772)
COHP-NF	HPGN Colorado State Planes- Northern Zone- US Foot (EPSG #2876)
COHP-S	HPGN Colorado State Planes- Southern Zone- Meter (EPSG #2774)
COHP-SF	HPGN Colorado State Planes- Southern Zone- US Foot (EPSG #2878)
CO-N CO S	NAD27 Colorado State Planes- Northern Zone- US Foot (EPSG #26753)
CO-S	NAD27 Colorado State Planes- Southern Zone- US Foot (EPSG #26755)

CT	NAD27 Connecticut State Plane Zone- US Foot (EPSG #26756)
CT83	NAD83 Connecticut State Plane Zone- Meter (EPSG #26956)
CT83F	NAD83 Connecticut State Plane Zone- US Foot (EPSG #2234)
CTHP	HPGN/HARN Connecticut State Plane Zone- Meter (EPSG #2775)
CTHPF	HPGN/HARN Connecticut State Plane Zone- US Foot (EPSG #2879)
DE	NAD27 Delaware State Planes- US Foot (EPSG #26757)
DE83	NAD83 Delaware State Planes- Meter (EPSG #26957)
DE83F	NAD83 Delaware State Planes- US Foot (EPSG #2235)
DEHP	HPGN Delaware State Planes- Meter (EPSG #2776)
DEHPF	HPGN Delaware State Planes- US Foot (EPSG #2880)
FL83-E	NAD83 Florida State Planes- Eastern Zone- Meter (EPSG #26958)
FL83-EF	NAD83 Florida State Planes- Eastern Zone- US Foot (EPSG #2236)
FL83-N	NAD83 Florida State Planes- Northern Zone- Meter (EPSG #26960)
FL83-NF	NAD83 Florida State Planes- Northern Zone- US Foot (EPSG #2238) NAD83 Florida State Planes- Western Zone- Meter (EPSG #26959)
FL83-W FL83-WF	NAD83 Florida State Planes- Western Zone- US Foot (EPSG #20939)
FL-E	NAD27 Florida State Planes- Eastern Zone- US Foot (EPSG #2257)
FLHP-E	HPGN Florida State Planes- Eastern Zone- Meter (EPSG #20758)
FLHP-EF	HPGN Florida State Planes- Eastern Zone- US Foot (EPSG #2777)
FLHP-N	HPGN Florida State Planes- Northern Zone- Meter (EPSG #2007)
FLHP-NF	HPGN Florida State Planes-Northern Zone- US Foot (EPSG #2883)
FLHP-W	HPGN Florida State Planes- Western Zone- Meter (EPSG #2778)
FLHP-WF	HPGN Florida State Planes- Western Zone- US Foot (EPSG #2882)
FL-N	NAD27 Florida State Planes- Northern Zone- US Foot (EPSG #26760)
FL-W	NAD27 Florida State Planes- Western Zone- US Foot (EPSG #26759)
GA83-E	NAD83 Georgia State Planes- Eastern Zone- Meter (EPSG #26966)
GA83-EF	NAD83 Georgia State Planes- Eastern Zone- US Foot (EPSG #2239)
GA83-W	NAD83 Georgia State Planes- Western Zone- Meter (EPSG #26967)
GA83-WF	NAD83 Georgia State Planes- Western Zone- US Foot (EPSG #2240)
GA-E	NAD27 Georgia State Planes- Eastern Zone- US Foot (EPSG #26766)
GAHP-E	HARN (HPGN) Georgia State Planes- Eastern Zone- Meter (EPSG #2780)
GAHP-EF	HARN (HPGN) Georgia State Planes- Eastern Zone- US Foot (EPSG #2884)
GAHP-W	HARN (HPGN) Georgia State Planes- Western Zone- Meter (EPSG #2781)
GAHP-WF	HARN (HPGN) Georgia State Planes- Western Zone- US Foot (EPSG #2885)
GA-W	NAD27 Georgia State Planes- Western Zone- US Foot (EPSG #26767)
HI-1	NAD27 Hawaii State Planes- Zone 1- US Foot
HI-2	NAD27 Hawaii State Planes- Zone 2- US Foot
HI-3	NAD27 Hawaii State Planes- Zone 3- US Foot
HI-4	NAD27 Hawaii State Planes- Zone 4- US Foot
HI-5	NAD27 Hawaii State Planes- Zone 5- US Foot
HI83-1	NAD83 Hawaii State Planes- Zone 1- Meter (EPSG #26961)
HI83-1F	NAD83 Hawaii State Planes- Zone 1- US Foot
HI83-2	NAD83 Hawaii State Planes- Zone 2- Meter (EPSG #26962)
HI83-2F	NAD83 Hawaii State Planes- Zone 2- US Foot
HI83-3	NAD83 Hawaii State Planes- Zone 3- Meter (EPSG #26963)
HI83-3F	NAD83 Hawaii State Planes- Zone 3- US Foot
HI83-4	NAD83 Hawaii State Planes- Zone 4- Meter (EPSG #26964)
HI83-4F	NAD83 Hawaii State Planes- Zone 4- US Foot
HI83-5	NAD83 Hawaii State Planes- Zone 5- Meter (EPSG #26965)
HI83-5F	NAD83 Hawaii State Planes- Zone 5- US Foot
HIHP-1 HIHP-2	NAD83(HARN) / Hawaii zone 1 (EPSG #2782) NAD83(HARN) / Hawaii zone 2 (EPSG #2783)
HIHP-3	NAD83(HARN) / Hawaii zone 3 (EPSG #2783)
HIHP-4	NAD83(HARN) / Hawaii zone 4 (EPSG #2785)
HIHP-5	NAD83(HARN) / Hawaii zone 5 (EPSG #2786)
IA83-N	NAD83 Iowa State Planes- Northern Zone- Meter (EPSG #26975)
IA83-NF	NAD83 Iowa State Planes- Northern Zone- US Foot
IA83-N	NAD83 Iowa State Planes- Northern Zone- Meter (EPSG #26976)
IA83-SF	NAD83 Iowa State Planes- Southern Zone- US Foot
IAHP-N	HARN (HPGN) Iowa State Planes- Northern Zone- Meter (EPSG #2794)
IAHP-NF	HARN (HPGN) Iowa State Planes- Northern Zone- US Foot
IAHP-S	HARN (HPGN) Iowa State Planes- Northern Zone- OS 1001 HARN (HPGN) Iowa State Planes- Southern Zone- Meter (EPSG #2795)
IAHP-SF	HARN (HPGN) Iowa State Planes- Southern Zone- US Foot
IA-N	NAD27 Iowa State Planes- Northern Zone- US Foot (EPSG #26775)
IA-S	NAD27 Iowa State Planes- Southern Zone- US Foot (EPSG #26776)
ID83-C	NAD83 Idaho State Planes- Central Zone- Meter (EPSG #26969)
ID83-CF	NAD83 Idaho State Planes- Central Zone- US Foot (EPSG #2242)
ID83-E	NAD83 Idaho State Planes- Eastern Zone- Meter (EPSG #26968)

ID83-EF	NAD83 Idaho State Planes- Eastern Zone- US Foot (EPSG #2241)
ID83-W	NAD83 Idaho State Planes- Western Zone- Meter (EPSG #26970)
ID83-WF	NAD83 Idaho State Planes- Western Zone- US Foot (EPSG #2243)
ID-C	NAD27 Idaho State Planes- Central Zone- US Foot (EPSG #26769)
ID-E	NAD27 Idaho State Planes- Eastern Zone- US Foot (EPSG #26768)
IDHP-C	HARN (HPGN) Idaho State Planes- Central Zone- Meter (EPSG #2788)
IDHP-CF	HARN (HPGN) Idaho State Planes- Central Zone- US Foot (EPSG #2887)
IDHP-E	HARN (HPGN) Idaho State Planes- Eastern Zone- Meter (EPSG #2787)
IDHP-EF	HARN (HPGN) Idaho State Planes- Eastern Zone- US Foot (EPSG #2886)
IDHP-W	HARN (HPGN) Idaho State Planes- Western Zone- Meter (EPSG #2789)
IDHP-WF	HARN (HPGN) Idaho State Planes- Western Zone- US Foot (EPSG #2888)
ID-W	NAD27 Idaho State Planes- Western Zone- US Foot (EPSG #26770)
IL83-E	NAD83 Illinois State Planes- Eastern Zone- Meter (EPSG #26971)
IL83-EF	NAD83 Illinois State Planes- Eastern Zone- US Foot
IL83-W	NAD83 Illinois State Planes- Western Zone- Meter (EPSG #26972)
IL83-WF	NAD83 Illinois State Planes- Western Zone- US Foot
IL-E	NAD27 Illinois State Planes- Eastern Zone- US Foot (EPSG #26771)
ILHP-E	HARN (HPGN) Illinois State Planes- Eastern Zone- Meter (EPSG #2790)
ILHP-EF	HARN (HPGN) Illinois State Planes- Eastern Zone- US Foot
ILHP-W	HARN (HPGN) Illinois State Planes- Western Zone- Meter (EPSG #2791)
ILHP-WF	HARN (HPGN) Illinois State Planes- Western Zone- US Foot
ILLIMAP	NAD27 Illinois Survey Mapping System- US Foot
IL-W	NAD27 Illinois State Planes- Western Zone- US Foot (EPSG #26772)
IN83-E	NAD83 Indiana State Planes- Eastern Zone- Meter (EPSG #26973)
IN83-EF	NAD83 Indiana State Planes- Eastern Zone- US Foot (EPSG #20975)
IN83-W	
	NAD83 Indiana State Planes- Western Zone- Meter (EPSG #26974)
IN83-WF	NAD83 Indiana State Planes- Western Zone- US Foot (EPSG #2245)
IN-E	NAD27 Indiana State Planes- Eastern Zone- US Foot (EPSG #26773)
INHP-E	HARN (HPGN) Indiana State Planes- Eastern Zone- Meter (EPSG #2792)
INHP-EF	HARN (HPGN) Indiana State Planes- Eastern Zone- US Foot (EPSG #2889)
INHP-W	HARN (HPGN) Indiana State Planes- Western Zone- Meter (EPSG #2793)
INHP-WF	HARN (HPGN) Indiana State Planes- Western Zone- US Foot (EPSG #2890)
IN-W	NAD27 Indiana State Planes- Western Zone- US Foot (EPSG #26774)
KS83-N	NAD83 Kansas State Planes- Northern Zone- Meter (EPSG #26977)
KS83-NF	NAD83 Kansas State Planes- Northern Zone- US Foot
KS83-S	NAD83 Kansas State Planes- Southern Zone- Meter (EPSG #26978)
KS83-SF	NAD83 Kansas State Planes- Southern Zone- US Foot
KSHP-N	HARN (HPGN) Kansas State Planes- Northern Zone- Meter (EPSG #2796)
KSHP-NF	HARN (HPGN) Kansas State Planes-Northern Zone- US Foot
KSHP-S	
	HARN (HPGN) Kansas State Planes- Southern Zone- Meter (EPSG #2797)
KSHP-SF	HARN (HPGN) Kansas State Planes- Southern Zone- US Foot
KS-N	NAD27 Kansas State Planes- Northern Zone- US Foot (EPSG #26777)
KS-S	NAD27 Kansas State Planes- Southern Zone- US Foot (EPSG #26778)
KY83-N	NAD83 Kentucky State Planes- Northern Zone- Meter (EPSG #26979)
KY83-NF	NAD83 Kentucky State Planes- Northern Zone- US Foot (EPSG #2246)
KY83-S	NAD83 Kentucky State Planes- Southern Zone- Meter (EPSG #26980)
KY83-SF	NAD83 Kentucky State Planes- Southern Zone- US Foot (EPSG #2247)
KYHP-N	HPGN Kentucky State Planes- Northern Zone- Meter (EPSG #2798)
KYHP-NF	HPGN Kentucky State Planes- Northern Zone- US Foot (EPSG #2891)
KYHP-S	HPGN Kentucky State Planes- Southern Zone- Meter (EPSG #2799)
KYHP-SF	HPGN Kentucky State Planes- Southern Zone- US Foot (EPSG #2892)
KY-N	NAD27 Kentucky State Planes- Northern Zone- US Foot (EPSG #26779)
KY-S	NAD27 Kentucky State Planes- Southern Zone- US Foot (EPSG #26780)
LA83-N	NAD83 Louisiana State Planes- Northern Zone- Meter (EPSG #26981)
	NAD83 Louisiana State Planes- Northern Zone- US Foot
LA83-NF	
LA83-O	NAD83 Louisiana State Planes- Offshore- Meter (EPSG #32199)
LA83-OF	NAD83 Louisiana State Planes- Offshore- US Foot
LA83-S	NAD83 Louisiana State Planes- Southern Zone- Meter (EPSG #26982)
LA83-SF	NAD83 Louisiana State Planes- Southern Zone- US Foot
LAHP-N	HPGN Louisiana State Planes- Northern Zone- Meter (EPSG #2800)
LAHP-NF	HPGN Louisiana State Planes- Northern Zone- US Foot
LAHP-O	HPGN Louisiana State Planes- Offshore- Meter
LAHP-OF	HPGN Louisiana State Planes- Offshore- US Foot
LAHP-S	HPGN Louisiana State Planes- Southern Zone- Meter (EPSG #2801)
LAHP-SF	HPGN Louisiana State Planes- Southern Zone- US Foot
LA-N	NAD27 Louisiana State Planes- Northern Zone- US Foot (EPSG #26781)
LA-N LA-O	NAD27 Louisiana State Planes- Offshore- US Foot (EPSG #32099)
LA-S	NAD27 Louisiana State Planes- Southern Zone- US Foot (EPSG #26782)

LL-83	NAD83 Latitude/Longitude- Degrees
LL84	WGS84 Lat/Long- Degrees180 through +180 (EPSG #4326)
MA	NAD27 Massachusetts State Planes- Mainland Zone- US Foot (EPSG #26786)
MA27-IS	NAD27 Massachusetts State Planes- Island Zone- US Foot (EPSG #26787)
MA83	NAD83 Massachusetts State Planes- Mainland Zone- Meter (EPSG #26986)
MA83F	NAD83 Massachusetts State Planes- Mainland Zone- US Foot (EPSG #2249)
MA83-IS	NAD83 Massachusetts State Planes- Island Zone- Meter (EPSG #26987)
MA83-ISF	NAD83 Massachusetts State Planes- Island Zone- US Foot (EPSG #2250)
MAHP	HPGN/HARN Massachusetts State Planes- Mainland Zone- Meter (EPSG #2805)
MAHPF	HPGN/HARN Massachusetts State Planes- Mainland Zone- US Foot (EPSG #2894)
MAHP-IS	HPGN/HARN Massachusetts State Planes- Island Zone- Meter (EPSG #2806)
MAHP-ISF	HPGN/HARN Massachusetts State Planes- Island Zone- US Foot (EPSG #2895)
MD	NAD27 Maryland State Plane Zone- US Foot (EPSG #26785)
MD83	NAD83 Maryland State Plane Zone-Meter (EPSG #26985)
MD83F	NAD83 Maryland State Plane Zone- US Foot (EPSG #2030)
MD051 MDHP	HPGN Maryland State Plane Zone- Meter (EPSG #2804)
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MDHPF ME ⁹² E	HPGN Maryland State Plane Zone- US Foot (EPSG #2893)
ME83-E	NAD83 Maine State Planes- Eastern Zone- Meter (EPSG #26983)
ME83-EF	NAD83 Maine State Planes- Eastern Zone- US Foot
ME83-W	NAD83 Maine State Planes- Western Zone- Meter (EPSG #26984)
ME83-WF	NAD83 Maine State Planes- Western Zone- US Foot
ME-E	NAD27 Maine State Planes- Eastern Zone- US Foot (EPSG #26783)
MEHP-E	HPGN Maine State Planes- Eastern Zone- Meter (EPSG #2802)
MEHP-EF	HPGN Maine State Planes- Eastern Zone- US Foot
MEHP-W	HPGN Maine State Planes- Western Zone- Meter (EPSG #2803)
MEHP-WF	HPGN Maine State Planes- Western Zone- US Foot
ME-W	NAD27 Maine State Planes- Western Zone- US Foot (EPSG #26784)
MI27-C	NAD27 Michigan State Planes- Central Zone- US Foot (EPSG #26812)
MI27-N	NAD27 Michigan State Planes- Northern Zone- US Foot (EPSG #26811)
MI27-S	NAD27 Michigan State Planes- Southern Zone- US Foot (EPSG #26813)
MI83-C	NAD83 Michigan State Planes- Central Zone- Meter (EPSG #26989)
MI83-CF	NAD83 Michigan State Planes- Central Zone- US Foot
MI83-CIF	NAD83 Michigan State Planes- Central Zone- Intnl Foot (EPSG #2252)
MI83-N	NAD83 Michigan State Planes- Northern Zone- Meter (EPSG #26988)
MI83-NF	NAD83 Michigan State Planes- Northern Zone- US Foot
MI83-NIF	NAD83 Michigan State Planes- Northern Zone- Intnl Foot (EPSG #2251)
MI83-S	NAD83 Michigan State Planes- Southern Zone- Meter (EPSG #26990)
MI83-SF	NAD83 Michigan State Planes- Southern Zone- US Foot
MI83-SIF	NAD83 Michigan State Planes- Southern Zone- Intnl Foot (EPSG #2253)
MIHP-C	HARN (HPGN) Michigan State Planes- Central Zone- Meter (EPSG #2808)
MIHP-CF	HARN (HPGN) Michigan State Planes- Central Zone- US Foot
MIHP-CIF	HARN (HPGN) Michigan State Planes- Central Zone- Intnl Foot (EPSG #2897)
MIHP-N	HARN (HPGN) Michigan State Planes- Northern Zone- Meter (EPSG #2807)
MIHP-NF	HARN (HPGN) Michigan State Planes- Northern Zone- US Foot
MIHP-NIF	HARN (HPGN) Michigan State Planes- Northern Zone- Intnl Foot (EPSG #2896)
MIHP-S	HARN (HPGN) Michigan State Planes- Southern Zone- Meter (EPSG #2809)
MIHP-SF	HARN (HPGN) Michigan State Planes- Southern Zone- US Foot
MIHP-SIF	HARN (HPGN) Michigan State Planes- Southern Zone- Intril Foot (EPSG #2898)
MN83-C	NAD83 Minnesota State Planes- Central Zone- Meter (EPSG #26992)
MN83-CF	NAD83 Minnesota State Planes- Central Zone- US Foot
MN83-N	NAD83 Minnesota State Planes- Northern Zone- Meter (EPSG #26991)
MN83-NF	NAD83 Minnesota State Planes- Northern Zone- US Foot
MN83-S	NAD83 Minnesota State Planes- South Zone- Meter (EPSG #26993)
MN83-SF	NAD83 Minnesota State Planes- South Zone- US Foot
MN-C	NAD27 Minnesota State Planes- Central Zone- US Foot (EPSG #26792)
MNHP-C MNHP-CF	HARN (HPGN) Minnesota State Planes- Central Zone- Meter (EPSG #2811) HARN (HPGN) Minnesota State Planes- Central Zone- US Foot
MNHP-N MNHD NE	HARN (HPGN) Minnesota State Planes- Northern Zone- Meter (EPSG #2810)
MNHP-NF	HARN (HPGN) Minnesota State Planes- Northern Zone- US Foot
MNHP-S MNHD SE	HARN (HPGN) Minnesota State Planes- South Zone- Meter (EPSG #2812)
MNHP-SF	HARN (HPGN) Minnesota State Planes- South Zone- US Foot
MN-N	NAD27 Minnesota State Planes- Northern Zone- US Foot (EPSG #26791)
MN-S	NAD27 Minnesota State Planes- South- US Foot (EPSG #26793)
MO83-C	NAD83 Missouri State Planes- Central Zone- Meter (EPSG #26997)
MO83-CF	NAD83 Missouri State Planes- Central Zone- US Foot
MO83-E	NAD83 Missouri State Planes- Eastern Zone- Meter (EPSG #26996)
MO83-EF	NAD83 Missouri State Planes- Eastern Zone- US Foot
MO83-W	NAD83 Missouri State Planes- Western Zone- Meter (EPSG #26998)

MO83-WF	NAD83 Missouri State Planes- Western Zone- US Foot
MO-C	NAD27 Missouri State Planes- Central Zone- US Foot (EPSG #26797)
MO-E	NAD27 Missouri State Planes- Eastern Zone- US Foot (EPSG #26796)
MOHP-C	HARN (HPGN) Missouri State Planes- Central Zone- Meter (EPSG #2816)
MOHP-CF	HARN (HPGN) Missouri State Planes- Central Zone- US Foot
MOHP-E	HARN (HPGN) Missouri State Planes- Eastern Zone- Meter (EPSG #2815)
MOHP-EF	HARN (HPGN) Missouri State Planes- Eastern Zone- US Foot
MOHP-W	HARN (HPGN) Missouri State Planes- Western Zone- Meter (EPSG #2817)
MOHP-WF	HARN (HPGN) Missouri State Planes- Western Zone- US Foot
MO-W	NAD27 Missouri State Planes- Western Zone- US Foot (EPSG #26798)
MS83-E	NAD83 Mississippi State Planes- Eastern Zone- Meter (EPSG #26994)
MS83-EF	NAD83 Mississippi State Planes- Eastern Zone- US Foot (EPSG #20574)
MS83-TM	NAD83 Mississippi State Hands' Eastern Zone' OS Foot (ELSG #2254) NAD83 Mississippi Transverse Mercator Projection (meters)
MS83-W	NAD83 Mississippi State Planes- Western Zone- Meter (EPSG #26995)
MS83-WF	NAD83 Mississippi State Planes- Western Zone- US Foot (EPSG #20995)
MS-E	11
	NAD27 Mississippi State Planes- Eastern Zone- US Foot (EPSG #26794)
MSHP-E	HPGN Mississippi State Planes- Eastern Zone- Meter (EPSG #2813)
MSHP-EF	HPGN Mississippi State Planes- Eastern Zone- US Foot (EPSG #2899)
MSHP-W	HPGN Mississippi State Planes- Western Zone- Meter (EPSG #2814)
MSHP-WF	HPGN Mississippi State Planes- Western Zone- US Foot (EPSG #2900)
MS-W	NAD27 Mississippi State Planes- Western Zone- US Foot (EPSG #26795)
MT83	NAD83 Montana State Plane Zone- Meter (EPSG #32100)
MT83F	NAD83 Montana State Plane Zone- US Foot
MT83IF	NAD83 Montana State Planes- Intnl Foot (EPSG #2256)
MT-C	NAD27 Montana State Planes- Central Zone- US Foot (EPSG #32002)
MTHP	HPGN Montana State Plane Zone- Meter (EPSG #2818)
MTHPF	HPGN Montana State Plane Zone- US Foot
MTHPIF	HPGN Montana State Planes- Intnl Foot (EPSG #2901)
MT-N	NAD27 Montana State Planes- Northern Zone- US Foot (EPSG #32001)
MT-S	NAD27 Montana State Planes- Southern Zone- US Foot (EPSG #32003)
NB83	NAD83 Nebraska State Planes- Meter (EPSG #32104)
NB83F	NAD83 Nebraska State Planes- US Foot
NBHP	HPGN/HARN Nebraska State Planes- Meter (EPSG #2819)
NBHPF	HPGN/HARN Nebraska State Planes- US Foot
NB-N	NAD27 Nebraska State Planes- Northern Zone- US Foot (EPSG #32005)
NB-S	NAD27 Nebraska State Planes- Southern Zone- US Foot (EPSG #32006)
NC	NAD27 North Carolina State Planes- US Foot (EPSG #32019)
NC83	NAD83 North Carolina State Planes- Meter (EPSG #32119)
NC83F	NAD83 North Carolina State Planes- US Foot (EPSG #2264)
NCHP	HARN (HPGN) North Carolina State Planes- Meter
NCHPF	HARN (HPGN) North Carolina State Planes- US Foot
ND83-N	NAD83 North Dakota State Planes- Northern Zone- Meter (EPSG #32120)
ND83-NF	NAD83 North Dakota State Planes- Northern Zone- US Foot
ND83-S	NAD83 North Dakota State Planes- Southern Zone- Meter (EPSG #32121)
ND83-SF	NAD83 North Dakota State Planes- Southern Zone- US Foot
NDHP-N	HARN (HPGN) North Dakota State Planes- Northern Zone- Meter (EPSG #2832)
NDHP-NF	HARN (HPGN) North Dakota State Planes- Northern Zone- US Foot
NDHP-S	HARN (HPGN) North Dakota State Planes- Southern Zone- Meter (EPSG #2833)
NDHP-SF	HARN (HPGN) North Dakota State Planes- Southern Zone- US Foot
ND-N	NAD27 North Dakota State Planes- Northern Zone- US Foot (EPSG #32020)
ND-S	NAD27 North Dakota State Planes- Southern Zone- US Foot (EPSG #32021)
NE83	NAD27 Norm Dakota State Planes- Southern Zone- OS Foot (EFSG #52021) NAD83 Nebraska State Planes- Meter
NE83F	NAD83 Nebraska State Planes- US Foot
NE-N	NAD27 Nebraska State Planes- Northern Zone- US Foot
NE-S	NAD27 Nebraska State Planes- Northern Zone- US Foot
NH	NAD27 New Hampshire State Planes- US Foot (EPSG #32010)
	NAD83 New Hampshire State Planes- Meter (EPSG #32010)
NH83	•
NH83F	NAD83 New Hampshire State Planes- US Foot
NHHP NHHPF	HPGN/HARN New Hampshire State Planes- Meter (EPSG #2823)
	HPGN/HARN New Hampshire State Planes- US Foot
NJ	NAD27 New Jersey State Planes- US Foot (EPSG #32011)
NJ83	NAD83 New Jersey State Planes- Meter (EPSG #32111)
NJ83F	NAD83 New Jersey State Planes- US Foot
NJHP	HARN (HPGN) New Jersey State Planes- Meter (EPSG #2824)
NJHPF	HARN (HPGN) New Jersey State Planes- US Foot
NM83-C	NAD83 New Mexico State Planes- Central Zone- Meter (EPSG #32113)
NM83-CF	NAD83 New Mexico State Planes- Central Zone- US Foot (EPSG #2258)
NM83-E	NAD83 New Mexico State Planes- Eastern Zone- Meter (EPSG #32112)

NM83-EF	NAD83 New Mexico State Planes- Eastern Zone- US Foot (EPSG #2257)
NM83-W	NAD83 New Mexico State Planes- Western Zone- Meter (EPSG #32114)
NM83-WF	NAD83 New Mexico State Planes- Western Zone- US Foot (EPSG #2259)
NM-C	NAD27 New Mexico State Planes- Central Zone- US Foot (EPSG #32013)
NM-E	NAD27 New Mexico State Planes- Eastern Zone- US Foot (EPSG #32012)
NMHP-C	HPGN New Mexico State Planes- Central Zone- Meter (EPSG #2826)
NMHP-CF	HPGN New Mexico State Planes- Central Zone- US Foot (EPSG #2903)
NMHP-E	HPGN New Mexico State Planes- Eastern Zone- Meter (EPSG #2825)
NMHP-EF	HPGN New Mexico State Planes- Eastern Zone- US Foot (EPSG #2902)
NMHP-W	HPGN New Mexico State Planes- Western Zone- Meter (EPSG #2827)
NMHP-WF	HPGN New Mexico State Planes- Western Zone- US Foot (EPSG #2904)
NM-W	NAD27 New Mexico State Planes- Western Zone- US Foot (EPSG #32014)
NV83-C	NAD83 Nevada State Planes- Central Zone- Meter (EPSG #32108)
NV83-CF	NAD83 Nevada State Planes- Central Zone- US Foot
NV83-E	NAD83 Nevada State Planes- Eastern Zone- Meter (EPSG #32107)
NV83-EF	NAD83 Nevada State Planes- Eastern Zone- US Foot
NV83-W	NAD83 Nevada State Planes- Western Zone- Meter (EPSG #32109)
NV83-WF	NAD83 Nevada State Planes- Western Zone- US Foot
NV-C	NAD27 Nevada State Planes- Central Zone- US Foot (EPSG #32008)
NV-C NV-E	NAD27 Nevada State Flanes- Central Zone- US Foot (EFSG #32008) NAD27 Nevada State Planes- Eastern Zone- US Foot (EPSG #32007)
NVHP-C	HARN (HPGN) Nevada State Planes- Central Zone- Meter (EPSG #2821)
NVHP-CF	HARN (HPGN) Nevada State Planes- Central Zone- US Foot
NVHP-E	HARN (HPGN) Nevada State Planes- Eastern Zone- Meter (EPSG #2820)
NVHP-EF	HARN (HPGN) Nevada State Planes- Eastern Zone- US Foot
NVHP-W	HARN (HPGN) Nevada State Planes- Western Zone- Meter (EPSG #2822)
NVHP-WF	HARN (HPGN) Nevada State Planes- Western Zone- US Foot
NV-W	NAD27 Nevada State Planes- Western Zone- US Foot (EPSG #32009)
NY83-C	NAD83 New York State Planes- Central Zone- Meter (EPSG #32116)
NY83-CF	NAD83 New York State Planes- Central Zone- US Foot (EPSG #2261)
NY83-E	NAD83 New York State Planes- Eastern Zone- Meter (EPSG #32115)
NY83-EF	NAD83 New York State Planes- Eastern Zone- US Foot (EPSG #2260)
NY83-LI	NAD83 New York State Planes- Long Island- Meter (EPSG #32118)
NY83-LIF	NAD83 New York State Planes- Long Island- US Foot (EPSG #2263)
NY83-W	NAD83 New York State Planes- Western Zone- Meter (EPSG #32117)
NY83-WF	NAD83 New York State Planes- Western Zone- US Foot (EPSG #2262)
NY-C	NAD27 New York State Planes- Central Zone- US Foot (EPSG #32016)
NY-E	NAD27 New York State Planes- Eastern Zone- US Foot (EPSG #32015)
NYHP-C	HARN (HPGN) New York State Planes- Central Zone- Meter (EPSG #2829)
NYHP-CF	HARN (HPGN) New York State Planes- Central Zone- US Foot (EPSG #2906)
NYHP-E	HARN (HPGN) New York State Planes- Eastern Zone- Meter (EPSG #2828)
NYHP-EF	HARN (HPGN) New York State Planes- Eastern Zone- US Foot (EPSG #2905)
NYHP-LI	HARN (HPGN) New York State Planes- Long Island- Meter (EPSG #2831)
NYHP-LIF	HARN (HPGN) New York State Planes- Long Island- US Foot (EPSG #2908)
NYHP-W	HARN (HPGN) New York State Planes- Western Zone- Meter (EPSG #2830)
NYHP-WF	HARN (HPGN) New York State Planes- Western Zone- US Foot (EPSG #2907)
NY-LI	NAD27 New York State Planes- Long Island- US Foot (EPSG #32018)
NY-W	NAD27 New York State Planes- Western Zone- US Foot (EPSG #32017)
OH83-N	NAD83 Ohio State Planes- Northern Zone- Meter (EPSG #32122)
OH83-NF	NAD83 Ohio State Planes- Northern Zone- US Foot
OH83-S	NAD83 Ohio State Planes- Southern Zone- Meter (EPSG #32123)
OH83-SF	NAD83 Ohio State Planes- Southern Zone- US Foot
OHHP-N	HARN (HPGN) Ohio State Planes- Northern Zone- Meter (EPSG #2834)
OHHP-NF	HARN (HPGN) Ohio State Planes- Northern Zone- US Foot
OHHP-S	HARN (HPGN) Ohio State Planes- Southern Zone- Meter (EPSG #2835)
OHHP-SF	HARN (HPGN) Ohio State Planes- Southern Zone- US Foot
OH-N	NAD27 Ohio State Planes- Northern Zone- US Foot (EPSG #32022)
OH-S	NAD27 Ohio State Planes- Southern Zone- US Foot (EPSG #32023)
OK83-N	NAD83 Oklahoma State Planes- Northern Zone- Meter (EPSG #32124)
OK83-NF	NAD83 Oklahoma State Planes- Northern Zone- US Foot (EPSG #2267)
OK83-S	NAD83 Oklahoma State Planes- Southern Zone- Meter (EPSG #32125)
OK83-SF	NAD83 Oklahoma State Planes- Southern Zone- US Foot (EPSG #2268)
OKHP-N	HPGN Oklahoma State Planes- Northern Zone- Meter (EPSG #2836)
OKHP-NF	HPGN Oklahoma State Planes- Northern Zone- US Foot (EPSG #2911)
OKHP-S	HPGN Oklahoma State Planes- Southern Zone- Meter (EPSG #2837)
OKHP-SF	HPGN Oklahoma State Planes- Southern Zone- US Foot (EPSG #2912)
OK-N	NAD27 Oklahoma State Planes- Northern Zone- US Foot (EPSG #32024)
OK-S	NAD27 Oklahoma State Planes- Southern Zone- US Foot (EPSG #32025)
OR83-N	NAD83 Oregon State Planes- Northern Zone- Meter (EPSG #32126)

OR83-NF	NAD83 Oregon State Planes- Northern Zone- US Foot
OR83-NIF	NAD83 Oregon State Planes- Northern Zone- Intnl Foot (EPSG #2269)
OR83-S	NAD83 Oregon State Planes- Southern Zone- Meter (EPSG #32127)
OR83-SF	NAD83 Oregon State Planes- Southern Zone- US Foot
OR83-SIF	NAD83 Oregon State Planes- Southern Zone- Intnl Foot (EPSG #2270)
OR83-SSCGIS	NAD83 Oregon GIS- International Foot (EPSG #2992)
ORHP-N	HPGN Oregon State Planes- Northern Zone- Meter (EPSG #2838)
ORHP-NF	HPGN Oregon State Planes- Northern Zone- US Foot
ORHP-NIF	HPGN Oregon State Planes- Northern Zone- Intnl Foot (EPSG #2913) HPGN Oregon State Planes- Southern Zone- Meter (EPSG #2839)
ORHP-S ORHP-SF	HPGN Oregon State Planes- Southern Zone- US Foot
ORHP-SIF	HPGN Oregon State Planes- Southern Zone- Intril Foot (EPSG #2914)
OR-N	NAD27 Oregon State Planes- Northern Zone- US Foot (EPSG #2014)
OR-S	NAD27 Oregon State Planes- Southern Zone- US Foot (EPSG #32027)
PA83-N	NAD83 Pennsylvania State Planes- Northern Zone- Meter (EPSG #32128)
PA83-NF	NAD83 Pennsylvania State Planes- Northern Zone- US Foot (EPSG #2271)
PA83-S	NAD83 Pennsylvania State Planes- Southern Zone- Meter (EPSG #32129)
PA83-SF	NAD83 Pennsylvania State Planes- Southern Zone- US Foot (EPSG #2272)
PAHP-N	HARN (HPGN) Pennsylvania State Planes- Northern Zone- Meter
PAHP-NF	HARN (HPGN) Pennsylvania State Planes- Northern Zone- US Foot
PAHP-S	HARN (HPGN) Pennsylvania State Planes- Southern Zone- Meter
PAHP-SF	HARN (HPGN) Pennsylvania State Planes- Southern Zone- US Foot
PA-N	NAD27 Pennsylvania State Planes- Northern Zone- US Foot (EPSG #32028)
PA-S	NAD27 Pennsylvania State Planes- Southern Zone- US Foot (EPSG #32029)
PR-1	NAD27 Puerto Rico and Virgin Islands- Zone 1- US Foot
PR-2	NAD27 Puerto Rico- St Croix Virgin Island- Zone 2- US Foot
PR83	NAD83 Puerto Rico and Virgin Islands- Meter (EPSG #32161)
PR83F	NAD83 Puerto Rico and Virgin Islands- US Foot
PRHP	HPGN Puerto Rico and Virgin Islands- Meter (EPSG #2866)
PRHPF	HPGN Puerto Rico and Virgin Islands- US Foot
RI	NAD27 Rhode Island State Planes- US Foot (EPSG #32030)
RI83	NAD83 Rhode Island State Planes- Meter (EPSG #32130)
RI83F	NAD83 Rhode Island State Planes- US Foot
RIHP	HPGN/HARN Rhode Island State Planes- Meter (EPSG #2840)
RIHPF	HPGN/HARN Rhode Island State Planes- US Foot
SC83	NAD83 South Carolina State Planes- Meter (EPSG #32133)
SC83F SC83IF	NAD83 South Carolina State Planes- US Foot NAD83 South Carolina State Planes- Intnl Foot (EPSG #2273)
SCHP	HARN (HPGN) South Carolina State Planes- Meter
SCHPF	HARN (HPGN) South Carolina State Planes- US Foot
SCHPIF	HARN (HPGN) South Carolina State Planes- Intril Foot
SC-N	NAD27 South Carolina State Planes- Northern Zone- US Foot (EPSG #32031)
SC-S	NAD27 South Carolina State Planes- Southern Zone- US Foot (EPSG #32033)
SD83-N	NAD83 South Dakota State Planes- Northern Zone- Meter (EPSG #32134)
SD83-NF	NAD83 South Dakota State Planes- Northern Zone- US Foot
SD83-S	NAD83 South Dakota State Planes- Southern Zone- Meter (EPSG #32135)
SD83-SF	NAD83 South Dakota State Planes- Southern Zone- US Foot
SDHP-N	HARN (HPGN) South Dakota State Planes- Northern Zone- Meter (EPSG #2841)
SDHP-NF	HARN (HPGN) South Dakota State Planes- Northern Zone- US Foot
SDHP-S	HARN (HPGN) South Dakota State Planes- Southern Zone- Meter (EPSG #2842)
SDHP-SF	HARN (HPGN) South Dakota State Planes- Southern Zone- US Foot
SD-N	NAD27 South Dakota State Planes- Northern Zone- US Foot (EPSG #32034)
SD-S	NAD27 South Dakota State Planes- Southern Zone- US Foot (EPSG #32035)
TN	NAD27 Tennessee State Plane Zone- US Foot (EPSG #2204)
TN83	NAD83 Tennessee State Plane Zone- Meter (EPSG #32136)
TN83F	NAD83 Tennessee State Plane Zone- US Foot (EPSG #2274)
TNHP	HPGN Tennessee State Plane Zone- Meter (EPSG #2843)
TNHPF TX82 C	HPGN Tennessee State Plane Zone- US Foot (EPSG #2915)
TX83-C TX83-CE	NAD83 Texas State Planes - Central Zone - Meter (EPSG #32139) NAD83 Texas State Planes - Central Zone - US Foot (EPSG #2277)
TX83-CF TX83-N	NAD83 Texas State Planes- Central Zone- US Foot (EPSG #2277) NAD83 Texas State Planes- Northern Zone- Meter (EPSG #32137)
TX83-NC	NAD85 Texas State Planes- Northern Zone- Meter (EPSG #32137) NAD83 Texas State Planes- North Central Zone- Meter (EPSG #32138)
TX83-NCF	NAD83 Texas State Planes- North Central Zone- US Foot (EPSG #32138) NAD83 Texas State Planes- North Central Zone- US Foot (EPSG #2276)
TX83-NF	NAD83 Texas State Planes- Northern Zone- US Foot (EPSG #2275)
TX83-S	NAD83 Texas State Planes- Northern Zone- Meter (EPSG #32141)
TX83-SC	NAD83 Texas State Planes- Southern Zone- Meter (EPSG #32141) NAD83 Texas State Planes- South Central Zone- Meter (EPSG #32140)
TX83-SCF	NAD83 Texas State Planes- South Central Zone- US Foot (EPSG #2278)
TX83-SF	NAD83 Texas State Planes- Southern Zone- US Foot (EPSG #2279)

TX-C	NAD27 Texas State Planes- Central Zone- US Foot (EPSG #32039)
TXHP-C	HPGN/HARN Texas State Planes- Central Zone- Meter (EPSG #2846)
TXHP-CF	HPGN/HARN Texas State Planes- Central Zone- US Foot (EPSG #2918)
TXHP-N	HPGN/HARN Texas State Planes- Northern Zone- Meter (EPSG #2844)
TXHP-NC	HPGN/HARN Texas State Planes- North Central Zone- Meter (EPSG #2845)
TXHP-NCF	HPGN/HARN Texas State Planes- North Central Zone- US Foot (EPSG #2917)
TXHP-NF	HPGN/HARN Texas State Planes- Northern Zone- US Foot (EPSG #2916)
TXHP-S	HPGN/HARN Texas State Planes- Southern Zone- Meter (EPSG #2848)
TXHP-SC	HPGN/HARN Texas State Planes- South Central Zone- Meter (EPSG #2847)
TXHP-SCF	HPGN/HARN Texas State Planes- South Central Zone- US Foot (EPSG #2919)
TXHP-SF	HPGN/HARN Texas State Planes- Southern Zone- US Foot (EPSG #2920)
TX-N	NAD27 Texas State Planes- Northern Zone- US Foot (EPSG #32037)
TX-NC	NAD27 Texas State Planes- North Central Zone- US Foot (EPSG #32038)
TX-S	NAD27 Texas State Planes- Southern Zone- US Foot (EPSG #32041)
TX-SC	NAD27 Texas State Planes- South Central Zone- US Foot (EPSG #32040)
UT83-C	NAD83 Utah State Planes- Central Zone- Meter (EPSG #32143)
UT83-CF	NAD83 Utah State Planes- Central Zone- US Foot
UT83-CIF	NAD83 Utah State Planes- Central Zone- Intnl Foot (EPSG #2281)
UT83-N	NAD83 Utah State Planes- Northern Zone- Meter (EPSG #32142)
UT83-NF	NAD83 Utah State Planes- Northern Zone- US Foot
UT83-NIF	NAD83 Utah State Planes- Northern Zone- Intnl Foot (EPSG #2280)
	· · · · · · · · · · · · · · · · · · ·
UT83-S	NAD83 Utah State Planes- Southern Zone- Meter (EPSG #32144)
UT83-SF	NAD83 Utah State Planes- Southern Zone- US Foot
UT83-SIF	NAD83 Utah State Planes- Southern Zone- Intnl Foot (EPSG #2282)
UT-C	NAD27 Utah State Planes- Central Zone- US Foot (EPSG #32043)
UTHP-C	HARN (HPGN) Utah State Planes- Central Zone- Meter (EPSG #2850)
UTHP-CF	HARN (HPGN) Utah State Planes- Central Zone- US Foot
UTHP-CIF	HARN (HPGN) Utah State Planes- Central Zone- Intnl Foot (EPSG #2922)
UTHP-N	HARN (HPGN) Utah State Planes- Northern Zone- Meter (EPSG #2849)
UTHP-NF	HARN (HPGN) Utah State Planes- Northern Zone- US Foot
UTHP-NIF	HARN (HPGN) Utah State Planes- Northern Zone- Intnl Foot (EPSG #2921)
UTHP-S	HARN (HPGN) Utah State Planes- Southern Zone- Meter (EPSG #2851)
UTHP-SF	HARN (HPGN) Utah State Planes- Southern Zone- US Foot
UTHP-SIF	HARN (HPGN) Utah State Planes- Southern Zone- Intnl Foot (EPSG #2923)
UTM27-1	NAD27 UTM- Zone 1 North- Meter
UTM27-10	NAD27 UTM- Zone 10 North- Meter (EPSG #26710)
UTM27-10F	NAD27 UTM- Zone 10 North- US Foot
UTM27-10IF	NAD27 UTM- Zone 10 North- Intnl Foot
UTM27-11	NAD27 UTM- Zone 11 North- Meter (EPSG #26711)
UTM27-11F	NAD27 UTM- Zone 11 North- US Foot
UTM27-11IF	NAD27 UTM- Zone 11 North- Intnl Foot
UTM27-12	NAD27 UTM- Zone 12 North- Meter (EPSG #26712)
UTM27-12F	NAD27 UTM- Zone 12 North- US Foot
UTM27-12IF	NAD27 UTM- Zone 12 North- Intnl Foot
UTM27-13	NAD27 UTM- Zone 13 North- Meter (EPSG #26713)
UTM27-13F	NAD27 UTM- Zone 13 North- US Foot
UTM27-13IF	NAD27 UTM- Zone 13 North- Intnl Foot
UTM27-14	NAD27 UTM- Zone 14 North- Meter (EPSG #26714)
UTM27-14F	NAD27 UTM- Zone 14 North- US Foot
UTM27-14IF	NAD27 UTM- Zone 14 North- Intnl Foot
UTM27-15	NAD27 UTM- Zone 15 North- Meter (EPSG #26715)
UTM27-15F	NAD27 UTM- Zone 15 North- US Foot
UTM27-15IF	NAD27 UTM- Zone 15 North- Intril Foot
UTM27-16	NAD27 UTM- Zone 16 North- Meter (EPSG #26716)
UTM27-16F	NAD27 UTM- Zone 16 North- US Foot
UTM27-16IF	NAD27 UTM- Zone 16 North- Intnl Foot
UTM27-17	NAD27 UTM- Zone 17 North- Meter (EPSG #26717)
UTM27-17F	NAD27 UTM- Zone 17 North- US Foot
UTM27-17IF	NAD27 UTM- Zone 17 North- Intnl Foot
UTM27-18	NAD27 UTM- Zone 18 North- Meter (EPSG #26718)
UTM27-18F	NAD27 UTM- Zone 18 North- US Foot
UTM27-18IF	NAD27 UTM- Zone 18 North- Intnl Foot
UTM27-19	NAD27 UTM- Zone 19 North- Meter (EPSG #26719)
UTM27-19F	NAD27 UTM- Zone 19 North- US Foot
UTM27-19IF	NAD27 UTM- Zone 19 North- Intnl Foot
UTM27-1N	NAD27 / UTM zone 1N (EPSG #26701)
UTM27-2	NAD27 UTM- Zone 2 North- Meter
UTM27-20	NAD27 UTM- Zone 20 North- Meter (EPSG #26720)

UTM27-20F	NAD27 UTM- Zone 20 North- US Foot
UTM27-20IF	NAD27 UTM- Zone 20 North- Intnl Foot
UTM27-21	NAD27 UTM- Zone 21 North- Meter (EPSG #26721)
UTM27-21F	NAD27 UTM- Zone 21 North- US Foot
UTM27-21IF	NAD27 UTM- Zone 21 North- Intnl Foot
UTM27-22	NAD27 UTM- Zone 22 North- Meter (EPSG #26722)
UTM27-22F	NAD27 UTM- Zone 22 North- US Foot
UTM27-22IF	NAD27 UTM- Zone 22 North- Intnl Foot
UTM27-23	NAD27 UTM- Zone 23 North- Meter
UTM27-23F	NAD27 UTM- Zone 23 North- US Foot
UTM27-23IF	NAD27 UTM- Zone 23 North- Intnl Foot
UTM27-2N	NAD27 / UTM zone 2N (EPSG #26702)
UTM27-3	NAD27 UTM- Zone 3 North- Meter (EPSG #26703)
UTM27-3F	NAD27 UTM- Zone 3 North- US Survey Foot
UTM27-3IF	NAD27 UTM- Zone 3 North- Intnl Foot
UTM27-4	NAD27 UTM- Zone 4 North- Meter (EPSG #26704)
UTM27-4F	NAD27 UTM- Zone 4 North- US Survey Foot
UTM27-4IF	NAD27 UTM- Zone 4 North- Intnl Foot
UTM27-5	NAD27 UTM- Zone 5 North- Meter (EPSG #26705)
UTM27-58	NAD27 UTM- Zone 58 North- Meter
UTM27-59	NAD27 UTM- Zone 59 North- Meter
UTM27-5F	NAD27 UTM- Zone 5 North- US Foot
UTM27-5IF	NAD27 UTM- Zone 5 North- Intnl Foot
UTM27-6	NAD27 UTM- Zone 6 North- Meter (EPSG #26706)
UTM27-60	NAD27 UTM- Zone 60 North- Meter
UTM27-6F	NAD27 UTM- Zone 6 North- US Foot
UTM27-6IF	NAD27 UTM- Zone 6 North- Intnl Foot
UTM27-7	NAD27 UTM- Zone 7 North- Meter (EPSG #26707)
UTM27-7F	NAD27 UTM- Zone 7 North- US Foot
UTM27-7IF	NAD27 UTM- Zone 7 North- Intnl Foot
UTM27-8	NAD27 UTM- Zone 8 North- Meter (EPSG #26708)
UTM27-8F	NAD27 UTM- Zone 8 North- US Foot
UTM27-8IF	NAD27 UTM- Zone 8 North- Intnl Foot
UTM27-9	NAD27 UTM- Zone 9 North- Meter (EPSG #26709)
UTM27-9F	NAD27 UTM- Zone 9 North- US Foot
UTM27-9IF	NAD27 UTM- Zone 9 North- Intnl Foot
UTM83-1	NAD83 UTM- Zone 1 North- Meter (EPSG #26901)
UTM83-10	NAD83 UTM- Zone 10 North- Meter (EPSG #26910)
UTM83-10F	NAD83 UTM- Zone 10 North- US Foot
UTM83-10IF	NAD83 UTM- Zone 10 North- Intnl Foot
UTM83-11	NAD83 UTM- Zone 11 North- Meter (EPSG #26911)
UTM83-11F	NAD83 UTM- Zone 11 North- US Foot
UTM83-11IF	NAD83 UTM- Zone 11 North- Intnl Foot
UTM83-12	NAD83 UTM- Zone 12 North- Meter (EPSG #26912)
UTM83-12F	NAD83 UTM- Zone 12 North- US Foot
UTM83-12IF	NAD83 UTM- Zone 12 North- Intnl Foot
UTM83-13	NAD83 UTM- Zone 13 North- Meter (EPSG #26913)
UTM83-13F	NAD83 UTM- Zone 13 North- US Foot
UTM83-13IF	NAD83 UTM- Zone 13 North- Intnl Foot
UTM83-14	NAD83 UTM- Zone 14 North- Meter (EPSG #26914)
UTM83-14F	NAD83 UTM- Zone 14 North- US Foot
UTM83-14IF	NAD83 UTM- Zone 14 North- Intnl Foot
UTM83-15	NAD83 UTM- Zone 15 North- Meter (EPSG #26915)
UTM83-15F	NAD83 UTM- Zone 15 North- US Foot
UTM83-15IF	NAD83 UTM- Zone 15 North- Intnl Foot
UTM83-16	NAD83 UTM- Zone 16 North- Meter (EPSG #26916)
UTM83-16F	NAD83 UTM- Zone 16 North- US Foot
UTM83-16IF	NAD83 UTM- Zone 16 North- Intnl Foot
UTM83-17	NAD83 UTM- Zone 17 North- Meter (EPSG #26917)
UTM83-17F	NAD83 UTM- Zone 17 North- US Foot
UTM83-17IF	NAD83 UTM- Zone 17 North- Intnl Foot
UTM83-18	NAD83 UTM- Zone 18 North- Meter (EPSG #26918)
UTM83-18F	NAD83 UTM- Zone 18 North- US Foot
UTM83-18IF	NAD83 UTM- Zone 18 North- Intnl Foot
UTM83-19	NAD83 UTM- Zone 19 North- Meter (EPSG #26919)
UTM83-19F	NAD83 UTM- Zone 19 North- US Foot
UTM83-19IF	NAD83 UTM- Zone 19 North- Intnl Foot
UTM83-2	NAD83 UTM- Zone 2 North- Meter (EPSG #26902)

UTM83-20	NAD83 UTM- Zone 20 North- Meter (EPSG #26920)
UTM83-20F	NAD83 UTM- Zone 20 North- US Foot
UTM83-20IF	NAD83 UTM- Zone 20 North- Intnl Foot
UTM83-21	NAD83 UTM- Zone 21 North- Meter (EPSG #26921)
UTM83-21F	NAD83 UTM- Zone 21 North- US Foot
UTM83-21IF	NAD83 UTM- Zone 21 North- Intnl Foot
UTM83-22	NAD83 UTM- Zone 22 North- Meter (EPSG #26922)
UTM83-22F	NAD83 UTM- Zone 22 North- US Foot
UTM83-22IF	NAD83 UTM- Zone 22 North- Intnl Foot
UTM83-23	NAD83 Universal Transverse Mercator- Zone 23 North- Meter
UTM83-25 UTM83-3	NAD83 UTM- Zone 3 North- Meter (EPSG #26903)
UTM83-3F	NAD83 UTM- Zone 3 North- US Survey Foot
UTM83-4	NAD83 UTM- Zone 4 North- Meter (EPSG #26904)
UTM83-4F	NAD83 UTM- Zone 4 North- US Survey Foot
UTM83-5	NAD83 UTM- Zone 5 North- Meter (EPSG #26905)
UTM83-58	NAD83 UTM- Zone 58 North- Meter
UTM83-59	NAD83 UTM- Zone 59 North- Meter
UTM83-5F	NAD83 UTM- Zone 5 North- US Survey Foot
UTM83-5IF	NAD83 UTM- Zone 5 North- Intnl Foot
UTM83-6	NAD83 UTM- Zone 6 North- Meter (EPSG #26906)
UTM83-60	NAD83 UTM- Zone 60 North- Meter
UTM83-6F	NAD83 UTM- Zone 6 North- US Foot
UTM83-6IF	NAD83 UTM- Zone 6 North- Intnl Foot
UTM83-7	NAD83 UTM- Zone 7 North- Meter (EPSG #26907)
UTM83-7F	NAD83 UTM- Zone 7 North- US Foot
UTM83-7IF	NAD83 UTM- Zone 7 North- Intnl Foot
UTM83-8	NAD83 UTM- Zone 8 North- Meter (EPSG #26908)
UTM83-8F	NAD83 UTM- Zone 8 North- US Foot
UTM83-8IF	NAD83 UTM- Zone 8 North- Intnl Foot
UTM83-9	NAD83 UTM- Zone 9 North- Meter (EPSG #26909)
UTM83-9F	NAD83 UTM- Zone 9 North- US Foot
UTM83-9IF	NAD83 UTM- Zone 9 North- Intnl Foot
UTM84-10N	WGS 1984 UTM- Zone 10 North- Meter (EPSG #32610)
UTM84-10S	WGS 1984 UTM- Zone 10 South- Meter (EPSG #32710)
UTM84-11N	WGS 1984 UTM- Zone 11 North- Meter (EPSG #32611)
UTM84-11S	WGS 1984 UTM- Zone 11 South- Meter (EPSG #32711)
UTM84-12N	WGS 1984 UTM- Zone 12 North- Meter (EPSG #32612)
UTM84-12S	WGS 1984 UTM- Zone 12 South- Meter (EPSG #32712)
UTM84-13N	WGS 1984 UTM- Zone 13 North- Meter (EPSG #32613)
UTM84-13S	WGS 1984 UTM- Zone 13 South- Meter (EPSG #32713)
UTM84-14N	WGS 1984 UTM- Zone 14 North- Meter (EPSG #32614)
UTM84-14S	WGS 1984 UTM- Zone 14 South- Meter (EPSG #32714)
UTM84-15N	WGS 1984 UTM- Zone 15 North- Meter (EPSG #32615)
UTM84-15S	WGS 1984 UTM- Zone 15 South- Meter (EPSG #32715)
UTM84-16N	WGS 1984 UTM- Zone 16 North- Meter (EPSG #32616)
UTM84-16S	WGS 1984 UTM- Zone 16 South- Meter (EPSG #32716)
UTM84-17N	WGS 1984 UTM- Zone 17 North- Meter (EPSG #32617)
UTM84-17S	WGS 1984 UTM- Zone 17 South- Meter (EPSG #32717)
UTM84-18N	WGS 1984 UTM- Zone 18 North- Meter (EPSG #32618)
UTM84-18S	WGS 1984 UTM- Zone 18 South- Meter (EPSG #32718)
UTM84-19N	WGS 1984 UTM- Zone 19 North- Meter (EPSG #32619)
UTM84-19S	WGS 1984 UTM- Zone 19 South- Meter (EPSG #32719)
UTM84-1N	WGS 1984 UTM- Zone 1 North- Meter (EPSG #32601)
UTM84-1S	WGS 1984 UTM- Zone 1 South- Meter (EPSG #32701)
UTM84-20N	WGS 1984 UTM- Zone 20 North- Meter (EPSG #32620)
UTM84-20S	WGS 1984 UTM- Zone 20 South- Meter (EPSG #32720)
UTM84-21N	WGS 1984 UTM- Zone 21 North- Meter (EPSG #32621)
UTM84-21S	WGS 1984 UTM- Zone 21 North Meter (EPSG #32721)
UTM84-22N	WGS 1984 UTM- Zone 22 North- Meter (EPSG #32622)
UTM84-22S	WGS 1984 UTM- Zone 22 South- Meter (EPSG #32722)
UTM84-22S UTM84-23N	WGS 1984 UTM- Zone 22 South- Meter (EPSG #32722) WGS 1984 UTM- Zone 23 North- Meter (EPSG #32623)
UTM84-23N	WGS 1984 UTM- Zone 23 North- Meter (EPSG #32023) WGS 1984 UTM- Zone 23 South- Meter (EPSG #32723)
UTM84-24N	WGS 1984 UTM- Zone 23 South- Meter (EPSG #32723) WGS 1984 UTM- Zone 24 North- Meter (EPSG #32624)
UTM84-24N UTM84-24S	WGS 1984 UTM- Zone 24 South- Meter (EPSG #32024) WGS 1984 UTM- Zone 24 South- Meter (EPSG #32724)
UTM84-245 UTM84-25N	WGS 1984 UTM- Zone 25 North- Meter (EPSG #32625)
	WGS 1984 UTM- Zone 25 South- Meter (EPSG #32025) WGS 1984 UTM- Zone 25 South- Meter (EPSG #32725)
UTM84-25S	
UTM84-26N UTM84-26S	WGS 1984 UTM- Zone 26 North- Meter (EPSG #32626) WGS 1984 UTM Zone 26 South Meter (EPSG #32726)
UTM84-26S	WGS 1984 UTM- Zone 26 South- Meter (EPSG #32726)

UTM84-27N	WGS 1984 UTM- Zone 27 North- Meter (EPSG #32627)
UTM84-27S	WGS 1984 UTM- Zone 27 South- Meter (EPSG #32727)
UTM84-28N	WGS 1984 UTM- Zone 28 North- Meter (EPSG #32628)
UTM84-28S	
	WGS 1984 UTM- Zone 28 South- Meter (EPSG #32728)
UTM84-29N	WGS 1984 UTM- Zone 29 North- Meter (EPSG #32629)
UTM84-29S	WGS 1984 UTM- Zone 29 South- Meter (EPSG #32729)
UTM84-2N	WGS 1984 UTM- Zone 2 North- Meter (EPSG #32602)
UTM84-2S	WGS 1984 UTM- Zone 2 South- Meter (EPSG #32702)
UTM84-30N	WGS 1984 UTM- Zone 30 North- Meter (EPSG #32630)
UTM84-30S	WGS 1984 UTM- Zone 30 South- Meter (EPSG #32730)
UTM84-31N	WGS 1984 UTM- Zone 31 North- Meter (EPSG #32631)
UTM84-31S	WGS 1984 UTM- Zone 31 South- Meter (EPSG #32731)
	WGS 1984 UTM- Zone 31 South- Meter (EPSG #32731) WGS 1984 UTM- Zone 32 North- Meter (EPSG #32632)
UTM84-32N	
UTM84-32S	WGS 1984 UTM- Zone 32 South- Meter (EPSG #32732)
UTM84-33N	WGS 1984 UTM- Zone 33 North- Meter (EPSG #32633)
UTM84-33S	WGS 1984 UTM- Zone 33 South- Meter (EPSG #32733)
UTM84-34N	WGS 1984 UTM- Zone 34 North- Meter (EPSG #32634)
UTM84-34S	WGS 1984 UTM- Zone 34 South- Meter (EPSG #32734)
UTM84-35N	WGS 1984 UTM- Zone 35 North- Meter (EPSG #32635)
UTM84-35S	WGS 1984 UTM- Zone 35 South- Meter (EPSG #32735)
UTM84-36N	WGS 1984 UTM- Zone 36 North- Meter (EPSG #32636)
UTM84-36S	WGS 1984 UTM- Zone 36 South- Meter (EPSG #32736)
UTM84-37N	WGS 1984 UTM- Zone 37 North- Meter (EPSG #32637)
UTM84-37S	WGS 1984 UTM- Zone 37 South- Meter (EPSG #32737)
UTM84-38N	WGS 1984 UTM- Zone 38 North- Meter (EPSG #32638)
UTM84-38S	WGS 1984 UTM- Zone 38 South- Meter (EPSG #32738)
UTM84-39N	WGS 1984 UTM- Zone 39 North- Meter (EPSG #32639)
UTM84-39S	WGS 1984 UTM- Zone 39 South- Meter (EPSG #32739)
UTM84-3N	WGS 1984 UTM- Zone 3 North- Meter (EPSG #32603)
UTM84-3S	WGS 1984 UTM- Zone 3 South- Meter (EPSG #32703)
UTM84-40N	WGS 1984 UTM- Zone 40 North- Meter (EPSG #32640)
UTM84-40S	WGS 1984 UTM- Zone 40 South- Meter (EPSG #32740)
UTM84-41N	WGS 1984 UTM- Zone 41 North- Meter (EPSG #32641)
UTM84-41S	WGS 1984 UTM- Zone 41 South- Meter (EPSG #32741)
UTM84-42N	WGS 1984 UTM- Zone 42 North- Meter (EPSG #32642)
UTM84-42S	WGS 1984 UTM- Zone 42 South- Meter (EPSG #32742)
UTM84-43N	WGS 1984 UTM- Zone 43 North- Meter (EPSG #32643)
UTM84-43S	WGS 1984 UTM- Zone 43 South- Meter (EPSG #32743)
UTM84-44N	WGS 1984 UTM- Zone 44 North- Meter (EPSG #32644)
UTM84-44S	WGS 1984 UTM- Zone 44 South- Meter (EPSG #32744)
UTM84-45N	WGS 1984 UTM- Zone 45 North- Meter (EPSG #32645)
UTM84-45S	WGS 1984 UTM- Zone 45 South- Meter (EPSG #32745)
UTM84-46N	WGS 1984 UTM- Zone 46 North- Meter (EPSG #32646)
UTM84-46S	WGS 1984 UTM- Zone 46 South- Meter (EPSG #32746)
UTM84-47N	WGS 1984 UTM- Zone 47 North- Meter (EPSG #32647)
UTM84-47S	WGS 1984 UTM- Zone 47 South- Meter (EPSG #32747)
UTM84-48N	WGS 1984 UTM- Zone 48 North- Meter (EPSG #32648)
UTM84-48S	WGS 1984 UTM- Zone 48 South- Meter (EPSG #32748)
UTM84-49N	WGS 1984 UTM- Zone 49 North- Meter (EPSG #32649)
UTM84-49S	WGS 1984 UTM- Zone 49 South- Meter (EPSG #32749)
UTM84-4N	WGS 1984 UTM- Zone 4 North- Meter (EPSG #32604)
UTM84-4S	WGS 1984 UTM- Zone 4 South- Meter (EPSG #32704)
UTM84-50N	WGS 1984 UTM- Zone 50 North- Meter (EPSG #32650)
UTM84-50S	WGS 1984 UTM- Zone 50 South- Meter (EPSG #32750)
UTM84-51N	WGS 1984 UTM- Zone 51 North- Meter (EPSG #32651)
UTM84-51S	WGS 1984 UTM- Zone 51 South- Meter (EPSG #32751)
UTM84-52N	WGS 1984 UTM- Zone 52 North- Meter (EPSG #32652)
UTM84-52S	WGS 1984 UTM- Zone 52 South- Meter (EPSG #32752)
UTM84-53N	WGS 1984 UTM- Zone 53 North- Meter (EPSG #32653)
UTM84-53S	WGS 1984 UTM- Zone 53 South- Meter (EPSG #32753)
UTM84-54N	WGS 1984 UTM- Zone 54 North- Meter (EPSG #32654)
UTM84-54S	WGS 1984 UTM- Zone 54 South- Meter (EPSG #32754)
UTM84-55N	WGS 1984 UTM- Zone 55 North- Meter (EPSG #32655)
UTM84-55S	WGS 1984 UTM- Zone 55 South- Meter (EPSG #32755)
UTM84-56N	WGS 1984 UTM- Zone 56 North- Meter (EPSG #32656)
UTM84-56S	WGS 1984 UTM- Zone 56 South- Meter (EPSG #32756)
UTM84-57N	WGS 1984 UTM- Zone 57 North- Meter (EPSG #32657)
UTM84-57S	WGS 1984 UTM- Zone 57 North- Meter (EPSG #32057) WGS 1984 UTM- Zone 57 South- Meter (EPSG #32757)
01110+ 575	1.05 1707 0 101 Zone 57 South-Meter (EI SO $\pi 52/57$)

UTM84-58S UTM84-59N UTM84-59S UTM84-5N UTM84-5S UTM84-60N UTM84-60S UTM84-6N UTM84-6S UTM84-7N UTM84-7S UTM84-8N UTM84-8S UTM84-9N UTM84-9S UTM89-30N UTMHP-10 UTMHP-10F UTMHP-10IF UTMHP-11 UTMHP-11F UTMHP-11IF UTMHP-12 UTMHP-12F UTMHP-12IF UTMHP-13 UTMHP-13F UTMHP-13IF UTMHP-14 UTMHP-14F UTMHP-14IF UTMHP-15 UTMHP-15F UTMHP-15IF UTMHP-16 UTMHP-16F UTMHP-16IF UTMHP-17 UTMHP-17F UTMHP-17IF UTMHP-18 UTMHP-18F UTMHP-18IF UT-N UT-S VA83-N VA83-NF VA83-S VA83-SF VAHP-N VAHP-NF VAHP-S VAHP-SF VA-N VA-S VT VT83 VT83F VTHP VTHPF WA83-N WA83-NF WA83-S WA83-SF WAHP-N WAHP-NF

WAHP-S

UTM84-58N

WGS 1984 UTM- Zone 58 North- Meter (EPSG #32658) WGS 1984 UTM- Zone 58 South- Meter (EPSG #32758) WGS 1984 UTM- Zone 59 North- Meter (EPSG #32659) WGS 1984 UTM- Zone 59 South- Meter (EPSG #32759) WGS 1984 UTM- Zone 5 North- Meter (EPSG #32605) WGS 1984 UTM- Zone 5 South- Meter (EPSG #32705) WGS 1984 UTM- Zone 60 North- Meter (EPSG #32660) WGS 1984 UTM- Zone 60 South- Meter (EPSG #32760) WGS 1984 UTM- Zone 6 North- Meter (EPSG #32606) WGS 1984 UTM- Zone 6 South- Meter (EPSG #32706) WGS 1984 UTM- Zone 7 North- Meter (EPSG #32607) WGS 1984 UTM- Zone 7 South- Meter (EPSG #32707) WGS 1984 UTM- Zone 8 North- Meter (EPSG #32608) WGS 1984 UTM- Zone 8 South- Meter (EPSG #32708) WGS 1984 UTM- Zone 9 North- Meter (EPSG #32609) WGS 1984 UTM- Zone 9 South- Meter (EPSG #32709) WGS 1984 UTM- Zone 30 North- Meter HPGN UTM- Zone 10 North- Meter HPGN UTM- Zone 10 North- US Foot HPGN UTM- Zone 10 North- Intnl Foot HPGN UTM- Zone 11 North- Meter HPGN UTM- Zone 11 North- US Foot HPGN UTM- Zone 11 North- Intnl Foot HPGN UTM- Zone 12 North- Meter HPGN UTM- Zone 12 North- US Foot HPGN UTM- Zone 12 North- Intnl Foot HPGN UTM- Zone 13 North- Meter HPGN UTM- Zone 13 North- US Foot HPGN UTM- Zone 13 North- Intnl Foot HPGN UTM- Zone 14 North- Meter HPGN UTM- Zone 14 North- US Foot HPGN UTM- Zone 14 North- Intnl Foot HPGN UTM- Zone 15 North- Meter HPGN UTM- Zone 15 North- US Foot HPGN UTM- Zone 15 North- Intnl Foot HPGN UTM- Zone 16 North- Meter HPGN UTM- Zone 16 North- US Foot HPGN UTM- Zone 16 North- Intnl Foot HPGN UTM- Zone 17 North- Meter HPGN UTM- Zone 17 North- US Foot HPGN UTM- Zone 17 North- Intnl Foot HPGN UTM- Zone 18 North- Meter HPGN UTM- Zone 18 North- US Foot HPGN UTM- Zone 18 North- Intnl Foot NAD27 Utah State Planes- Northern Zone- US Foot (EPSG #32042) NAD27 Utah State Planes- Southern Zone- US Foot (EPSG #32044) NAD83 Virginia State Planes- Northern Zone- Meter (EPSG #32146) NAD83 Virginia State Planes- Northern Zone- US Foot (EPSG #2283) NAD83 Virginia State Planes- Southern Zone- Meter (EPSG #32147) NAD83 Virginia State Planes- Southern Zone- US Foot (EPSG #2284) HPGN/HARN Virginia State Planes- Northern Zone- Meter (EPSG #2853) HPGN/HARN Virginia State Planes- Northern Zone- US Foot (EPSG #2924) HPGN/HARN Virginia State Planes- Southern Zone- Meter (EPSG #2854) HPGN/HARN Virginia State Planes- Southern Zone- US Foot (EPSG #2925) NAD27 Virginia State Planes- Northern Zone- US Foot (EPSG #32046) NAD27 Virginia State Planes- Southern Zone- US Foot (EPSG #32047) NAD27 Vermont State Planes- US Foot (EPSG #32045) NAD83 Vermont State Planes- Meter (EPSG #32145) NAD83 Vermont State Planes- US Foot HPGN/HARN Vermont State Planes- Meter (EPSG #2852) HPGN/HARN Vermont State Planes- US Foot NAD83 Washington State Planes- Northern Zone- Meter (EPSG #32148) NAD83 Washington State Planes- Northern Zone- US Foot (EPSG #2285) NAD83 Washington State Planes- Southern Zone- Meter (EPSG #32149) NAD83 Washington State Planes- Southern Zone- US Foot (EPSG #2286) HPGN Washington State Planes- Northern Zone- Meter (EPSG #2855) HPGN Washington State Planes- Northern Zone- US Foot (EPSG #2926) HPGN Washington State Planes- Southern Zone- Meter (EPSG #2856)

WAHP-SF	HPGN Washington State Planes- Southern Zone- US Foot (EPSG #2927)
WA-N	NAD27 Washington State Planes- Northern Zone- US Foot (EPSG #32048)
WA-S	NAD27 Washington State Planes- Southern Zone- US Foot (EPSG #32049)
WI83-C	NAD83 Wisconsin State Planes- Central Zone- Meter (EPSG #32153)
WI83-CF	NAD83 Wisconsin State Planes- Central Zone- US Foot (EPSG #2288)
WI83-N	NAD83 Wisconsin State Planes- Northern Zone- Meter (EPSG #32152)
WI83-NF	NAD83 Wisconsin State Planes- Northern Zone- US Foot (EPSG #2287)
WI83-S	NAD83 Wisconsin State Planes- Southern Zone- Meter (EPSG #32154)
WI83-SF	NAD83 Wisconsin State Planes- Southern Zone- US Foot (EPSG #2289)
WI-C	NAD27 Wisconsin State Planes- Central Zone- US Foot (EPSG #32053)
WIHP-C	HPGN Wisconsin State Planes- Central Zone- Meter (EPSG #2860)
WIHP-CF	HPGN Wisconsin State Planes- Central Zone- US Foot (EPSG #2929)
WIHP-N	HPGN Wisconsin State Planes- Northern Zone- Meter (EPSG #2859)
WIHP-NF	HPGN Wisconsin State Planes- Northern Zone- US Foot (EPSG #2928)
WIHP-S	HPGN Wisconsin State Planes- Southern Zone- Meter (EPSG #2861)
WIHP-SF	HPGN Wisconsin State Planes- Southern Zone- US Foot (EPSG #2930)
WI-N	NAD27 Wisconsin State Planes- Northern Zone- US Foot (EPSG #32052)
WI-S	NAD27 Wisconsin State Planes- Southern Zone- US Foot (EPSG #32054)
WV83-N	NAD83 West Virginia State Planes- Northern Zone- Meter (EPSG #32150)
WV83-NF	NAD83 West Virginia State Planes- Northern Zone- US Foot
WV83-S	NAD83 West Virginia State Planes- Southern Zone- Meter (EPSG #32151)
WV83-SF	NAD83 West Virginia State Planes- Southern Zone- US Foot
WVHP-N	HARN (HPGN) West Virginia State Planes- Northern Zone- Meter (EPSG #2857)
WVHP-NF	HARN (HPGN) West Virginia State Planes- Northern Zone- US Foot
WVHP-S	HARN (HPGN) West Virginia State Planes- Southern Zone- Meter (EPSG #2858)
WVHP-SF	HARN (HPGN) West Virginia State Planes- Southern Zone- US Foot
WV-N	NAD27 West Virginia State Planes- Northern Zone- US Foot (EPSG #32050)
WV-S	NAD27 West Virginia State Planes- Southern Zone- US Foot (EPSG #32051)
WY83-E	NAD83 Wyoming State Planes- Eastern- Meter (EPSG #32155)
WY83-EC	NAD83 Wyoming State Planes- East Central Zone- Meter (EPSG #32156)
WY83-ECF	NAD83 Wyoming State Planes- East Central Zone- US Foot
WY83-EF	NAD83 Wyoming State Planes- Eastern- US Foot
WY83-W	NAD83 Wyoming State Planes- Western- Meter (EPSG #32158)
WY83-WC	NAD83 Wyoming State Planes- West Central Zone- Meter (EPSG #32157)
WY83-WCF	NAD83 Wyoming State Planes- West Central Zone- US Foot
WY83-WF	NAD83 Wyoming State Planes- Western- US Foot
WY-E	NAD27 Wyoming State Planes- Eastern Zone- US Foot (EPSG #32055)
WY-EC	NAD27 Wyoming State Planes- East Central Zone- US Foot (EPSG #32056)
WYHP-E	HPGN/HARN Wyoming State Planes- Eastern- Meter (EPSG #2862)
WYHP-EC	HPGN/HARN Wyoming State Planes- East Central Zone- Meter (EPSG #2863)
WYHP-ECF	HPGN/HARN Wyoming State Planes- East Central Zone- US Foot
WYHP-EF	HPGN/HARN Wyoming State Planes- Eastern- US Foot
WYHP-W	HPGN/HARN Wyoming State Planes- Western- Meter (EPSG #2865)
WYHP-WC	HPGN/HARN Wyoning State Planes- West Central Zone- Meter (EPSG #2864)
WYHP-WCF	HPGN/HARN Wyoning State Planes- West Central Zone- US Foot
WYHP-WF	HPGN/HARN Wyoning State Planes- West Central Zone- US Foot HPGN/HARN Wyoning State Planes- Western- US Foot
WY-W	NAD27 Wyoming State Planes- Western Zone- US Foot (EPSG #32058)
WY-WC	NAD27 Wyoning State Planes- West Central Zone- US Foot (EPSG #32058)
	141227 (1.50ming butter rands) (1.63 Central Zone- 0.5 1.00t (EI 50 π 52057)

CodeDataSource

Used by Attributes: Air Operations Area - DataSource; Aircraft Gate Stand - DataSource; Aircraft Non Movement Area -DataSource; Airfield Light - DataSource; Airport Boundary - DataSource; Airport Control Point - DataSource; Airport Parcel -DataSource;Airport Sign - DataSource;AnchorageArea - DataSource;Apron - DataSource;Arresting Gear - DataSource;Blast Pad - DataSource;Bridge - DataSource;Building - DataSource;County - DataSource;Deicing Area - DataSource;Dock -DataSource; Driveway - DataSource; Driveway Centerline - DataSource; Easements And Rights of Way - DataSource; Elevation Contour - DataSource; Environmental Contamination Area - DataSource; FAA Region - DataSource; Fauna Hazard Area -DataSource; Fence - DataSource; Flood Plain - DataSource; Flora Habitat Area - DataSource; Flora Species Site -DataSource; Frequency Area - DataSource; Gate - DataSource; Hazardous Material Storage Site - DataSource; Image Area -DataSource;Land and Hold Short Line - DataSource;Land Use - DataSource;Landmark Segment - DataSource;Lease Area -DataSource;Lease Area - DataSource;Lease Area - DataSource;Lease Area - DataSource;Marking Area - DataSource;Marking Line - DataSource; Movement Area - DataSource; Municipality - DataSource; Navigation Buoy - DataSource; Navigational Aid Critical Area - DataSource: Navigational Aid Equipment - DataSource: Navigational Aid Site - DataSource: Noise Contour -DataSource; Noise Incident - DataSource; Noise Monitoring Point - DataSource; Obstacle - DataSource; Obstruction Area -DataSource; Obstruction Identification Surface - DataSource; Parcel - DataSource; Parking Lot - DataSource; Passenger Loading

Bridge - DataSource;Project Area - DataSource;Railroad Centerline - DataSource;Railroad Yard - DataSource;Reference Grid Line - DataSource;Restricted Access Boundary - DataSource;Road Centerline - DataSource;Road Point - DataSource;Road Segment - DataSource;Roof - DataSource;Runway - DataSource;Runway Arresting Area - DataSource;Runway Centerline -DataSource;Runway Element - DataSource;Runway End - DataSource;Runway Helipad Design Surface - DataSource;Runway Intersection - DataSource;Runway Label - DataSource;Runway Protection Area - DataSource;Runway Safety Area Boundary -DataSource;Sample Collection Point - DataSource;Seaplane Ramp Centerline - DataSource;Seaplane Ramp Site -DataSource;Shoreline - DataSource;Security Identification Display Area - DataSource;State - DataSource;Sterile Area -DataSource;Stopway - DataSource;Tank Site - DataSource;Taxi Channel - DataSource;Taxiway Element - DataSource;Taxiway Holding Position - DataSource;Taxiway Intersection - DataSource;Touchdown Lift Off - DataSource;Tower - DataSource;Tunnel - DataSource;Turning Basin - DataSource;Utility Line - DataSource;Utility Point - DataSource;Utility Polygon -DataSource;Water Lane End - DataSource;Water Operations Area - DataSource;Wetland - DataSource;Zoning - DataSource

Value

AERIAL CAD CAD_ASBUILT CAD DIGITAL CAD_PAPER CNTRLIMG COGO CONSTRSURVEY CONVSURVEY DIG RTK DIGITAL_OTHER FIELD FIELDMEASURE GIS DIGITAL GIS_PAPER GPS_COM GPS_MAP GPS_RTK LEGACY LEGAL NA NO_ACCESS ORTHOGT6 ORTHOLT6 OTHER PARSONS PLAT RECOLLECTION ROD LEVEL TOWSON UNCNTRLIMG UNKNOWN WRITTEN

Definition (Notes) [Source] 2005/2007 Aerial Photography Georeferenced CAD File/Scan CAD As-Built CAD Digital CAD Paper Controlled Image COGO Construction Survey Conventional Survey Dig Survey - RTK Digital File (Other) Field Observatin Field Measurement **GIS** Digital GIS Paper Commercial GPS Mapping GPS Trimble R8/5800 Receiver and TSC2 Data Collector Existed in Legacy Database Legal Description NA Cannot Access Feature Ortho (Greater than 6 Inch GSD) Ortho (Less than 6 Inch GSD) Other Parsons Data Plat Personal Recollection Laser Rangefinder and Survey Rod & Level Towson Data Uncontrolled Image Unknown Written Description

CodeDesignGroup

Used by Attributes: <u>Runway End - Design Group; Taxiway Element - Design Group</u>

Value	Definition (Notes) [Source]
Ι	Less than 20 foot tail height; and less than 49 foot wingspan
П	20 or more and less than 30 foot tail height; and 49 or more and less than 79 foot wingspan
III	30 or more and less than 45 foot tail height; and 79 or more and less than 118 foot wingspan
IV	45 or more and less than 60 foot tail height; and 118 or more and less than 171 foot wingspan
V	60 or more and less than 66 foot tail height; and 171 or more and less than 214 foot wingspan
VI	66 or more and less than 80 foot tail height; and 214 or more and less than 262 foot wingspan

CodeDesignSurfaceType

Used by Attributes: Runway Helipad Design Surface - Design Surface Type

Value	Definition (Notes) [Source]
BRL	Building restriction line (not a standard)
FATO	Final Approach and Takeoff Clearance Surface
HAS	Heliport Safety Area
HPZ	Heliport Protection Zone
IAOFZ	Inner Approach Obstacle Free Zone
ITOFZ	Inner Transitional Obstacle Free Zone
OFZ	Obstacle Free Zone
POFZ	Precision obstacle free zone (See AC 150/5300-13)
PRSIFR	Parallel Runway Separation Simultaneous IFR Operations
PRSVFR	Parallel Runway Separation Simultaneous VFR Operations
ROFA	Runway Object Free Area
RPZ	Runway protection zone (See AC 150/5300-13)
RSA	Runway safety area
RWYPTX	Runway to Parallel Taxiway and Taxiline Separation
TOFA	Taxiway and taxilane object free area (See AC 150/5300-13)
TSA	Threshold sighting area
TSS	Threshold Siting Surface (See AC 150/5300-13)
TXSA	Taxiway safety area (See AC 150/5300-13)

CodeDirection

Used by Attributes: <u>Baggage Carousel - Direction;Baggage Conveyor - Direction</u>

Value	Definition (Notes) [Source]
INBOUND	Baggage flow is from non-secure areas to secure areas of the airport.
OUTBOUND	Baggage flow is from secure areas to non-secure areas of the airport.
UNKNOWN	Baggage flow direction is unknown

CodeDirectionality

Used by Attributes: <u>Bridge - Directionality;Railroad Centerline - Directionality;Road Segment - Directionality;Taxiway</u> Element - Directionality;<u>Tunnel - Directionality;Utility Line - Directionality</u>

Value	Definition (Notes) [Source]
BI	Bidirectional
ES	One way from end-to-startpoint
SE	One way from start-to-endpoint

CodeDoorType

Used by Attributes: <u>Door - Type</u>

Value	Definition (Notes) [Source]
Access	Access
Alarm Point	Alarm Point
Chop	Chop
Comm/Electrical	Comm/Electrical
Elevator	Elevator
Emergency Exit	Emergency Exit
Interior	Interior
Jetway	Jetway
Roll Up	Roll Up
Turnstile	Turnstile
Baggage Handling System	Baggage Handling System
Roof Access	Roof Access

CodeFloorLevel

Used by Attributes: <u>Baggage Carousel - Floor Level;Baggage Conveyor - Floor Level;Building Zone - Floor Level;Column - Floor Level;Column Grid - Floor Level;Column Line - Floor Level;Door - Floor Level;Floor - Floor Level;Flooring Material - Floor Level;Furnishing - Floor Level;Interior Sign - Floor Level;Lease Area - Floor Level;Lease Area - Floor Level;Maintenance Responsibility Area - Floor Level;Moving Sidewalk - Floor Level;Passenger Gate - Floor Level;Room - Floor Level;Space - Floor Level;Wall - Floor Level;Window - Floor Level;Baggage Carousel - From Level;Baggage Conveyor - From Level;Chase - From Level;Elevator - From Level;Escalator - From Level;Ladder - From Level;Moving Sidewalk - From Level;Baggage Carousel - To Level;Baggage Conveyor - To Level;Chase - To Level;Elevator - To Level;Baggage Conveyor - To Level;Chase - To Level;Elevator - To Level;Baggage Conveyor - To Level;Chase - To Level;Elevator - To Level;Baggage Conveyor - To Level;Chase - To Level;Elevator - To Level;Moving Sidewalk - To Level;Stair - To Level;Chase - To Level;Elevator - To Level;Moving Sidewalk - To Level;Stair - To Level;Chase - To Level;Elevator - To Level;Elevator - To Level;Elevator - To Level;Chase - To Level;Chase - To Level;Elevator - To Level;Chase - To Level;Chase - To Level;Elevator - To</u>

Value	Definition (Notes) [Source]
Level 1	Apron
Level 2	Boarding
Level 3	Level 3
Level 4	Level 4
Level 5	Level 5
Level 6	Level 6
Level 7	Level 7
Level 8	Level 8
Level 9	Level 9
Level G	Automated Ground Transportation
Level U	Utility Chase
Level Z	Mezzanine - Baggage Sort

CodeFuel

Used by Attributes: Apron - Fuel

Value	Definition (Notes) [Source]
100	100/130 octane gasoline, leaded, MIL-L-5572F (GREEN)
100LL	100/130 MIL Spec, low lead, aviation gasoline (BLUE)
115	115/145 octane gasoline, leaded, MIL-L-5572F (PURPLE)
7	JP-7, Jet Propellant type 7 (Glass Tank Fuel)
80	80/87 octane gasoline, leaded, MIL-L-5572F (RED)
А	Jet A, without icing inhibitor
A+	Jet A+, Kerosene fuel, Type A, Jet A or JP-1 With icing inhibitor.
A1	Jet A1, without icing inhibitor
A1+	Jet A1+, Jet A1 with icing inhibitor.
В	Jet B, Wide cut turbine fuel, Without icing inhibitor.
B+	Jet B+, wide cut turbine fuel with icing inhibitor.
С	91/96 octane gasoline, leaded, No MIL Spec.
F	80 octane gasoline, unleaded, No MIL Spec.
G	Aviation Gasoline (AVGAS), octane unknown
Н	108/135 octane gasoline, leaded, No MIL Spec
J	Jet fuel available but type is unknown
J4	JP-4, Wide cut turbine fuel MIL Spec T-5624
J5	JP-5, Kerosene MIL Spec T-5624
J8	JP-8, Semi Kerosene MIL Spec T-83133, without icing inhibitor
K	73 octane gasoline, unleaded, No MIL Spec
Х	Storage tanks available and fuel type unknown or the tanks were used at one time for aviation
	products but may now store other products
LqNaturalGas	Liguified Natural Gas

CodeGateStandType

Used by Attributes: Aircraft Gate Stand - Gate Stand Type

Value	Definition (Notes) [Source]
ANG-NI	Angled nose-in parking position
ANG-NO	Angled nose-out parking position
HS	Hard stand
ISO	Isolated parking position.

JB	Jet bridge
NI	Nose-in parking position.
OTHER	Other
PR	Portable ramp
RMT	Remote parking position.
SR	Stairs
TM	Temporary
UNK	unknown

CodeGridType

Used by Attributes: <u>Reference Grid Line - Grid Type</u>

Value	Definition (Notes) [Source]
ed50	European Datum 1950
gaussKruger	Gauss Kruger
GEOREF	World Geographic Reference System
ING	Irish National Grid Reference Survey
LCC	Lambert Conformal Conic
LL	Latitude, longitude
MIL	Military
OTHER	Other
RT90	Swedish Coordinate System
SPCS	State Plane Coordinate System
UPS	Universal Polar Stereographic
USNG	United States National Grid for Spatial Addressing
UTM	Universal Transverse Mercator

CodeHazardCategory

Used by Attributes: <u>Hazardous Material Storage Site - Stored Hazmat Category</u>

Value	Definition (Notes) [Source]
1	Explosives are any substance or article, including a device, which is designed to function by explosion or which, by chemical reaction within itself is able to function in a similar manner even if not designed to function by explosion (unless the article
1.1	Explosives that have a mass explosion hazard. A mass explosion is one which affects almost the entire load instantaneously
1.2	Explosives that have a projection hazard but not a mass explosion hazard
1.3	Explosives that have a fire hazard and either a minor blast hazard or a minor projection hazard or, both but not a mass explosion hazard.
1.4	Explosives that present a minor explosion hazard. The explosive effects are largely confined to the package and no projection of fragments of appreciable size or range is to be expected. An external fire must not cause virtually instantaneous explosion of
1.5	Blasting agents consist of very insensitive explosives. This division comprises substances which have a mass explosion hazard but are so insensitive that there is very little probability of initiation or of transition from burning to detonation under norm
1.6	Consists of extremely insensitive articles which do not have a mass explosive hazard. This division comprises articles which contain only extremely insensitive detonating substances and which demonstrate a negligible probability of accidental initiation o
2	HazMat Class 2 includes all gases which are compressed and stored for transportation. Class 2 has three divisions: Flammable (also called combustible), Non-Flammable/Non-Poisonous, and Poisonous.
2.1	Flammable Gas - 454 kg (1001 lb) of any material which is a gas at 20 degrees C (68 degrees F) or less and 101.3 kPa (14.7 psi) of pressure (a material which has a boiling point of 20 degrees C (68 degrees F) or less at 101.3 kPa (14.7 psi)) which-1. Is i
2.2	Non-Flammable, Non-Poisonus Gas - This division includes compressed gas, liquefied gas, pressurized cryogenic gas, compressed gas in solution, asphyxiant gas and oxidizing gas. A non-flammable, nonpoisonous compressed gas (Division 2.2) means any material
2.3	Poison Gas - Gas poisonous by inhalation means a material which is a gas at 20 degrees C or less and a pressure of 101.3 kPa (a material which has a boiling point of 20 degrees C or less at 101.3kPa (14.7 psi)) and which: 1. Is known to be so toxic to huma
3	HazMat Class 3 are flammable liquids. They are liquids with flash point of not more than 60.5

	degrees C (141 degrees F), or any material in a liquid phase with a flash point at or above 37.8
	degrees C (100 degrees F).
4	HazMat Class 4 are Flammable solids. Flammable Solids are any materials in the solid phase
	of matter that can readily undergo combustion in the presence of a source of ignition under
	standard circumstances, i.e. without: Artificially changing variables suc
4.1	Flammable Solid
4.2	Spontaneously Combustible
4.3	Dangerous When Wet - Dangerous when wet material is material that, by contact with water,
	is liable to become spontaneously flammable or to give off flammable or toxic gas at a rate
	greater than 1 liter per kilogram of the material, per hour, when tested
5	HazMat Class 5 Oxidizing Agents and Organic Peroxides - An oxidizer is a chemical that
	readily yields oxygen in reactions, thereby causing or enhancing combustion
5.1	Oxidizers - An oxidizer is a material that may, generally by yielding oxygen, cause or enhance
	the combustion of other materials
5.2	Organic Peroxides - An organic peroxide is any organic compound containing oxygen (O) in
	the bivalent -O-O- structure and which may be considered a derivative of hydrogen peroxide,
	where one or more of the hydrogen atoms have been replaced by organic radi
6	HazMat Class 6 is Toxic and Infectious Substances. Poisonous material is a material, other
	than a gas, known to be so toxic to humans that it presents a health hazard during
	transportation
6.1	Poisonous material is a material, other than a gas, which is known to be so toxic to humans as
	to afford a hazard to health during transportation, or which, in the absence of adequate data on
	human toxicity:
6.2	Biohazards
7	HazMat Class 7 is Radioactive substances. Radioactive substances are materials that emit
	radiation.
8	Hazmat Class 8 is Corrosive Substances. A corrosive material is a liquid or solid that causes
	full thickness destruction of human skin at the site of contact within a specified period of time.
	A liquid that has a severe corrosion rate on steel or aluminum
9	HazMat Class 9 is Miscellaneous Substances. The miscellaneous hazardous materials category
	encompasses all hazardous materials that do not fit one of the definitions listed in Class 1
	through Class 8.

CodeHazardType

Used by Attributes: Fauna Hazard Area - Hazard Type

Value	Definition (Notes) [Source]
BASH	Bird Aircraft Strike Hazard
DEER STRIKE	Deer Strike
TBD	Hazard yet to be determined
TORTOISE PITFALL	Tortoise Pitfall
UNKNOWN	Unknown

CodeHowAcquired

Used by Attributes: <u>Airport Parcel - How Acquired; Parcel - How Acquired</u>

Value
AIP_APPROACH_PROTECTION
AIP_DEVELOPMENT
AIP_NOISE
DONATION
PFC_APPROACH_PROTECTION
PFC_DEVELOPMENT
PFC_NOISE
SURPLUS_PROPERTY

Definition (Notes) [Source]

Land acquired using AIP funds for approach protection Land acquired using AIP funds for airport development Land acquired using AIP funds for noise Land acquired by donation Land acquired using PFC funds for approach protection Land acquired using PFC funds for airport development Land acquired using PFC funds for noise Land acquired using PFC funds for noise Land acquired as surplus property

CodeImageType

Used by Attributes: <u>Image Location - File Type</u>

Value	
BMP	
JPG	
OTH	
TIF	
UNK	

Definition (Notes) [Source] Bitmap Jpeg Other Tiff Unknown

CodeLandmarkType

Used by Attributes: Landmark Segment - Landmark Type

Value AERIAL CABLEWAY AGRICULTURE AREA AIRPORT ATHLETIC FIELD BOAT RAMP BREAKWATER CANAL CEMETERY CREEK DAM FENCE GOLF COURSE LEVEE MILITARY AREA MOUNTAIN PASS OTHER PIER POWERPLANT QUARRY QUAY RACECOURSE OR TRACK RAILROAD RIVER ROAD SHORELINE STADIUM STREAM TANK TRAP TRENCH URBAN AREA UTILITY LINE WALL WHARF

Definition (Notes) [Source] Aerial Cableway Agriculture Area Airport Athletic Field Boat Ramp Breakwater Canal Cemetery Creek Dam Fence Golf Course Levee Military Area Mountain Pass Other Pier Powerplant Quarry Quay Racecourse Or Track Railroad River Road Shoreline Stadium Stream Tank Trap Trench Urban Area Utility Line Wall Wharf

CodeLandUseType

Used by Attributes: <u>Land Use - Use Type</u>

Value	Definition (Notes) [Source]
1000	Residential activities (Source: APA LBCS)
1100	Household activities (Source: APA LBCS)
1200	Transient living (Source: APA LBCS)
1300	Institutional living (Source: APA LBCS)
2000	Shopping, business, or trade activities (Source: APA LBCS)
2100	Shopping (Source: APA LBCS)
2110	Goods-oriented shopping (Source: APA LBCS)
2120	Service-oriented shopping (Source: APA LBCS)
2200	Restaurant-type activity (Source: APA LBCS)
2210	Restaurant-type activity with drive-through (Source: APA LBCS)
2300	Office activities (Source: APA LBCS)

2310	Office activities with high turnover of people (Source: APA LBCS)
2320	Office activities with high turnover of automobiles (Source: APA LBCS)
3000	Industrial, manufacturing, and waste-related activities (Source: APA LBCS)
3100	Plant, factory, or heavy goods storage or handling activities (Source: APA LBCS)
3110	Primarily plant or factory-type activities (Source: APA LBCS)
3120	Primarily goods storage or handling activities (Source: APA LBCS)
3200	Solid waste management activities (Source: APA LBCS)
3210	Solid waste collection and storage (Source: APA LBCS)
3220	Landfilling or dumping (Source: APA LBCS)
3230	Waste processing or recycling (Source: APA LBCS)
3300	Construction activities (grading, digging, etc.) (Source: APA LBCS)
4000	Social, institutional, or infrastructure-related activities (Source: APA LBCS)
4100	School or library activities (Source: APA LBCS)
4110	Classroom-type activities (Source: APA LBCS)
4120	Training or instructional activities outside classrooms (Source: APA LBCS)
4130	Other instructional activities including those that occur in libraries (Source: APA LBCS)
4200	Emergency response or public-safety-related activities (Source: APA LBCS)
4210	Fire and rescue-related activities (Source: APA LBCS)
4220	Police, security, and protection-related activities (Source: APA LBCS)
4230	Emergency or disaster-response-related activities (Source: APA LBCS)
4300	Activities associated with utilities (water, sewer, power, etc.) (Source: APA LBCS)
4310	Water-supply-related activities (Source: APA LBCS)
4311	Water storing, pumping, or piping (Source: APA LBCS)
4312	Water purification and filtration activities (Source: APA LBCS)
4313	Irrigation water storage and distribution activities (Source: APA LBCS)
4314	Flood control, dams, and other large irrigation activities (Source: APA LBCS)
4320	Sewer-related control, monitor, or distribution activities (Source: APA LBCS)
4321	Sewage storing, pumping, or piping (Source: APA LBCS)
4322	Sewer treatment and processing (Source: APA LBCS)
4330	Power generation, control, monitor, or distribution activities (Source: APA LBCS)
4331	Power transmission lines or control activities (Source: APA LBCS)
4332	Power generation, storage, or processing activities (Source: APA LBCS)
4340	Telecommunications-related control, monitor, or distribution activities (Source: APA LBCS)
4350	Natural gas or fuels-related control, monitor, or distribution Activities (Source: APA LBCS)
4400 4410	Mass storage, inactive (Source: APA LBCS) Water storage (Source: APA LBCS)
4410	Storage of natural gas, fuels, etc. (Source: APA LBCS)
4420	Storage of natural gas, fuels, etc. (Source: AFA LBCS)
4430	Storage of chemical nuclear, or other materials (Source: APA I BCS)
4430 4500	Storage of chemical, nuclear, or other materials (Source: APA LBCS) Health care, medical, or treatment activities (Source: APA LBCS)
4500	Health care, medical, or treatment activities (Source: APA LBCS)
4500 4600	Health care, medical, or treatment activities (Source: APA LBCS) Interment, cremation, or grave digging activities (Source: APA LBCS)
4500 4600 4700	Health care, medical, or treatment activities (Source: APA LBCS) Interment, cremation, or grave digging activities (Source: APA LBCS) Military base activities (Source: APA LBCS)
4500 4600 4700 4710	Health care, medical, or treatment activities (Source: APA LBCS) Interment, cremation, or grave digging activities (Source: APA LBCS) Military base activities (Source: APA LBCS) Ordnance storage (Source: APA LBCS)
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4500 4600 4700 4710 4720 5000 5100 5200 5210 5220 5400 5410 5500 5510 5520 5600 5700 6000 6100 6200 6300 6400 6500 6600 6700	 Health care, medical, or treatment activities (Source: APA LBCS) Interment, cremation, or grave digging activities (Source: APA LBCS) Military base activities (Source: APA LBCS) Ordnance storage (Source: APA LBCS) Range and test activities (Source: APA LBCS) Travel or movement activities (Source: APA LBCS) Pedestrian movement (Source: APA LBCS) Vehicular movement (Source: APA LBCS) Vehicular parking, storage, etc. (Source: APA LBCS) Drive-in, drive through, stop-n-go, etc. (Source: APA LBCS) Trains or other rail movement (Source: APA LBCS) Rail maintenance, storage, or related activities (Source: APA LBCS) Sailing, boating, and other port, marine and water-based Activities (Source: APA LBCS) Boat mooring, docking, or servicing (Source: APA LBCS) Aircraft takeoff, landing, taxiing, and parking (Source: APA LBCS) Spacecraft launching and related activities (Source: APA LBCS) Mass assembly of people (Source: APA LBCS) Passenger assembly (Source: APA LBCS) Spectator sports assembly (Source: APA LBCS) Movies, concerts, or entertainment shows (Source: APA LBCS) Gatherings at fairs and exhibitions (Source: APA LBCS) Mass training, drills, etc. (Source: APA LBCS) Social, cultural, or religious assembly (Source: APA LBCS) Gatherings at galleries, museums, aquariums, zoological parks, etc. (Source: APA LBCS)
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7130	Hockey, ice skating, etc. (Source: APA LBCS)
7140	Skiing, snowboarding, etc. (Source: APA LBCS)
7150	Automobile and motorbike racing (Source: APA LBCS)
7160	Golf (Source: APA LBCS)
7180	Tennis (Source: APA LBCS)
7190	Track and field, team sports (baseball, basketball, etc.), or other sports (Source: APA LBCS)
7200	Passive leisure activity (Source: APA LBCS)
7210	Camping (Source: APA LBCS)
7220	Gambling (Source: APA LBCS)
7230	Hunting (Source: APA LBCS)
7240	Promenading and other activities in parks (Source: APA LBCS)
7250	Shooting (Source: APA LBCS)
7260	Trapping (Source: APA LBCS)
7300	Flying or air-related sports (Source: APA LBCS)
7400	Water sports and related leisure activities (Source: APA LBCS)
7410	Boating, sailing, etc. (Source: APA LBCS)
7420	Canoeing, kayaking, etc. (Source: APA LBCS)
7430	Swimming, diving, etc. (Source: APA LBCS)
7440	Fishing, angling, etc. (Source: APA LBCS)
7450	Scuba diving, snorkeling, etc. (Source: APA LBCS)
7460	Water-skiing (Source: APA LBCS)
8000	Natural resources-related activities (Source: APA LBCS)
8100	Farming, tilling, plowing, harvesting, or related activities (Source: APA)
8200	Livestock related activities (Source: APA LBCS)
8300	Pasturing, grazing, etc. (Source: APA LBCS)
8400	Logging (Source: APA LBCS)

${\bf Code Lighting Configuration Type}$

Used by Attributes: <u>Airfield Light - Lighting Type;Building - Lighting Type;Navigation Buoy - Lighting Type;Navigational</u> <u>Aid Equipment - Lighting Type;Tank Site - Lighting Type;Tower - Lighting Type;Water Lane End - Lighting Type</u>

Value	Definition (Notes) [Source]
ALSF-1	High Intensity Approach Lighting System - Configuration 1
ALSF-2	High Intensity Approach Lighting System - Configuration 2
APAP	Alignment of Element Systems
APBN	Airport Rotating Beacon
CLRBAR	Taxiway Clearance Bar Lights
CODEBEACON	Code Beacon
COURSE	Course Lights
F	Fixed
FL	Flashing (Sea Plane Navigation Buoy use only)
FL (2)	Group Flashing (Sea Plane Navigation Buoy use only)
FL (2+1)	Composite Group-Flashing (Sea Plane Navigation Buoy use only)
HLL	Hover Lane Light
HLLL	Hover Lane Limit Light
HPIL	Helipad Perimeter Inset Light
HPPEL	Helipad Perimeter Light (Elevated)
HPPLSF	Helipad Perimeter Light (Semiflush)
ISO	Isophase (Sea Plane Navigation Buoy use only)
L-804	Unidirectional elevated runway guard lights
L-850A	Bi directional or unidirectional runway in pavement light used for runway centerline, Land and
	Hold Short Operations (LAHSO).
L-850B	Unidirectional runway in pavement light used for runway touchdown zone and medium
	intensity approach light system applications.
L-850C	Bi directional runway in pavement light used for runway edge lights and displaced threshold
	applications.
L-850D	Bi directional or unidirectional runway in pavement lights used for runway threshold or
	runway end light applications.
L-850E	Unidirectional runway in pavement light used for runway threshold light and Medium
	Intensity Approach Light System applications
L-850F	Unidirectional runway in pavement lights white flashing lights used for LAHSO
L-852A	Bi directional or unidirectional taxiway centerline in pavement lights used for the straight
	sections of taxiways where operations are permitted when the Runway Visual Range (RVR) is
	greater than or equal to 1200 feet.
L-852B	Bi directional or unidirectional taxiway centerline in pavement lights for curved sections of

	taxiways where operations are permitted when the Runway Visual Range (RVR) is greater
	than or equal to 1200 feet.
L-852C	bi directional or unidirectional taxiway centerline in pavement lights for straight portions of
	taxiways where operations are permitted when the Runway Visual Range (RVR) is less than
1.0520	1200 feet.
L-852D	Bi directional or unidirectional taxiway centerline in pavement lights used for curved portions
	of taxiways where operations are permitted when the Runway Visual Range is less than 1200
L-852E	feet. Omni directional taxiway intersection in pavement lights where operations are permitted when
L-032E	the Runway Visual Range is greater than or equal to 1200 feet.
L-852E/F	Runway Guard Light in-pavement
L-852F	Omni directional taxiway intersection in pavement lights where operations are permitted when
	the Runway Visual Range is less than 1200 feet.
L-852G	Unidirectional Runway Guard in pavement lights
L-852G/S	Combination Runway Guard/Stop bar light in-pavement
L-852J	Bi directional taxiway centerline in pavement lights for the curved portions of taxiways where
	operations are permitted when the Runway Visual Range is greater than or equal to 1200 feet.
L-852K	Bi directional taxiway centerline in pavement lights for the curved portions of taxiway where
	operation are permitted when the Runway Visual Ranger is less than 1200 feet.
L-852S	Unidirectional in pavement Stop Bar lights
L-852T	Omni directional in pavement taxiway edge and Apron edge lights
L-853	Reflective Marker
L-854	Radio Controller (Pilot Controlled Lights)
L-860 L-860E	Omni directional elevated runway edge lights for Visual Flight Rules (VFR) operations. Bi directional or unidirectional elevated runway threshold or runway end lights for Visual
L-800E	Flight Rules operations.
L-861	Omni directional or bi directional elevated runway edge or displaced threshold lights for non-
2 001	precision Instrument Flight Rules (IFR) operations.
L-861E	Bi directional or unidirectional elevated runway threshold or runway end lights for non-
	precision Instrument Flight Rule operations.
L-861SE	Bi directional and unidirectional elevated runway threshold, runway end, and displaced
	threshold lights for non-precision Instrument Flight Rule operations
L-861T	Omni directional elevated taxiway and apron edge lights.
L-862	Bi directional elevated runway edge, threshold, and displaced threshold lights for precision
	Instrument Flight Rule operations.
L-862E	Bi directional or unidirectional elevated runway threshold, runway end, and displaced
1.000	threshold lights for precision Instrument Flight Rule operations.
L-862S	Unidirectional elevated stop bar lights
L-880/L881 LDIN	Precision Approach Path Indicator Lead In Lighting System
MALS	Medium Intensity Approach Lighting System
MALS	Medium Intensity Approach Lighting System with Sequenced Flashing Lights
MALSR	Medium Intensity Approach Lighting System with Runway Alignment Indicator Lights
	(RAIL)
MO (A)	Morse Code (Sea Plane Navigation Buoy use only)
NONE	No lights
OBSCAT	Catenary Lighting
OBSDUAL	A combination of OBSRED and OBSWHT
OBSRED	Aviation red Obstruction Lights
OBSWHITE	Flashing White Obstruction Lights
OC ODALS	Occulting (Sea Plane Navigation Buoy use only)
ODALS	Omnidirectional Approach Lighting System
OTHER	Other Description American Dath Indicator with 2 lights
PAPI2 PAPI4	Precision Approach Path Indicator with 2 lights Precision Approach Path Indicator with 4 lights
PORTABLE	Portable Lights
PVASI	Pulsating visual Approach Slope Indicator
Q	Quick (Flashing) (Sea Plane Navigation Buoy use only)
RAIL	Runway Alignment Indicator Lights
REIL	Runway End Identifier Lights
RWSL	Runway Status Lights
SALS	Short Approach lighting System
SMGCS	Surface Movement Guidance Control System
SSALF	Short Simplified Approach Light System with Sequenced Flashing Lights
SSALR	Simplified Short Approach Lighting System with Runway Alignment Indicator
TRCV	TriColor VASI Visual Approach Stone Indicator
T-VASI TWYON_OFFLGT	Visual Approach Slope Indicator Taxiway Lead on/off lights
I WION_OFTEDT	Turiway Load On/OII lights

VASI-12	Visual Approach Slope Indicator with 2 bars and 12 boxes
VASI-16	Visual Approach Slope Indicator with 3 bars and 16 boxes
VASI-2	Visual Approach Slope Indicator with 2 bars
VASI-2-2	Visual Approach Slope Indicator with 2 bars and 2 boxes
VASI-3	Visual Approach Slope Indicator with 3 bars

CodeLoadingBridgeType

Used by Attributes: <u>Passenger Loading Bridge - Loading Bridge Type</u>

Value
ARM
OTHER
PORTABLE_RAMP
PORTABLE STAIRS

Definition (Notes) [Source] Moveable Arm Other Portable Ramp Portable Stairs

CodeLowVisibilityCategory

Used by Attributes: Taxiway Holding Position - Low Visibility Category

Value	Definition (Notes) [Source]
0	No low visibility operation supported
1	Supports ILS CAT I low visibility operations
2	Supports ILS CAT II III low visibility operations

CodeMarkingFeatureType

Used by Attributes: <u>Building - Marking Feature Type;Land and Hold Short Line - Marking Feature Type;Marking Area - Marking Feature Type;Marking Line - Marking Feature Type;Obstacle - Marking Feature Type;Obstruction Area - Marking Feature Type;Tank Site - Marking Feature Type;Tower - Marking Feature Type</u>

Value	Definition (Notes) [Source]
AIMING_POINT	Runway Aiming Point (Geometry Type: Polygon) [Source: AC 150/5340-1]
ALTBAND	Iternating bands of aviation orange and white [Source AC 70/7640-1]
APRON_SIGN	Surface painted apron position/entrance sign (Geometry Type: Polygon) [Source: AC 150/5340-1]
ARROW	Arrows identify the displaced threshold area to provide centerline guidance for takeoffs and rollouts (Geometry Type: Line) [Source: AC 150/5340-1]
ARROW_HEAD	Arrow heads are used in conjunction with a threshold bar to further highlight the beginning of a runway (Geometry Type: Line) [Source: AC 150/5340-1]
CHECKERBOARD	Checkerboard obstruction marking pattern [Source AC 70/7640-1]
CHEVRON	A marking used to designate blast pads and other areas that are not suitable for aircraft (Geometry Type: Line) [Source: AC 150/5340-1]
DEMARCATION	Demarcation Bar (Geometry Type: Line) [Source: AC 150/5340-1]
DIR_SIGN	Surface painted taxiway direction signs (Geometry Type: Polygon) [Source: AC 150/5340-1]
GATE_LINE	All painted taxilines covering a parking stand area are regarded as stand guidance lines and will be individual objects in the database. There may be several stand guidance taxilines leading to an aircraft stand to accommodate different aircraft types.
GATE SIGN	Surface painted gate position signs (Geometry Type: Polygon) [Source: AC 150/5340-1]
HOLD SIGN	Surface painted holding position signs (Geometry Type: AC 150/5340-1]
ILS_HOLD	Holding position markings for Instrument Landing Systems (Geometry Type: Polygon) [Source: AC 150/5340-1]
INTERSECTION_HOLD	Holding position marking for taxiway/taxiway intersections (Geometry Type: Line) [Source: AC 150/5340-1]
LAHSO	Marking associated with a Land And Hold Short Operations (LAHSO)
LOCATION_SIGN	Surface painted taxiway location signs (Geometry Type: Polygon) [Source: AC 150/5340-1]
NON_MOVE_AREA	Non-movement area marking (Geometry Type: Line) [Source: AC 150/5340-1]
NONE	No marking(s)
OTHER	Other markings not listed
OTHER_LINE	Other markings suitable for representation as a line
OTHER_POLYGON	Other markings suitable for representation as a polygon

PERM_CLOSED	Markings for permanently closed runways and taxiways (Geometry Type: Polygon) [Source: AC 150/5340-1]
POS_SIGN	Geographic position markings (Geometry Type: Polygon) [Source: AC 150/5340-1]
RWY_CL	Runway Centerline (Geometry Type: Line) [Source: AC150/5340-1]
RWY_HOLD	Runway holding position markings on Runways (Geometry Type: Polygon) [Source: AC 150/5340-1]
RWY_ID	Runway Designation Marking (Geometry Type: Polygon) [Source: AC 150/5340-1]
RWY_SHD	Runway shoulder markings (Geometry Type: Line) [Source: AC 150/5340-1]
RWY_THRSH	Runway Threshold Marking (Geometry Type: Polygon) [Source: AC 150/5340-1]
SIDE_STRP	Runway Side Stripe Marking (Geometry Type: Line) [Source: AC 150/5340-1]
SOLID	Solid pattern obstruction marking [Source AC 70/7640-1]
TDZ_MARK	Runway Touchdown Zone Marking (Geometry Type: Polygon) [Source: AC 150/5340-1]
TEMP_CLOSED	Markings for temporarily closed runways and taxiways (Geometry Type: Line) [Source: AC 150/5340-1]
THRSH_BAR	Runway Threshold Bar (Geometry Type: Polygon) [Source: AC 150/5340-1]
TIEDOWN	Aircraft tiedown
TWY_CL	Taxiway Centerline (Geometry Type: Line) [Source: AC 150/5340-1]
TWY_EDGE	Taxiway edge marking (Geometry Type: Line) [Source: AC 150/5340-1]
TWY_HOLD	Runway hold position markings on taxiways (Geometry Type: Polygon) [Source: AC 150/5340-1]
TWY SHD	Taxiway shoulder marking (Geometry Type: Line) [Source: AC 150/5340-1]
VEHICLE	Vehicle roadway markings (Geometry Type: Line) [Source: AC 150/5340-1]

CodeMaterialType

Used by Attributes: Column - Material; Wall - Structural Material

Value	Definition (Notes) [Source]
Block	Block
Other	Other
Poured Concrete	Poured Concrete
Unknown	Unknown
Wood	Wood
Steel	Steel
Aluminum	Aluminum

CodeMonumentType

Used by Attributes: <u>Airport Control Point - Monument Type</u>

Value	Definition (Notes) [Source]
1ST_ORDER_CLASS_I	Meets the standards and specifications for geodetic control network accuracy according to the
	Federal Geodetic Control Subcommittee [NGS]
1ST_ORDER_CLASS_II	Meets the standards and specifications for geodetic control network accuracy according to the
	Federal Geodetic Control Subcommittee [NGS]
2ND_ORDER_CLASS_I	Meets the standards and specifications for geodetic control network accuracy according to the
	Federal Geodetic Control Subcommittee [NGS]
2ND_ORDER_CLASS_II	Meets the standards and specifications for geodetic control network accuracy according to the
	Federal Geodetic Control Subcommittee [NGS]
3RD_ORDER_NO_TABLET	Meets the standards and specifications for geodetic control network accuracy according to the
	Federal Geodetic Control Subcommittee [NGS]
3RD_ORDER_WITH_TABLET	Meets the standards and specifications for geodetic control network accuracy according to the
	Federal Geodetic Control Subcommittee [NGS]
A_Order	Meets the standards and specifications for geodetic control network accuracy according to the
	Federal Geodetic Control Subcommittee [FGCS]
B_Order	Meets the standards and specifications for geodetic control network accuracy according to the
	Federal Geodetic Control Subcommittee [FGCS]
BM	Benchmark is a location whose elevation and horizontal position has been surveyed as
	accurately as possible. Benchmarks are designed for use as reference points, and are usually
	marked by small brass plates
FOUND_CLOSING_CORNER	A found corner is a corner whose original or restored monument or mark is recovered, or
	whose position is definitely established by one or more witness corners or monuments
FOUND_SECTION_CORNER	A found corner is a corner whose original or restored monument or mark is recovered, or

MEANDER_CORNER	whose position is definitely established by one or more witness corners or monuments A corner established where a township line, section line, or other survey intersects the bank of a navigable stream or other meanderable body of water [USGS, 1996, Part 5: Public Land Survey System]
SPOT	A point with a measured vertical position of less than third order accuracy, measured relative
	to a reference datum [USGS, 2001, Part 7: Hypsography]
UNMONUMENTED	Indicates that no permanent marker has been placed
WEAK_CORNER	Corners established by the USDA Forest Service that have been found but their location has not been tied to their true ground position [USGS, 2003]
WITNESS_CORNER	A monumented station on a line of the survey that is used to perpetuate an important location more or less remote from and without special relation to any regular corner [USGS, 1996, Part 5: Public Land Survey System]

CodeNavaidEquipmentType

Used by Attributes: Navigational Aid Equipment - Navaid Equipment Type

Value	Definition (Notes) [Source]
ARSR	Air Route Surveillance Radar
ASR	Airport Surveillance Radar
DF	Direction Finding Equipment
DME	Distance Measuring Equipment
FM	Fan Marker
FMH	Fan Marker located with a radio beacon
GS CE	Glide Slope Capture Effect
GS EF	Glide Slope End Fire
GS NR	Glide Slope Null Reference
GS SB	Glide Slope Side Band
LOC	Localizer
MLSAZ	Microwave Landing System Azimuth Antenna
MLSDME	Microwave Landing System DME
MLSEL	Microwave Landing System Elevation Antenna
MSBLS-AZ	Microwave Scan Beam Landing System Azimuth
MSBLS-DME	Microwave Scan Beam Landing System Distance Measuring Equipment
MSBLS-EL	Microwave Scan Beam Landing System Elevation
MTI	Moving Target Indicator Reflector
NDB/C	Nondirectional Radio Beacon Compass Locator
NDB/H	Nondirectional Radio Beacon High Frequency
NDB/M	Nondirectional Radio Beacons/Medium HF
NDB/U	Nondirectional Radio Beacons/Ultra HF
PAR	Precision Approach Radar
SDF	Simplified Direction Finding Equipment
SECRA	Secondary Radar Antenna
TACAN	Tactical Air Navigation
TDR	Touchdown Reflector
TLS-APGS	Transponder Landing System Approach Glideslope
TLS-LOC	Transponder Landing System - Localizer
VISUAL	Used to identify the navaid as a visual system
VOR	VHF Omnidirectional Range
VORTAC	VOR and collocated TACAN
VOT	VOR Test Facility

CodeNavaidSystemType

Used by Attributes: <u>Navigational Aid Equipment - Navaid System Type</u>

Value	Definition (Notes) [Source]
DF	Direction Finder
ILS	Instrument Landing System
MLS	Microwave Landing System
MSBLS	Microwave Scan Beam Landing System
NDB/C	Nondirectional Radio Beacon Compas Locator
NDB/H	Nondirectional Radio Beacon High Frequency

NDB/M	Nondirectional Radio Beacons/Medium HF
NDB/U	Nondirectional Radio Beacons/Ultra HF
PAR	Precision Approach Radar
TLS	Transponder Landing System

CodeObstacleSource

Used by Attributes: <u>Obstacle - Obstacle Source; Obstruction Area - Obstacle Source</u>

Value AD AF AO DD	Definition (Notes) [Source] Airport Design and Planning FAA Tech Ops Field Survey Airports Field Office Digital Terrain Elevation Data
DI DM	U.S. Department of Interior Maps USGS Digital Elevation Model
EO	Estimated by Airport Owner
F77	Part 77 Analysis
FI	Flight Inspection
NV	Non-Vertically Guided Airport Airspace Analysis
OF	Digital Obstacle File (FAA)
OR	Other Source not named
RS	Remote Sensed
SE	Spot Elevations
SR	Shuttle Radar Terrain Model
ST	State Coded
SV	Field Survey
TE	TERPS Analysis
VG	Vertically Guided Airport Airspace Analysis
WW	Worldwide DoD

CodeObstacleType

Used by Attributes: Obstacle - Obstacle Type; Obstruction Area - Obstacle Type

Value AERIAL CABLEWAY AERIAL CABLEWAY PYLON AGRICULTURE EQUIPMENT AIRCRAFT AMUSEMENT PARK STRUCTURE ANTENNA AQUEDUCT ARCH ATHLETIC FIELD BILBOARD BLAST FURNACE BLEACHERS BRIDGE SUPERSTRUCTURE BRIDGE TOWER BRIDGE TOWER BRIDGE/OVERPASS/VIADUCT BUILDING BUSH CABLE CAR/RAILWAY CATALYTIC CRACKER CATENARY	Definition (Notes) [Source] Aerial Cableway Aerial Cableway Pylon Generic for any agricultural equipment Generic for a parked or moving aircraft Amusement Park Structure Antenna Aqueduct Arch Generic for any type of athletic field or stadium Billboard Blast Furnace Bleachers Generic for larger bridges such as cable stayed bridges etc. Bridge Tower Generic for any type of bridge Generic for any type of bridge Generic for any type of bridge Generic for any type of building Generic for any type of building Generic for bushes and other low growing vegetation Cable Car/Railway An oil refinery unit in which the cracking of petroleum takes place in the presence of a catalyst The curve formed by a perfectly flexible, uniformly dense, and inextensible cable suspended
CATALYTIC CRACKER	An oil refinery unit in which the cracking of petroleum takes place in the presence of a catalyst
CHIMMNEY/SMOKESTACK CHURCH COMMUNICATION BUILDING COMMUNICATION TOWER CONTROL TOWER CONVEYOR	Chimmney/Smokestack Generic for houses of worship Communication Building Communication Tower Control Tower Conveyor

COOLING TOWER A large tower or similar structure typically attached to a power plant through which water is circulated to lower its temperature by partial evaporation CRANE Crane DAM Dam DEBRIS/RUINS Debris/Ruins DIRT PILE Dirt Pile DOME Dome DREDGE/POWERSHOVEL /DRAG Dredge/Powershovel /Drag ELEVATOR Elevator FLAGPOLE Flagpole FLARE PIPE Flare Pipe FORTIFICATION OR FORT Fortification Or Fort GRAIN BIN/SILO Grain Bin/Silo GRAIN ELEVATOR Grain Elevator HOPPER Hopper HORIZONTAL POINT Point of known horizontal position INTERSTATE Interstate highways with 17 foot vehicle allowance added to the features elevation LAUNCHPAD Launchpad LIGHT RAILWAY Generic for people mover systems serving airports LIGHT SUPPORT STRUCTURE Light Support Structure Light Vessel/Lightship LIGHT VESSEL/LIGHTSHIP LIGHTHOUSE Lighthouse Generic for historical or cultural monuments MONUMENT NATURAL HIGH POINT Generic for high terrain features Used when defined as an obstacle NAVAID NUCLEAR REACTOR Nuclear Reactor OFF-SHORE PLATFORM Off-Shore Platform PARKING LOT Parking Lot Generic for manufacturing facilities PLANT POLE Generic for utility or light poles providing local service POWER PLANT Power Plant POWER TRANSMISSION LINE Larger Tower high power Utility lines POWER TRANSMISSION PYLON Larger tower high power utility structures Non-Interstate roads with 15 foot vehicle allowance added to the features elevation PRIMARY ROAD PROCESING/TREATMENT PLANT Procesing/Treatment Plant RAILROAD Railroad track with 23 foot vehicle allowance added to the features elevation. Refinery REFINERY RIG/SUPERSTRUCTURE Rig/Superstructure ROAD SIGN Interstate highway overhead signs SCRUB Scrub SECONDARY ROAD Local city, county state roads with 10 foot vehicle allowance added to the features elevation SHIP Ship underway SHIP STORAGE Ship manufacturing or storage facilities SIGN Generic for any type of sign other than interstate or street signs SKI JUMP Ski Jump SKI LIFT Ski Lift SKI PYLON Ski Pvlon SKYSCRAPER Skyscraper SPIRE Spire STACK Stack **STADIUM** Stadium STEEPLE Steeple STORAGE DEPOT Storage Depot STREET SIGN Signs used to control traffic or provide direction information other than interstate signs SUBSTATION/TRANSFORMER Substation/Transformer TANK Generic for other types of tanks TELEPHONE LINE Telephone Line TELEPHONE PYLON/POLE Telephone Pylon/Pole TETHERED BALLOON Tethered Balloon TOWER (NON-COMMUNICATON TOWERS) Tower (Non-Communicaton Towers) TRAFFIC LIGHT/SIGNAL Traffic Light/Signal TRAMWAY Tramway TREE Generic for a single or small group of trees TREE OUTLINE Dense area of trees UTILITY LINE Generic for local utility service VEGETATION Vegetation VEHICLE Generic for any type of vehicle VERTICAL POINT Point of known elevation

VERTICAL STRUCTURE WALL WATER TOWER WIND MOTOR WINDMILL WINDMILL FARMS Generic for items not classified otherwise in this list Wall Generic for water towers Wind Motor Single windmill Multiple Windmills located close together

${\bf CodeObstructionAreaType}$

Used by Attributes: Obstruction Area - Obstruction Area Type

Value
AG_EQUIP
BUILDING
GROUND
MOBILE_CRANE
OTHER
TREE
URBAN
VESSEL

Definition (Notes) [Source]

Agricultural equipment Building Ground Mobile_Crane Other Tree Urban Vessel

CodeOffsetDirection

Used by Attributes: Navigational Aid Equipment - Offset Direction

Value	Definition (Notes) [Source]
CL	On centerline
L	Offset to the left
R	Offset to the right

CodeOisSurfaceCondition

Used by Attributes: Obstacle - Ois Surface Condition; Obstruction Area - OIS Surface Condition; Obstruction Identification Surface - OIS Surface Condition

Value	Definition (Notes) [Source]	
PRIMARY	Identifies an obstructing area solely within a single surface.	
SUPPLEMENTARY	Used to identify when an obstructing area covers more than a single OIS.	

CodeOisSurfaceType

Used by Attributes: Obstruction Identification Surface - OIS Surface Type

Value	Definition (Notes) [Source]
AAAA	Approach Surfaces
AAAC	Conical Surface
AAAH	Horizontal Surface
AAAP	Primary Surfaces
AAAT	Transitional Surfaces
AAAV	Vertical Guidance Protection Surface
APRC77	14 CFR Part 77 Approach Surfaces
CONL77	14 CFR Part 77 Conical Surface
DEPT	Departure Analysis
HORZ 77	14 CFR Part 77 Horizontal Surface
OEIA	One Engine Inoperative Analysis
PRIM77	14 CFR Part 77 Primary Surface
TERP	TERPS Surfaces
TRNS77	14 CFR Part 77 Transitional Surfaces

CodeOisZoneType

Used by Attributes: Obstruction Identification Surface - Ois Zone Type

- Value APPROACH CONICAL HORIZONTAL PRIMARY TRANSITION
- **Definition (Notes) [Source]** Approach Conical
- CodeOperationsType

Used by Attributes: Arresting Gear - Airport Facility Type; Airport Boundary - Operations Type

Horizontal

Transition

Primary

Value	Definition (Notes) [Source]
CIVIL	Civil operations only
JOINT	Joint military and civil operations
MIL	Military operations only

CodePointType

Used by Attributes: <u>Airport Control Point - Point Type</u>

Value	Definition (Notes) [Source]
AIRPORT_ELEVATION	Indicates the point of highest elevation on the landing surface of the airport.
ARP	Point identified is computed as the Airport reference point for the airport
ASOS	Location of the Automated Surface Observing System
AWOS	Location of the Aviation Weather Observing System
CENTERLINE_POINT	A point collected along the runway centerline whose location is variable based on collection method etc. Typically this point is used for runway profile points.
DISDLACED THRESHOLD	Point provides the location of the displaced threshold for a runway
DISPLACED_THRESHOLD	The point defined as the HelipadReferencePoint
HELIPAD_REFERENCE_POINT IMAGERY	
	Imagery Control Point Other
OTHER	
PACS	Point referenced is the airport's Primary Airport Control Station
RUNWAY_CONTROL_POINT	Point provides the location and elevation of a specific point on the runway such as the point abeam an offset navaid or the intersection point of two runways defined in this standard as required information.
SACS	Point referenced is the airport's Secondary Airport Control Station
SAWS	Location of the Stand Alone Weather System
SEGMENTED_CIRCLE	Location of the airport segmented circle
SPOT ELEVATION	Spot Elevation Point
STOPWAY END	Point provides the end point for the stopway
TDZE	Touchdown Zone Elevation (TDZE) - Indicates the highest point along the runway centerline
	within the first 3000 feet from the threshold.
TEMPORARY SURVEY MARK	Temporary Survey Mark
VERTICAL_OBJECT	Point reference is a VerticalPointObject not classified by another feature but of possible significance
WIND_CONE	Location of the wind cone

CodeProjectStatus

Used by Attributes: Project Area - Project Status

Value	Definition (Notes) [Source]	
IN_PROGRESS	In progress	
PLAN_ON_FILE	Indicates a project that is part of a long term (11 + years) plan	

PLANNED
PROPOSED

Indicates a project that is a part of a short term (0 - 5 year) plan Indicates a project that is part of a midterm (6 - 10 year) plan

CodeProjectType

Used by Attributes: Air Operations Area - ProjectType; Aircraft Gate Stand - ProjectType; Aircraft Non Movement Area -ProjectType;Airfield Light - ProjectType;Airport Boundary - ProjectType;Airport Control Point - ProjectType;Airport Parcel -ProjectType;Airport Sign - ProjectType;AnchorageArea - ProjectType;Apron - ProjectType;Arresting Gear - ProjectType;Blast Pad - ProjectType;Bridge - ProjectType;Building - ProjectType;County - ProjectType;Deicing Area - ProjectType;Dock -ProjectType;Driveway - ProjectType;Driveway Centerline - ProjectType;Easements And Rights of Way - ProjectType;Elevation Contour - ProjectType:Environmental Contamination Area - ProjectType:FAA Region - ProjectType:Fauna Hazard Area -ProjectType;Fence - ProjectType;Flood Plain - ProjectType;Flora Habitat Area - ProjectType;Flora Species Site -ProjectType;Frequency Area - ProjectType;Gate - ProjectType;Hazardous Material Storage Site - ProjectType;Image Area -ProjectType;Land and Hold Short Line - ProjectType;Land Use - ProjectType;Landmark Segment - ProjectType;Lease Area -ProjectType;Lease Area - ProjectType;Lease Area - ProjectType;Lease Area - ProjectType;Marking Area - ProjectType;Marking Line - ProjectType;Movement Area - ProjectType;Municipality - ProjectType;Navigation Buoy - ProjectType;Navigational Aid Critical Area - ProjectType;Navigational Aid Equipment - ProjectType;Navigational Aid Site - ProjectType;Noise Contour -ProjectType;Noise Incident - ProjectType;Noise Monitoring Point - ProjectType;Obstacle - ProjectType;Obstruction Area -ProjectType;Obstruction Identification Surface - ProjectType;Parcel - ProjectType;Parking Lot - ProjectType;Passenger Loading Bridge - ProjectType: Project Area - ProjectType; Railroad Centerline - ProjectType; Railroad Yard - ProjectType; Reference Grid Line - ProjectType;Restricted Access Boundary - ProjectType;Road Centerline - ProjectType;Road Point - ProjectType;Road Segment - ProjectType:Roof - ProjectType:Runway - ProjectType:Runway Arresting Area - ProjectType:Runway Centerline -ProjectType;Runway Element - ProjectType;Runway End - ProjectType;Runway Helipad Design Surface - ProjectType;Runway Intersection - ProjectType;Runway Label - ProjectType;Runway Protection Area - ProjectType;Runway Safety Area Boundary -ProjectType;Sample Collection Point - ProjectType;Seaplane Ramp Centerline - ProjectType;Seaplane Ramp Site -ProjectType;Security Area - ProjectType;Security Identification Display Area - ProjectType;Security Perimeter Line -ProjectType;Shoreline - ProjectType;Shoulder - ProjectType;Sidewalk Segment - ProjectType;State - ProjectType;Sterile Area -ProjectType;Stopway - ProjectType;Tank Site - ProjectType;Taxi Channel - ProjectType;Taxiway Element -ProjectType;Taxiway Holding Position - ProjectType;Taxiway Intersection - ProjectType;Touchdown Lift Off -ProjectType;Tower - ProjectType;Tunnel - ProjectType;Turning Basin - ProjectType;Utility Line - ProjectType;Utility Point -ProjectType:Utility Polygon - ProjectType;Water Lane End - ProjectType;Water Operations Area - ProjectType;Wetland -ProjectType;Zoning - ProjectType

Value

Definition (Notes) [Source]

CodeRecoveredCondition

Used by Attributes: Airport Control Point - Recovered Condition

Value	Definition (Notes) [Source]
Disturbed but not missing	Surface mark destroyed (do not classify a mark as destroyed unless the actual disk is found and returned to the setting agency).
Good	Mark recovered in good condition
Other	Other
Poor	Mark recovered in poor condition and should be considered for replacement
Set now (for a first time description)	To identify a condition not available in the list.
Surface mark destroyed	Underground mark destroyed (do not classify a mark as destroyed unless the actual disk is found and returned to the setting agency).
Underground mark destroyed	Newly established mark

CodeRestrictionType

Used by Attributes: Door - Access Restriction Type; Elevator - Access Restriction Type

Value Biometric BMS Card CardKey Definition (Notes) [Source] Biometric BMS Card Reader Card and Key

Cyper
Key
None
Other
Unknown

Cyper Lock Key None Other Unknown

CodeRouteType

Used by Attributes: <u>Road Segment - Route 1 Type;Road Segment - Route 2 Type;Road Segment - Route 3 Type</u>

Value	Definition (Notes) [Source]
ALLEY	Hard-surface or loose-surface narrow street or passageway primarily found between or behind buildings
CITY	City or subdivision streets
COUNTY	Hard-surface roads not included in a higher class and improved, loose-surface roads passable in all kinds of weather. These roads are adjuncts to the primary and secondary highway systems. These roads are under the jurisdiction and maintained by county au
FIFTHCLASS	Fifth Class Unimproved roads passable only with 4-wheel-drive vehicles [USGS, 2001, Part 3: Transportation]
FIRSTCLASS	First Class
FOURTHCLASS	Unimproved roads which are generally passable only in fair weather and used mostly for local traffic. Also included are driveways, regardless of construction [USGS, 2001, Part 3: Transportation]
INTERSTATE	Hard-surface highways including Interstate and U.S. numbered highways (including alternates), primary State routes, and all controlled access highways [USGS, 2001, Part 3: Transportation]
JEEPTRAIL	Unimproved roads passable only with 4-wheel-drive vehicles
LOCAL	Local jurisdiction roads
NATIONAL	First Class - Hard-surface highways including Interstate and U.S. numbered highways (including alternates), primary State routes, and all controlled access highways [USGS, 2001, Part 3: Transportation]. E.g. U.S. 66
OTHER	Other class of road
SECONDCLASS	Second Class Hard-surface highways including secondary State routes, primary county routes, and other highways that connect principal cities and towns, and link these places with primary highway system [USGS, 2001, Part 3: Transportation]
STATE	Hard-surface State routes under the control and jurisdiction of State authorities
THIRDCLASS	Hard-surface roads not included in a higher class and improved, loose-surface roads passable in all kinds of weather. These roads are adjuncts to the primary and secondary highway systems. Also included are important private roads such as main logging or
TRAIL	Unimproved roads passable only with 4-wheel-drive vehicles, snowmobiles, motocross bikes, and so forth

CodeRunwayProtectionAreaType

Used by Attributes: <u>Runway Protection Area - Type</u>

Value	Definition (Notes) [Source]
CWY	Clearway
ILS	ILS protection area. Protects ILS signal distortion by forbidding large objects in the area.
LIGHT	Light Plane Surface
OTHER	Other
SNOW	Area protected from snow accumulation
STOPWAY	A defined rectangular area on the ground at the end of take-off run available prepared as a suitable area in which an aircraft can be stopped in the case of an abandoned take-off.
VGSI	Visual Glide Slope Indicator (VGSI) protection area. Protects VGSI signal coverage by forbidding objects in the area.

CodeSamplePointLocation

Used by Attributes: Sample Collection Point - Collection Point Location

Value	Definition (Notes) [Source]
AS	Air sample
BH	Borehole
BIO	Biological sample
GWS	Ground water sample
OTHER	Other
SEDS	Sediment sample
SOIL	Soil sample
SOLM	Solid material sample
SURF	Surface water sample
WAS	Waste water sample
WL	Well
PC	Pavement core

CodeSegmentType

Used by Attributes: <u>Railroad Centerline - Segment Type;Road Segment - Segment Type;Sidewalk Segment - Segment Type;Tunnel - Segment Type</u>

Value	Definition (Notes) [Source]
BEGIN	Beginning section of the segment
CONNECTING	Intermediate segments connecting beginning and ending, beginning and intersection, or
	intersection and end.
END	Ending section of the segment
INTERSECTION	Defined intersection of multiple segments

CodeShape

Used by Attributes: <u>Column - Column Shape</u>

Value	Definition (Notes) [Source]
Circular	Circular
Ellipse	Ellipse
Other	Other
Rectangular	Rectangular
Square	Square
Unknown	Unknown
Wide Flange	Wide Flange

CodeShorelineType

Used by Attributes: <u>Shoreline - Shoreline Type</u>

Value APPARENT	Definition (Notes) [Source] Apparent edge of vegetation. Representation of the vegetative border is considered
	approximate because this line cannot be accurately identified on the ground, due to intricate growth patterns and change over time
INDEFINITE	Conditions prevent the feature from being confidently positioned. Horizontal data are confidently positioned within 0.02 Inches, at map scale, of the true ground position. Vertical data are confidently positioned within one-half contour interval of true g
MEAN_HIGH_LEVEL	The average limit of dry land during periods of highest water level (for example, high tide
MEAN_LOW_LEVEL MEAN_SEA_LEVEL	The average limit of dry land during periods of lowest water level (for example, low tide The arithmetic mean of hourly heights observed over some specified time

CodeShoulderType

Used by Attributes: <u>Shoulder - Shoulder Type</u>

Value	Definition (Notes) [Source]
0	Other airfield pavement with a shoulder
R	Runway
Т	Taxiway

CodeSignTypeCode

Used by Attributes: Airport Sign - Sign Type

Value	Definition (Notes) [Source]
CARGO	Inbound Destination Sign - areas set aside for cargo handling
FBO	Inbound Destination Sign - fixed base operator
FUEL	Inbound Destination Sign - areas where aircraft are fueled or serviced
HOLD_INSTRUMENT_LANDING_SY	6 6
HOLD_RUNWAY_APPROACH	Holding Position Sign for Runway Approach Areas
HOLD_RUNWAY_INTERSECTION	Holding Position Sign for Runway/Runway Intersections
INFO	Signs installed on the airside of an airport, other than taxiway guidance signs or runway
	distance remaining signs.
MIL	Inbound Destination Sign - areas set aside for military aircraft
NO_ENTRY	No Entry Sign
OUTBOUND_DESTINATION	Outbound Destination Sign
PAX	Inbound Destination Sign - areas set aside for passenger handling
ROAD_STOP	Stop sign in areas where vehicle roadways intersect runways or taxiways
ROAD_YIELD	Yield sign in areas where vehicle roadways intersect runways or taxiways
RSA_RUNWAY_APPROACH	Runway Safety Area/OFZ and Runway Approach Boundary Sign
RUNWAY_DISTANCE_REMAINING	Sign that designates the remaining runway distance to pilots during takeoff and landing
	operations
RUNWAY_EXIT	Runway Exit Sign
RUNWAY_LOCATION	Runway Location Sign
TAXIWAY_DIRECTION	Taxiway Direction Sign
TAXIWAY_END	Taxiway Ending Marker
TAXIWAY_LOCATION	Taxiway Location Sign
TERMINAL	Inbound Destination Sign - gate positions at which aircraft are loaded and unloaded

CodeSpaceClass

Used by Attributes: Lease Area - Class; Lease Area - Class

Value

Airlines Common Use Airlines Leased BAA Maryland CUTE Joint Use Federal SP Leased Federal SP Unleased MAA Occupied MAA Vacant Misc. Tennants Other Public Circulation Restrooms Unknown Utilities

Definition (Notes) [Source]

Airlines Common Use Airlines Leased BAA Maryland CUTE Joint Use Federal SP Leased Federal SP Unleased MAA Occupied MAA Vacant Misc. Tennants Other Public Circulation Restrooms Unknown Utilities

CodeSpaceType

Used by Attributes: Lease Area - Type; Lease Area - Type

Value

Airline VIP Lounge BAA Food and Beverage **Definition (Notes) [Source]** Airline VIP Lounge BAA Food and Beverage

BAA Retail Baggage Claim Baggage Makeup Circulation Communication Dead Space EDS EDT Electrical FIS Holdroom Kiosk Lounge or Meeting Rooms Mechanical Office Public Office Restricted Other Public Elevator Public Escalator Public Stairs Restricted Security Checkpoint Ticket Counter Unfinished Unknown

BAA Retail Baggage Claim Baggage Makeup Circulation Communication Dead Space EDS EDT Electrical FIS Holdroom Kiosk Lounge or Meeting Rooms Mechanical Office Public Office Restricted Other Public Elevator Public Escalator Public Stairs Restricted Security Checkpoint Ticket Counter Unfinished Unknown

CodeStatus

Used by Attributes: Air Operations Area - Status; Aircraft Gate Stand - Status; Aircraft Non Movement Area - Status; Airfield Light - Status; Airport Boundary - Status; Airport Control Point - Status; Airport Parcel - Status; Airport Sign -Status; AnchorageArea - Status; Apron - Status; Arresting Gear - Status; Blast Pad - Status; Bridge - Status; Building - Status; County - Status; Deicing Area - Status; Dock - Status; Driveway - Status; Driveway Centerline - Status; Easements And Rights of Way -Status; Elevation Contour - Status; Environmental Contamination Area - Status; FAA Region - Status; Fauna Hazard Area -Status; Fence - Status; Flood Plain - Status; Flora Habitat Area - Status; Flora Species Site - Status; Frequency Area - Status; Gate -Status; Hazardous Material Storage Site - Status; Image Area - Status; Land and Hold Short Line - Status; Land Use -Status;Landmark Segment - Status;Lease Area - Status;Lease Area - Status;Lease Area - Status;Marking Area - Status; Marking Line - Status; Movement Area - Status; Municipality - Status; Navigation Buoy - Status; Navigational Aid Critical Area - Status; Navigational Aid Equipment - Status; Navigational Aid Site - Status; Noise Contour - Status; Noise Incident -Status; Noise Monitoring Point - Status; Obstacle - Status; Obstruction Area - Status; Obstruction Identification Surface -Status; Parcel - Status; Parking Lot - Status; Passenger Loading Bridge - Status; Project Area - Status; Railroad Centerline -Status;Railroad Yard - Status;Reference Grid Line - Status;Restricted Access Boundary - Status;Road Centerline - Status;Road Point - Status;Road Segment - Status;Roof - Status;Runway - Status;Runway Arresting Area - Status;Runway Centerline -Status;Runway Element - Status;Runway End - Status;Runway Helipad Design Surface - Status;Runway Intersection -Status; Runway Label - Status; Runway Protection Area - Status; Runway Safety Area Boundary - Status; Sample Collection Point - Status; Seaplane Ramp Centerline - Status; Seaplane Ramp Site - Status; Security Area - Status; Security Identification Display Area - Status; Security Perimeter Line - Status; Shoreline - Status; Shoulder - Status; Sidewalk Segment - Status; State -Status; Sterile Area - Status; Stopway - Status; Tank Site - Status; Taxi Channel - Status; Taxiway Element - Status; Taxiway Holding Position - Status; Taxiway Intersection - Status; Touchdown Lift Off - Status; Tower - Status; Tunnel - Status; Turning Basin - Status; Utility Line - Status; Utility Point - Status; Utility Polygon - Status; Water Lane End - Status; Water Operations Area - Status:Wetland - Status:Zoning - Status

Value	Definition (Notes) [Source]
ABANDONED	Abandoned
ACTIVE	Active surface
AIRSPACED	A favorable airspace determination has been issued
AS_BUILT	As-Built
BROKEN	Broken or rough surface
CLOSED	Closed surface
CONDEMNED	Condemned
DEMOLISHED	Demolished
ENV_CLEARED	All required environmental actions and documentation described in FAAO 5050.4 National
	Environmental Policy Act (NEPA) have been satisfied
FAILED_AID	Failure or irregular operation of visual aides
INACTIVE	Inactive

LIMITED LONG_TERM MEDIUM_TERM NON_OPERATIONAL OCCUPIED OPERATIONAL OTHER PARKED PERMANENT PORTABLE RELEASED S_POWER SEMI_PERMANENT SHORT_TERM TBD TEMPORARY TERMINATED UNDER_CONSTRUCTION UNKNOWN UNOCCUPIED WORK_IN_PROGRESS

Limited operations] Indicates the feature is part of a long term (11 + years) plan Indicates the feature is part of a midterm (6 - 10 year) plan Non-operational Occupied Operational (fully) Other Parked or disabled aircraft Permanent Portable Used to track land released by the airport Secondary power supply in operation Semi_Permanent Indicates the feature is part of a short term (0 - 5 year) plan To be determined Temporary Terminated no longer used Planned or under construction Unknown Unoccupied Construction or work in progress

CodeStructureType

Used by Attributes: <u>Building - Structure Type</u>

Value
APARTMENT
APM STATION
APM TRACK
ARENA
ARFF_STATION
ATC FACILITY
ATC_TOWER
BANK
BARN
CAPITOL
CHURCH
CITY_HALL
COMMUNITY_CENTER
CONCERT_HALL
CONDO
COURT_HOUSE
DRY_STORAGE_DOCK
DUPLEX
DWELLING
EARTHWORKS
FBO
GARAGE
GRAIN_ELEVATOR
HANGAR
HIGHRISE
HOSPITAL
HOUSE
JAIL_OR_PRISON
MEDICAL_CENTER
MEMORIAL
MOBILE_HOME
MUSEUM
OFFICE
OFFSHORE_PLATFORM
OTHER
PARKING_GARAGE
POLICE
POST_OFFICE
POWER_PLANT

Definition (Notes) [Source]

Apartment building Automated People Mover station Automated People Mover tracks Sports Arena or facility Aircraft Rescue and Firefighting station Combined or Single (other than the airport control tower) Air Traffic Control Facility Air Traffic Control Tower Bank barn Capitol church/temple City Hall Community Center Concert Hall condominium Court House Dry Storage Dock house, duplex dwelling Earthworks Fixed Base operator A structure used for the maintenance, storage, and display of motor vehicles Grain Elevator A structure used for the maintenance, storage, and display of aircraft A multi-story structure with at least 12 floors or 35 meters (115 feet) in height Hospital house, single family Jail or Prison Medical Center Memorial Mobile home or trailer Museum. office building Offshore Platform Other Parking garage or facility Police Station Post Office A facility used in the production and distribution of electrical power

PUBLIC_TRANSPORTATION RADIO FACILITY	Public transportation facility (buses, taxi, etc.) Radio Facility
RAILROAD STATION	Railroad Station
RAIN_SHED	Rain Shed
RENTAL_FACILITY	Rental Car facility
SCHOOL	Any building or structure whose primary purpose is education
SECURITY	Security Office
SKYSCRAPER	Office or housing where the building clearly stands out above its surrounding built environment and significantly changes the overall skyline of that particular city
SNOW_SHED	A structure used for the storage, maintenance of Snow removal equipment
STORAGE_FACILITY	A structure used for any type of storage
TBD	to be determined
TERMINAL	Airport Terminal building
THEATER	Theater (any type)
TOWER	Tower
TOWN_HALL	Town Hall
TOWNHOUSE	townhouse
WATER_TANK	Water Tank

CodeSurfaceCondition

Used by Attributes: <u>Aircraft Gate Stand - Surface Condition;Apron - Surface Condition;Blast Pad - Surface</u> <u>Condition;Runway - Surface Condition;Runway Arresting Area - Surface Condition;Runway Element - Surface</u> <u>Condition;Shoulder - Surface Condition;Stopway - Surface Condition;Taxiway Element - Surface Condition;Touchdown Lift Off</u> <u>- Surface Condition</u>

Value	Definition (Notes) [Source]
FAIR	Fair condition
GOOD	Good condition
OTHER	Other
POOR	Poor condition
UNSAFE	Surface is deemed unsafe for operations

CodeSurfaceMaterial

Used by Attributes: <u>Apron - Surface Material;Blast Pad - Surface Material;Bridge - Surface Material;Driveway - Surface Material;Road Segment - Surface Material;Runway - Surface Material;Runway Arresting Area - Surface Material;Runway Element - Surface Material;Stopway - Surface Material;Stopway - Surface Material;Taxiway Element - Surface Material;Touchdown Lift Off - Surface Material;Water Operations Area - Surface Material;</u>

Value AG Ags ANG BE	Definition (Notes) [Source] Asphalt grooved Asphalt and turf Asphalt ungrooved Bare earth
CA	Concrete and asphalt
CG	Concrete grooved
CGS	Concrete and turf
CNG	Concrete ungrooved
DS	Desert/Sand
DT	Dirt
EMAS	Engineered Material Arresting System
FW	Fresh Water
GR	Gravel
GS	Turf
SI	Snow/Ice
SW	Salt Water
W	Water

CodeSurfaceType

Used by Attributes: <u>Aircraft Gate Stand - Surface Type;Apron - Surface Type;Blast Pad - Surface Type;Parking Lot - Surface Type;Road Segment - Surface Type;Runway - Surface Type;Runway Element - Surface Type;Stopway - Surface Type;Taxiway Element - Surface Type;Touchdown Lift Off - Surface Type</u>

Value	Definition (Notes) [Source]
Р	Specially prepared hard surface Paved
S	Specially prepared hard surface Unpaved
U	Not a specially prepared hard surface

CodeTaxiwayType

Used by Attributes: <u>Taxiway Element - Taxiway Type</u>

Value	Definition (Notes) [Source]
AIR_TAXIWAY	Air taxiway
AIR_TLANE	Air taxilane
APRON	Apron taxiway
BYPASS	Bypass holding bay
CROSS_OVER	Crossover taxiway
EAT	End Around Taxiway
ENTER_EXIT_TAXIWAY	Entrance and Exit taxiway
EXIT	Exit/turnoff taxiway
FASTEXIT	Rapid exit/turnoff taxiway
GATE_TLANE	Gate/stand taxilane
GND	Ground taxiway
HOLDING	Holding bay
INLINE	Inline taxiway
OTHER	Those not listed here
PARALLEL	Parallel taxiway
STUB	Stub taxiway
TLANE	Taxilane
TURN_AROUND	Turn around taxiway

CodeThresholdType

Used by Attributes: <u>Runway End - Threshold Type</u>

Value	Definition (Notes) [Source]
Displaced	An indication that the landing threshold is located at a point other than the runway end
Normal	An indication that the landing threshold corresponds to the end of the runway

CodeUseCode

Used by Attributes: Navigational Aid Equipment - Use Code

Value	Definition (Notes) [Source]
С	Compass Locator
Н	High Altitude for VOR/VORTAC/TACAN; All Altitudes for NDB at 50-90 watts
HH	All Altitudes for NDB; 2000 watts or more
L	Low Altitude
MH	All Altitudes for NDB; Under 50 watts
Т	Terminal

CodeUtilityType

Used by Attributes: <u>Utility Line - Utility Type;Utility Point - Utility Type;Utility Polygon - Utility Type</u>

Value	Definition (Notes) [Source]
COMMUNICATION_SYSTEM	Telephone, telegraph, cable, video and voice transmission lines
COMPRESSED_AIR_SYSTEM	The components of a compressed air system.
CONTROL_MONITORING_SYSTEM	
ELECTRICAL_EXT_LIGHT	The components of an electrical exterior lighting system including cables, switches, devices, transformers, etc. Does not include airfield, NAVAID or approach lighting.
ELECTRICAL_SYSTEM	The components of an electrical distribution system including cables, switches, devices, motors, transformers, etc.
FUEL_SYSTEM	The components of a fuel distribution system consisting of pipes, fittings, fixtures, pumps, tanks, etc.
GENERAL_UTILITY	The components of utility system which are universal in use and purpose and do not belong to a specific utility.
HEAT_COOL_SYSTEM	The components of a heating and cooling distribution system consisting of pipes, fittings, fixtures, etc.
INDUSTRIAL_SYSTEM	The components of an industrial waste collection system including pipes, fittings, fixtures, tanks, lagoons, etc.
NATURAL_GAS_SYSTEM	The components of a natural gas distribution system consisting of pipes, fittings, fixtures, etc.
NUCLEAR_REACTOR	The components of a nuclear system such as nuclear fuel, Nuclear research, nuclear waste, and nuclear weapons.
POWER_SYSTEM	Power transmission lines
SALTWATER_SYSTEM	The components of a salt water collection system.
STORM_SYSTEM	The components of a storm drainage collection system including pipes, fittings, fixtures, etc.
TRANSMISSION_LINE	Objects related to the long distance transmission of gas, oil, or hazardous liquid.
WASTEWATER_SYSTEM	The components of a wastewater collection system including pipes, fittings, fixtures, treatment plants, collection locations, etc.
WATER_SYSTEM	The components of a water system including pipes, fittings, fixtures, treatment plants, etc.

CodeVerticalStructureMaterial

Used by Attributes: <u>Dock - Floating Barge Material;Dock - Floating Dock Material;Dock - Gangway Material;Dock - Pier</u> <u>Material;Bridge - Vertical Structure Material;Tank Site - Vertical Structure Material;Tower - Vertical Structure Material</u>

Value COMPOSITION CONCRETE METAL ROCK STONE_BRICK WOOD

Definition (Notes) [Source]

Composition Concrete Metal Rock Stone/brick Wood

CodeWallMaterial

Used by Attributes: Wall - Surface Material

Value	Definition (Notes) [Source]
CMU	Concrete Masonry Unit
Composite	Composite
Glass Curtain	Glass Curtain
Metal Stud	Metal Stud
Other	Other
Unknown	Unknown
Aluminum	Aluminum
Block	Block
Brick	Brick
Concrete	Concrete
Partition	Partition
Railing	Railing
Steel	Steel
Wallboard	Wallboard
Wood	Wood
Other	Other

CodeZoneType

Used by Attributes: Flood Plain - Zone Type

Value	Definition (Notes) [Source]
10_YEAR	Areas subject to 10 year flooding.
100_YEAR	Areas subject to 100 year flooding.
15_YEAR	Areas subject to 15 year flooding.
25_YEAR	Areas subject to 25 year flooding.
5_YEAR	Areas subject to 5 year flooding.
50_YEAR	Areas subject to 50 year flooding.
500_YEAR	Areas subject to 500 year flooding.
GENERAL	Areas prone to flooding in general.
OTHER	Other
PROJECTED	Areas expected to be subject to flooding in the future.

CodeZoningClass

Used by Attributes: Zoning - Zoning Classification

Value
COMMERCIAL

INDUSTRIAL

OTHER

QUASI_PUBLIC RESIDENTIAL

Definition (Notes) [Source]

Areas which are zoned for merchandising, shopping, or other commercial development. (Source SDSFIE)
Areas which are zoned for factory, manufacturing, or other industrial development. (Source SDSFIE)
Other Zoning
Areas which are zoned public although under private ownership or control. (Source SDSFIE)
Areas which are zoned for housing or residential development. (Source SDSFIE)

Maryland Aviation Administration

Office of Design & Construction

GEOGRAPHIC INFORMATION SYSTEM DATA STANDARD

Appendix 2 – Cross Reference of CADD and GIS

Version 2.0

July 2013

APPENDIX 2 – Cross Reference of CADD and GIS

This appendix lists each of the CADD layers defined in MAA's CADD Standards Manual, Version 4.0 that are associated with GIS layers defined in this document, as well as the Utilities Supplement. The layers are ordered by category (i.e. Airfield, Airspace, Environmental, etc.) and then by Feature Type (i.e. Air Operations Area, Aircraft Deicing Area, etc.) as the GIS layers were in Appendix 1. Each feature type has one or more CADD layers associated with it. For each CADD layer, the layer name is provided. The first character of the CADD layer names, which indicates the discipline, has been replaced with an asterisk ('*') meaning that multiple discipline codes may apply. Applicable discipline codes for each CADD layers are listed in Appendix 1 of the CADD Standards Manual, but are omitted here. It is important to note that many CADD layers included in the CADD Standards Manual are not relevant for GIS and are therefore excluded from this appendix.

Discipline Designators that Can be Used As Permitted in the CADD Standards Manual to Replace
the '*' in the GIS to CADD Layer Crosswalk

Designator	Discipline	Designator	Discipline
А	Architectural	Ι	Interiors
В	Geotechnical	L	Landscaping
С	Civil	М	Mechanical
Е	Electrical	Р	Plumbing
F	Fire Protection	S	Structural
G	General	Т	Telecommunications
Н	Hazardous Materials	V	Surveying/Mapping

GIS to CADD Layer Crosswalk

Category	Feature Class	Geometry	CADD Layer Name
Airfield	AircraftNonMovementArea	Line	*-APRN-ANOM
Airfield	AirfieldLight	Point	*-AFLD-LITE-APPR
Airfield	AirfieldLight	Point	*-AFLD-LITE-DIST
Airfield	AirfieldLight	Point	*-AFLD-LITE-LANE
Airfield	AirfieldLight	Point	*-AFLD-LITE-OBST
Airfield	AirfieldLight	Point	*-AFLD-LITE-RUNW
Airfield	AirfieldLight	Point	*-AFLD-LITE-SIGN
Airfield	AirfieldLight	Point	*-AFLD-LITE-TAXI
Airfield	AirfieldLight	Point	*-AFLD-LITE-THRS
Airfield	AirOperationsArea	Polygon	*-AFLD-AHOA
Airfield	AirportSign	Point	*-APRN-SIGN
Airfield	AirportSign	Point	*-ELEV-SIGN
Airfield	AirportSign	Point	*-FLOR-SIGN
Airfield	AirportSign	Point	*-LITE-DIST
Airfield	AirportSign	Point	*-LITE-SIGN
Airfield	AirportSign	Point	*-PRKG-SIGN
Airfield	AirportSign	Point	*-ROAD-SIGN

Category	Feature Class	Geometry	CADD Layer Name
Airfield	AirportSign	Point	*-RUNW-SIGN
Airfield	AirportSign	Point	*-SIGN-EXTN
Airfield	AirportSign	Point	*-SIGN-FRMG
Airfield	AirportSign	Point	*-SIGN-GAGE
Airfield	AirportSign	Point	*-SIGN-PANL
Airfield	AirportSign	Point	*-SIGN-SPRT
Airfield	AirportSign	Point	*-SPCL-TRAF
Airfield	AirportSign	Point	*-TAXI-SIGN
Airfield	Apron	Polygon	*-APRN-GRND
Airfield	Apron	Polygon	*-APRN-OTLN
Airfield	DeicingArea	Polygon	*-APRN-DEIC
Airfield	FrequencyArea	Polygon	*-AFLD-FREQ
Airfield	MarkingArea	Polygon	*-HELI-IDEN
Airfield	MarkingArea	Polygon	*-HELI-TDZM
Airfield	MarkingArea	Polygon	*-RUNW-CNTR-MRKG
Airfield	MarkingArea	Polygon	*-RUNW-DISP
Airfield	MarkingArea	Polygon	*-RUNW-DIST
Airfield	MarkingArea	Polygon	*-RUNW-IDEN
Airfield	MarkingArea	Polygon	*-RUNW-SIDE
Airfield	MarkingArea	Polygon	*-RUNW-TDZM
Airfield	MarkingArea	Polygon	*-RUNW-THRS
Airfield	MarkingLine	Line	*-APRN-CNTR
Airfield	MarkingLine	Line	*-APRN-HOLD
Airfield	MarkingLine	Line	*-APRN-MRKG
Airfield	MarkingLine	Line	*-APRN-SECU
Airfield	MarkingLine	Line	*-APRN-SHLD
Airfield	MarkingLine	Line	*-APRN-SHLD-MRKG
Airfield	MarkingLine	Line	*-HELI-BLST
Airfield	MarkingLine	Line	*-HELI-CNTR-MARK
Airfield	MarkingLine	Line	*-HELI-DIST
Airfield	MarkingLine	Line	*-HELI-SIDE
Airfield	MarkingLine	Line	*-OVRN-CNTR
Airfield	MarkingLine	Line	*-OVRN-SHLD-MRKG
Airfield	MarkingLine	Line	*-PADS-CNTR
Airfield	MarkingLine	Line	*-PADS-OTLN
Airfield	MarkingLine	Line	*-PVMT-MRKG
Airfield	MarkingLine	Line	*-PVMT-MRKG-WHIT
Airfield	MarkingLine	Line	*-PVMT-MRKG-YELO
Airfield	MarkingLine	Line	*-RUNW-CNTR-MARK

Category	Feature Class	Geometry	CADD Layer Name
Airfield	MarkingLine	Line	*-RUNW-SHLD
Airfield	MarkingLine	Line	*-TAXI-CNTR-MARK
Airfield	MarkingLine	Line	*-TAXI-CNTR-MRKG
Airfield	MarkingLine	Line	*-TAXI-EDGE
Airfield	MarkingLine	Line	*-TAXI-SHLD
Airfield	PassengerLoadingBridge	Polygon	*-APRN-ACPK-BRDG
Airfield	PassengerLoadingBridge	Polygon	*-EQPM-JETB
Airfield	RestrictedAccessBoundary	Line	*-AFLD-SECR-RSTR
Airfield	Runway	Polygon	*-RUNW-EDGE
Airfield	RunwayArrestingArea	Polygon	*-RUNW-ARST
Airfield	RunwayBlastPad	Polygon	*-RUNW-BLST
Airfield	RunwayCenterline	Line	*-RUNW-CNTR
Airfield	RunwayElement	Polygon	*-RUNW-SEGM
Airfield	RunwayEnd	Point	*-RUNW-ENDP
Airfield	RunwayHelipadDesignSurface	Polygon	*-AFLD-DSRF-BLDR
Airfield	RunwayHelipadDesignSurface	Polygon	*-AFLD-DSRF-KEYH
Airfield	RunwayHelipadDesignSurface	Polygon	*-AFLD-DSRF-NMOV
Airfield	RunwayHelipadDesignSurface	Polygon	*-AFLD-DSRF-OFA_
Airfield	RunwayHelipadDesignSurface	Polygon	*-AFLD-DSRF-OFZ_
Airfield	RunwayHelipadDesignSurface	Polygon	*-AFLD-DSRF-POFA
Airfield	RunwayHelipadDesignSurface	Polygon	*-AFLD-DSRF-RPZ_
Airfield	RunwayHelipadDesignSurface	Polygon	*-AFLD-DSRF-RSA_
Airfield	RunwayHelipadDesignSurface	Polygon	*-HELI-DSRF
Airfield	RunwayHelipadDesignSurface	Polygon	*-OVRN-IDEN
Airfield	RunwayHelipadDesignSurface	Polygon	*-OVRN-OTLN
Airfield	RunwayHelipadDesignSurface	Polygon	*-RUNW-CLRW
Airfield	RunwayLabel	Point	*-RUNW-ENDP-MARK
Airfield	RunwayLAHSO	Line	*-RUNW-LAHS
Airfield	RunwaySafetyAreaBoundary	Polygon	*-RUNW-SAFT
Airfield	Shoulder	Polygon	*-HELI-SHLD
Airfield	Shoulder	Polygon	*-PADS-SHLD
Airfield	Stopway	Polygon	*-RUNW-STWY
Airfield	TaxiwayElement	Polygon	*-TAXI-OTLN
Airfield	TaxiwayHoldingPosition	Line	*-TAXI-HOLD
Airfield	TaxiwayIntersection	Polygon	*-TAXI-INTS
Airfield	TouchdownLiftOff	Polygon	*-HELI-TLOF
Airspace	LandmarkSegment	Line	*-AIRS-LNDM
Airspace	Obstacle	Point	*-AIRS-OBSC
Airspace	Obstacle	Point	*-AIRS-OBST-PPNT

Category	Feature Class	Geometry	CADD Layer Name
Airspace	Obstacle	Point	*-OBST-AIRS
Airspace	ObstructionArea	Polygon	*-AIRS-OBST-LINE
Airspace	ObstructionArea	Polygon	*-AIRS-OBST-POLY
Airspace	ObstructionIdSurface	Polygon	*-AIRS-OTHR
Airspace	ObstructionIdSurface	Polygon	*-AIRS-PART-APRC
Airspace	ObstructionIdSurface	Polygon	*-AIRS-PART-CONL
Airspace	ObstructionIdSurface	Polygon	*-AIRS-PART-HORZ
Airspace	ObstructionIdSurface	Polygon	*-AIRS-PART-PRIM
Airspace	ObstructionIdSurface	Polygon	*-AIRS-PART-TRNS
Airspace	ObstructionIdSurface	Polygon	*-AIRS-TERP
Cadastral	AirportBoundary	Polygon	*-AFLD-PROP
Cadastral	County	Polygon	*-PROP-CNTY
Cadastral	EasementsAndRightsofWay	Polygon	*-PROP-ESMT
Cadastral	EasementsAndRightsofWay	Polygon	*-PROP-RWAY
Cadastral	EasementsAndRightsofWay	Polygon	*-PROP-RWAY-ACQU
Cadastral	FaaRegionArea	Polygon	*-AFLD-FAAR
Cadastral	LandUse	Polygon	*-PROP-LUSE
Cadastral	LandUse	Polygon	*-PROP-LUSE-FUTR
Cadastral	LeaseZone	Polygon	*-PROP-LEAS
Cadastral	Municipality	Polygon	*-PROP-MUNI
Cadastral	Parcel	Polygon	*-PROP-LINE
Cadastral	Parcel	Polygon	*-PROP-QTRS
Cadastral	Parcel	Polygon	*-PROP-SECT
Cadastral	Parcel	Polygon	*-PROP-SXTS
Cadastral	State	Polygon	*-PROP-STAT
Cadastral	Zoning	Polygon	*-PROP-ZONG
Environmental	EnvironmentalContaminationArea	Polygon	*-POLL-CONC
Environmental	EnvironmentalContaminationArea	Polygon	*-POLL-POTN
Environmental	FaunaHazardArea	Polygon	*-BORW-IDEN
Environmental	FaunaHazardArea	Polygon	*-BORW-LINE
Environmental	FaunaHazardArea	Polygon	*-ECCO-BURR
Environmental	FaunaHazardArea	Polygon	*-ECCO-DENS
Environmental	FaunaHazardArea	Polygon	*-ECCO-GATR
Environmental	FaunaHazardArea	Polygon	*-ECCO-HUMK
Environmental	FaunaHazardArea	Polygon	*-ECCO-NEST
Environmental	FaunaHazardArea	Polygon	*-ECCO-PRCH
Environmental	FaunaHazardArea	Polygon	*-SITE-VEGE-HZRD
Environmental	FaunaHazardArea	Polygon	*-TOPO-SPEC
Environmental	FloodZone	Polygon	*-FLHA-025Y

Category	Feature Class	Geometry	CADD Layer Name
Environmental	FloodZone	Polygon	*-FLHA-050Y
Environmental	FloodZone	Polygon	*-FLHA-100Y
Environmental	FloodZone	Polygon	*-FLHA-200Y
Environmental	FloodZone	Polygon	*-FLHA-500Y
Environmental	FloodZone	Polygon	*-FLHA-IDEN
Environmental	FloodZone	Polygon	*-TOPO-FLZN
Environmental	FloraSpeciesSite	Point	*-PLNT-CTNR
Environmental	FloraSpeciesSite	Point	*-PLNT-PLTS
Environmental	FloraSpeciesSite	Point	*-PLNT-TREE
Environmental	FloraSpeciesSite	Point	*-SITE-VEGE-PONT
Environmental	ForestStandArea	Polygon	*-PLNT-BEDS
Environmental	ForestStandArea	Polygon	*-PLNT-BUSH
Environmental	ForestStandArea	Polygon	*-PLNT-BUSH-LINE
Environmental	ForestStandArea	Polygon	*-PLNT-GRND
Environmental	ForestStandArea	Polygon	*-PLNT-MLCH
Environmental	ForestStandArea	Polygon	*-PLNT-SPRG
Environmental	ForestStandArea	Polygon	*-PLNT-TREE-LINE
Environmental	ForestStandArea	Polygon	*-PLNT-TURF
Environmental	ForestStandArea	Polygon	*-SITE-VEGE
Environmental	ForestStandArea	Polygon	*-SITE-VEGE-AREA
Environmental	HazMatStorageSite	Point	*-STOR-HAZM
Environmental	HazMatStorageSite	Point	*-STOR-HAZW
Environmental	NoiseContour	Polygon	*-TOPO-AUZN
Environmental	NoiseIncident	Point	*-TOPO-AUCO
Environmental	NoiseMonitoringPoint	Point	*-TOPO-AUST
Environmental	SampleCollectionPoint	Point	*-BORE-CONE
Environmental	SampleCollectionPoint	Point	*-BORE-GENL-LOCN
Environmental	SampleCollectionPoint	Point	*-BORE-GPRO-LOCN
Environmental	SampleCollectionPoint	Point	*-BORE-HOLE
Environmental	SampleCollectionPoint	Point	*-BORE-LINE
Environmental	SampleCollectionPoint	Point	*-BORE-PUSH
Environmental	SampleCollectionPoint	Point	*-BORE-STRK
Environmental	SampleCollectionPoint	Point	*-BORE-UNDS-LOCN
Environmental	SampleCollectionPoint	Point	*-BORE-VCOR-LOCN
Environmental	SampleCollectionPoint	Point	*-MNST-AIRQ
Environmental	SampleCollectionPoint	Point	*-SAMP-AIRS
Environmental	SampleCollectionPoint	Point	*-SAMP-AUGR
Environmental	SampleCollectionPoint	Point	*-SAMP-BIOL
Environmental	SampleCollectionPoint	Point	*-SAMP-CORE

Category	Feature Class	Geometry	CADD Layer Name
Environmental	SampleCollectionPoint	Point	*-SAMP-DRVE
Environmental	SampleCollectionPoint	Point	*-SAMP-GRAB
Environmental	SampleCollectionPoint	Point	*-SAMP-GWTR
Environmental	SampleCollectionPoint	Point	*-SAMP-IDEN
Environmental	SampleCollectionPoint	Point	*-SAMP-MAGN
Environmental	SampleCollectionPoint	Point	*-SAMP-PERC
Environmental	SampleCollectionPoint	Point	*-SAMP-PITS
Environmental	SampleCollectionPoint	Point	*-SAMP-SEDI
Environmental	SampleCollectionPoint	Point	*-SAMP-SOIL
Environmental	SampleCollectionPoint	Point	*-SAMP-SOLI
Environmental	SampleCollectionPoint	Point	*-SAMP-SWTR
Environmental	SampleCollectionPoint	Point	*-SAMP-VERT
Environmental	SampleCollectionPoint	Point	*-SAMP-WASH
Environmental	SampleCollectionPoint	Point	*-SAMP-WAST
Environmental	SampleCollectionPoint	Point	*-TOPO-BORE
Environmental	SampleCollectionPoint	Point	*-WELL-ASR~
Environmental	SampleCollectionPoint	Point	*-WELL-MONT
Environmental	SampleCollectionPoint	Point	*-WELL-PIZO
Environmental	Shoreline	Polygon	*-CHAN-BANK-TOP~
Environmental	Shoreline	Polygon	*-CHAN-DACL
Environmental	Shoreline	Polygon	*-CHAN-DACL-IDEN
Environmental	Shoreline	Polygon	*-CHAN-LIMT
Environmental	Shoreline	Polygon	*-CHAN-LIMT-IDEN
Environmental	Shoreline	Polygon	*-DRED-OHWM
Environmental	Shoreline	Polygon	*-MNST-GWTR
Environmental	Shoreline	Polygon	*-MNST-SWTR
Environmental	Shoreline	Polygon	*-RIVR-BANK-TOP~
Environmental	Shoreline	Polygon	*-RIVR-EDGE
Environmental	Shoreline	Polygon	*-SITE-EWAT
Environmental	Shoreline	Polygon	*-SITE-WATR
Environmental	Shoreline	Polygon	*-TOPO-SHOR
Environmental	Shoreline	Polygon	*-TOPO-WATR
Environmental	Wetland	Polygon	*-TOPO-WETL
Environmental	Wetland	Polygon	*-WETL-BOGS
Environmental	Wetland	Polygon	*-WETL-FENS
Environmental	Wetland	Polygon	*-WETL-MRSH
Environmental	Wetland	Polygon	*-WETL-MRSH-SALT
Environmental	Wetland	Polygon	*-WETL-MRSH-TIDL
Environmental	Wetland	Polygon	*-WETL-PCSN

Category	Feature Class	Geometry	CADD Layer Name
Environmental	Wetland	Polygon	*-WETL-PHOL
Environmental	Wetland	Polygon	*-WETL-RPRN
Environmental	Wetland	Polygon	*-WETL-SLGH
Environmental	Wetland	Polygon	*-WETL-SWMP
Geodetic	AirportControlPoint	Point	*-CTRL-BMRK
Geodetic	AirportControlPoint	Point	*-CTRL-HCPT
Geodetic	AirportControlPoint	Point	*-CTRL-HVPT
Geodetic	AirportControlPoint	Point	*-CTRL-TRAV
Geodetic	AirportControlPoint	Point	*-CTRL-VCPT
Geodetic	AirportControlPoint	Point	*-SURV-DATA
Geodetic	AirportControlPoint	Point	*-TOPO-RNYE
Geodetic	AirportControlPoint	Point	*-TOPO-SPOT
Geodetic	AirportControlPoint	Point	*-TOPO-SPOT-BLDG
Geodetic	CoordinateGridCell	Polygon	*-CTRL-GRID
Geodetic	CoordinateGridCell	Polygon	*-DETL-GRPH
Geodetic	CoordinateGridCell	Polygon	*-GRID-COOR
Geodetic	CoordinateGridCell	Polygon	*-GRID-COOR-IDEN
Geodetic	CoordinateGridCell	Polygon	*-GRID-EXTR
Geodetic	CoordinateGridCell	Polygon	*-GRID-FRAM
Geodetic	CoordinateGridCell	Polygon	*-GRID-HORZ
Geodetic	CoordinateGridCell	Polygon	*-GRID-IDEN
Geodetic	CoordinateGridCell	Polygon	*-GRID-INTR
Geodetic	CoordinateGridCell	Polygon	*-GRID-MAJR
Geodetic	CoordinateGridCell	Polygon	*-GRID-MINR
Geodetic	CoordinateGridCell	Polygon	*-GRID-VERT
Geodetic	CoordinateGridCell	Polygon	*-PROJ-LALO-COOR
Geodetic	CoordinateGridCell	Polygon	*-PROJ-STAT-COOR
Geodetic	CoordinateGridCell	Polygon	*-TOPO-COOR
Geodetic	CoordinateGridCell	Polygon	*-TOPO-COOR-LALO
Geodetic	CoordinateGridCell	Polygon	*-TOPO-COOR-STAT
Geodetic	ElevationContour	Line	*-GRAD-AFTR
Geodetic	ElevationContour	Line	*-GRAD-EXST
Geodetic	ElevationContour	Line	*-GRAD-EXST-BASE
Geodetic	ElevationContour	Line	*-GRAD-EXST-SYR1
Geodetic	ElevationContour	Line	*-GRAD-EXST-SYR2
Geodetic	ElevationContour	Line	*-GRAD-EXST-SYR3
Geodetic	ElevationContour	Line	*-GRAD-EXST-SYR4
Geodetic	ElevationContour	Line	*-GRAD-FNSH
Geodetic	ElevationContour	Line	*-GRAD-PRED

Category	Feature Class	Geometry	CADD Layer Name
Geodetic	ElevationContour	Line	*-GRAD-SCLN
Geodetic	ElevationContour	Line	*-TOPO-BKLN
Geodetic	ElevationContour	Line	*-TOPO-DTMP
Geodetic	ElevationContour	Line	*-TOPO-DTMT
Geodetic	ElevationContour	Line	*-TOPO-MAJR
Geodetic	ElevationContour	Line	*-TOPO-MAJR-IDEN
Geodetic	ElevationContour	Line	*-TOPO-MINR
Geodetic	ElevationContour	Line	*-TOPO-MINR-IDEN
Geodetic	ElevationContour	Line	*-TOPO-MINR-ONEF
Geodetic	ElevationContour	Line	*-TOPO-MINR-TWOF
Geodetic	ElevationContour	Line	*-TOPO-SLOP-FILL
Geodetic	ElevationContour	Line	*-TOPO-SLOP-IDEN
Geodetic	ElevationContour	Line	*-TOPO-SLOP-TOPT
Geodetic	ElevationContour	Line	*-TOPO-SOUN
Geodetic	ElevationContour	Line	*-WATR-SURF
Geodetic	ImageArea	Polygon	*-AERI-BNDY
Geodetic	ImageArea	Polygon	*-AERI-PHOT
Geodetic	ImageArea	Polygon	*-AERI-PNPT
Geodetic	ImageArea	Polygon	*-IMAG-BDRY-QUAD
Interior	BaggageCarousel	Polygon	*-BAGS-CARR
Interior	BaggageConveyor	Polygon	*-BAGS-CVRI
Interior	BaggageConveyor	Polygon	*-BAGS-CVRO
Interior	BuildingColumn	Polygon	*-COLS-CNTR
Interior	BuildingColumn	Polygon	*-COLS-ENCL
Interior	BuildingColumn	Polygon	*-COLS-POST
Interior	BuildingColumn	Polygon	*-COLS-PRIM
Interior	BuildingColumn	Polygon	*-COLS-RBAR
Interior	BuildingColumn	Polygon	*-COLS-SECD
Interior	BuildingColumn	Polygon	*-FNDN-FTNG
Interior	BuildingColumn	Polygon	*-FNDN-PEDS
Interior	BuildingColumn	Polygon	*-FNDN-PILE
Interior	Door	Line	*-ALRM-EQPM-SECU
Interior	Door	Line	*-DOOR-FULL
Interior	Door	Line	*-DOOR-PRHT
Interior	Door	Line	*-DOOR-SECR
Interior	Door	Line	*-HVAC-ACCS
Interior	Door	Line	*-OTLN-OPNG
Interior	Elevator	Polygon	*-ACCS-EVTR
Interior	Elevator	Polygon	*-FLOR-EVTR

Category	Feature Class	Geometry	CADD Layer Name
Interior	Escalator	Polygon	*-FLOR-ECSL
Interior	Floor	Polygon	*-FLOR-LEVL
Interior	Floor	Polygon	*-FLOR-OTLN
Interior	Floor	Polygon	*-OTLN-FLOR
Interior	Floor	Polygon	*-OTLN-ROOF
Interior	Furnishing	Point	*-FURN-ACCS
Interior	Furnishing	Point	*-FURN-ADPC
Interior	Furnishing	Point	*-FURN-ARTW
Interior	Furnishing	Point	*-FURN-FLOR
Interior	Furnishing	Point	*-FURN-FREE
Interior	Furnishing	Point	*-FURN-GRID
Interior	Furnishing	Point	*-FURN-IDEN
Interior	Furnishing	Point	*-FURN-PLNT
Interior	Furnishing	Point	*-FURN-SEAT
Interior	Furnishing	Point	*-FURN-STOR
Interior	MovingSidewalk	Polygon	*-FLOR-MWLK
Interior	Room	Polygon	*-FLOR-OTLN-RPRM
Interior	Space	Polygon	*-FLOR-SPCE
Interior	Stair	Polygon	*-ACCS-STRS
Interior	Stair	Polygon	*-ACCS-STRS-FRMG
Interior	Stair	Polygon	*-FLOR-HRAL
Interior	Stair	Polygon	*-FLOR-STRS
Interior	Stair	Polygon	*-SITE-STRS
Interior	Wall	Line	*-FNDN-ANCH
Interior	Wall	Line	*-FNDN-CNTR
Interior	Wall	Line	*-FNDN-GRBM
Interior	Wall	Line	*-PENE-WALL
Interior	Wall	Line	*-WALL-ABUT
Interior	Wall	Line	*-WALL-CAVI
Interior	Wall	Line	*-WALL-CELL
Interior	Wall	Line	*-WALL-CNTR
Interior	Wall	Line	*-WALL-COFF
Interior	Wall	Line	*-WALL-CURT
Interior	Wall	Line	*-WALL-CWMG
Interior	Wall	Line	*-WALL-FULL
Interior	Wall	Line	*-WALL-FULL-EXTR
Interior	Wall	Line	*-WALL-FULL-INTR
Interior	Wall	Line	*-WALL-GARD
Interior	Wall	Line	*-WALL-HEAD

Category	Feature Class	Geometry	CADD Layer Name
Interior	Wall	Line	*-WALL-JAMB
Interior	Wall	Line	*-WALL-LOAD
Interior	Wall	Line	*-WALL-MONO
Interior	Wall	Line	*-WALL-MOVE
Interior	Wall	Line	*-WALL-MSE~
Interior	Wall	Line	*-WALL-NONL
Interior	Wall	Line	*-WALL-OPEN-LVRS
Interior	Wall	Line	*-WALL-PCST
Interior	Wall	Line	*-WALL-PRHT
Interior	Wall	Line	*-WALL-RBAR
Interior	Wall	Line	*-WALL-RTWL
Interior	Wall	Line	*-WALL-SHEA
Interior	Wall	Line	*-WALL-SPCL
Interior	Wall	Line	*-WALL-STUD
Interior	Window	Line	*-GLAZ-FULL
Interior	Window	Line	*-GLAZ-PRHT
Interior	Window	Line	*-GLAZ-SILL
Navigational Aids	NavaidEquipment	Point	*-AFLD-AIDS-COMM
Navigational Aids	NavaidEquipment	Point	*-AFLD-AIDS-CRIT
Navigational Aids	NavaidEquipment	Point	*-AFLD-AIDS-GPS_
Navigational Aids	NavaidEquipment	Point	*-AFLD-AIDS-ILS_
Navigational Aids	NavaidEquipment	Point	*-AFLD-AIDS-MCWV
Navigational Aids	NavaidEquipment	Point	*-AFLD-AIDS-OTHR
Navigational Aids	NavaidEquipment	Point	*-AFLD-AIDS-RADI
Navigational Aids	NavaidEquipment	Point	*-AFLD-AIDS-RADR
Navigational Aids	NavaidEquipment	Point	*-AFLD-AIDS-RMTE
Navigational Aids	NavaidEquipment	Point	*-AFLD-AIDS-SITE
Navigational Aids	NavaidEquipment	Point	*-AFLD-AIDS-SYST
Navigational Aids	NavaidEquipment	Point	*-AFLD-AIDS-WTHR
Navigational Aids	NavaidEquipment	Point	*-AFLD-BCNS-IDEN
Navigational Aids	NavaidEquipment	Point	*-AFLD-BCNS-MISC
Navigational Aids	NavaidEquipment	Point	*-AFLD-BCNS-STRB
SeaPlane	NavigationBuoy	Point	*-SEAP-BUOY
SeaPlane	NavigationBuoy	Point	*-SIGN-BUOY
SeaPlane	SeaplaneRampCenterline	Line	*-SEAP-RAMP-CNTR
SeaPlane	SeaplaneRampSite	Polygon	*-SEAP-RAMP
Security	SecurityArea	Polygon	*-AFLD-SECR-SECA
Security	SecurityIdDisplayArea	Polygon	*-AFLD-SECR-SIDA
Security	SterileArea	Polygon	*-AFLD-SECR-STER

Category	Feature Class	Geometry	CADD Layer Name
Security	SurveillanceCamera	Point	*-CCTV-EQPM
Structures	Building	Polygon	*-BLDG-DECK
Structures	Building	Polygon	*-BLDG-DOCK
Structures	Building	Polygon	*-BLDG-OTLN
Structures	Building	Polygon	*-BLDG-OVHD
Structures	Building	Polygon	*-BLDG-PRCH
Structures	Building	Polygon	*-DECK-FLOR
Structures	Building	Polygon	*-DECK-ROOF
Structures	Building	Polygon	*-ELEV-OTLN
Structures	Building	Polygon	*-EXST-BLDG
Structures	Building	Polygon	*-OTLN-BLDG
Structures	Building	Polygon	*-OTLN-STRC
Structures	Building	Polygon	*-PLAN-OTLN
Structures	ConstructionArea	Polygon	*-PROP-CONS
Structures	ConstructionArea	Polygon	*-SITE-OTLN
Structures	Fence	Line	*-DETL-FENC-SECU
Structures	Fence	Line	*-SAFE-FENC
Structures	Fence	Line	*-SITE-FENC
Structures	Gate	Line	*-DETL-GATE
Structures	Gate	Line	*-GATE-AXIS
Structures	Gate	Line	*-GATE-MISC
Structures	Gate	Line	*-SITE-GATE
Structures	Tower	Point	*-STRC-TOWR
Surface Transportation	Bridge	Polygon	*-BRDG-BEAR
Surface Transportation	Bridge	Polygon	*-BRDG-CNTR
Surface Transportation	Bridge	Polygon	*-BRDG-DECK
Surface Transportation	Bridge	Polygon	*-BRDG-OTLN
Surface Transportation	Bridge	Polygon	*-MATL-CRAN
Surface Transportation	Bridge	Polygon	*-RAIL-BRDG
Surface Transportation	Bridge	Polygon	*-SITE-BRDG
Surface Transportation	Bridge	Polygon	*-SITE-STRC
Surface Transportation	DrivewayArea	Polygon	*-ROAD-DRIV
Surface Transportation	DrivewayCenterline	Line	*-ROAD-DRIV-CNTR
Surface Transportation	ParkingLot	Polygon	*-PRKG-OTLN
Surface Transportation	RailroadCenterline	Line	*-RAIL-BRDG-CNTR
Surface Transportation	RailroadCenterline	Line	*-RAIL-CNTR
Surface Transportation	RailroadCenterline	Line	*-RAIL-TRAK
Surface Transportation	RailroadYard	Polygon	*-RAIL-YARD
Surface Transportation	RoadCenterline	Line	*-ROAD-CNTR

Category	Feature Class	Geometry	CADD Layer Name
Surface Transportation	RoadPoint	Point	*-ROAD-POIN
Surface Transportation	RoadSegment	Polygon	*-ROAD-ASPH
Surface Transportation	RoadSegment	Polygon	*-ROAD-CONC
Surface Transportation	RoadSegment	Polygon	*-ROAD-CURB
Surface Transportation	RoadSegment	Polygon	*-ROAD-GRVL
Surface Transportation	RoadSegment	Polygon	*-ROAD-OTLN
Surface Transportation	RoadSegment	Polygon	*-ROAD-SHLD
Surface Transportation	RoadSegment	Polygon	*-ROAD-UPVD
Surface Transportation	Sidewalk	Polygon	*-BRDG-CURB
Surface Transportation	Sidewalk	Polygon	*-GATE-WALK
Surface Transportation	Sidewalk	Polygon	*-SITE-WALK
Surface Transportation	Tunnel	Polygon	*-ACCS-TUNL
Surface Transportation	Tunnel	Polygon	*-FNDN-TUNL
Surface Transportation	Tunnel	Polygon	*-SITE-TUNL

Maryland Aviation Administration

Office of Design & Construction

GEOGRAPHIC INFORMATION SYSTEM DATA STANDARD

Appendix 3 – Utilities Supplement

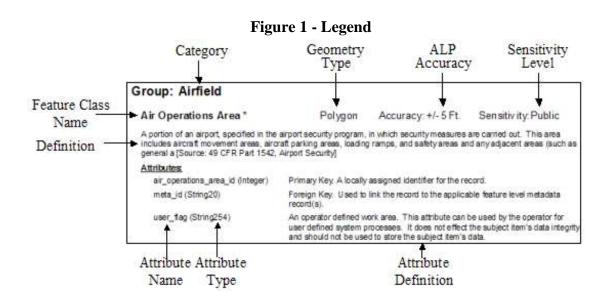
Version 2.0

July 2013

Geographic Information System Data Standard Utilities Supplement For the Maryland Aviation Administration Version 2.0, July 2013

This document defines communications and utilities feature classes that are included in MAA's Geographic Information System (GIS) Data Standard. This document is a supplement to the MAA Geographic Information System Data Standard and should be used by anyone developing or checking GIS data for MAA that includes communications or utility features. This document is related to the content included in the Geographic Information System Data Standard and Standard and should only be used in conjunction with that document.

This Utilities Supplement contains a list of 271 GIS Feature Types. The Feature Types are grouped into categories (i.e., General, Electrical, Communications, etc.) for ease of use. For each Feature Type, the class name, geometry type, sensitivity level, and a definition are provided. Suggested accuracies are also provided. Accuracies are indicated at a reasonable level that will meet a broad range of end user requirements. Individual project scopes, technical limitations and other factors may require data to be of a higher or lower level of accuracy. Attributes are also provided along with their type and definition. The following figure provides a key to the information provided in this supplement.



At the end of this document is a list of acceptable domain values for each attribute domain list.

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Data Set: Air

Air : Drain Separator

(Database Feature Class Name = CompressedAirDrainSeparator) Geometry Type: Point Accuracy: +/-1Ft. Sensitivity: Secret This table contains information about compressed air drain separators. [SDSFIE FGDC Utilities Classification]. Names and Identifiers: maaID (String30) A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value) maaAlias (String60) An alternative or former name by which the feature is refered. Attributes: owner (String60) A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE]. description (String255) Any brief description of the feature. The material of the subject item. material (String16) size (Integer) The size of the subject item. The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), disposition (CodeDispositionObject) from lists or entered from field inspections. junctionType (CodeJunctionType) An indicator as to whether the feature serves as a source, sink or neither in the network. Metadata: collectionProgress (CodeProgress) The progress of the data collection. dateAcquired (Date) The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915). verified (String255) Whether or not the feature has been verified. projectType (CodeProjectType) The type of project or work activity that installed or first recorded the location of this feature. A unique identifier associated with the project or work activity that installed or first projectId (String20) recorded the location of this feature. status (CodeStatus) A temporal description of the operational status of the feature. Alternative (Integer) Discriminator used to tie features of a plan or proposal together into a version. An operator defined work area. This attribute can be used by the operator for user defined userFlag (String254) system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE]. qualityLevel (CodeSueQualityLevel) The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02. dataSource (CodeDataSource) The primary source of the data in this record. dataSource2 (CodeDataSource) The secondary source of the data in this record. sourceStatement (String255) A statement providing additional details about the source of the data. editorName (String50) The name of the individual who last edited this data. lastUpdate (Date) The date upon which any data associated with this record was last updated.

System Keys:

guid (String60) metaId (Integer) A globally unique identifier applied to each feature in the database for reference. An identifier used to refer to a metadata record that provide additional information about the data in this record.

Air : Fitting

(Database Feature Class Name = CompressedAirFitting) Accuracy: +/-1Ft. Geometry Type: Point Sensitivity: Secret A fitting is an item used to connect, cap, plug or otherwise alter a pipe carrying compressed air. [SDSFIE FGDC Utilities Classification]. Names and Identifiers

Traines and fucilities.	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system
	primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.

Attributes:

fittyp (CodeCompAirFitting) Discriminator. The type of fitting used for the compressed air unit. owner (String60) A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE]. description (String255) Any brief description of the feature. material (String16) The material of the subject item. size (Integer) The size of the subject item. disposition (CodeDispositionObject) The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections. An indicator as to whether the feature serves as a source, sink or neither in the network. junctionType (CodeJunctionType) Metadata: collectionProgress (CodeProgress) The progress of the data collection. dateAcquired (Date) The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915). verified (String255) Whether or not the feature has been verified. projectType (CodeProjectType) The type of project or work activity that installed or first recorded the location of this feature projectId (String20) A unique identifier associated with the project or work activity that installed or first recorded the location of this feature. status (CodeStatus) A temporal description of the operational status of the feature. Alternative (Integer) Discriminator used to tie features of a plan or proposal together into a version. userFlag (String254) An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE]. qualityLevel (CodeSueQualityLevel) The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02. dataSource (CodeDataSource) The primary source of the data in this record. dataSource2 (CodeDataSource) The secondary source of the data in this record. sourceStatement (String255) A statement providing additional details about the source of the data. editorName (String50) The name of the individual who last edited this data. lastUpdate (Date) The date upon which any data associated with this record was last updated. System Keys: guid (String60) A globally unique identifier applied to each feature in the database for reference. metaId (Integer) An identifier used to refer to a metadata record that provide additional information about the data in this record.

Air : Pipe Line

(Database Feature Class Name = CompressedAirPipeLine) Geometry Type: Line Accuracy: +/-5Ft. Sensitivity: Secret A pipe used to carry compressed air from location to location [SDSFIE FGDC Utilities Classification].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
Attributes:	
length (Double)	The overall length of the feature.[Center].
coverDepth (Double)	The depth of cover. The depth measured from top of ground's surface (or grade) to top of underground air line pipe.[Air Force].
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
description (String255)	Any brief description of the feature.
cblMaterial (CodeElectricCable)	Cable material.
directionality (CodeDirectionality)	The directionality of flow with repsect to the line's geometry.
size (CodePipeDiameter)	The size of the pipe
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.

impedance (Double)	The number representing the total opposition to flow.
Metadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record. The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
<u>System Keys:</u>	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Air : Tank Area

(Database Feature Class Name = $Correction Correction Class Name = Correction Name $	mpressedAirTankArea)
Geometry Type: Polygon	Accuracy: +/-5Ft. Sensitivity: Confidential
An area of physical boundary encom	passing one or more tanks.
Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
Attributes:	
color (<u>CodeColor</u>)	The color of the compressed air tank.
disposition (<u>CodeDispositionObject</u>)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
lightCode (String1)	The light code of the tank.
lightingType (CodeLightingConfigurationT	ype) Thetype of lighting configuration.
markingFeatureType (<u>CodeMarkingFeature</u>	Type) The type of the marking
material (String16)	The material of the subject item.
description (String255)	A description or other unique information concerning the subject item.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
tankCapacity (Integer)	The capacity of the tank.
tankSt (CodeStyleTank)	This value differentiates similar entities by use or type.
tankUse (<u>CodeTankUse</u>)	The particular kind or use of the industrial waste water tank.
topElevation (Double)	The top elevation of the tank.
verticalStructureMaterial (String16)	The vertical structure material.
Metadata:	

Metadata:

collectionProgress (CodeProgress) dateAcquired (Date)

The progress of the data collection. The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).

	verified (String255)	Whether or not the feature has been verified.
	projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
	projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
	status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
	Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
	userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
	qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
	dataSource (<u>CodeDataSource</u>)	The primary source of the data in this record. The primary source of the data in this record.
	dataSource2 (CodeDataSource)	The secondary source of the data in this record.
	sourceStatement (String255)	A statement providing additional details about the source of the data.
	editorName (String50)	The name of the individual who last edited this data.
	lastUpdate (Date)	The date upon which any data associated with this record was last updated.
Sy	stem Keys:	
	guid (String60)	A globally unique identifier applied to each feature in the database for reference.
	metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Air : Valve

(Database Feature Class Name = CompressedAirValve)			
Geometry Type: Point Accuracy: +/-1Ft. Sensitivity: Secret			
A device to control flow through a compressed air line. [SDSFIE REEGIS].			
Names and Identifiers:			

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
Attributes:	
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
description (String255)	Any brief description of the feature.
material (String16)	The material of the subject item.
size (Integer)	The size of the subject item.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
junctionType (CodeJunctionType)	An indicator as to whether the feature serves as a source, sink or neither in the network.
valveOpen (<u>CodeValveOpen</u>)	The direction a valve must be turned to open
operatingStatus (CodeValveStatus)	The normal operating status of the valve
<u>Aetadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.

dataSource (CodeDataSource) dataSource2 (CodeDataSource) sourceStatement (String255)

editorName (String50) lastUpdate (Date)

System Keys:

guid (String60) metaId (Integer) The primary source of the data in this record. The secondary source of the data in this record. A statement providing additional details about the source of the data. The name of the individual who last edited this data. The date upon which any data associated with this record was last updated.

A globally unique identifier applied to each feature in the database for reference. An identifier used to refer to a metadata record that provide additional information about the data in this record.

Air : Valve Pit

 (Database Feature Class Name = CompressedAirValvePit)

 Geometry Type: Point
 Accuracy: +/-1Ft.

 Sensitivity: Secret

 A below grade chamber, too small to enter, containing one or more valves that control the flow of compressed air. [SDSFIE FGDC Utilities Classification].

maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
Attributes:	
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
description (String255)	Any brief description of the feature.
material (String16)	The material of the subject item.
size (Integer)	The size of the subject item.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
Metadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Communications Data Set:

Communications : Access Coverage Area			
(Database Feature Class Name = CommAccessCoverageArea)			
Geometry Type: Polygon Accuracy: +/-5Ft. Sensitivity: Confidential			
The nominal coverage area for a wireless local area network (WLAN) access point. [SDSFIE].			
Names and Identifiers:			
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)		
maaAlias (String60)	An alternative or former name by which the feature is refered.		
Attributes:			
avgss (Double)	Average Signal Strength for coverage area.[AIR FORCE].		
maxsnr (Double)	Maximum Signal to Noise Ratio (dbm) for coverage area.[AIR FORCE].		
minsnr (Double)	Minimum Signal to Noise Ratio (dbm) for coverage area.[AIR FORCE].		
area (Double)	The size of the area, zone, or polygon in square units.		
perimeter (Double)	The distance around the boundary of the area, zone, or subject item in linear units.		
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].		
maxdr (Double)	Maximum Data Rate for the coverage area.[AIR FORCE].		
mindr (Double)	Minimum Data Rate for the coverage area.[AIR FORCE].		
description (String255)	A description or other unique information concerning the subject item.		
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.		
Metadata:			
collectionProgress (CodeProgress)	The progress of the data collection.		
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).		
verified (String255)	Whether or not the feature has been verified.		
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.		
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.		
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.		

Discriminator used to tie features of a plan or proposal together into a version.

An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].

The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.

The primary source of the data in this record.

The secondary source of the data in this record.

A statement providing additional details about the source of the data.

The name of the individual who last edited this data.

The date upon	which any	data associated	with this record	was last updated.

A globally unique identifier applied to each feature in the database for reference. An identifier used to refer to a metadata record that provide additional information about the data in this record.

Communications : Access Point

Alternative (Integer)

userFlag (String254)

qualityLevel (CodeSueQualityLevel)

dataSource (CodeDataSource)

dataSource2 (CodeDataSource)

sourceStatement (String255)

editorName (String50)

lastUpdate (Date)

guid (String60) metaId (Integer)

System Keys:

(Database Feature Class Name = CommAccessPoint) Geometry Type: Point Accuracy: +/-1Ft. Sensitivity: Secret An access point is a station that transmits and receives data in a wireless local area network (WLAN). [SDSFIE Tinker Air Force Base].

Names and Identifiers:

maaID (String30)

name (String20) maaAlias (String60) modelNumber (String16)

Attributes:

encProt (CodeCryptographyProtocol)

antType (<u>CodeCommAntenna</u>) pomx (String16) ids (<u>CodeBoolean</u>)

owner (String60)

antennaLocation (<u>CodeBoolean</u>) ssid (String50) mac (String20) numSens (Integer) standard (String16) channel (Integer) gain (Double) height (Double) elevation (Double)

radiationPattern (<u>CodeAntRadPattern</u>) material (String16) size (Integer) description (String255) junctionType (<u>CodeJunctionType</u>) disposition (<u>CodeDispositionObject</u>)

Metadata:

collectionProgress (<u>CodeProgress</u>) dateAcquired (Date)

verified (String255) projectType (<u>CodeProjectType</u>)

projectId (String20)

status (<u>CodeStatus</u>) Alternative (Integer) userFlag (String254)

qualityLevel (CodeSueQualityLevel)

dataSource (<u>CodeDataSource</u>) dataSource2 (<u>CodeDataSource</u>) sourceStatement (String255) editorName (String50) lastUpdate (Date)

System Keys:

guid (String60) metaId (Integer) A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value) The local name of the Access Point.[AIR FORCE]. An alternative or former name by which the feature is refered. The Model, Product, Catalog, or Item Number of subject item.[AIR FORCE]. Protocol used to provide encryption for the access point (WEP, WPA, etc.).[AIR FORCE]. The type of communications antenna used.[AIR FORCE]. The Access Point designator as defined in the POMX Site Survey Report.[AIR FORCE]. A boolean indicating whether the WLAN AP has an Intrusion Detection System (IDS).[AIR FORCE]. A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE]. A boolean indicating whether the antenna is located inside a building.[AIR FORCE]. The service set identification of the device.[AIR FORCE]. The MAC address of the device.[AIR FORCE]. The number of sensors used for the Intrusion Detection System (IDS).[AIR FORCE]. IEEE wireless standard used (i.e. 802.11a, b, g, etc.).[AIR FORCE]. Channel number utilized.[AIR FORCE]. The measure of signal amplification.[AIR FORCE]. Antenna height above ground level.[AIR FORCE]. The height of the antenna as measured from a reference point or from sea level.[AIR FORCE]. The radiation pattern of the antenna.[AIR FORCE]. The material of the subject item. The size of the subject item. A description or other unique information concerning the subject item. An indicator as to whether the feature serves as a source, sink or neither in the network. The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections. The progress of the data collection. The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).

Whether or not the feature has been verified.

The type of project or work activity that installed or first recorded the location of this feature.

A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.

A temporal description of the operational status of the feature.

Discriminator used to tie features of a plan or proposal together into a version.

An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].

The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.

The primary source of the data in this record.

The secondary source of the data in this record.

A statement providing additional details about the source of the data.

The name of the individual who last edited this data.

The date upon which any data associated with this record was last updated.

A globally unique identifier applied to each feature in the database for reference. An identifier used to refer to a metadata record that provide additional information about the data in this record.

Communications : Air Pipe

(Database Feature Class Name = CommAirLine)Geometry Type: LineAccuracy: +/-5Ft.Sensitivity: SecretA pipe which conveys pressurized air to a pressurized telephone cable system [SDSFIE TinkerAir Force Base].

Names and Identifiers: maaID (String30) maaAlias (String60) modelNumber (String16) Attributes: dateAcquired (Date) disposition (CodeDispositionObject) material (CodePipeMaterial) size (CodePipeDiameter) owner (String60) pipeLength (Double) invElv1 (Double)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value) An alternative or former name by which the feature is refered. The Model, Product, Catalog, or Item Number of subject item. The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915). The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections. The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc. The manufacturers designated size, or nominal (i.e., rounded to the nearest unit) diameter for the subject item (e.g., 1 in gas hydrant, 2 in meter, 6 in pipe). A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE]. A measurement of the longer of two linear axes. The elevation of the bottom of pipe (i.e., pipe invert) at node_id_1 in feet (English units)
maaAlias (String60) modelNumber (String16) <u>Attributes:</u> dateAcquired (Date) disposition (<u>CodeDispositionObject</u>) material (<u>CodePipeMaterial</u>) size (<u>CodePipeDiameter</u>) owner (String60) pipeLength (Double)	 primary or foreign key value) An alternative or former name by which the feature is refered. The Model, Product, Catalog, or Item Number of subject item. The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915). The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections. The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc. The manufacturers designated size, or nominal (i.e., rounded to the nearest unit) diameter for the subject item (e.g., 1in gas hydrant, 2in meter, 6in pipe). A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE]. A measurement of the longer of two linear axes.
modelNumber (String16) <u>Attributes:</u> dateAcquired (Date) disposition (<u>CodeDispositionObject</u>) material (<u>CodePipeMaterial</u>) size (<u>CodePipeDiameter</u>) owner (String60) pipeLength (Double)	The Model, Product, Catalog, or Item Number of subject item. The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915). The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections. The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc. The manufacturers designated size, or nominal (i.e., rounded to the nearest unit) diameter for the subject item (e.g., 1 in gas hydrant, 2 in meter, 6 in pipe). A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE]. A measurement of the longer of two linear axes.
Attributes: dateAcquired (Date) disposition (CodeDispositionObject) material (CodePipeMaterial) size (CodePipeDiameter) owner (String60) pipeLength (Double)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915). The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections. The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc. The manufacturers designated size, or nominal (i.e., rounded to the nearest unit) diameter for the subject item (e.g., 1 in gas hydrant, 2 in meter, 6 in pipe). A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE]. A measurement of the longer of two linear axes.
dateAcquired (Date) disposition (CodeDispositionObject) material (CodePipeMaterial) size (CodePipeDiameter) owner (String60) pipeLength (Double)	 is YYYYMMDD (i.e., September 15, 1994 = 19940915). The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections. The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc. The manufacturers designated size, or nominal (i.e., rounded to the nearest unit) diameter for the subject item (e.g., 1in gas hydrant, 2in meter, 6in pipe). A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE]. A measurement of the longer of two linear axes.
disposition (<u>CodeDispositionObject</u>) material (<u>CodePipeMaterial</u>) size (<u>CodePipeDiameter</u>) owner (String60) pipeLength (Double)	 is YYYYMMDD (i.e., September 15, 1994 = 19940915). The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections. The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc. The manufacturers designated size, or nominal (i.e., rounded to the nearest unit) diameter for the subject item (e.g., 1in gas hydrant, 2in meter, 6in pipe). A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE]. A measurement of the longer of two linear axes.
material (<u>CodePipeMaterial</u>) size (<u>CodePipeDiameter</u>) owner (String60) pipeLength (Double)	from lists or entered from field inspections. The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc. The manufacturers designated size, or nominal (i.e., rounded to the nearest unit) diameter for the subject item (e.g., 1in gas hydrant, 2in meter, 6in pipe). A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE]. A measurement of the longer of two linear axes.
size (<u>CodePipeDiameter</u>) owner (String60) pipeLength (Double)	plastic, etc. The manufacturers designated size, or nominal (i.e., rounded to the nearest unit) diameter for the subject item (e.g., 1in gas hydrant, 2in meter, 6in pipe). A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE]. A measurement of the longer of two linear axes.
owner (String60) pipeLength (Double)	for the subject item (e.g., 1 in gas hydrant, 2 in meter, 6 in pipe). A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE]. A measurement of the longer of two linear axes.
pipeLength (Double)	utility asset.[Adopted from SDSFIE]. A measurement of the longer of two linear axes.
	•
invElv1 (Double)	The elevation of the bottom of pipe (i.e., pipe invert) at node_id_1 in feet (English units)
	or meters (SI units) above some datum.[Derived from SDSFIE].
groundElevation1 (Double)	The elevation of the ground surface at node_id_1, in feet (English units) or meters (SI units) above some datum.
invElv2 (Double)	The elevation of the bottom of pipe (i.e., pipe invert) at node_id_2 in feet (English units) or meters (SI units) above some datum.
groundElevation2 (Double)	The elevation of the ground surface at node_id_2, in feet (English units) or meters (SI units) above some datum.
pressMax (Double)	The manufacturers or industry standards maximum pressure rating of the subject item.
pressNorm (Double)	The manufacturers or industry standards normal pressure rating of the subject item.
slopeBot (Double)	The slope of the bottom of the subject item expressed as a percentage.
description (String255)	A description or other unique information concerning the subject item.
directionality (CodeDirectionality)	The directionality of flow with repsect to the line's geometry.
impedance (Double)	The number representing the total opposition to flow.
<u>Metadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection.
verified (String255)	Whether or not the feature has been verified.
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (CodeStatus)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.

metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.
ommunications : Air Pressure 1	Device

Coi nmunications : Air Pressure Device

(Database Feature Class Name = CommAirPressureDevice) Geometry Type: Point Accuracy: +/-1Ft. Sensitivity: Secret Any device which supports a cable pressurization system, for example valves, compressors, pressure transducers, air dryers, and pressure mete. [SDSFIE Tinker Air Force Base]. nd Idontific Nomos o

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
modelNumber (String16)	The Model, Product, Catalog, or Item Number of subject item.
serialNumber (String16)	The manufacturers serial, or unique identification number of the subject item.
maaAlias (String60)	An alternative or former name by which the feature is refered.
Attributes:	
airpType (<u>CodeAirPressureDeviceType</u>)	The type of air pressure device.[Austin and Pitts].
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from list or entered from field inspections.
featureUse (<u>CodeValveType</u>)	The site specific use of the valve.
devSt (CodeStyleValve)	The particular kind, class, or group of valve (e.g., gate, check, etc.).
devSize (Double)	The manufacturers nominal size designation.
deviceElevation (Double)	The elevation measured at centerline of the valve, in feet (English Units) or meters (SI Units) above some datum.
groundElevation (Double)	The elevation of the ground surface in feet (English units) or meters (SI units) above some datum.
placement (CodePlacementOfAirPreType)	Indicates the placement of the device.[AIR FORCE].
description (String255)	A description of the feature.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
Metadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Communications : Amplifier

(Database Feature Class Name = CommAmplifier)Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretAny electronic device intended to boost the power or amplify the signal associated with acommunications system. [SDSFIE].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
modelNumber (String16)	The Model, Product, Catalog, or Item Number of subject item.[Tinker Air Force Base].
Attributes:	
gain (Double)	The measure of signal amplification.[Tinker Air Force Base].
bandwidth (Double)	The difference between the highest and lowest frequencies that an amplifier can pass.[Tinker Air Force Base].
power (Double)	The amplifier power.[Tinker Air Force Base].
ampType (<u>CodeAmplifierType</u>)	Discriminator - Amplifier type[Tinker Air Force Base].
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
inSigLvl (Double)	The amount of the input signal to the amplifier.[Tinker Air Force Base].
outsigLvl (Double)	The output level of the signal.[Tinker Air Force Base].
impedIn (Double)	The input impedance of the amplifier[Tinker Air Force Base].
impedOut (Double)	The output impedance of the amplifier.[Tinker Air Force Base].
description (String255)	A description of the feature.[Tinker Air Force Base].
size (Integer)	The size of the subject item.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
junctionType (CodeJunctionType)	An indicator as to whether the feature serves as a source, sink or neither in the network.
Metadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (CodeStatus)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (<u>CodeDataSource</u>)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Communications : Antenna Site

(Database Feature Class Name = CommAntenna) Geometry Type: Point Accuracy: +/-1Ft.

Sensitivity: Secret

The location of a communications antenna. [SDSFIE Tinker Air Force Base].

Na

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
modelNumber (String16)	The Model, Product, Catalog, or Item Number of subject item.[Tinker Air Force Base].
corpName (String80)	Name of station corporation.[HSIP].
Attributes:	
length (Double)	A measurement of the longer of two linear axes.
diameter (Double)	The width of a cylindrical or circular antenna.[Tinker Air Force Base].
antType (<u>CodeCommAntenna</u>)	Discriminator. The type of communications antenna.[Tinker Air Force Base].
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
azimuth (Double)	The angle of horizontal deviation.
bandwidth (Double)	The difference between the highest and lowest frequencies that an antenna can pass.[Tinker Air Force Base].
elevation (Double)	The height of the antenna as measured from a reference point or from sea level.[Tinker Air Force Base].
gain (Double)	The measure of signal amplification.[Tinker Air Force Base].
txPower (Double)	The transmission power rating of the antenna.[Tinker Air Force Base].
txFreq (Double)	The transmission frequency of the antenna.[Tinker Air Force Base].
area (Double)	The size of the area, zone, or polygon in square units.
perimeter (Double)	The distance around the boundary of the area, zone, or subject item in linear units.
antUse (CodeCommAntennaUsageType)	The usage of communications antenna.[AIR FORCE].
beamwdthE (Integer)	The measurement of vertical beamwidth at half power.[Tinker Air Force Base].
beamwdthH (Integer)	The measurement of horizontal beamwidth at half power.[Tinker Air Force Base].
eqFpArea (Double)	The surface area used for calculating wind loading for tower design.[Tinker Air Force Base].
freqRngH (Double)	The highest frequency antenna is designed to pass.[Tinker Air Force Base].
rxFreq (Double)	The receiving frequency of the antenna.[Tinker Air Force Base].
freqRngL (Double)	The lowest frequency antenna is designed to pass.[Tinker Air Force Base].
ftbRatio (Integer)	The isolation provided by directional antennas away from the beam.[HSIP].
height (Double)	The overall height of an antenna unit - base to top.[HSIP].
maxWind (Integer)	The maximum wind speed antenna is designed to withstand.[HSIP].
polarizatn (Integer)	The rf polarization provided by antenna (as installed).[Tinker Air Force Base].
rdomeDiameter (Double)	The radome diameter.[Tinker Air Force Base].
vswr (Integer)	The maximum voltage that the Standing Wave Ratio antenna will operate at over range.[Tinker Air Force Base].
weight (Integer)	The weight of the antenna unit for use in tower loading calculations.[Tinker Air Force Base].
polrType (CodeAntennaPolarization)	Polarization type.[AIR FORCE].
aboveGroundLevel (Double)	Antenna height above ground level.[AIR FORCE].
tilt (Double)	Antenna tilt angle for dish and parabolic antennas.[AIR FORCE].
peakpower (Double)	The peak amount of power the antenna can withstand.[AIR FORCE].
avgpwr (Double)	Average power rating for this antenna.[AIR FORCE].
radiationPattern (CodeAntRadPattern)	The radiation pattern of the antenna.[AIR FORCE].
connType (CodeCableConnectorType)	The type of RF connector presented on the antenna.[AIR FORCE].
description (String255)	A description of the feature.
size (Integer)	The size of the subject item
impedance (Double)	The impedance of antenna for cable matching (in Ohms) apparent opposition in an electrical circuit to the flow of an alternating current. Analogous to the actual electrical resistance to a direct current. It is the ratio of effective electromotive force t[HSIP].
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
Metadata:	

The type of project or work activity that installed or first recorded the location of this

projectId (String20)

status (CodeStatus) Alternative (Integer) userFlag (String254)

qualityLevel (CodeSueQualityLevel)

collectionProgress (CodeProgress) dateAcquired (Date)

verified (String255) dataSource (CodeDataSource) dataSource2 (CodeDataSource) sourceStatement (String255) editorName (String50) lastUpdate (Date)

feature.

A unique identifier associated with the project or work activity that installed or first recorded the location of this feature. A temporal description of the operational status of the feature. Discriminator used to tie features of a plan or proposal together into a version. An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE]. The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02. The progress of the data collection. The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915). Whether or not the feature has been verified. The primary source of the data in this record. The secondary source of the data in this record. A statement providing additional details about the source of the data. The name of the individual who last edited this data. The date upon which any data associated with this record was last updated.

System Keys:

guid (String60) metaId (Integer) A globally unique identifier applied to each feature in the database for reference. An identifier used to refer to a metadata record that provide additional information about the data in this record.

Communications : Antenna Line

(Database Feature Class Name = CommAntennaLine) Geometry Type: Line Accuracy: +/-5Ft. Sensitivity: Secret Any device or wire which is intended to transmit or receive electromagnetic impulses to or from air or space. [SDSFIE Tinker Air Force Base].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
<u>Attributes:</u>	
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
cblMaterial (CodeElectricCable)	The material of the cable.
cblSize (CodeCableDimension)	The size of the cable.
directionality (<u>CodeDirectionality</u>)	The directionality of flow with repsect to the line's geometry.
description (String255)	A description or other unique information concerning the subject item.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
impedance (Double)	The number representing the total opposition to flow.
<u>Metadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection.
verified (String255)	Whether or not the feature has been verified.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].

qualityLevel (CodeSueQualityLevel)

qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
<u>System Keys:</u>	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Communications : Attenuator

(Database Feature Class Name = CommAttenuator) Geometry Type: Point Accuracy: +/-1Ft. Sensitivity: Secret A device for reducing the amplitude of an electrical signal without appreciable distortion [SDSFIE Tinker Air Force Base]. Names and Identifiers:

Trancs and Tuchthers.	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
modelNumber (String16)	The Model, Product, Catalog, or Item Number of subject item.[Tinker Air Force Base].
maaAlias (String60)	An alternative or former name by which the feature is refered.
Attributes:	
attnType (CodeAmplifierType)	The type of attenuator.[Tinker Air Force Base].
loss (Double)	The amount of signal loss of the attenuator.[Tinker Air Force Base].
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
bandwidth (Double)	The difference between the highest and lowest frequencies that an attenuator can pass.[Tinker Air Force Base].
inSigLvl (Double)	The amplitude of the input signal.[Tinker Air Force Base].
outsigLvl (Double)	The amplitude of the output signal.[Tinker Air Force Base].
impedIn (Double)	The input impedance of the attenuator.[Tinker Air Force Base].
impedOut (Double)	The output impedance of the attenuator.[Tinker Air Force Base].
description (String255)	A description of the feature.[Tinker Air Force Base].
size (Integer)	The size of the subject item
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
junctionType (CodeJunctionType)	An indicator as to whether the feature serves as a source, sink or neither in the network.
<u>Metadata:</u>	
collectionProgress (CodeProgress)	
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (<u>CodeDataSource</u>)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.

editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
<u>System Keys:</u>	A globally unique identifier applied to each feature in the database for reference.
guid (String60)	An identifier used to refer to a metadata record that provide additional information about
metaId (Integer)	the data in this record.

Communications : Cable Bridge Line

(Database Feature Class Name = CommCableBridgeLine)Geometry Type: LineAccuracy: +/-5Ft.Sensitivity: SecretA structure used for the horizontal conveyance of A communications cable that allows passageover or under an obstacle such as a river, chasm, mountain, road or railroad. [SDSFIE Tinker AirForce Base].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
Attributes:	
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
material (CodeEnclosureMaterials)	The material of the subject item.
directionality (<u>CodeDirectionality</u>)	The directionality of flow with repsect to the line's geometry.
description (String255)	A description or other unique information concerning the subject item.
size (Integer)	The size of the subject item
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
impedance (Double)	The number representing the total opposition to flow.
<u>Metadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
dataSource2 (<u>CodeDataSource</u>)	The secondary source of the data in this record.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
ystem Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Communications : Cable Ladder

(Database Feature Class Name = CommCableLadder) Geometry Type: Point Accuracy: +/-1Ft.

Sensitivity: Secret

A ladder type structure used to support the vertical conveyance of communications cable. [SDSFIE Tinker Air Force Base].

ames and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
modelNumber (String16)	The Model, Product, Catalog, or Item Number of subject item.[Tinker Air Force Base].
ttributes:	
height (Double)	The height of the cable ladder measured from the ground surface to the top.[Tinker Air Force Base].
width (Double)	A measurement of the shorter of two linear axes.[Tinker Air Force Base].
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset. [Adopted from SDSFIE].
description (String255)	A description or other unique information concerning the subject item.
material (String16)	The material of the subject item.
size (Integer)	The size of the subject item
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
junctionType (CodeJunctionType)	An indicator as to whether the feature serves as a source, sink or neither in the network.
<u>Ietadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for dat is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user define system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
<u>ystem Keys:</u>	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information abou the data in this record.

Communications : Cable Rack Line

(Database Feature Class Name = CommCableRackLine)		
Geometry Type: Line	Accuracy: +/-5Ft.	Sensitivity: Secret
A ladder type structure used to support the horizontal conveyance of communications cable.		
[SDSFIE Tinker Air Force Base].		

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
Attributes:	
owner (String60)	A person, organization, or agency with legal control or management responsibility of the

	utility asset.[Adopted from SDSFIE].
material (CodeEnclosureMaterials)	The material composition of the cable way.[AIR FORCE].
directionality (CodeDirectionality)	The directionality of flow with repsect to the line's geometry.
description (String255)	A description or other unique information concerning the subject item.
size (Integer)	The size of the subject item
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
impedance (Double)	The number representing the total opposition to flow.
<u>Metadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (CodeStatus)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metald (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Communications : Cable Tray Line

(Database Feature Class Name = CommCableTrayLine)

Geometry Type: Line Accuracy: +/-5Ft. Sensitivity: Secret An elevated structure enclosed on the bottom and sides usually fabricated from sheet metal which is used to support the horizontal conveyance of communications cable. [SDSFIE Tinker Air Force Base].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
modelNumber (String16)	The Model, Product, Catalog, or Item Number of subject item.[Tinker Air Force Base].
Attributes:	
width (Double)	A measurement of the shorter of two linear axes.[Tinker Air Force Base].
cawType (<u>CodeCableWayType</u>)	The type of cable way.[Tinker Air Force Base].
material (CodeEnclosureMaterials)	The material composition of the cable way.[AIR FORCE].
height (Double)	The height of the cable way measured from the ground surface to the top.[Tinker Air Force Base].
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
length (Double)	A measurement of the longer of two linear axes.[Tinker Air Force Base].
description (String255)	A description or other unique information concerning the subject item.
directionality (CodeDirectionality)	The directionality of flow with repsect to the line's geometry.

disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
impedance (Double)	The number representing the total opposition to flow.
<u>Metadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Communications : Cable Trough Line

(Database Feature Class Name = CommCableTroughLine)Geometry Type: LineAccuracy: +/-5Ft.Sensitivity: SecretA trench along the ground used for the horizontal conveyance of communications cables.[SDSFIE Tinker Air Force Base].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
Attributes:	
material (CodeSurfaceComposition)	The material composition of the cable trough line.[Tinker Air Force Base].
width (Double)	A measurement of the shorter of the two linear axes of the cable trough line.[Tinker Air Force Base].
length (Double)	A measurement of the longer of the two linear axes.[Tinker Air Force Base].
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
description (String255)	A description or other unique information concerning the subject item.
directionality (CodeDirectionality)	The directionality of flow with repsect to the line's geometry.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
impedance (Double)	The number representing the total opposition to flow.
<u>Metadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature

projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (<u>CodeDataSource</u>)	The primary source of the data in this record.
dataSource2 (<u>CodeDataSource</u>)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Communications : Coaxial Line

(Database Feature Class Name = CommCoaxialLine)

Geometry Type: Line Accuracy: +/-5Ft. Sensitivity: Secret a transmission line that consists of a tube of electrically conducting material surrounding a central conductor held in place by insulators that is used to transmit telegraph, telephone, and television signals of high frequency [SDSFIE Tinker Air Force Base].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String60)	Any commonly used name for the cable.[Tinker Air Force Base].
maaAlias (String60)	An alternative or former name by which the feature is refered.
Attributes:	
noConduct (Integer)	The number of conductors within the coaxial cable.[Tinker Air Force Base].
cabUse (<u>CodeCableUse</u>)	Discriminator - The overall use of the coaxial cable.
cabNo (String16)	The alphanumeric string assigned to the cable.[Tinker Air Force Base].
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
cabElev (CodeCableElevation)	The vertical location of the cable.[Tinker Air Force Base].
cblMaterial (CodeElectricCable)	The material composition of the cable.[Tinker Air Force Base].
riverMile (Double)	The reference of the river mile associated with the cable.[REEGIS].
verticalClearance (Double)	The clearance in feet between the lowest point under the cable line and the water's surface at Mean High Water (MHW) referenced to a reading on the appropriate gage.[Tinker Air Force Base].
frequency (Double)	The number of cycles per unit time of the current in the coaxial cable.[Tinker Air Force Base].
cabOffset (Double)	The distance to the cable as measured from the edge of a paved surface.[Tinker Air Force Base].
installType (CodeCableInstallationType)	The installation type code for cables.[Austin and Pitts].
chlSht (CodeSheathInsulateType)	The type of cable sheathing or insulation.[Tinker Air Force Base].
cblLength (Double)	The length dimension of the cable.[Tinker Air Force Base].
diameter (Double)	The width of a cylindrical or circular cable.[Tinker Air Force Base].
description (String255)	Any brief description of the feature.[Tinker Air Force Base].
directionality (CodeDirectionality)	The directionality of flow with repsect to the line's geometry.
impedance (Double)	The number representing the total opposition to alternating current within an electrical circuit.[Tinker Air Force Base].
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.

Metadata:

collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (CodeStatus)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Communications : DbSplice

(Database Feature Class Name = Co	ommDbsplice)	
Geometry Type: Point	Accuracy: +/-1Ft. Sensitivity: Secret	
A enclosed structure that represents a splice case (aerial or buried). [SDSFIE Air Force].		. [SDSFIE Air Force].
Names and Identifiers:	I	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)	
name (String20)	The standard identifier name (i.e. MH-19).	[AIR FORCE].
maaAlias (String60)	An alternative or former name by which the feature is refered.	
modelNumber (String16)	The Model, Product, Catalog, or Item Number of subject item.[AIR FORCE].	
Attributes:		
area (Double)	The size of the area, zone, or polygon in sq	uare units.
perimeter (Double)	The distance around the boundary of the ar	ea, zone, or subject item in linear units.
dateInstalled (Date)	The date on which the feature was originally installed.	
owner (String60)	A person, organization, or agency with lega utility asset.[Adopted from SDSFIE].	al control or management responsibility of the
ecsType (CodeSpliceCaseEncapsulate)	The type of encapsulate used.[AIR FORCE].	
disposition (CodeDispositionObject)	The status of the subject item (e.g., perman from lists or entered from field inspections.	ent, temporary, proposed, abandoned, etc.), .[AIR FORCE].
casType (CodeSpliceCaseTyp)	Used to describe the type of splice case.[Al	IR FORCE].
casMaterial (CodeSpliceCaseMat)	Used to describe the material composition	of the splice case.[AIR FORCE].
size (Integer)	The size of the subject item	
description (String255)	A description or other unique information of	concerning the subject item.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serve	es as a source, sink or neither in the network.
Metadata:		
collectionProgress (CodeProgress)	The progress of the data collection.	
dateAcquired (Date)	The date on which the subject item was ori is YYYYMMDD (i.e., September 15, 1994	ginally acquired or purchased. Format for date 4 = 19940915).
verified (String255)	Whether or not the feature has been verified	d.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that insteadure.	stalled or first recorded the location of this
projectId (String20)	A unique identifier associated with the proj	ect or work activity that installed or first

	recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Communications : Device

(Database Feature Class Name = CommDevice) Geometry Type: Point Accuracy: +/-1Ft. Sensitivity: Secret A communications system component that lies within the signal transmission path and modifies the transmission characteristics of the media. [SDSFIE]. Names and Identifiers:

Na	mes and Identifiers:	
	maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
	maaAlias (String60)	An alternative or former name by which the feature is refered.
	devName (String30)	Any commonly used name for the device.[Tinker Air Force Base].
	modelNumber (String16)	The Model, Product, Catalog, or Item Number of subject item.[Tinker Air Force Base].
At	tributes:	
	dgtlIn (Integer)	The total number of digital-in ports on the device.
	dgtlOt (Integer)	The total number of digital-out ports on the device.
	owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
	noPairlnk (Integer)	The number of cables attached to the device.
	readout (CodeDisplayType)	The type of display or readout for the device.
	anlgIn (Integer)	The total number of analog-in ports on the device.
	anlgOt (Integer)	The total number of analog-out ports on the device.
	description (String255)	A description of the feature[Tinker Air Force Base].
	material (String16)	The material of the subject item.
	size (Integer)	The size of the subject item
	disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
	junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
	impedance (Double)	The apparent opposition in an electrical circuit to the flow of an alternating current. Analogous to the actual electrical resistance to a direct current. It is the ratio of effective electromotive force to the effective current.[Tinker Air Force Base].
M	etadata:	
	collectionProgress (CodeProgress)	The progress of the data collection.
	dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
	verified (String255)	Whether or not the feature has been verified.
	projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
	projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
	status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.

Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.	
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].	
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.	
dataSource (CodeDataSource)	The primary source of the data in this record.	
dataSource2 (<u>CodeDataSource</u>)	The secondary source of the data in this record.	
sourceStatement (String255)	A statement providing additional details about the source of the data.	
editorName (String50)	The name of the individual who last edited this data.	
lastUpdate (Date)	The date upon which any data associated with this record was last updated.	
System Keys:		
guid (String60)	A globally unique identifier applied to each feature in the database for reference.	
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.	

Communications : Ductbank

(Database Feature Class Name = CommDuctbank)		
Geometry Type: Line	Accuracy: +/-5Ft.	Sensitivity: Secret
One or more duct routed in parallel between two nodes [SDSFIE Tinker Air Force Base].		

Names and Identifiers:

	maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
	maaAlias (String60)	An alternative or former name by which the feature is refered.
At	tributes:	
	noDucts (Integer)	The total number of ducts in the ductbank.
	noDuHigh (Integer)	The number of ducts in the y-direction
	noDuWide (Integer)	The number of ducts in the x-direction
	noSpares (Integer)	The total number of ducts not used in the ductbank.
	owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
	dbkSize (Double)	A two dimensional description of the physical size of the ductbank including units of measure (e.g., 2 ft x 2 ft, 3 m x 3 m).
	dblLength (Double)	The total length of the ductbank from source to load. Manholes and pullboxes should not break the measurement.
	concEnc (CodeBoolean)	A Boolean indicating whether the ductbank is encased in concrete.[Tinker Air Force Base].
	diameter (Double)	Diameter (if round).[AIR FORCE].
	width (Double)	Width of horizontal cross section.[AIR FORCE].
	height (Double)	Height.[AIR FORCE].
	disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.[AIR FORCE].
	description (String255)	A description or other unique information concerning the subject item.
	ductMat (CodePipeMaterial)	The material of the duct.
	directionality (CodeDirectionality)	The directionality of flow with repsect to the line's geometry.
	impedance (Double)	The number representing the total opposition to flow.
Μ	etadata:	
	collectionProgress (CodeProgress)	The progress of the data collection.
	dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
	verified (String255)	Whether or not the feature has been verified.
	projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
	projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
	status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
	Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.

userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].	
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.	
dataSource (CodeDataSource)	The primary source of the data in this record.	
dataSource2 (CodeDataSource)	The secondary source of the data in this record.	
sourceStatement (String255)	A statement providing additional details about the source of the data.	
editorName (String50)	The name of the individual who last edited this data.	
lastUpdate (Date)	The date upon which any data associated with this record was last updated.	
System Keys:		
guid (String60)	A globally unique identifier applied to each feature in the database for reference.	
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.	

Communications : Marker

 (Database Feature Class Name = CommElectronicMarker)

 Geometry Type: Point
 Accuracy: +/-1Ft.

 Sensitivity: Secret

 Device that aids location of buried communications equipment or pathways. [SDSFIE

 NGA/NIMA].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
Attributes:	
passve (<u>CodeBoolean</u>)	Is it a passive device? (Y/N).[AIR FORCE].
elmpur (CodeElectronicMarkerPurpose)	Purpose of this marker.[AIR FORCE].
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
type (String16)	Discriminator - The type of marker.[AIR FORCE].
meterType (<u>CodeDisplayType</u>)	The meter type.
material (String16)	The material of the subject item.
size (Integer)	The size of the subject item
description (String255)	A description or other unique information concerning the subject item.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
letadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.

lastUpdate (Date)	The date upon which any data associated with this record was last updated.
<u>System Keys:</u>	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Communications : Equipment

(Database Feature Class Name = CommEquipment) Geometry Type: Point Accuracy: +/-1Ft. Sensitivity: Secret A generic piece of communications equipment, that has not otherwise been defined with the communications equipment entity class. [SDSFIE Tinker Air Force Base]. <u>Names and Identifiers:</u>

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
eqpName (String60)	The name or type of the equipment.[Tinker Air Force Base].
modelNumber (String16)	The Model, Product, Catalog, or Item Number of subject item.[Tinker Air Force Base].
maaAlias (String60)	An alternative or former name by which the feature is refered.
serialNumber (String16)	The manufacturer's serial, or unique identification number of the subject item.[Tinker Air Force Base].
stdsyName (String50)	The standard system name.[Air Force].
bLanName (String50)	The domain name.[Air Force].
runwayDesignator (String50)	The name of the runway.[Air Force].
Attributes:	
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
portNum (String50)	The port identifier corresponding to port's location on the device(slot/card/port).[Air Force].
portVlan (String50)	The VLAN(s) port is assigned to.[Air Force].
ncc (<u>CodeBoolean</u>)	A boolean indicating whether it is under The Network Control Center control $(Y = YES or N = NO)$?[Air Force].
coeqpinid (String20)	The identifying number of the input equipment.[Air Force].
installDate (Date)	The date of the Installation. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).[Air Force].
secFac (String50)	The secondary facility name.[Air Force].
priFacNa (String30)	The primary facility name.[Air Force].
platform (String50)	The processor class.[Air Force].
priFacNo (String20)	The primary facility number.[Air Force].
contrid (Integer)	The access control system for this portal. [Air Force].
equipmentType (<u>CodeEquipmentType</u>)	The different types of equipment.[Air Force].
barCode (String50)	The IPMS Bar Code.[Air Force].
bandwidth (Double)	The bandwidth of network adapter.[Air Force].
mediaType (<u>CodeMediaType</u>)	The different types of media.[Air Force].
antUse (<u>CodeCommAntennaUsageType</u>)	The different usages of communications antenna.[Air Force].
autoSys (String20)	The Automation System.[Air Force].
cardPorts (Integer)	The total ports used/available on card.[Air Force].
porDuplex (String50)	The transmission duplex of the port.[Air Force].
portLoc (String50)	The location of the portal.[Air Force].
cardType (String50)	The model/version of card.[Air Force].
crdNoUse (Integer)	The total number of expansion slots in chassis in use.[Air Force].
ifMac (String50)	The MAC Address of interface.[Air Force].
probDescription (String255)	The identifier of processor.[Air Force].
devClass (String50)	The class of device.[Air Force].
devMac (String50)	The MAC Address of device.[Air Force].
devIp (String50)	The IP Address of device.[Air Force].
osVer (String50)	The software version/I.O.S. of device.[Air Force].
dateInstalled (Date)	The date on which the feature was originally installed.

cameraNo (Integer) monitorNumber (Integer) keybordNo (Integer) maxCamNo (Integer) maxMonNo (Integer) maxKeyNo (Integer) numSens (Integer) maxSenNo (Integer) intVid (CodeBoolean)

cblType (CodeCableType) onlncmptos (String25) softVer (String50) cntrType (CodeElectricControlType) portalNo (Integer) dnsName (String50) netVerNo (String50) physDimension (Double) pwrInType (String50) pwrSupply (Integer) pwrSupNo (Integer) totalIf (Integer) cardSlots (Integer) contrlLvl (String50) radioCap (Double) ifIp (String50) ifProtocl (String50) ifSpeed (String50) ifMtu (String50) ifApp (String50) ifAppDes (String50) prtModNo (String50) fanTray (String50) maxPorNo (Integer) portIndex (String50) voltage (CodeVoltage) monitorType (String50) ifTyp (String50) rackDescription (String255) cardIp (String50) intrfDesc (String255) cardMac (String50) coeqpoutid (String20) remInd (String50) crypto (CodeBoolean)

junctionType (<u>CodeJunctionType</u>) lineCap (Double) disposition (<u>CodeDispositionObject</u>)

numOpPos (Integer) numautscop (Integer) flCkDate (Integer)

reflcLoc (String50) remindloc (String50) secFacNo (Integer) The number of cameras on the switch.[Air Force]. The number of monitors on the switch.[Air Force]. The number of keyboards on the switch.[Air Force]. The maximum number of cameras switch can have.[Air Force]. The maximum of monitors switch can have.[Air Force]. The maximum number of keyboards a switch can have.[Air Force]. The number of sensors on an annunciator.[Air Force]. The maximum number of sensors annunciator you can have.[Air Force]. A boolean indicating of it is integrated w/a video switch (Y = YES and N = NO)?[Air Forcel. The type of cable.[Air Force]. The name of the operating system.[Air Force]. The version of the software being used.[Air Force]. The list of control type codes.[Air Force]. The number of controlled portals.[Air Force]. The Domain Name Server name of device if applicable.[Air Force]. The version number of network device.[Air Force]. The physical dimensions of network device (HxWxD).[Air Force]. The required input power type.[Air Force]. The number of power supplies network device was designed for.[Air Force]. The number of power supplies network device has installed.[Air Force]. The total number of network interfaces/ports network device has.[Air Force]. The total number of expansion slots in chassis.[Air Force]. The level of control at the portal.[Air Force]. The radio circuit capacity system.[Air Force]. The IP Address of interface.[Air Force]. The protocol by which interface communicates.[Air Force]. The interface bit rate.[Air Force]. The maximum transmission unit of interface.[Air Force]. The application for interface.[Air Force]. The destination interface/port number.[Air Force]. The physical module number.[Air Force]. The description of the number of fans that are operational.[Air Force]. The maximum number of controlled portals.[Air Force]. The physical port number.[Air Force]. The voltage requirements.[Air Force]. The primary or remote annunciator.[Air Force]. The physical/electrical type of interface.[Air Force]. The identifier of rack chassis is located in.[Air Force]. The IP Address of device.[Air Force]. A unique Identifier of interface that port corresponds to.[Air Force]. The MAC Address of device.[Air Force]. The identifying number of the output equipment.[Air Force]. The type of remote indicators.[Air Force]. A boolean indicating whether the data is classified or unclassified (Y = YES and N = NO)?[Air Force]. An indicator as to whether the feature serves as a source, sink or neither in the network. The landline circuit capacity system.[Air Force]. The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections. The number of operator positions.[Air Force]. The number of automation scopes or positions.[Air Force]. The date of the flight check. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).[Air Force]. The name of the reflector location.[Air Force]. The location position of the remote indicator.[Air Force]. The secondary facility number.[Air Force].

description (String255)	A description of the feature.[Tinker Air Force Base].
remarks (String255)	Additional information about the camera switch.[Air Force].
Metadata:	······
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
collectionProgress (CodeProgress)	The progress of the data collection.
verified (String255)	Whether or not the feature has been verified.
<u>ystem Keys:</u>	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Communications : Fiberoptic Line

(Database Feature Class Name = CommFiberopticLine)Geometry Type: LineAccuracy: +/-5Ft.Sensitivity: SecretThin transparent fibers of glass or plastic that are enclosed by material of a lower index of
refraction and that transmit light throughout their length by internal reflections [SDSFIE].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String60)	The name of the feature.[Tinker Air Force Base].
maaAlias (String60)	An alternative or former name by which the feature is refered.
stationName (String12)	Commercial identifier.[HSIP].
corpName (String80)	Name of station corporation.[HSIP].
Attributes:	
verticalClearance (Double)	The clearance in feet between the lowest point under the cable line and the water's surface at Mean High Water (MHW) referenced to a reading on the appropriate gage.[REEGIS].
cabElev (CodeCableElevation)	The vertical location of the cable.[Tinker Air Force Base].
riverMile (Double)	The river mile marker.[REEGIS].
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
cabUse (<u>CodeCableUse</u>)	Discriminator - The overall use of the fiberoptic cable.
installType (CodeCableInstallationType)	The installation type code for cables.[Tinker Air Force Base].
cblSht (<u>CodeSheathInsulateType</u>)	The type of cable sheathing or insulation.[Tinker Air Force Base].
length (Double)	A measurement of the longer of two linear axes.[Tinker Air Force Base].
diameter (Double)	The width of a cylindrical or circular cable.[Tinker Air Force Base].
cabOffset (Double)	The distance to the cable as measured from the edge of a paved surface.[Tinker Air Force Base].
fcSm (Integer)	The number of single-mode fibers[Tinker Air Force Base].
fcMm (Integer)	The number of multi-mode fibers in the cable.[Tinker Air Force Base].

fcDs (Integer)	The number of dispersion-shifted fibers in the cable.[Tinker Air Force Base].	
fcTotal (Integer)	The total number of fibers in the cable.[Tinker Air Force Base].	
cblMaterial (CodeElectricCable)	Types of communication cable.[HSIP].	
netAffil (String32)	Network affiliation.[HSIP].	
description (String255)	A description of the feature.[Tinker Air Force Base].	
directionality (CodeDirectionality)	The directionality of flow with repsect to the line's geometry.	
impedance (Double)	The number representing the total opposition to flow.	
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.	
<u>Metadata:</u>		
collectionProgress (CodeProgress)	The progress of the data collection.	
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).	
verified (String255)	Whether or not the feature has been verified.	
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.	
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.	
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.	
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.	
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].	
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.	
dataSource (CodeDataSource)	The primary source of the data in this record.	
dataSource2 (CodeDataSource)	The secondary source of the data in this record.	
sourceStatement (String255)	A statement providing additional details about the source of the data.	
editorName (String50)	The name of the individual who last edited this data.	
lastUpdate (Date)	The date upon which any data associated with this record was last updated.	
System Keys:		
guid (String60)	A globally unique identifier applied to each feature in the database for reference.	
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.	

Communications : Groundplane Area

(Database Feature Class Name = CommGroundplaneArea)

Geometry Type: Polygon Accuracy: +/-5Ft. Sensitivity: Confidential A series of ground points electrically connected in a mesh formation necessary to minimize ground resistance and electromagnetic radiation, for example lightening strikes, in support of critical communications systems. [SDSFIE Tinker Air Force Base].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
<u>Attributes:</u>	
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
description (String255)	A description or other unique information concerning the subject item.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
<u>Metadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this

	feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
<u>System Keys:</u>	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Communications : Ground Point

 (Database Feature Class Name = CommGroundPoint)

 Geometry Type: Point
 Accuracy: +/-1Ft.

 Sensitivity: Secret

 The location where the communication configuration is grounded. [SDSFIE Tinker Air Force

 Base].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
Attributes:	
area (Double)	The size of the area, zone, or polygon in square units.
perimeter (Double)	The distance around the boundary of the area, zone, or subject item in linear units.
resistance (Double)	The measured resistance of the cable.[Tinker Air Force Base].
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
description (String255)	A description of the feature.
material (String16)	The material of the subject item.
size (Integer)	The size of the subject item
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
junctionType (CodeJunctionType)	An indicator as to whether the feature serves as a source, sink or neither in the network.
<u>Metadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.

dataSource (CodeDataSource) The primary source of the data in this record. dataSource2 (CodeDataSource) The secondary source of the data in this record. sourceStatement (String255) A statement providing additional details about the source of the data. editorName (String50) The name of the individual who last edited this data. lastUpdate (Date) The date upon which any data associated with this record was last updated. System Keys: guid (String60) A globally unique identifier applied to each feature in the database for reference. metaId (Integer) An identifier used to refer to a metadata record that provide additional information about the data in this record.

Communications : Groundwave Area

(Database Feature Class Name $=$ Co	ommGroundwaveArea)	
Geometry Type: Polygon	Accuracy: +/-5Ft.	Sensitivity: Confidential
An emanation pattern of Low Frequency Electromagnetic transmissions which use a ground path		
for transmission. [SDSFIE].		
Names and Identifiers:		
maaID (String30)	A unique identifier used by people to refer to primary or foreign key value)	this feature (note: this is not a system
maaAlias (String60)	An alternative or former name by which the f	eature is refered.
Attributes:		
owner (String60)	A person, organization, or agency with legal outility asset.[Adopted from SDSFIE].	control or management responsibility of the
description (String255)	A description or other unique information con	ncerning the subject item.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanen from lists or entered from field inspections.	t, temporary, proposed, abandoned, etc.),
Metadata:		
collectionProgress (CodeProgress)	The progress of the data collection.	
dateAcquired (Date)	The date on which the subject item was origin is YYYYMMDD (i.e., September 15, 1994 =	

verified (String255) projectType (<u>CodeProjectType</u>)

projectId (String20)

status (<u>CodeStatus</u>) Alternative (Integer) userFlag (String254)

qualityLevel (CodeSueQualityLevel)

dataSource (<u>CodeDataSource</u>) dataSource2 (<u>CodeDataSource</u>) sourceStatement (String255) editorName (String50) lastUpdate (Date) <u>System Keys:</u> guid (String60)

metaId (Integer)

The type of project or work activity that installed or first recorded the location of this feature.

A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.

A temporal description of the operational status of the feature.

Discriminator used to tie features of a plan or proposal together into a version.

An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].

The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.

The primary source of the data in this record.

Whether or not the feature has been verified.

The secondary source of the data in this record.

A statement providing additional details about the source of the data.

The name of the individual who last edited this data.

The date upon which any data associated with this record was last updated.

A globally unique identifier applied to each feature in the database for reference. An identifier used to refer to a metadata record that provide additional information about the data in this record.

Communications : Impedance Matching Point

(Database Feature Class Name = CommImpedanceMatchingPoint) Geometry Type: Point Accuracy: +/-1Ft.

Sensitivity: Secret

A device that matches the impedance between two transmissions in order to minimize signal attenuation and distortion [SDSFIE Tinker Air Force Base].

Names and Identifiers:

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
modelNumber (String16)	The Model, Product, Catalog, or Item Number of subject item.[Tinker Air Force Base].
maaAlias (String60)	An alternative or former name by which the feature is refered.
Attributes:	
impType (<u>CodeAmplifierType</u>)	The impedance matching device type.[Tinker Air Force Base].
loss (Double)	The signal amplitude loss of matching device.[Tinker Air Force Base].
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
bandwidth (Double)	The difference between the highest and lowest frequencies.[Tinker Air Force Base].
inSigLvl (Double)	The amplitude of the input signal.[Tinker Air Force Base].
outsigLvl (Double)	The amplitude of the output signal.[Tinker Air Force Base].
impedIn (Double)	The input impedance.[Tinker Air Force Base].
impedOut (Double)	The output impedance.[Tinker Air Force Base].
description (String255)	A description of the feature.[Tinker Air Force Base].
material (String16)	The material of the subject item.
size (Integer)	The size of the subject item
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
junctionType (CodeJunctionType)	An indicator as to whether the feature serves as a source, sink or neither in the network.
<u>Ietadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (<u>CodeDataSource</u>)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
ystem Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about

Communications : Internet Center

(Database Feature Class Name = Co	mmInternetCenter)	
Geometry Type: Point	Accuracy: +/-1Ft.	Sensitivity: Secret
A site that contains information about the internet center. [SDSFIE Air Force].		
Names and Identifiers:		
maaID (String30)	A unique identifier used by people to refer to this primary or foreign key value)	s feature (note: this is not a system

maaAlias (String60)	An alternative or former name by which the feature is refered.
<u>ttributes:</u>	
perimeter (Double)	The distance around the boundary of the area, zone, or subject item in linear units.
area (Double)	The size of the area, zone, or polygon in square units.
owner (String60)	A person, organization, or agency with legal control or management responsibility of t utility asset.[Adopted from SDSFIE].
material (String16)	The material of the subject item.
description (String255)	A description or other unique information concerning the subject item.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network
<u>letadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for d is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defi system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
<u>ystem Keys:</u>	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information abo the data in this record.

Communications : Junction

(Database Feature Class Name = CommJunction)

Geometry Type: Point Accuracy: +/-1Ft. Sensitivity: Secret The communications junction node represents a transition node of cable path. For example, it can represent terminal, splice, or cross connection points. It can also indicate the transition of the cable into a duct opening. [SDSFIE Air Force].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
Attributes:	
conectedTo (String30)	Table name of Child Equipment that links to this node.[AIR FORCE].
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
material (CodePipeMaterial)	The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc.
description (String255)	A description or other unique information concerning the subject item.
size (Integer)	The size of the subject item
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.

junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
juncType (<u>CodeJuncType</u>)	The type of junction (e.g. manhole, handhole, other)
<u>Metadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (<u>CodeDataSource</u>)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Communications : Line Of Sight Line

(Database Feature Class Name = CommLineOfSightLine)Geometry Type: LineAccuracy: +/-5Ft.Sensitivity: SecretAn electromagnetic transmission signal path requiring line of sight such as microwave or lasertransmission [SDSFIE].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String30)	Any commonly used name for the signal path.
maaAlias (String60)	An alternative or former name by which the feature is refered.
Attributes:	
frequency (Double)	The frequency of the signal in the LOS transmission path.
power (Double)	The power of the signal in the LOS transmission path.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
txLength (Double)	The length of the LOS transmission path.
verticalClearance (Double)	The clearance in feet MHW between the lowest point under the transmission path.[REEGIS].
riverMile (Double)	The river mile marker.
description (String255)	A description of the feature.
directionality (CodeDirectionality)	The directionality of flow with repsect to the line's geometry.
material (String16)	The material of the subject item.
size (Integer)	The size of the subject item.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
impedance (Double)	The number representing the total opposition to flow.
<u>Metadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date

	is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (<u>CodeDataSource</u>)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Communications : Load Capacitor

 (Database Feature Class Name = CommLoadCapacitor)

 Geometry Type: Point
 Accuracy: +/-1Ft.
 Sensitivity: Secret

 Device used to eliminate problems with high-frequencies on long telephone lines using capacitance.
 Spliced into the line. [SDSFIE].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
modelNumber (String16)	The Model, Product, Catalog, or Item Number of subject item.[AIR FORCE].
Attributes:	
capacity (Double)	Capacitance of each capacitor.[AIR FORCE].
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
coDist (Double)	Distance from the build-out unit to the Central Office.[AIR FORCE].
ldcnum (CodeCountsInAssembly)	Number of capacitors making up the build-out unit.[AIR FORCE].
description (String255)	A description or other unique information concerning the subject item.[AIR FORCE].
material (String16)	The material of the subject item.
disposition (<u>CodeDispositionObject</u>)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
<u>Metadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be

	used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
<u>System Keys:</u>	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Communications : Load Coil

(Database Feature Class Name = CommLoadCoilPoint)Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretDevice used to eliminate problems with high-frequencies on long telephone lines usinginductance.Spliced into the line. [SDSFIE Air Force].

Names and Identifiers:

maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)	
maaAlias (String60)	An alternative or former name by which the feature is refered.	
modelNumber (String16)	The Model, Product, Catalog, or Item Number of subject item.[AIR FORCE].	
Attributes:		
ldccas (CodeLoadsCoilCaseType)	Type of case in which the load coil(s) are assembled.[AIR FORCE].	
ldcType (<u>CodeNumberLoadsCoilType</u>)	Type of loading coils.[AIR FORCE].	
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset. [Adopted from SDSFIE].	
loadPtNo (Integer)	Load point number.[AIR FORCE].	
coDist (Double)	Distance from the load coil assembly to the Central Office.[AIR FORCE].	
ldcnum (CodeCountsInAssembly)	Number of coils making up the load coil assembly.[AIR FORCE].	
ldcsym (<u>CodeLoadCoilSystem</u>)	Type of load coil system used.[AIR FORCE].	
description (String255)	A description or other unique information concerning the subject item.[AIR FORCE].	
material (String16)	The material of the subject item.	
size (Integer)	The size of the subject item.	
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.	
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.	
<u>Metadata:</u>		
collectionProgress (CodeProgress)	The progress of the data collection.	
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).	
verified (String255)	Whether or not the feature has been verified.	
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.	
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.	
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.	
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.	
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].	
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.	
dataSource (CodeDataSource)	The primary source of the data in this record.	
dataSource2 (CodeDataSource)	The secondary source of the data in this record.	
sourceStatement (String255)	A statement providing additional details about the source of the data.	

editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
<u>System Keys:</u>	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Communications : Media Converter

(Database Feature Class Name = CommMediaConverter)Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretDevice used to convert from one type of signal transmission media to another. [SDSFIE TinkerAir Force Base].

primary or foreign key value)

Names and Identifiers:

maaID (String30)

maaAlias (String60) modelNumber (String16)

Attributes:

connt2 (<u>CodeCableConnectorType</u>) maxcellt (<u>CodeMaxcellType</u>) mtimzone (<u>CodeMaritimeMgmtType</u>) netbw (<u>CodeNetworkBandwidth</u>) cbltyp1 (<u>CodeCableType</u>) owner (String60)

cbltyp2 (<u>CodeCableType</u>) netprc (<u>CodeNetworkProtocol</u>) vehtype (<u>CodeTransVehicleType</u>) connt1 (<u>CodeCableConnectorType</u>) voltReq (<u>CodeVoltageRequirements</u>) mcnvty (<u>CodeMediaConverter</u>) description (String255) material (String16) junctionType (<u>CodeJunctionType</u>) disposition (CodeDispositionObject)

Metadata:

collectionProgress (<u>CodeProgress</u>) dateAcquired (Date)

verified (String255) projectType (<u>CodeProjectType</u>)

projectId (String20)

status (<u>CodeStatus</u>) Alternative (Integer) userFlag (String254)

qualityLevel (CodeSueQualityLevel)

dataSource (<u>CodeDataSource</u>) dataSource2 (<u>CodeDataSource</u>) sourceStatement (String255) editorName (String50) The Model, Product, Catalog, or Item Number of subject item.[AIR FORCE]. The connector type at port two.[AIR FORCE]. For flexible MaxCell inner ducts, this indicates the type used.[AIR FORCE]. Typical Maritime Zones.[NAVFAC]. The data transmission rate through the repeater.[AIR FORCE]. The type of cable accommodated by port one.[AIR FORCE]. A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE]. The type of cable accommodated by port two.[AIR FORCE]. The network protocol accommodated by the media converter.[AIR FORCE]. The type of vehicles located in the parking area.[AIR FORCE]. The connector type at port one.[AIR FORCE]. Voltage Requirements.[AIR FORCE]. Converter Type.[AIR FORCE]. A description or other unique information concerning the subject item.[AIR FORCE]. The material of the subject item. An indicator as to whether the feature serves as a source, sink or neither in the network. The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections. The progress of the data collection. The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915). Whether or not the feature has been verified. The type of project or work activity that installed or first recorded the location of this feature A unique identifier associated with the project or work activity that installed or first recorded the location of this feature. A temporal description of the operational status of the feature. Discriminator used to tie features of a plan or proposal together into a version. An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE]. The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02. The primary source of the data in this record. The secondary source of the data in this record. A statement providing additional details about the source of the data.

A unique identifier used by people to refer to this feature (note: this is not a system

An alternative or former name by which the feature is refered.

The name of the individual who last edited this data.

lastUpdate (Date)	The date upon which any data associated with this record was last updated.
<u>System Keys:</u>	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Communications : Multihop Area

(Database Feature Class Name = CommMultihopArea)

Geometry Type: Polygon Accuracy: +/-5Ft. Sensitivity: Confidential A radio broadcast transmission which consist of a larger network such as cellular telephone, polygon represents coverage area. [SDSFIE Tinker Air Force Base].

mes and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String30)	any commonly used name for the feature.[REEGIS].
maaAlias (String60)	An alternative or former name by which the feature is refered.
tributes:	
riverMile (Double)	The river mile marker.[REEGIS].
area (Double)	The size of the area, zone, or polygon in square units.
perimeter (Double)	The distance around the boundary of the area, zone, or subject item in linear units.
owner (String60)	A person, organization, or agency with legal control or management responsibility of th utility asset.[Adopted from SDSFIE].
frequency (Double)	The frequency of the signal.[Tinker Air Force Base].
power (Double)	The amount power of the transmission signal.[Tinker Air Force Base].
description (String255)	A description of the feature.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
etadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for datis YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defin system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
stem Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Communications : Network Systems Site

(Database Feature Class Name = CommNetworkSystemsSite)Geometry Type: PointAccuracy: +/-1Ft.

Sensitivity: Secret

The Network Standard System name, architecture (i.e. protocol), number of facilities where installed and number of users of system. [SDSFIE Tinker Air Force Base].

Names and Identifiers:

Names and Identifiers.	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String80)	The name for the standard system.[Tinker Air Force Base].
maaAlias (String60)	An alternative or former name by which the feature is refered.
Attributes:	
netAff (<u>CodeNetworkAffiliationType</u>)	The broadcasting network to which the facility is associated.[HSIP].
area (Double)	The size of the area, zone, or polygon in square units.
perimeter (Double)	The distance around the boundary of the area, zone, or subject item in linear units.
convType (String50)	A type of media converter.[Tinker Air Force Base].
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
protocol (String60)	The Protocol Description.[Tinker Air Force Base].
numUsers (Integer)	The number of users of standard system.[Tinker Air Force Base].
material (String16)	The material of the subject item.
description (String255)	A description or other unique information concerning the subject item.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
Metadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (<u>CodeDataSource</u>)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Communications : Other Cable

maaAlias (String60)

(Database Feature Class Name = Co	mmOtherCable)	
Geometry Type: Line	Accuracy: +/-5Ft.	Sensitivity: Secret
Any type of communications cable transmission not otherwise specified. [SDSFIE].		
Names and Identifiers:		
maaID (String30)	A unique identifier used by people to refer to this primary or foreign key value)	s feature (note: this is not a system
name (String60)	Any commonly used name for the cable.[Tinker	Air Force Base].

An alternative or former name by which the feature is refered.

Attributes:

cabUse (<u>CodeCableUse</u>) installType (<u>CodeCableInstallationType</u>) diameter (Double) owner (String60)

cabElev (<u>CodeCableElevation</u>) riverMile (Double) cblMaterial (<u>CodeElectricCable</u>) verticalClearance (Double)

cblSht (<u>CodeSheathInsulateType</u>) cblLength (Double) coffset (Double)

icefacClr (Double)

description (String255) directionality (<u>CodeDirectionality</u>) impedance (Double) disposition (<u>CodeDispositionObject</u>)

Metadata:

collectionProgress (<u>CodeProgress</u>) dateAcquired (Date)

verified (String255) projectType (<u>CodeProjectType</u>)

projectId (String20)

status (<u>CodeStatus</u>) Alternative (Integer) userFlag (String254)

qualityLevel (CodeSueQualityLevel)

dataSource (<u>CodeDataSource</u>) dataSource2 (<u>CodeDataSource</u>) sourceStatement (String255) editorName (String50) lastUpdate (Date) <u>System Keys:</u>

guid (String60) metaId (Integer)

A measurement of the longer of two linear axes.[Tinker Air Force Base]. The distance to the cable as measured from the edge of a paved surface.[Tinker Air Force Base]. The clearance in feet between the lowest point under the cable line and the ice facility surface.[S-57]. A description of the feature.[Tinker Air Force Base]. The directionality of flow with repsect to the line's geometry. The number representing the total opposition to flow. The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections. The progress of the data collection. The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915). Whether or not the feature has been verified. The type of project or work activity that installed or first recorded the location of this

feature.

A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.

A temporal description of the operational status of the feature.

Discriminator used to tie features of a plan or proposal together into a version.

An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].

The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.

The primary source of the data in this record.

Discriminator - The overall use of the cable

utility asset.[Adopted from SDSFIE].

The river mile marker.[REEGIS].

gage.[REEGIS].

The installation type code for cables.[Tinker Air Force Base].

The vertical location of the cable.[Tinker Air Force Base].

The material composition of the cable.[Tinker Air Force Base].

The type of cable sheathing or insulation.[Tinker Air Force Base].

The width of a cylindrical or circular cable.[Tinker Air Force Base].

A person, organization, or agency with legal control or management responsibility of the

The clearance in feet between the lowest point under the cable line and the water's surface at Mean High Water (MHW) referenced to a reading on the appropriate

The secondary source of the data in this record.

A statement providing additional details about the source of the data.

The name of the individual who last edited this data.

The date upon which any data associated with this record was last updated.

A globally unique identifier applied to each feature in the database for reference. An identifier used to refer to a metadata record that provide additional information about the data in this record.

Communications : Path Node Site

(Database Feature Class Name = CommPathNode)Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretNode that represents a transition of different communications path segment types (i.e. duct to
aerial) or attributes (i.e. duct material type from PVC to PE). [SDSFIE].

Names and Identifiers:

maaID (String30)

A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)

maaAlias (String60)	An alternative or former name by which the feature is refered.	
Attributes:		
area (Double)	The size of the area, zone, or polygon in square units.	
perimeter (Double)	The distance around the boundary of the area, zone, or subject item in linear units.	
nodeType (<u>CodeCommNodeType</u>)	Discriminator. The type of node this represents.[AIR FORCE].	
ductFlap (String20)	The flap on which this duct opening is located (i.e. N, NNE, NE, ENE, E, ESE, SE, SSE, S, SSW, SW, WSW, W, WNW, NW, and NNW).[AIR FORCE].	
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].	
ductTag (String8)	The location of the duct within the flap (i.e. A3).[AIR FORCE].	
inDiameter (Double)	The inside diameter measurement of the duct, stub out, or hole.[AIR FORCE].	
material (String16)	The material of the subject item.	
description (String255)	A description or other unique information concerning the subject item.	
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.	
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.	
Metadata:		
collectionProgress (CodeProgress)	The progress of the data collection.	
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).	
verified (String255)	Whether or not the feature has been verified.	
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.	
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.	
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.	
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.	
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].	
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.	
dataSource (CodeDataSource)	The primary source of the data in this record.	
dataSource2 (CodeDataSource)	The secondary source of the data in this record.	
sourceStatement (String255)	A statement providing additional details about the source of the data.	
editorName (String50)	The name of the individual who last edited this data.	
lastUpdate (Date)	The date upon which any data associated with this record was last updated.	
System Keys:		
guid (String60)	A globally unique identifier applied to each feature in the database for reference.	
metald (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.	

Communications : Path Segment Line

(Database Feature Class Name = CommPathSegmentLine)

Geometry Type: LineAccuracy: +/-5Ft.Sensitivity: SecretLink that represents an enclosure path of communications items outside of a building, manhole,
pedestal, or other enclosed structures. [SDSFIE].

,	L J
Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
Attributes:	
pathType (<u>CodePathType</u>)	A field that describes what type of thing this segment is representing.[AIR FORCE].
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.[AIR FORCE].
pathCnt (<u>CodePathCont</u>)	A field that indicates what the path contains.[AIR FORCE].
owner (String60)	A person, organization, or agency with legal control or management responsibility of the

cabins (<u>CodeCableInstallationType</u>) coverDepth (Double)

dateInstalled (Date) percent (<u>CodePercentModifier</u>) directionality (<u>CodeDirectionality</u>) material (String16) size (Integer) description (String255) impedance (Double)

Metadata:

collectionProgress (<u>CodeProgress</u>) dateAcquired (Date)

verified (String255) projectType (<u>CodeProjectType</u>)

projectId (String20)

status (<u>CodeStatus</u>) Alternative (Integer) userFlag (String254)

qualityLevel (CodeSueQualityLevel)

dataSource (<u>CodeDataSource</u>) dataSource2 (<u>CodeDataSource</u>) sourceStatement (String255) editorName (String50) lastUpdate (Date)

System Keys:

guid (String60) metaId (Integer) utility asset.[Adopted from SDSFIE].
A field to describe the type of installation.[AIR FORCE].
The depth of cover. The depth measured from top of ground's surface (or grade) to top of underground communications path.[AIR FORCE].
The date on which the feature was originally installed.
How continuous the enclosure path is.
The directionality of flow with repsect to the line's geometry.
The material of the subject item.
The size of the subject item.
A description or other unique information concerning the subject item.
The number representing the total opposition to flow.

The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).

Whether or not the feature has been verified. The type of project or work activity that installed or first recorded the location of this feature.

A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.

A temporal description of the operational status of the feature.

Discriminator used to tie features of a plan or proposal together into a version. An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].

The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.

The primary source of the data in this record.

The secondary source of the data in this record.

A statement providing additional details about the source of the data.

The name of the individual who last edited this data.

The date upon which any data associated with this record was last updated.

A globally unique identifier applied to each feature in the database for reference. An identifier used to refer to a metadata record that provide additional information about the data in this record.

Communications : Pedestal Site

(Database Feature Class Name = CommPedestal)Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretAn above-ground enclosure providing access to buried plant. [SDSFIE].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String20)	The standard identifier name (i.e. PED-19).[AIR FORCE].
maaAlias (String60)	An alternative or former name by which the feature is refered.
modelNumber (String16)	The Model, Product, Catalog, or Item Number of subject item.[Tinker Air Force Base].
serialNumber (String16)	The manufacturer's serial, or unique identification number of the subject item.[Tinker Air Force Base].
Attributes:	
type (String16)	The type of communications pedestal.[Austin and Pitts].
terminal (CodeBoolean)	A Boolean indicating the presence of a terminal[Tinker Air Force Base].
bonded (<u>CodeBoolean</u>)	A Boolean indicating whether the pedestal is bonded.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset. [Adopted from SDSFIE].
area (Double)	The size of the area, zone, or polygon in square units.
perimeter (Double)	The distance around the boundary of the area, zone, or subject item in linear units.

costrm (CodeEnclosureMaterials) diameter (Double) width (Double) height (Double) depth (Double) description (String255) material (String16) size (Integer) junctionType (CodeJunctionType) disposition (CodeDispositionObject)

Metadata:

collectionProgress (<u>CodeProgress</u>) dateAcquired (Date)

verified (String255) projectType (<u>CodeProjectType</u>)

projectId (String20)

status (<u>CodeStatus</u>) Alternative (Integer) userFlag (String254)

qualityLevel (CodeSueQualityLevel)

dataSource (<u>CodeDataSource</u>) dataSource2 (<u>CodeDataSource</u>) sourceStatement (String255) editorName (String50) lastUpdate (Date)

System Keys:

guid (String60) metaId (Integer) The material composition of the pedestal.[AIR FORCE]. Diameter.[AIR FORCE]. Width of horizontal cross section.[AIR FORCE]. Height.[AIR FORCE]. Depth of horizontal cross-section.[AIR FORCE]. A description or other unique information concerning the subject item. The material of the subject item. The size of the subject item. An indicator as to whether the feature serves as a source, sink or neither in the network. The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.

The progress of the data collection. The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915). Whether or not the feature has been verified. The type of project or work activity that installed or first recorded the location of this feature. A unique identifier associated with the project or work activity that installed or first recorded the location of this feature. A temporal description of the operational status of the feature. Discriminator used to tie features of a plan or proposal together into a version. An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE]. The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.

The primary source of the data in this record.

The secondary source of the data in this record.

A statement providing additional details about the source of the data.

The name of the individual who last edited this data.

The date upon which any data associated with this record was last updated.

A globally unique identifier applied to each feature in the database for reference. An identifier used to refer to a metadata record that provide additional information about the data in this record.

Communications : Pullbox Site

 (Database Feature Class Name = CommPullbox)
 Geometry Type: Point
 Accuracy: +/-1Ft.
 Sensitivity: Secret

 A box with cover used as an aid for pulling cable. [SDSFIE].
 Names and Identifiers:
 Sensitivity: Secret

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
modelNumber (String16)	The Model, Product, Catalog, or Item Number of subject item.[Tinker Air Force Base].
Attributes:	
area (Double)	The size of the area, zone, or polygon in square units.
perimeter (Double)	The distance around the boundary of the area, zone, or subject item in linear units.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset. [Adopted from SDSFIE].
description (String255)	A description of the feature.[Tinker Air Force Base].
material (String16)	The material of the subject item.
size (Integer)	The size of the subject item.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.

Metadata:

collectionProgress (CodeProgress) The progress of the data collection. dateAcquired (Date) verified (String255) Whether or not the feature has been verified. projectType (CodeProjectType) feature. projectId (String20) recorded the location of this feature. status (CodeStatus) Alternative (Integer) userFlag (String254) used to store the subject items data.[SDSFIE]. qualityLevel (CodeSueQualityLevel) ASCE38-02.

dataSource (CodeDataSource) dataSource2 (CodeDataSource) sourceStatement (String255) editorName (String50) lastUpdate (Date)

System Keys:

guid (String60) metaId (Integer) The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).

The type of project or work activity that installed or first recorded the location of this

A unique identifier associated with the project or work activity that installed or first

A temporal description of the operational status of the feature.

Discriminator used to tie features of a plan or proposal together into a version.

An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be

The subsurface utility engineering quality level assigned to utilities features as defined in

The primary source of the data in this record.

The secondary source of the data in this record.

A statement providing additional details about the source of the data.

The name of the individual who last edited this data.

The date upon which any data associated with this record was last updated.

A globally unique identifier applied to each feature in the database for reference. An identifier used to refer to a metadata record that provide additional information about the data in this record.

Communications : Radar Site

(Database Feature Class Name = CommRadarSite)

Geometry Type: Point Accuracy: +/-1Ft. Sensitivity: Secret The location of equipment used for determining the presence and position of an object by measure the direction and timing of electromagnetic waves. [SDSFIE Tinker Air Force Base].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
modelNumber (String16)	The Model, Product, Catalog, or Item Number of subject item.[Tinker Air Force Base].
serialNumber (String16)	The manufacturer's serial, or unique identification number of the subject item.[Tinker Air Force Base].
Attributes:	
area (Double)	The size of the area, zone, or polygon in square units.
perimeter (Double)	The distance around the boundary of the area, zone, or subject item in linear units.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
radType (<u>CodeRadio</u>)	The operating spectrum of the radar.[Tinker Air Force Base].
power (Double)	The amount of power the radar emits.[Tinker Air Force Base].
description (String255)	A description of the feature.[Tinker Air Force Base].
material (String16)	The material of the subject item.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
<u>Metadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.

projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (CodeStatus)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (<u>CodeDataSource</u>)	The primary source of the data in this record.
dataSource2 (<u>CodeDataSource</u>)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Communications : Radio

(Database Feature Class Name = CommRadio)Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretThe location of equipment used to transmit and receive communications signals viaelectromagnetic waves. [SDSFIE Tinker Air Force Base].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
Attributes:	
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
material (String16)	The material of the subject item.
description (String255)	A description or other unique information concerning the subject item.
size (Integer)	The size of the subject item.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
junctionType (CodeJunctionType)	An indicator as to whether the feature serves as a source, sink or neither in the network.
<u>Metadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (CodeStatus)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.

lastUpdate (Date)	The date upon which any data associated with this record was last updated.
<u>System Keys:</u>	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metald (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Communications : Radio Receiver

(Database Feature Class Name = CommRadioReceiver)Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretThe location to store individual radio receiver sections that may be in one piece of radioequipment. [SDSFIE Tinker Air Force Base].

Names and Identifiers: maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system
maan ^o (String50)	primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
<u>Attributes:</u>	
area (Double)	The size of the area, zone, or polygon in square units.
perimeter (Double)	The distance around the boundary of the area, zone, or subject item in linear units.
rfAsnFrq (String50)	The frequencies assigned to this unit.[Tinker Air Force Base].
rfHigh (Integer)	The highest capable operating frequency unit.[Tinker Air Force Base].
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
rfLow (Integer)	The lowest capable operating frequency unit.[Tinker Air Force Base].
rfBndwdth (Double)	The bandwidth of signal (LMR is 25k wide, 12.5k narrow).[Tinker Air Force Base].
modPos (Integer)	From the left of unit, module number for multiple transmitters in one radio.[Tinker Air Force Base].
rfP25t (<u>CodeBoolean</u>)	Is the unit capable of operating P25 Trunking (Y/N)?[Tinker Air Force Base].
rfP25c (<u>CodeBoolean</u>)	Is the unit capable of operation P25 Conventional (Y/N)?[Tinker Air Force Base].
description (String255)	A description or other unique information concerning the subject item.[Tinker Air Force Base].
material (String16)	The material of the subject item.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
<u>letadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for da is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defin system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
<u>ystem Keys:</u>	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.

 metaId (Integer)
 An identifier used to refer to a metadata record that provide additional information about the data in this record.

 Communications : Radio Transmitter

 (Database Feature Class Name = CommRadioTransmitter)

 Communications : Department

Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretThe location to store individual radio transmitter sections that may be in one piece of radioequipment. [SDSFIE Tinker Air Force Base].

ames and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
ttributes:	
area (Double)	The size of the area, zone, or polygon in square units.
rfLow (Integer)	The lowest capable operating frequency unit.[Tinker Air Force Base].
rfP25t (CodeBoolean)	Is the unit capable of operating P25 Trunking (Y/N)?[Tinker Air Force Base].
rfP25c (CodeBoolean)	Is the unit capable of operation P25 Conventional (Y/N)?[Tinker Air Force Base].
modPos (Integer)	From the left of unit, module number for multiple transmitters in one radio.[Tinker Air Force Base].
owner (String60)	A person, organization, or agency with legal control or management responsibility of th utility asset.[Adopted from SDSFIE].
perimeter (Double)	The distance around the boundary of the area, zone, or subject item in linear units.
rfAsnFrq (String50)	The frequencies assigned to this unit.[Tinker Air Force Base].
rfFccid (String50)	FCC emission designators.[Tinker Air Force Base].
rfBndwdth (Double)	The bandwidth of signal (LMR is 25k wide, 12.5k narrow).[Tinker Air Force Base].
rfMaxwats (Integer)	The maximum output power of this unit in watts.[Tinker Air Force Base].
rfHigh (Integer)	The highest capable operating frequency unit.[Tinker Air Force Base].
description (String255)	A description or other unique information concerning the subject item.[Tinker Air For Base].
material (String16)	The material of the subject item.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
etadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for d is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user define system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
ystem Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about

Communications : Relay Station

(Database Feature Class Name = CommRelayStation)

Geometry Type: Point Accuracy: +/-1Ft. Sensitivity: Secret A piece of equipment used to relay communications signals. [SDSFIE Air Force].

Names and Identifiers:

maaID (String30)

name (String80) serialNumber (String16)

maaAlias (String60) modelNumber (String16) stationName (String20)

Attributes:

facilityType (String16) netAff (<u>CodeNetworkAffiliationType</u>) radioType (<u>CodeRadioType</u>) owner (String60)

radType (<u>CodeRadio</u>) accountCode (String20) baseIIc (String20) deployab (<u>CodeBoolean</u>) encLvl (String20)

encMax (CodeEncryptionLevelType) encProt (String16) lmrNet (String20) narrowbn (CodeBoolean) power (CodePowerUseType) pwrPhase (Integer) pwrVolt (Integer) pwrWatts (Integer) rackNo (String20) rackPos (String20) rfLmrwd (CodeBoolean) suppSys (String20)

thermLoad (Integer) trnkP25 (<u>CodeBoolean</u>) trunkNum (Integer) txAnalg (<u>CodeBoolean</u>) txDigl (<u>CodeBoolean</u>) vehicleNo (String20) description (String255) material (String16) size (Integer) junctionType (<u>CodeJunctionType</u>) disposition (<u>CodeDispositionObject</u>)

Metadata:

collectionProgress (<u>CodeProgress</u>) dateAcquired (Date) primary or foreign key value) Any commonly used name of the feature.[HSIP]. The manufacturer's serial, or unique identification number of the subject item.[Tinker Air Force Base]. An alternative or former name by which the feature is refered.

A unique identifier used by people to refer to this feature (note: this is not a system

The Model, Product, Catalog, or Item Number of subject item.[Tinker Air Force Base]. Indicates the Commercial Identifier.[HSIP].

The type of broadcast facility located at this location.[Tinker Air Force Base]. The broadcasting network to which the facility is associated.[Tinker Air Force Base]. Types of radio points[Tinker Air Force Base]. A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE]. Discriminator - Radio type[Tinker Air Force Base]. The owners account code.[Tinker Air Force Base]. ILC code of the installation where this equipment is located.[Tinker Air Force Base]. Is unit flagged as deployable (Y/N)?[Tinker Air Force Base]. The level of encryption unit supports (TRS is not standard on this).[Tinker Air Force Basel. The highest level of encryption unit can operate .[Tinker Air Force Base]. Type of protocol used to provide encryption.[Tinker Air Force Base]. The network is this unit assigned to (LMR or Conventional).[Tinker Air Force Base]. Narrowband operation 12.5kHz capable (Y/N)?[Tinker Air Force Base]. Alternating Current or Direct Current (AC/DC).[Tinker Air Force Base]. The phase requirement if AC.[Tinker Air Force Base]. The voltage required in Volts.[Tinker Air Force Base]. The maximum power draw.[Tinker Air Force Base]. The rack identifier the unit is in.[Tinker Air Force Base]. The position in the rack if applicable.[Tinker Air Force Base]. Is the unit wideband operation capable (Y/N)?[Tinker Air Force Base]. The system that does this asset support (LMR, Giant Voice, Milstar).[Tinker Air Force Base]. Thermal loading of unit for HVAC calculations.[Tinker Air Force Base]. Is the unit capable of operating trunking P25 (Y/N)?[Tinker Air Force Base]. Trunking site ID (LMR).[Tinker Air Force Base]. Analog transmission capable (Y/N)?[Tinker Air Force Base]. Digital transmission capable (Y/N)?[Tinker Air Force Base]. For mobile units assigned to vehicles (LMR).[Tinker Air Force Base]. A description of the feature.[Tinker Air Force Base]. The material of the subject item. The size of the subject item. An indicator as to whether the feature serves as a source, sink or neither in the network. The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.

The progress of the data collection.

The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).

projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
verified (String255)	Whether or not the feature has been verified.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Communications : Repeater

(Database Feature Class Name	= CommRepeater)		
Geometry Type: Point	Accuracy: +/-1Ft.	Sensitivity: Secret	
Device used to receive, clean up a signal, and then retransmit it. [SDSFIE].			
Names and Identifiers:			
maaID (String30)	A unique identifier used by people to a	refer to this feature (note: this is not a system	

maand (Stringso)	primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
Attributes:	
netbw (CodeNetworkBandwidth)	The data transmission rate through the repeater.[AIR FORCE].
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset. [Adopted from SDSFIE].
description (String255)	A description or other unique information concerning the subject item.[AIR FORCE].
material (String16)	The material of the subject item.
size (Integer)	The size of the subject item.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
junctionType (CodeJunctionType)	An indicator as to whether the feature serves as a source, sink or neither in the network.
<u>Metadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.

sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
<u>System Keys:</u>	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Communications : Riser

(Database Feature Class Name = CommRiser) Geometry Type: Point Accuracy: +/-1Ft. Sensitivity: Secret A pipe-like structure used for the vertical conveyance of cable [SDSFIE Tinker Air Force Base]. Names and Identifiers: maaID (String30) A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value) maaAlias (String60) An alternative or former name by which the feature is refered. modelNumber (String16) The Model, Product, Catalog, or Item Number of subject item. **Attributes:** duct (CodeBoolean) A Boolean indicating the presence of a duct.[Tinker Air Force Base]. height (Double) The height of the riser duct measured from the ground surface to the top.[Tinker Air Force Base]. diameter (Double) The width of a cylindrical or circular riser as measured from the ground surface to the top.[Tinker Air Force Base]. owner (String60) A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE]. The code used to determine the type of material the riser is made of. material (String16) dateInstalled (Date) The date on which the feature was originally installed. description (String255) A description or other unique information concerning the subject item. size (Integer) The size of the subject item. The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), disposition (CodeDispositionObject) from lists or entered from field inspections. An indicator as to whether the feature serves as a source, sink or neither in the network. junctionType (CodeJunctionType) Metadata: collectionProgress (CodeProgress) The progress of the data collection. dateAcquired (Date) The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915). verified (String255) Whether or not the feature has been verified. projectType (CodeProjectType) The type of project or work activity that installed or first recorded the location of this feature. projectId (String20) A unique identifier associated with the project or work activity that installed or first recorded the location of this feature. status (CodeStatus) A temporal description of the operational status of the feature. Alternative (Integer) Discriminator used to tie features of a plan or proposal together into a version. An operator defined work area. This attribute can be used by the operator for user defined userFlag (String254) system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE]. qualityLevel (CodeSueQualityLevel) The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02. dataSource (CodeDataSource) The primary source of the data in this record. dataSource2 (CodeDataSource) The secondary source of the data in this record. sourceStatement (String255) A statement providing additional details about the source of the data. editorName (String50) The name of the individual who last edited this data. lastUpdate (Date) The date upon which any data associated with this record was last updated. System Keys: guid (String60) A globally unique identifier applied to each feature in the database for reference. metaId (Integer) An identifier used to refer to a metadata record that provide additional information about

the data in this record.

Communications : Satellite

atabase Feature Class Name = C	CommSatellitePoint)		
ometry Type: Point	Accuracy: +/-1Ft. Sensitivity: Secret		
mmunications Satellite. Used to	o retransmit signals from space. [SDSFIE].		
Names and Identifiers:			
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)		
comnName (String30)	Common Name.[AIR FORCE].		
modelNumber (String16)	The Model, Product, Catalog, or Item Number of subject item.[AIR FORCE].		
maaAlias (String60)	An alternative or former name by which the feature is refered.		
noradNo (String5)	NORAD Designation Number.[AIR FORCE].		
Attributes:			
origin (String50)	Country of Origin.[AIR FORCE].		
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].		
lvehicle (String25)	Launch vehicle used.[AIR FORCE].		
launchDate (Date)	Launch date. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).[AIR FORCE].		
description (String255)	A description or other unique information concerning the subject item.[AIR FORCE].		
material (String16)	The material of the subject item.		
size (Integer)	The size of the subject item.		
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.		
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.		
<u>Metadata:</u>			
collectionProgress (CodeProgress)	The progress of the data collection.		
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).		
verified (String255)	Whether or not the feature has been verified.		
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.		
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.		
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.		
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.		
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user define system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].		
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.		
dataSource (CodeDataSource)	The primary source of the data in this record.		
dataSource2 (CodeDataSource)	The secondary source of the data in this record.		
sourceStatement (String255)	A statement providing additional details about the source of the data.		
editorName (String50)	The name of the individual who last edited this data.		
lastUpdate (Date)	The date upon which any data associated with this record was last updated.		
<u>System Keys:</u>			
guid (String60)	A globally unique identifier applied to each feature in the database for reference.		
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.		

Communications : Segmented Cable

(Database Feature Class Name = CommSegmentedCable)			
Geometry Type: Line	Accuracy: +/-5Ft.	Sensitivity: Secret	

Used to represent a portion of the entire cable sheath as it is shown in an enclosed structure (building, manhole, vault, etc.) so that the cable sheath does not have to be drawn between enclosed structures. [SDSFIE Tinker Air Force Base].

Names and Identifiers: maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
Attributes:	
owner (String60)	A person, organization, or agency with legal control or management responsibility of th utility asset.[Adopted from SDSFIE].
cblMaterial (CodeElectricCable)	
cblSize (CodeCableDimension)	
description (String255)	A description or other unique information concerning the subject item.
directionality (CodeDirectionality)	The directionality of flow with repsect to the line's geometry.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
impedance (Double)	The number representing the total opposition to flow.
<u>Aetadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defin system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information abo the data in this record.

Communications : Segmented Cable Point

(Database Feature Class Name = CommSegmentedCablePoint)				
Geometry Type: Point	Accuracy: +/-1Ft.	Sensitivity: Secret		
The location all communication cable types. [SDSFIE].				
Names and Identifiers:				
maaID (String30)	A unique identifier used by people to refer to thi primary or foreign key value)	s feature (note: this is not a system		
name (String60)	Any commonly used name for the cable.[Tinker Air Force Base].			
maaAlias (String60)	An alternative or former name by which the feature is refered.			
Attributes:				
coreType (<u>CodeCoreType</u>)	Attributes for Core Types.[Air Force].			
bufferType (<u>CodeShoreBufferType</u>)	The types of buffers.[Tinker Air Force Base].			
cabUse (<u>CodeCableUse</u>)	The overall use of the cable.[Tinker Air Force B	ase].		

installType (CodeCableInstallationType)
owner (String60)

cblSht (<u>CodeSheathInsulateType</u>) cblLength (Double) disposition (<u>CodeDispositionObject</u>)

area (Double) perimeter (Double) segNum (Integer) cabType (<u>CodeCableType</u>) cabNo (String16) begincount (Integer) endCount (Integer) totalCount (Integer)

sheathDia (Double) mediaDiam (Double) mediaType (<u>CodeMediaType</u>) dateInstalled (Date) description (String255) material (String16) junctionType (<u>CodeJunctionType</u>)

Metadata:

collectionProgress (<u>CodeProgress</u>) dateAcquired (Date)

verified (String255) projectType (<u>CodeProjectType</u>)

projectId (String20)

status (<u>CodeStatus</u>) Alternative (Integer) userFlag (String254)

qualityLevel (CodeSueQualityLevel)

dataSource (<u>CodeDataSource</u>) dataSource2 (<u>CodeDataSource</u>) sourceStatement (String255) editorName (String50) lastUpdate (Date)

System Keys: guid (String60)

metaId (Integer)

A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE]. The type of cable sheathing or insulation.[Tinker Air Force Base]. A measurement of the longer of two linear axes.[Tinker Air Force Base]. The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.[AIR FORCE]. The size of the area, zone, or polygon in square units. The distance around the boundary of the area, zone, or subject item in linear units. The segment in which the cable section is located.[Tinker Air Force Base]. The type of cable.[Tinker Air Force Base]. Cable name or number.[Tinker Air Force Base]. Starting count of pairs or strands.[Tinker Air Force Base]. Ending count of pairs or strands.[Tinker Air Force Base]. Total number of pairs or strands associated with a particular cable.[Tinker Air Force Basel. Overall Diameter of sheath.[Tinker Air Force Base]. Diameter of gauge of individual media.[Tinker Air Force Base]. The types of media.[Tinker Air Force Base]. The date on which the feature was originally installed. A description of the feature.[Tinker Air Force Base]. The material of the subject item. An indicator as to whether the feature serves as a source, sink or neither in the network. The progress of the data collection. The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915). Whether or not the feature has been verified. The type of project or work activity that installed or first recorded the location of this feature. A unique identifier associated with the project or work activity that installed or first recorded the location of this feature. A temporal description of the operational status of the feature. Discriminator used to tie features of a plan or proposal together into a version. An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE]. The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02. The primary source of the data in this record. The secondary source of the data in this record. A statement providing additional details about the source of the data.

The installation type code for cables.[Tinker Air Force Base].

The name of the individual who last edited this data.

The date upon which any data associated with this record was last updated.

A globally unique identifier applied to each feature in the database for reference. An identifier used to refer to a metadata record that provide additional information about the data in this record.

Communications : Sensor

(Database Feature Class Name = CommSensor)Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretThe location of equipment used to detect and measure various environmental conditions (e.g.Temperature, Fire, Intrusion, etc.) [SDSFIE Austin and Pitts].

Names and Identifiers:

maaID (String30)

A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)

modelNumber (String16) maaAlias (String60) serialNumber (String16)

busName (String80)

Attributes:

sensorType (String16) owner (String60)

officeType (String30) sensLoc (String50) cblType (CodeElectricCable) sensZone (String50) annunNum (String50) description (String255) material (String16) size (Integer) disposition (CodeDispositionObject)

junctionType (CodeJunctionType)

<u>Metadata:</u>

collectionProgress (<u>CodeProgress</u>) dateAcquired (Date)

verified (String255) projectType (<u>CodeProjectType</u>)

projectId (String20)

status (<u>CodeStatus</u>) Alternative (Integer) userFlag (String254)

qualityLevel (CodeSueQualityLevel)

dataSource (<u>CodeDataSource</u>) dataSource2 (<u>CodeDataSource</u>) sourceStatement (String255) editorName (String50) lastUpdate (Date)

System Keys:

guid (String60) metaId (Integer) The Model, Product, Catalog, or Item Number of subject item.[Tinker Air Force Base]. An alternative or former name by which the feature is refered. The manufacturer's serial, or unique identification number of the subject item.[Tinker Air Force Base]. Name of the Weather Forecast Office. The type of sensor.[Tinker Air Force Base]. A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE]. National Hurricane Center, Nat. Severe Storm Forecast Center.[HSIP]. The sensor location (Interior or exterior).[Tinker Air Force Base]. Sensor cable connectivity type.[Tinker Air Force Base]. The Detection zone.[Tinker Air Force Base]. The Annunciator in which the sensor is connected.[Tinker Air Force Base]. A description of the feature.[Tinker Air Force Base]. The material of the subject item. The size of the subject item. The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.),

from lists or entered from field inspections.

An indicator as to whether the feature serves as a source, sink or neither in the network.

The progress of the data collection. The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915). Whether or not the feature has been verified. The type of project or work activity that installed or first recorded the location of this feature. A unique identifier associated with the project or work activity that installed or first recorded the location of this feature. A temporal description of the operational status of the feature. Discriminator used to tie features of a plan or proposal together into a version. An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE]. The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02. The primary source of the data in this record. The secondary source of the data in this record.

A statement providing additional details about the source of the data.

The name of the individual who last edited this data.

The date upon which any data associated with this record was last updated.

A globally unique identifier applied to each feature in the database for reference. An identifier used to refer to a metadata record that provide additional information about the data in this record.

Communications : Service Loop Point

(Database Feature Class Name = Con	nmServiceLoopPoint)	
Geometry Type: Point	Accuracy: +/-1Ft.	Sensitivity: Secret
Service loops contain extra cable that may be required in the future. [SDSFIE].		
Names and Identifiers:		
maaID (String30)	A unique identifier used by people to refer to this primary or foreign key value)	feature (note: this is not a system
maaAlias (String60)	An alternative or former name by which the featu	re is refered.
Attributes:		
length (Double)	The length of cable contained in the service loop.	[AIR FORCE].
owner (String60)	A person, organization, or agency with legal cont	rol or management responsibility of the

	utility asset.[Adopted from SDSFIE].
material (String16)	The material of the subject item.
description (String255)	A description or other unique information concerning the subject item.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
junctionType (CodeJunctionType)	An indicator as to whether the feature serves as a source, sink or neither in the network.
<u>Metadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (CodeStatus)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (<u>CodeDataSource</u>)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Communications : Speaker

 (Database Feature Class Name = CommSpeaker)

 Geometry Type: Point
 Accuracy: +/-1Ft.

 Sensitivity: Secret

 A device that converts an electrical signal into sound.
 Generally used as part of a public address,

 giant voice, or mass notification system. [SDSFIE].

Na	mes and Identifiers:	
	maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
	name (String20)	The local name of the Speaker.[AIR FORCE].
	maaAlias (String60)	An alternative or former name by which the feature is refered.
	modelNumber (String16)	The Model, Product, Catalog, or Item Number of subject item.[AIR FORCE].
At	tributes:	
	disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.[AIR FORCE].
	weather (<u>CodeBoolean</u>)	Indicates a weather proof speaker case.[AIR FORCE].
	multp25 (CodeBoolean)	Indicates a 25 Volt multi-tap transformer.[AIR FORCE].
	owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
	multp70 (CodeBoolean)	Indicates a 70 Volt multi-tap transformer.[AIR FORCE].
	rmsWatage (Integer)	Average power handling capability over time, in watts AKA average power or mean power. [AIR FORCE].
	diameter (Double)	Diameter, if round or cylindrical.[AIR FORCE].
	width (Double)	Width.[AIR FORCE].
	height (Double)	Height.[AIR FORCE].
	depth (Double)	Depth.[AIR FORCE].

freqRngH (Double) Highest effective frequency speaker emits in Hz.[AIR FORCE]. freqRngL (Double) Lowest effective frequency speaker emits in Hz.[AIR FORCE]. weight (Double) Weight of speaker.[AIR FORCE]. dispertnH (Integer) Angle of horizontal sound dispersion in degrees.[AIR FORCE]. dispertnV (Integer) Angle of vertical sound dispersion in degrees.[AIR FORCE]. sensitivty (String50) Speaker sensitivity or efficiency measured as dB/W/m - decibels output for an input of one nominal watt measured at on meter from the speaker.[AIR FORCE]. spkimp (CodeSpeakerImpedance) Input impedance.[AIR FORCE]. description (String255) A description or other unique information concerning the subject item.[AIR FORCE]. material (String16) The material of the subject item. junctionType (CodeJunctionType) An indicator as to whether the feature serves as a source, sink or neither in the network. Metadata: collectionProgress (CodeProgress) The progress of the data collection. dateAcquired (Date) The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915). verified (String255) Whether or not the feature has been verified. The type of project or work activity that installed or first recorded the location of this projectType (CodeProjectType) feature. projectId (String20) A unique identifier associated with the project or work activity that installed or first recorded the location of this feature. status (CodeStatus) A temporal description of the operational status of the feature. Alternative (Integer) Discriminator used to tie features of a plan or proposal together into a version. userFlag (String254) An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE]. qualityLevel (CodeSueQualityLevel) The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02. The primary source of the data in this record. dataSource (CodeDataSource) dataSource2 (CodeDataSource) The secondary source of the data in this record. sourceStatement (String255) A statement providing additional details about the source of the data. editorName (String50) The name of the individual who last edited this data. lastUpdate (Date) The date upon which any data associated with this record was last updated. System Keys: guid (String60) A globally unique identifier applied to each feature in the database for reference. metaId (Integer) An identifier used to refer to a metadata record that provide additional information about the data in this record.

Communications : Splice

1 7 1

(Database Feature Class Name = CommSplice)Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretA joining of two or more communications cables, each cable contributing one end of itself to thesplice. [SDSFIE Tinker Air Force Base].

A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
An alternative or former name by which the feature is refered.
The Model, Product, Catalog, or Item Number of subject item.
The signal loss introduced by the splice
Discriminator. The type of splice.[Austin and Pitts].
The material composition of the splice case.[Austin and Pitts].
A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
The method of spicing used.[Austin and Pitts].
Length of the splice case.[AIR FORCE].
The inside diameter of the splice case.[AIR FORCE].

casType (<u>CodeSpliceCaseTyp</u>)	Used to describe the type of splice case.[AIR FORCE].
ecsType (CodeSpliceCaseEncapsulate)	The type of encapsulate used.[AIR FORCE].
description (String255)	Any description of the feature.
size (Integer)	The size of the subject item.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
Metadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (<u>CodeDataSource</u>)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Communications : Splitter

(Database Feature Class Name = CommSplitter)Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretA device to split a signal transmission into two or more signal paths while minimizing
attenuation and distortion, generally used in broadband cable systems. [SDSFIE].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
modelNumber (String16)	The Model, Product, Catalog, or Item Number of subject item.[Tinker Air Force Base].
Attributes:	
inSigLvl (Double)	The input signal amplitude.[Tinker Air Force Base].
outsigLvl (Double)	The amplitude of the output signal.[Tinker Air Force Base].
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
spltType (<u>CodeSplitterType</u>)	Discriminator - Splitter Type.[Tinker Air Force Base].
loss (Double)	The signal amplitude loss of splitter.[Tinker Air Force Base].
bandwidth (Double)	The difference between the highest and lowest frequencies that a splitter can pass.[Tinker Air Force Base].
impedIn (Double)	The input impedance of the amplifier[Tinker Air Force Base].
impedOut (Double)	The output impedance of the amplifier[Tinker Air Force Base].
description (String255)	A description of the feature.[Tinker Air Force Base].
material (String16)	The material of the subject item.
size (Integer)	The size of the subject item.

disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
Metadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Communications : Telephone

(Database Feature Class Name = CommTelephone) Geometry Type: Point Accuracy: +/-1Ft. Sensitivity: Secret The location of an end user telephone set used for voice communications. [SDSFIE Tinker Air Force Base]. Names and Identifiers:

i tumes und identifierst	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String80)	Indicates the name of the feature.[HSIP].
modelNumber (String16)	The Model, Product, Catalog, or Item Number of subject item.[Tinker Air Force Base].
maaAlias (String60)	An alternative or former name by which the feature is refered.
serialNumber (String16)	The manufacturer's serial, or unique identification number of the subject item.[Tinker Air Force Base].
Attributes:	
color (<u>CodeColor</u>)	The color of the emergency telephone.[FGDC].
appearance (String50)	A description of the appearance of phone.[FGDC].
status (CodeStatus)	A description of the status of the emergency telephone.[FGDC].
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
condition (CodePoleCondition)	Indicates a state of being, or readiness for use of the subject item (e.g., good, fair, poor), from lists or field inspections.[FGDC].
phoneType (<u>CodePhoneType</u>)	The type of phone.[Tinker Air Force Base].
phoneNumber (String16)	The phone number of the location.[Tinker Air Force Base].
description (String255)	A description of the feature.[Tinker Air Force Base].
material (String16)	The material of the subject item.
size (Integer)	The size of the subject item.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.),

from lists or entered from field inspections.

junctionType (<u>CodeJunctionType</u>)

An indicator as to whether the feature serves as a source, sink or neither in the network.

The date on which the subject item was originally acquired or purchased. Format for date

The type of project or work activity that installed or first recorded the location of this

A unique identifier associated with the project or work activity that installed or first

An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be

Discriminator used to tie features of a plan or proposal together into a version.

Metadata:

collectionProgress (<u>CodeProgress</u>) dateAcquired (Date)

verified (String255) projectType (<u>CodeProjectType</u>)

projectId (String20)

status (<u>CodeStatus</u>) Alternative (Integer) userFlag (String254)

	used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

The progress of the data collection.

recorded the location of this feature.

feature.

Whether or not the feature has been verified.

is YYYYMMDD (i.e., September 15, 1994 = 19940915).

A temporal description of the operational status of the feature.

Communications : Telephone Booth

(Database Feature Class Name = CommTelephoneBooth) Geometry Type: Point Accuracy: +/-1Ft.

Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretThe location of one or more outdoor telephones either in an open air bank or enclosed within a
booth or other enclosure. [SDSFIE Tinker Air Force Base].

Names and Identifiers:

maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
modelNumber (String16)	The Model, Product, Catalog, or Item Number of subject item.[Tinker Air Force Base].
maaAlias (String60)	An alternative or former name by which the feature is refered.
serialNumber (String16)	The manufacturer's serial, or unique identification number of the subject item.[Tinker Air Force Base].
Attributes:	
perimeter (Double)	The distance around the boundary of the area, zone, or subject item in linear units.
area (Double)	The size of the area, zone, or polygon in square units.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
description (String255)	A description of the feature.[Tinker Air Force Base].
material (String16)	The material of the subject item.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
junctionType (CodeJunctionType)	An indicator as to whether the feature serves as a source, sink or neither in the network.
<u>Metadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first

recorded the location of this feature.
A temporal description of the operational status of the feature.
Discriminator used to tie features of a plan or proposal together into a version.
An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
The primary source of the data in this record.
The secondary source of the data in this record.
A statement providing additional details about the source of the data.
The name of the individual who last edited this data.
The date upon which any data associated with this record was last updated.
A globally unique identifier applied to each feature in the database for reference.
An identifier used to refer to a metadata record that provide additional information about the data in this record.

Communications : Terminal

(Database Feature Class Name = CommTerminal)Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: Secreta device attached to the end of a wire or cable or to an electrical apparatus for convenience inmaking connections [SDSFIE Tinker Air Force Base].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
modelNumber (String16)	The Model, Product, Catalog, or Item Number of subject item.
maaAlias (String60)	An alternative or former name by which the feature is refered.
Attributes:	
caseType (<u>CodeTerminalCaseType</u>)	The type of terminal case.[Austin and Pitts].
termType (CodeTerminalType)	The type of terminal[Austin and Pitts].
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
description (String255)	A description of the feature.[Tinker Air Force Base].
size (Integer)	The size of the subject item.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
<u>Metadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (CodeStatus)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.

editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
<u>System Keys:</u>	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Communications : Terminator

(Database Feature Class Name = CommTerminator)

Geometry Type: Point Accuracy: +/-1Ft. Sensitivity: Secret A device that terminates an electrical or optical transmission media. [SDSFIE Tinker Air Force Base].

Names and Identifiers:

maaID (String30)

modelNumber (String16) maaAlias (String60)

Attributes:

termType (String16) connt (<u>CodeCableConnectorType</u>) owner (String60)

cbldim3 (<u>CodeCableGaDimensions</u>) description (String255) disposition (<u>CodeDispositionObject</u>)

junctionType (CodeJunctionType)
impedance (Double)

<u>Metadata:</u>

collectionProgress (<u>CodeProgress</u>) dateAcquired (Date)

verified (String255) projectType (<u>CodeProjectType</u>)

projectId (String20)

status (<u>CodeStatus</u>) Alternative (Integer) userFlag (String254)

qualityLevel (CodeSueQualityLevel)

dataSource (<u>CodeDataSource</u>) dataSource2 (<u>CodeDataSource</u>) sourceStatement (String255) editorName (String50) lastUpdate (Date)

System Keys:

guid (String60) metaId (Integer) A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)

The Model, Product, Catalog, or Item Number of subject item.[Tinker Air Force Base]. An alternative or former name by which the feature is refered.

The type of terminator.[AIR FORCE].

The type of connector used for the terminator.[AIR FORCE].

A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].

Tertiary. Wire Gauge (AWG) or Core Size (in um).[AIR FORCE].

A description of the feature.[Tinker Air Force Base].

The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.

An indicator as to whether the feature serves as a source, sink or neither in the network. A measure of the apparent opposition in an electrical circuit to the flow of an alternating

A measure of the apparent opposition in an electrical circuit to the now of an alternating current that is analogous to the actual electrical resistance to a direct current and that is the ratio of effective electromotive force to the effective current.[Tinker Air Force Base].

The progress of the data collection.

The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).

Whether or not the feature has been verified.

The type of project or work activity that installed or first recorded the location of this feature.

A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.

A temporal description of the operational status of the feature.

Discriminator used to tie features of a plan or proposal together into a version.

An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].

The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.

The primary source of the data in this record.

The secondary source of the data in this record.

A statement providing additional details about the source of the data.

The name of the individual who last edited this data.

The date upon which any data associated with this record was last updated.

A globally unique identifier applied to each feature in the database for reference. An identifier used to refer to a metadata record that provide additional information about the data in this record.

Communications : Twisted Pair Line

(Database Feature Class Name = CommTwistedPairLine)Geometry Type: LineAccuracy: +/-5Ft.Sensitivity: SecretMulti-conductor Communications cable generally consisting of copper wire, with each pair beingtwisted in order to minimize signal loss due to electromagnetic radiation. [SDSFIE].

U	
Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String60)	The name of the feature.[Tinker Air Force Base].
maaAlias (String60)	An alternative or former name by which the feature is refered.
Attributes:	
verticalClearance (Double)	The clearance in feet between the lowest point under the cable line and the water's surface at Mean High Water (MHW) referenced to a reading on the appropriate gage.[REEGIS].
cabUse (<u>CodeCableUse</u>)	Discriminator - The overall use of the cable.
noPairs (Integer)	The number of wire pairs in the cable
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
installType (CodeCableInstallationType)	The installation type code for cables.[Tinker Air Force Base].
cblSht (CodeSheathInsulateType)	The type of cable sheathing or insulation.[Tinker Air Force Base].
riverMile (Double)	The reference of the river mile associated with the cable.[REEGIS].
cblSize (CodeCableDimension)	The wire gauge of the cable. [Austin and Pitts].
resistance (Double)	The degree of tendency of the cable to oppose the flow of current.
numprLow (Integer)	The lowest numbered pair within the cable[Tinker Air Force Base].
numprHigh (Integer)	The highest numbered pair within the cable[Tinker Air Force Base].
coreType (<u>CodeCoreType</u>)	The type of core in the cable.[Tinker Air Force Base].
cabOffset (Double)	The distance to the cable as measured from the edge of a paved surface.[Tinker Air Force Base].
length (Double)	A measurement of the longer of two linear axes.[Tinker Air Force Base].
diameter (Double)	The width of a cylindrical or circular cable.[Tinker Air Force Base].
cabElev (CodeCableElevation)	The vertical location of the cable.
cblMaterial (CodeElectricCable)	The material composition of the cable.[Tinker Air Force Base].
description (String255)	A description of the feature.[Tinker Air Force Base].
directionality (CodeDirectionality)	The directionality of flow with repsect to the line's geometry.
impedance (Double)	The number representing the total opposition to flow.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
Metadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (CodeStatus)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.

lastUpdate (Date)	The date upon which any data associated with this record was last updated.
<u>System Keys:</u>	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Communications : Vault

(Database Feature Class Name = CommVaultSite)

Geometry Type: Point Accuracy: +/-1Ft. Sensitivity: Secret A special structure for transitioning the outside cable plant from horizontal orientation to vertical orientation in preparation for termination on the distribution frame. [SDSFIE Tinker Air Force Base].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String20)	The standard identifier name (i.e. MH-19).[AIR FORCE].
maaAlias (String60)	An alternative or former name by which the feature is refered.
modelNumber (String16)	The Model, Product, Catalog, or Item Number of subject item.[Tinker Air Force Base].
serialNumber (String16)	The manufacturer's serial, or unique identification number of the subject item.[Tinker Air Force Base].
Attributes:	
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
noCircuit (Integer)	The number of circuits housed in the vault.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
area (Double)	The size of the area, zone, or polygon in square units.
perimeter (Double)	The distance around the boundary of the area, zone, or subject item in linear units.
vltMaterial (CodeEnclosureMaterials)	Used to describe the material composition of the vault.[AIR FORCE].
dateInstalled (Date)	The date on which the feature was originally installed.
diameter (Double)	Diameter.[AIR FORCE].
depth (Double)	Depth of horizontal cross-section.[AIR FORCE].
width (Double)	Width of horizontal cross section.[AIR FORCE].
height (Double)	Height.[AIR FORCE].
description (String255)	A description or other unique information concerning the subject item.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
<u>Metadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (CodeStatus)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.

lastUpdate (Date)	The date upon which any data associated with this record was last updated.
<u>System Keys:</u>	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Communications : Vertical Site

(Database Feature Class Name = CommVerticalSite)

Geometry Type: Point Accuracy: +/-1Ft. Sensitivity: Secret A vertical is part of a mainframe where the outside cable plant terminates. [SDSFIE Tinker Air Force Base].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
Attributes:	
covtbk (CodeVerticalConnectingBlock)	The type of the connector block.[AIR FORCE].
covtht (CodeVerticalHeight)	The height of this vertical in the frame.[AIR FORCE].
covtma (CodeVerticalMountingArea)	The spacing between mounting brackets for mounting MDF connector blocks.[AIR FORCE].
covtmb (CodeVerticalMountBlock)	The type of mounting bar.[AIR FORCE].
covtsw (CodeVerticalShelfWidth)	The width of the mounting shelf for connector blocks.[AIR FORCE].
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
covtty (<u>CodeVerticalType</u>)	The type of vertical.[AIR FORCE].
area (Double)	The size of the area, zone, or polygon in square units.
perimeter (Double)	The distance around the boundary of the area, zone, or subject item in linear units.
grndbar (<u>CodeBoolean</u>)	Indicates the presences of a grounding bar.[AIR FORCE].
grdrails (<u>CodeBoolean</u>)	Indicates the presences of a guardrail.[AIR FORCE].
endguard (CodeBoolean)	Indicates the presences of an end guard.[AIR FORCE].
material (String16)	The material of the subject item.
description (String255)	A description or other unique information concerning the subject item.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
<u>letadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (<u>CodeDataSource</u>)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
	A statement providing additional details about the source of the data.
sourceStatement (String255)	
sourceStatement (String255) editorName (String50)	The name of the individual who last edited this data.

guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about
	the data in this record.

Communications : Video Site

(Database Feature Class Name = CommVideoSite)Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretThe location of equipment used to receive or transmit the visual portion of a communicationssignal. [SDSFIE Tinker Air Force Base].

Names and Identifiers:

maaID (String30) A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value) name (String30) Name of the recreation feature.[Tinker Air Force Base]. maaAlias (String60) An alternative or former name by which the feature is refered. modelNumber (String16) The Model, Product, Catalog, or Item Number of subject item.[Tinker Air Force Base]. serialNumber (String15) The manufacturer's serial, or unique identification number of the subject item.[Tinker Air Force Basel. Attributes: convType (String60) A type of media converter.[Tinker Air Force Base]. area (Double) The size of the area, zone, or polygon in square units. perimeter (Double) The distance around the boundary of the area, zone, or subject item in linear units. owner (String60) A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE]. sysDescription (String255) The system description.[Tinker Air Force Base]. transType (String50) The transmission type protocol.[Tinker Air Force Base]. bandwidth (Double) The data rate.[Tinker Air Force Base]. crypto (CodeBoolean) Classified or Unclassified (Y/N)?[Tinker Air Force Base]. description (String255) The name or type of the equipment.[Tinker Air Force Base]. material (String16) The material of the subject item. disposition (CodeDispositionObject) The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections. An indicator as to whether the feature serves as a source, sink or neither in the network. junctionType (CodeJunctionType) Metadata: collectionProgress (CodeProgress) The progress of the data collection. dateAcquired (Date) The date on which the subject item was originally acquired or purchased. Format for date

verified (String255) projectType (<u>CodeProjectType</u>)

projectId (String20)

status (<u>CodeStatus</u>) Alternative (Integer) userFlag (String254)

qualityLevel (CodeSueQualityLevel)

dataSource (<u>CodeDataSource</u>) dataSource2 (<u>CodeDataSource</u>) sourceStatement (String255) editorName (String50) lastUpdate (Date)

System Keys: guid (String60) metaId (Integer) A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.

The type of project or work activity that installed or first recorded the location of this

A temporal description of the operational status of the feature.

is YYYYMMDD (i.e., September 15, 1994 = 19940915).

Whether or not the feature has been verified.

feature.

Discriminator used to tie features of a plan or proposal together into a version. An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].

The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.

The primary source of the data in this record.

The secondary source of the data in this record.

A statement providing additional details about the source of the data.

The name of the individual who last edited this data.

The date upon which any data associated with this record was last updated.

A globally unique identifier applied to each feature in the database for reference. An identifier used to refer to a metadata record that provide additional information about the data in this record.

Communications : Voice Switch

(Database Feature Class Name = CommVoiceSwitch)Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretThe location of equipment used to receive or transmit the voice portion of a communicationssignal. [SDSFIE FGDC Utilities Classification].

Names and Identifiers:	····· · · · · ·]
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system
	primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
serialNumber (String15)	The manufacturer's serial, or unique identification number of the subject item.[Tinker Air Force Base].
modelNumber (String12)	The Model, Product, Catalog, or Item Number of subject item.[Tinker Air Force Base].
Attributes:	
voipTrk (String50)	Number of Trunks Voice IP switch -to- DCO PBX.[Tinker Air Force Base].
numUsers (Integer)	The number of users capability in Voice Mail system.[Tinker Air Force Base].
trkUsed (String50)	The total number of trunk lines being used.[Tinker Air Force Base].
linCapNo (String50)	The number of lines capability.[Tinker Air Force Base].
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset. [Adopted from SDSFIE].
numLused (Integer)	The number of lines used.[Tinker Air Force Base].
area (Double)	The size of the area, zone, or polygon in square units.
perimeter (Double)	The distance around the boundary of the area, zone, or subject item in linear units.
swType (String20)	The code for the different switch types.[Tinker Air Force Base].
softVer (String50)	The software version release number.[Tinker Air Force Base].
swCap (Double)	The number of lines that the software is capable of running.[Tinker Air Force Base].
hwCap (Double)	The total hardware line capacity.[Tinker Air Force Base].
anlgLused (Integer)	The number of analog lines being used.[Tinker Air Force Base].
digtLused (Integer)	The number of digital lines being used.[Tinker Air Force Base].
isdnLused (Integer)	The number of ISDN lines being used.[Tinker Air Force Base].
trkCap (Double)	The total number of trunk lines capacity.[Tinker Air Force Base].
description (String255)	A description or other unique information concerning the subject item.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
Metadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (CodeStatus)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
last Indata (Data)	The date ypon which any date accordent with this record was last undeted

lastUpdate (Date)

System Keys:

guid (String60) metaId (Integer)	A globally unique identifier applied to each feature in the database for reference. An identifier used to refer to a metadata record that provide additional information about the data in this record.
Communications : Waveguide Lin	e
(Database Feature Class Name = Con	nmWaveguideLine)
Geometry Type: Line	Accuracy: +/-5Ft. Sensitivity: Secret
	ct the propagation of electromagnetic waves. [SDSFIE].
Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String60)	The name of the feature.[Tinker Air Force Base].
maaAlias (String60)	An alternative or former name by which the feature is refered.
<u>Attributes:</u>	
installType (CodeCableInstallationType)	The installation type code for cables.[Tinker Air Force Base].
cblSht (<u>CodeSheathInsulateType</u>)	The type of cable sheathing or insulation.[Tinker Air Force Base].
length (Double)	A measurement of the longer of two linear axes.[Tinker Air Force Base].
diameter (Double)	The width of a cylindrical or circular cable.[Tinker Air Force Base].
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
cabElev (CodeCableElevation)	The vertical location of the cable.[Tinker Air Force Base].
cblMaterial (<u>CodeElectricCable</u>)	The material composition of the cable.[Tinker Air Force Base].
riverMile (Double)	The river mile marker.[REEGIS].
verticalClearance (Double)	The clearance in feet between the lowest point under the cable line and the water's surface at Mean High Water (MHW) referenced to a reading on the appropriate gage.[REEGIS].
cabType (<u>CodeCableType</u>)	The type of cable.[Tinker Air Force Base].
frequency (Double)	The number of cycles per unit time of the energy in the waveguide[Tinker Air Force Base].
cabOffset (Double)	The distance to the cable as measured from the edge of a paved surface.[Tinker Air Force Base].
cabUse (<u>CodeCableUse</u>)	Discriminator - The overall use of the cable.
description (String255)	A description of the feature.[Tinker Air Force Base].
directionality (<u>CodeDirectionality</u>)	The directionality of flow with repsect to the line's geometry.
impedance (Double)	The number representing the total opposition to flow.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
Metadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (<u>CodeDataSource</u>)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.

Data Set: Deicing

Deicing : Culvert Center Line

(Database Feature Class Name = DeicingCulvertCenterline)

Geometry Type: Line Accuracy: +/-5Ft. Sensitivity: Secret The centerline of a pipe or structure, the purpose of which is for the interception and conveyance of deicing fluid. [Adapted from SDSFIE].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String30)	Any commonly used name of the culvert.[Derived from SDSFIE].
maaAlias (String60)	An alternative or former name by which the feature is refered.
canalName (String30)	The canal name that the structure is located on.[Derived from USACE].
Attributes:	
angle (Double)	The angle that the structure symbol should appear on a map.[Derived from USACE].
control (String30)	The means in which the water being controlled; i.e., by gate, weir, flashboard, pump, lock or uncontrolled?[Derived from USACE].
peakFlow (Double)	Q10 runoff (cubic feet per second of the 10 year peak flow associated with a ten year storm).[Derived from ARMY].
purpose (String30)	A summary of the intentions with which the data set was developed.[Derived from USACE].
estuary (String25)	The name of the Estuary, if applicable.[Derived from USACE].
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
area (Double)	The size of the area, zone, or polygon in square units.
perimeter (Double)	The distance around the boundary of the area, zone, or subject item in linear units.
gateType (<u>CodeCulvert</u>)	Discriminator. The type of gate.[Derived from SDSFIE].
drainagePattern (CodeDrainagePattern)	The drainage pattern of the material surrounding the culvert.[Derived from SDSFIE].
drainageZone (CodeDrainageZone)	The local name of assigned the hydrographic drainage zone.[Derived from SDSFIE].
materialTexture (CodeDrainageDensity)	The texture of the material surrounding the culvert.[Derived from SDSFIE].
slopeBot (Double)	The slope of the bottom of the subject item expressed as a percentage.[Derived from SDSFIE].
invElv2 (Double)	The dimension indicating the elevation of the bottom of pipe (i.e., pipe invert) at node_id_2 in feet (English units) or meters (SI units) above some datum.[Derived from SDSFIE].
invElv1 (Double)	The elevation of the bottom of pipe (i.e., pipe invert) at node_id_1 in feet (English units) or meters (SI units) above some datum.[Derived from SDSFIE].
culvLength (Double)	The length of culvert, measured from node to node along the culvert centerline .[Derived from SDSFIE].
lined (<u>CodeBoolean</u>)	A boolean indicating whether the culvert is lined or not (Y = YES and N = NO)?[Derived from SDSFIE].
flowType (String15)	The type of flow such as culvert, lock, pump, spillway or weir.[Derived from USACE].
material (CodePipeMaterial)	The material composition of the subject item, such as concrete or corrugated metal, etc.[Derived from USACE].
source (String20)	The event's source of information.[Derived from USACE].
critical (<u>CodeBoolean</u>)	A boolean indicating whether this is a 'critical' structure ($Y = YES$ or $N = NO$).[Derived from USACE].
voltReq (CodeVoltageRequirements)	Voltage Requirements.[Derived from AIR FORCE].
size (CodePipeDiameter)	The size of the diameter of the pipe opening in inches.[Derived from ARMY].
description (String255)	A description or other unique information concerning the subject item.[Derived from ARMY].

directionality (CodeDirectionality) The directionality of flow with repsect to the line's geometry. The number representing the total opposition to flow. impedance (Double) disposition (CodeDispositionObject) The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections. Metadata: collectionProgress (CodeProgress) The progress of the data collection. verified (String255) Whether or not the feature has been verified. verified (CodeBoolean) A boolean indicating whether that a structure has been repositioned and with good source (Y = YES or N = NO).[Derived from USACE]. dateAcquired (Date) The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915). The type of project or work activity that installed or first recorded the location of this projectType (CodeProjectType) feature. projectId (String20) A unique identifier associated with the project or work activity that installed or first recorded the location of this feature. status (CodeStatus) A temporal description of the operational status of the feature. Alternative (Integer) Discriminator used to tie features of a plan or proposal together into a version. userFlag (String254) An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE]. The subsurface utility engineering quality level assigned to utilities features as defined in qualityLevel (CodeSueQualityLevel) ASCE38-02. dataSource (CodeDataSource) The primary source of the data in this record. dataSource2 (CodeDataSource) The secondary source of the data in this record. sourceStatement (String255) A statement providing additional details about the source of the data. editorName (String50) The name of the individual who last edited this data. lastUpdate (Date) The date upon which any data associated with this record was last updated. System Keys: guid (String60) A globally unique identifier applied to each feature in the database for reference. metaId (Integer) An identifier used to refer to a metadata record that provide additional information about the data in this record.

Deicing : Culvert End

(Database Feature Class Name = DeicingCulvertEnd)

Geometry Type: PointAccuracy: +/-5Ft.Sensitivity: SecretA pipe or structure, the purpose of which is for the interception and conveyance of surface watertransported in open drainage lines and ditches [Adapted from SDSFIE].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
Attributes:	
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
material (String16)	The material of the subject item.
description (String255)	A description or other unique information concerning the subject item.
size (Integer)	The size of the subject item.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
<u>Metadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection.
verified (String255)	Whether or not the feature has been verified.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.

projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (<u>CodeDataSource</u>)	The primary source of the data in this record.
dataSource2 (<u>CodeDataSource</u>)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Deicing : Discharge Point

8 8			
(Database Feature Class Name = DeicingDischargePoint)			
Geometry Type: Point	Accuracy: +/-1Ft.	Sensitivity: Secret	
Any location where deicing pipes directly discharge effluent. [Adapted from SDSFIE].			

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
Attributes:	
disposition (CodeDispositionObject)	The status of the subject item from lists or entered from field inspections.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
effluentDischargeType (String16)	A field indicating the kind, class, or group of the subject item.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
sysType (String16)	The type of deicing fluid discharge system.[Derived from USACE OPERATIONS].
description (String255)	A description or other unique information concerning the subject item.
material (String16)	The material of the subject item.
size (Integer)	The size of the subject item.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
<u>letadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection.
verified (String255)	Whether or not the feature has been verified.
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (CodeStatus)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.

lastUpdate (Date)	The date upon which any data associated with this record was last updated.
<u>System Keys:</u>	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metald (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Deicing : Drainage Basin

 (Database Feature Class Name = DeicingDrainageBasin)

 Geometry Type: Polygon
 Accuracy: +/-5Ft.
 Sensitivity: Confidential

 An area in which surface runoff collects and from which it is carried by a drainage system.

 [Adapted from SDSFIE].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
Attributes:	
area (Double)	The size of the area, zone, or polygon in square units.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
gradeMean (Double)	The average grade in the drainage basin.
gradeMin (Double)	The minimum or shallowest grade in the drainage basin.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset. [Adopted from SDSFIE].
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
maxGrade (Double)	The maximum or steepest grade in the drainage basin.
perimeter (Double)	The distance around the boundary of the area, zone, or subject item in linear units.
description (String255)	A description or other unique information concerning the subject item.
material (String16)	The material of the subject item.
valveDrain(String50)	The name of the valve through which the drainage area flows.
<u>Metadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection.
verified (String255)	Whether or not the feature has been verified.
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user define system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Deicing : Drainage Divide

(Database Feature Class Name = DeicingDrainageDivide)

Geometry Type: Line Accuracy: +/-5Ft. Sensitivity: Secret The border of a drainage basin where one side directs runoff to one basin and the other side directs runoff to a different basin. [Adapted from SDSFIE].

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mes and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
tributes:	
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
description (String255)	Any brief description of the feature.
directionality (CodeDirectionality)	The directionality of flow with repsect to the line's geometry.
material (String16)	The material of the subject item.
size (Integer)	The size of the subject item.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
impedance (Double)	The number representing the total opposition to flow.
etadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
verified (String255)	Whether or not the feature has been verified.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (<u>CodeDataSource</u>)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
stem Keys:	-
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Deicing : Fitting

(Database Feature Class Name = DeicingFitting)Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretA fitting is an item used to connect, cap, plug or otherwise alter a pipe deicing fluid [Adaptedfrom SDSFIE].

A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
An alternative or former name by which the feature is refered.
The Model, Product, Catalog, or Item Number of subject item.
The manufacturer's serial, or unique identification number of the subject item.
The depth below the ground surface or cover measured from the top of the subject item.

fitLength (Double) The overall length of the	he fitting.
	ct item (e.g., permanent, temporary, proposed, abandoned, etc.),
	subject item was originally acquired or purchased. Format for date , September 15, 1994 = 19940915).
fitWidth (Double) The width dimension of	of the subject item measured at its' widest point.
owner (String60) A person, organization utility asset.[Adopted f	a, or agency with legal control or management responsibility of the from SDSFIE].
	signated size, or nominal (i.e., rounded to the nearest unit) diameter g., 1 in gas hydrant, 2 in meter, 6 in pipe).
material (<u>CodePipeMaterial</u>) The material composition plastic, etc.	ion of the subject item, such as wood, concrete, steel, cast iron,
type (String16) Discriminator. The kin	id, class, or group of the subject item.
	ne depth measured from top of ground's surface (or grade) to top of ystem line fitting.[Derived from Air Force].
description (String255) A description or other	unique information concerning the subject item.
junctionType (<u>CodeJunctionType</u>) An indicator as to whe	ther the feature serves as a source, sink or neither in the network.
Metadata:	
collectionProgress (CodeProgress) The progress of the dat	ta collection.
verified (String255) Whether or not the feat	ture has been verified.
	subject item was originally acquired or purchased. Format for date , September 15, 1994 = 19940915).
projectType (<u>CodeProjectType</u>) The type of project or v feature.	work activity that installed or first recorded the location of this
projectId (String20) A unique identifier ass recorded the location of	sociated with the project or work activity that installed or first of this feature.
status (<u>CodeStatus</u>) A temporal description	n of the operational status of the feature.
Alternative (Integer) Discriminator used to t	tie features of a plan or proposal together into a version.
system processes. It do	ork area. This attribute can be used by the operator for user defined bes not affect the subject items data integrity and should not be ct items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>) The subsurface utility of ASCE38-02.	engineering quality level assigned to utilities features as defined in
dataSource (CodeDataSource) The primary source of	the data in this record.
dataSource2 (<u>CodeDataSource</u>) The secondary source	of the data in this record.
sourceStatement (String255) A statement providing	additional details about the source of the data.
editorName (String50) The name of the indivi	idual who last edited this data.
lastUpdate (Date) The date upon which a	ny data associated with this record was last updated.
System Keys:	
guid (String60) A globally unique iden	tifier applied to each feature in the database for reference.
metaId (Integer) An identifier used to re the data in this record.	efer to a metadata record that provide additional information about

Deicing : Flow Control Device

(Database Feature Class Name = DeicingFlowControlPoint)Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretDevices for a storm water system to control the pressure in and out of the open channel.[Adapted from SDSFIE].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
modelNumber (String12)	The Model, Product, Catalog, or Item Number of subject item.
serialNumber (String15)	The manufacturer's serial, or unique identification number of the subject item.
Attributes:	
cntrlElv (Double)	The elevation at the centerline of the flow control device, in feet (English units) or meters (SI units) above some datum.

disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
installType (CodePumpSta)	The type installation of the subject item.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
depth (Double)	The depth below the ground surface or cover measured from the top of the subject item.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset. [Adopted from SDSFIE].
length (Double)	The overall length of the flow control.
width (Double)	The width dimension of the subject item, measured from opposite inside faces.
size (<u>CodePipeDiameter</u>)	The manufacturers designated size, or nominal (i.e., rounded to the nearest unit) diameter for the subject item (e.g., 1 in gas hydrant, 2 in meter, 6 in pipe).
type (String16)	A field indicating the kind, class, or group of the subject item.
description (String255)	A description or other unique information concerning the subject item.
material (String16)	The material of the subject item.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
<u>Metadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection.
verified (String255)	Whether or not the feature has been verified.
source (String255)	The source of the deicing flow.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Deicing : Glycol Recovery Pit

(Database Feature Class Name = De	icingGlycolRecoveryPit)	
Geometry Type: Point	Accuracy: +/-5Ft.	Sensitivity: Secret
Designated places for glycol recovery vehicles to dump the recovered glycol		
Names and Identifiers:		
maaID (String30)	A unique identifier used by people to refer to this primary or foreign key value)	feature (note: this is not a system
maaAlias (String60)	An alternative or former name by which the featu	re is refered.
Attributes:		
material (String16)	The material of the subject item.	
description (String255)	A description or other unique information concern	ning the subject item.
size (Integer)	The size of the subject item.	
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, ter from lists or entered from field inspections.	mporary, proposed, abandoned, etc.),
Metadata:		
collectionProgress (CodeProgress)	The progress of the data collection.	

verified (String255)	Whether or not the feature has been verified.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Deicing : Inlet

 (Database Feature Class Name = DeicingInlet)
 Geometry Type: Point
 Accuracy: +/-1Ft.
 Sensitivity: Secret

 The location where deicing fluid is collected and received into the utility system. [Adapted from SDSFIE].
 SDSFIE].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
modelNumber (String12)	The Model, Product, Catalog, or Item Number of subject item.
Attributes:	
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
capacityDgn (Double)	The design flow capacity of the subject item.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
inletSt (CodeInlets)	Discriminator. The step domain code for an inlet.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset. [Adopted from SDSFIE].
invertElv (Double)	The top surface elevation of the subject item's interior floor/bottom in feet (English units) or meters (SI units) above some datum.
weirElevation (Double)	Elevation of the weir invert.
description (String255)	A description or other unique information concerning the subject item.
pierCode (String7)	The one-letter code for the terminal pier where the inlet is located
gateNumber (String20)	The number of the terminal gate where the inlet is located.
trenchDrain (String10)	The identifying name or tag of the Trench drain associated with the inlet
diversionVault (String10)	The identifying name or tag of the Div. Vault associated with the inlet
material (String16)	The material of the subject item.
size (Integer)	The size of the subject item.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
Metadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
verified (String255)	Whether or not the feature has been verified.

projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (CodeStatus)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (<u>CodeDataSource</u>)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Deicing : Junction

(Database Feature Class Name = DeicingJunction)Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretA box or small vault (usually concrete, brick, or cast iron) in deicing systems located belowgrade with above grade access where pipes intersect. The manhole also houses associatedfittings, valves, meters, etc. [Adapted from SDSFIE].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
modelNumber (String12)	The Model, Product, Catalog, or Item Number of subject item.
Attributes:	
drainType (CodeDrainType)	The type of subject item drain.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
featureUse (String16)	Discriminator. An attribute that differentiates the use of the subject item.
mhDia (Double)	The diameter dimension of the subject item, measured from inside face of wall to inside face of opposite wall.
mhLength (Double)	The length dimension of the subject item, from outside face of exterior wall/side to outside face of opposite exterior wall/side.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
mhWidth (Double)	The width dimension of the subject item, from outside face of exterior wall/side to outside face of opposite exterior wall/side.
invertElv (Double)	The top surface elevation of the subject item's interior floor/bottom in feet (English units) or meters (SI units) above some datum.
material (CodePipeMaterial)	The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc.
type (String16)	A field indicating the kind, class, or group of manhole for the subject utility.
noPipes (Integer)	The number of the pipes entering and exiting the subject item.
rimElevation (Double)	The elevation of exterior top surface of the subject item's lid, hatch, rim, or roof in feet (English units) or meters (SI units) above some datum.
description (String255)	A description or other unique information concerning the subject item.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
juncType (<u>CodeJuncType</u>)	The type of junction (e.g. manhole, handhole, other)
<u>Metadata:</u>	

collectionProgress (CodeProgress)	The progress of the data collection.
verified (String255)	Whether or not the feature has been verified
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (CodeStatus)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
<u>System Keys:</u>	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Deicing : Lift Station

(Database Feature Class Name = De	eicingLiftStation)	
Geometry Type: Point	Accuracy: +/-5Ft.	Sensitivity: Secret
Equipment used to pump deicing flu	id to a higher level to enable grav	ity flow in pipes.
Names and Identifiers:	0	
maaID (String30)	A unique identifier used by people to refer to this primary or foreign key value)	s feature (note: this is not a system
maaAlias (String60)	An alternative or former name by which the feature	are is refered.
Attributes:		
coordX (Double)	The coordinate in the east-west plane, expressed	in decimal degrees.
coordY (Double)	The coordinate in the north-south plane, expressed	ed in decimal degrees.
MAA requirementvaultLength (Double)	Length of diversion vault, in feet	
vaultWidth (Double)	Width of diversion vault, in feet	
vaultDepth (Double)	Depth of diversion vault, in feet	
inletLength (Double)	Length of inlet pipe into diversion vault, in feet	
inletDiameter (Double)	Diameter of inlet pipe into diversion vault, in inches	
inletMaterial (String20)	Material of the inlet pipe into the vault	
outletLength (Double)	Length of outlet pipe from diversion vault, in feet	
outletDiameter (Double)	Diameter of out;et pipe from diversion vault, in i	nches
outletMaterial (String20)	Material of the outlet pipe from the vault	
description (String255)	A description or other unique information concer	ming the subject item.
MAA requirementmaterial (String16)		
size (Integer)		
disposition (<u>CodeDispositionObject</u>)	The status of the subject item (e.g., permanent, to from lists or entered from field inspections.	emporary, proposed, abandoned, etc.),
Metadata:		
collectionProgress (CodeProgress)	The progress of the data collection.	
verified (String255)	Whether or not the feature has been verified.	
dateAcquired (Date)	The date on which the subject item was originall is YYYYMMDD (i.e., September 15, 1994 = 19	
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed feature.	or first recorded the location of this

projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (<u>CodeDataSource</u>)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Deicing : Line

 (Database Feature Class Name = DeicingLine)

 Geometry Type: Line
 Accuracy: +/-5Ft.
 Sensitivity: Secret

 A pipe used to carry deicing fluid from location to location (main line, service line, vent line, etc). [Adapted from SDSFIE].
 Feature Class Name = DeicingLine)

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String30)	Any commonly used name of the culvert. [Derived from REEGIS].
maaAlias (String60)	An alternative or former name by which the feature is refered.
modelNumber (String12)	The Model, Product, Catalog, or Item Number of subject item.
ttributes:	
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
drainageZone (CodeDrainageZone)	Local name of assigned hydrographic drainage zones.
drainagePattern (CodeDrainagePattern)	The drainage pattern of the material surrounding the pipe.
drainageTexture (CodeDrainageDensity)	The texture of the material surrounding the pipe.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMDD (i.e., September 15, 1994 = 19940915).
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
pressMax (Double)	The manufacturer's or industry standard's maximum pressure rating of the subject item.
pipeLength (Double)	The length of pipe, measured from node to node along the pipe centerline .
pipeWidth (Double)	The width dimension of the subject item, measured from opposite inside faces.
lined (CodeBoolean)	An indicator as to whether the pipe is lined or not (yes/no).
invElv1 (Double)	The elevation of the bottom of pipe (i.e., pipe invert) at node_id_1 in feet (English units) or meters (SI units) above some datum.[Derived from SDSFIE].
invElv2 (Double)	The elevation of the bottom of pipe (i.e., pipe invert) at node_id_2 in feet (English units) or meters (SI units) above some datum.
size (CodePipeDiameter)	The manufacturers designated size, or nominal (i.e., rounded to the nearest unit) diameter for the subject item (e.g., 1in gas hydrant, 2in meter, 6in pipe).
material (CodePipeMaterial)	The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc.
scrnType (<u>CodeCulvertScreenType</u>)	The type of screen used to cover the end of the culvert.
type (String16)	A field indicating the kind, class, or group of the subject item.
slopeBot (Double)	The slope of the bottom of the subject item expressed as a percentage.
featureUse (String16)	Discriminator. The use code for deicing line.
pressNorm (Double)	The normal operating pressure of the deicing system pipe.

coverDepth (Double)	The depth of cover. The depth measured from top of ground's surface (or grade) to top of underground deicing line pipe.[Derived from Air Force].
description (String255)	A description or other unique information concerning the subject item.
coordX (Double)	The coordinate in the east-west plane, expressed in decimal degrees.
coordY (Double)	The coordinate in the north-south plane, expressed in decimal degrees.
directionality (CodeDirectionality)	The directionality of flow with repsect to the line's geometry.
impedance (Double)	The number representing the total opposition to flow.
Metadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
verified (String255)	Whether or not the feature has been verified.
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Deicing : Line Clean Out

(Database Feature Class Name = DeicingLineCleanOut)

Geometry Type: Point	Accuracy: +/-5Ft.	Sensitivity: Secret
Glycol force main cleanouts,	which are mechanism used to clear	out the pipe line

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
<u>Attributes:</u>	
description (String255)	A description or other unique information concerning the subject item.
material (String16)	The material of the subject item.
size (Integer)	The size of the subject item.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
Metadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
verified (String255)	Whether or not the feature has been verified.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined

	system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
<u>System Keys:</u>	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Deicing : Marker

(Database Feature Class Name = DeicingMarker)

Geometry Type: Point Accuracy: +/-1Ft. Sensitivity: Secret A sign, concrete monument, etc. installed either directly above or immediately adjacent to underground lines, bends, fittings, etc to indicate the presence of nearby deicing system component. [Adapted from SDSFIE].

Traines and Tuchtiners.	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
Attributes:	
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
material (String16)	The material of the subject item.
description (String255)	A description or other unique information concerning the subject item.
size (Integer)	The size of the subject item
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
junctionType (CodeJunctionType)	An indicator as to whether the feature serves as a source, sink or neither in the network.
<u>Metadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection.
verified (String255)	Whether or not the feature has been verified.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
<u>System Keys:</u>	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about

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the data in this record.
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Deicing : Pump

(Database Feature Class Name = DeicingPump)

Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretA mechanical device for deicing system that draws material into itself through an entrance portand forces the material out through an exhaust port. [Adapted from SDSFIE].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
modelNumber (String12)	The Model, Product, Catalog, or Item Number of subject item.
serialNumber (String15)	The manufacturer's serial, or unique identification number of the subject item.
Attributes:	
outflwAct (Double)	The actual measured pump flow output.
coolMethod (CodeEquipmentCooling)	The method by which the pump is cooled.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
flowRate (Double)	The manufacturer's pump capacity (e.g., gpm) rating at a specific design total dynamic head (TDH), usually depicted by a pump curve.
type (String16)	A field indicating the kind, class, or group of the subject item.
primRqd (<u>CodeBoolean</u>)	An indicator as to whether or not the pump has to be primed? (yes or no).
primeMethod (String15)	The method by which the pump is primed.
featureUse (String16)	The particular application, or use the subject item.
pumpElevation (Double)	The elevation measured at centerline of the pump, in feet (English units) or meters (SI units) above some datum.
pumpHp (Double)	The power generated by the pump, equal in the U.S. to 746 watts and nearly equivalent to the English gravitational unit of the same name that equals 550 foot-pounds of work per second.
description (String255)	A description or other unique information concerning the subject item.
material (String16)	
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
<u>Metadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection.
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (<u>CodeDataSource</u>)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
<u>System Keys:</u>	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.

metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.
Deicing : Pump Station	
(Database Feature Class Name = DeicingPumpStation)	

Geometry Type: Point Accuracy: +/-1Ft. Sensitivity: Secret A building in which one or more pumps operate to supply material flowing at adequate pressure to or from a deicing fluid system. [Adapted from SDSFIE].

Names and Identifiers:	• -
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String30)	Any commonly used name for the deicing pump station.[Derived from REEGIS].
maaAlias (String60)	An alternative or former name by which the feature is refered.
Attributes:	
alrmlvlelv (Double)	The elevation in the wet well that triggers an alarm indicating no additional storage capacity.
condition (CodePoleCondition)	Indicates a state of being, or readiness for use of the subject item (e.g., good, fair, poor), from lists or field inspections.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset. [Adopted from SDSFIE].
hiWaterElevation (Double)	The high water or overflow elevation of the storage tank at the pumping station, in feet (English units) or meters (SI units) above some datum.
nodalElv (Double)	The elevation of subject node, which is used in performing computer analyses of the deicing distribution system. The node elevation is usually the ground elevation at the subject node, or the elevation of the subject item located at the subject node (e.g.
invertElv (Double)	The top surface elevation of the subject item's interior floor/bottom in feet (English units) or meters (SI units) above some datum.
width (Double)	The width dimension of the station, measured from outside face of the exterior wall/side to outside face of the opposite exterior wall/side.
length (Double)	The overall length of the pump station plant area.
wetwlCapacity (Double)	The wet well capacity.
area (Double)	The size of the area, zone, or polygon in square units.
type (String16)	A field indicating the kind, class, or group of the subject item.
perimeter (Double)	The distance around the boundary of the area, zone, or subject item in linear units.
noPumps (Integer)	The total number of pumps located at the subject item.
riverMile (Double)	River mile marker.[Derived from REEGIS].
pumpElevation (Double)	The elevation measured at centerline of the pump, in feet (English units) or meters (SI units) above some datum.
mxDsgnHd (Double)	The water elevation of the maximum design head of the pump in feet NGVD.[Derived from REEGIS].
dateEnd (Date)	The date the project was actually completed. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915)[Derived from REEGIS].
capacity (Double)	The pumping capacity at the maximum design head in cfs.[Derived from REEGIS].
description (String255)	A description or other unique information concerning the subject item.
material (String16)	The material of the subject item.
junctionType (CodeJunctionType)	An indicator as to whether the feature serves as a source, sink or neither in the network.
<u>Metadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection.
verified (String255)	Whether or not the feature has been verified.
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.

Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metald (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Deicing : Reservoir

(Database Feature Class Name = DeicingReservoirLocation)		
Geometry Type: Point	Accuracy: +/-1Ft.	Sensitivity: Secret
The location where deicing fluid is collected. [Adapted from SDSFIE].		

Names and Identifiers:

Names and Identifiers.	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String16)	The site specific identification name or number assigned to the subject item.
maaAlias (String60)	An alternative or former name by which the feature is refered.
Attributes:	
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
dateConstructed (Date)	The date on which the subject item construction was complete and user occupancy provided. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915)
depthAvg (Double)	The average depth of containment measured from normal operating pool.
invElvAv (Double)	The average elevation of the bottom of the reservoir.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
xDikes (<u>CodeBoolean</u>)	An indicator whether cross dikes exists in the subject item or not (yes or no).
outCntr (String12)	The outlet control.
featureUse (String16)	The particular application, or use the subject item.
resLength (Double)	The overall length of the reservoir.
resType (<u>CodeReservoirType</u>)	The type or classification of the reservoir.
resWidth (Double)	The average width dimension of the reservoir, measured from top of opposite side slopes.
description (String255)	A description or other unique information concerning the subject item.
material (String16)	The material of the subject item.
size (Integer)	The size of the subject item.
junctionType (CodeJunctionType)	An indicator as to whether the feature serves as a source, sink or neither in the network.
<u>Metadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection.
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be

qualityLevel (CodeSueQualityLevel)

dataSource (<u>CodeDataSource</u>) dataSource2 (<u>CodeDataSource</u>) sourceStatement (String255) editorName (String50) lastUpdate (Date)

System Keys:

guid (String60) metaId (Integer)

Deicing : Tank

used to store the subject items data.[SDSFIE]. The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02. The primary source of the data in this record. The secondary source of the data in this record. A statement providing additional details about the source of the data. The name of the individual who last edited this data. The date upon which any data associated with this record was last updated. A globally unique identifier applied to each feature in the database for reference. An identifier used to refer to a metadata record that provide additional information about

(Database Feature Class Name = DeicingTank)Geometry Type: PointAccuracy: +/-5Ft.Sensitivity: SecretA tank which holds deicing fluid [Entity MAA requirement database merge, attributes fromIndustrialWasteTankPoint].

the data in this record.

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
modelNumber (String12)	The Model, Product, Catalog, or Item Number of subject item.
tributaryId (String20)	An operator generated identifier used locally to identify a tributary subsystem of the main utility system.
serialNumber (String15)	The manufacturer's serial, or unique identification number of the subject item.
Attributes:	
altValve (<u>CodeBoolean</u>)	Indicates whether or not the tank has an altitude valve which controls the flow into the tank? (yes or no).
area (Double)	The size of the area, zone, or polygon in square units.
ovrflwElevation (Double)	The elevation measured at the point of overflow, or entrance, into the tank overflow pipe,, in feet (English units) or meters (SI units) above some datum.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
headNorm (Double)	The normal operating head for the subject item.
invertElv (Double)	The elevation measured at bottom of the tank, in feet (English units) or meters (SI units) above some datum. mean sea level.
material (CodePipeMaterial)	The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc.
topElevation (Double)	The elevation of exterior top surface of the subject item's lid, hatch, rim, or roof in feet (English units) or meters (SI units) above some datum.
tankLength (Double)	The length dimension of the tank, measured from outside face of the exterior wall/side to outside face of the opposite exterior wall/side.
tankSt (<u>CodeStyleTank</u>)	This value differentiates similar entities by use or type.
tankUse (<u>CodeTankUse</u>)	The particular kind or use of the industrial waste water tank.
tankWidth (Double)	The exterior width dimension of the tank, measured from outside face of the exterior wall/side to outside face of the opposite exterior wall/side.
tankCapacity (Double)	The tank's storage capacity (e.g., gallons, ft3, etc).
tankDepth (Double)	The depth below the ground surface or cover measured from the top of the subject item.
tankDiameter (Double)	The inside diameter of the tank, measured from the interior wall surface to the opposite interior wall surface.
description (String255)	A description or other unique information concerning the subject item.
mapGrid (String5)	Placeholder for ETL process to hold column 'grid' in MES DI_Tanks feature

color (<u>CodeColor</u>)	The color of the deicing tank.
lightCode (String1)	The light code of the tank.
lightingType (CodeLightingConfigurationT	ype) Thetype of lighting configuration.
markingFeatureType (CodeMarkingFeature	Type) The type of the marking
verticalStructureMaterial (String16)	The vertical structure material.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
Metadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
metadata (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Deicing : Valve

 (Database Feature Class Name = DeicingValve)
 Geometry Type: Point
 Accuracy: +/-1Ft.
 Sensitivity: Secret

 A fitting or device used for shutting or throttling flow through a decing fluid line. [Adapted from SDSFIE].
 Sensitivity: Secret

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
dVaultId (String50)	
Attributes:	
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
size (<u>CodePipeDiameter</u>)	The manufacturers designated size, or nominal (i.e., rounded to the nearest unit) diameter for the subject item (e.g., 1 in gas hydrant, 2 in meter, 6 in pipe).
valveElv (Double)	The elevation measured at centerline of the valve, in feet (English units) or meters (SI units) above some datum.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset. [Adopted from SDSFIE].
featureUse (String16)	The particular application, or use the subject item.
valveSt (CodeStyleValve)	The particular kind, class, or group of valve (e.g., gate, check, etc.).
coverDepth (Double)	The depth of cover. The depth measured from top of ground's surface (or grade) to top of

	underground deicing fluid line valve. [Derived from Air Force].
description (String255)	A description or other unique information concerning the subject item.
pierCode (String10)	The one-letter code for the terminal pier where the valve is located
divVaultValve (<u>CodeBoolean</u>)	Indicates if the valve is a diversion vault valve or not.
mapGrid (String5)	Placeholder for ETL process to hold column 'grid' in MES DI_Tanks feature
material (String16)	The material of the subject item.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
valveOpen (CodeValveOpen)	The direction a valve must be turned to open
operatingStatus (CodeValveStatus)	The normal operating status of the valve
Metadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
<u>System Keys:</u>	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Deicing : Vault

(Database Feature Class Name = DeicingVault)Geometry Type: PointAccuracy: +/-5Ft.Sensitivity: SecretReservoirs for used deicing fluid and stormwater [Entity MAA requirement database merge,
attributes from IndustrialWasteTankPoint].Sensitivity: Secret

	-
Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String60)	The site specific identification name or number assigned to the subject item.
maaAlias (String60)	An alternative or former name by which the feature is refered.
Attributes:	
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
dateConstructed (Date)	The date on which the subject item construction was complete and user occupancy provided. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915)
depthAvg (Double)	The average depth of the vault.
vaultLength (Double)	The overall length of the vault.
vaultType (String20)	The type or classification of the vault.
vaultWidth (Double)	The average width dimension of the vault measured from top of opposite side slopes.
description (String255)	A description or other unique information concerning the subject item.

pipeWidth (Double)	Size of inlet pipe
pipeMaterial (CodePipeMaterial)	Material of which inlet pipe is made
airReleasePresent (CodeBoolean)	Indicates whether or not an air release valve is present
pumpOutPresent (<u>CodeBoolean</u>)	Indicates whether or not a pump out conection is present
enabled (<u>CodeBoolean</u>)	Flag used for networking functionality in MES application.
mapGrid (String5)	Target column for ETL process to hold column 'grid' in MES database
coordX (Double)	The coordinate in the east-west plane, expressed in decimal degrees.
coordY (Double)	The coordinate in the north-south plane, expressed in decimal degrees.
pierCode (String10)	The one-letter code for the terminal pier where the valve is located
material (String16)	The material of the subject item.
size (Integer)	The size of the subject item.
Metadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
metadata (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (<u>CodeDataSource</u>)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Data Set: Electrical

Electrical : Bus Line

 (Database Feature Class Name = ElectricalBusLine)

 Geometry Type: Line
 Accuracy: +/-5Ft.
 Sensitivity: Secret

 A rigid metallic conductor (copper or aluminum), typically in the form of a flat bar, angle stock, or square tubing. [SDSFIE FGDC Utilities Classification].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
<u>Attributes:</u>	
bilRat (<u>CodeBilKv</u>)	The insulators basic insulation level rating.
busMat (CodeElectricBus)	The material composition of the electrical bus group.
cblUse (CodeElectricCableUse)	The use or purpose of the cable group.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
frameType (String20)	The substation structural frame configuration.

owner (String60)

utility asset.[Adopted from SDSFIE]. voltage (CodeVoltage) The voltage of the bus group. noConduct (Integer) The total number of ungrounded conductors in the cable. The number of neutral conductors. noNeutral (Integer) reactance (Double) The reactance of the bus provided by the manufacturer. sizeNeut (CodeCableDimension) The size of the neutral conductors. The resistance of the bus provided by the manufacturer. resistance (Double) length (Double) The overall length of the feature.[Center]. description (String255) A description or other unique information concerning the subject item. cblMaterial (CodeElectricCable) The material of the cable. directionality (CodeDirectionality) The directionality of flow with repsect to the line's geometry. impedance (Double) The number representing the total opposition to flow. Metadata: collectionProgress (CodeProgress) The progress of the data collection. dateAcquired (Date) The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915). verified (String255) Whether or not the feature has been verified. projectType (CodeProjectType) The type of project or work activity that installed or first recorded the location of this feature. projectId (String20) A unique identifier associated with the project or work activity that installed or first recorded the location of this feature. status (CodeStatus) A temporal description of the operational status of the feature. Alternative (Integer) Discriminator used to tie features of a plan or proposal together into a version. userFlag (String254) An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE]. qualityLevel (CodeSueQualityLevel) The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02. dataSource (CodeDataSource) The primary source of the data in this record. dataSource2 (CodeDataSource) The secondary source of the data in this record. sourceStatement (String255) A statement providing additional details about the source of the data. editorName (String50) The name of the individual who last edited this data. lastUpdate (Date) The date upon which any data associated with this record was last updated. System Keys: guid (String60) A globally unique identifier applied to each feature in the database for reference. An identifier used to refer to a metadata record that provide additional information about metaId (Integer) the data in this record.

A person, organization, or agency with legal control or management responsibility of the

Electrical : Cable

(Database Feature Class Name = ElectricalCable)Geometry Type: LineAccuracy: +/-5Ft.Sensitivity: SecretA group of conductors used to carry electrical energy from point to point. [SDSFIE FGDCUtilities Classification].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String30)	Any commonly used name for the feature.[REEGIS].
maaAlias (String60)	An alternative or former name by which the feature is refered.
Attributes:	
condSize (<u>CodeCableDimension</u>)	The size of a single ungrounded conductor in the cable group in American Wire Gauge (AWG) units.
cblType (<u>CodeElectricCable</u>)	This value differentiates similar entities by use or type.[REEGIS].
catnav (CodeNavigationLineType)	Category of navigation line[S-57].
cblLength (Double)	The length of the cable between nodes.
cblMaterial (<u>CodeElectricCable</u>)	The material composition of the cable.

cfgType (<u>CodeElectricConfigType</u>)	The cable mounting configuration on the pole or tower.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
voltage (<u>CodeVoltage</u>)	The system voltage applied to the cable group.
installType (CodeElectricCable)	Discriminator. The installation type code.
insulMaterial (CodeSheathInsulateType)	The type of material with which the conductors are insulated from each other and from their surroundings.
neutSize (CodeCableDimension)	The size of a single neutral conductor in American Wire Gauge (AWG) units.
noConduct (Integer)	The total number of ungrounded conductors in the cable.
noNeutral (Integer)	The total number of grounded conductors in a ductbank.
noPhases (Integer)	The number of phases routed by this cable group.
phaseLeter (CodeElectricPhaseType)	The letter(s) of the phase(s) for the subject item.
riverMile (Double)	River mile marker.[REEGIS].
description (String255)	A description or other unique information concerning the subject item.
directionality (CodeDirectionality)	The directionality of flow with repsect to the line's geometry.
impedance (Double)	The number representing the total opposition to flow.
etadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
stem Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metald (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Electrical : Capacitor

 (Database Feature Class Name = ElectricalCapacitor)

 Geometry Type: Point
 Accuracy: +/-1Ft.

 Sensitivity: Secret

 An electrical device placed in a circuit to correct power factor by adding reactive power to the circuit. [SDSFIE FGDC Utilities Classification].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
modelNumber (String12)	The Model, Product, Catalog, or Item Number of subject item.
serialNumber (String15)	The manufacturer's serial, or unique identification number of the subject item.
Attributes:	
cntrType (<u>CodeElectricControlType</u>)	The method of adjusting the kilovar output of the capacitor.

disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
cpctrKv (CodeElectricKvar)	The rating of the capacitor's ability to provide reactive power to a circuit.
voltage (<u>CodeVoltage</u>)	The system voltage across the capacitor.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
installType (CodePumpSta)	The type installation of the subject item.
noPhases (Integer)	The number of phases to which this device provides reactive power.
phaseLeter (CodeElectricPhaseType)	The letter(s) of the phase(s) for the subject item.
switch (<u>CodeBoolean</u>)	This indicates whether the capacitor is presently in the circuit or is not presently in the circuit.
description (String255)	A description or other unique information concerning the subject item.
material (String16)	The material of the subject item.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
Metadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (CodeStatus)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Electrical : Ductbank

(Database Feature Class Name = ElectricalDuctbank)Geometry Type: LineAccuracy: +/-5Ft.Sensitivity: SecretA tubular structure that provides protection for underground cables contained in conduit.[SDSFIE FGDC Utilities Classification].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String30)	Name of the electrical underground conduit.[REEGIS].
maaAlias (String60)	An alternative or former name by which the feature is refered.
Attributes:	
ductMat (CodePipeMaterial)	An indication of the type of material of which the duct is composed.
dbkLength (Double)	The total length of the ductbank from source to load. Manholes and pullboxes should not break the measurement.
dbkSize (Double)	A two dimensional description of the physical size of the ductbank including units of measure (e.g., $2 \text{ ft } x 2 \text{ ft}, 3 \text{ m } x 3 \text{ m}$).
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.),

from lists or entered from field inspections. voltage (CodeVoltage) The maximum voltage in the ductbank. A person, organization, or agency with legal control or management responsibility of the owner (String60) utility asset.[Adopted from SDSFIE]. noDucts (Integer) An indicator of the number of conduits or wireways found in the ductbank. noSpares (Integer) The number of spare ducts enclosed in the ductbank for future use. riverMile (Double) River mile marker.[REEGIS]. description (String255) A description or other unique information concerning the subject item. directionality (CodeDirectionality) The directionality of flow with repsect to the line's geometry. impedance (Double) The number representing the total opposition to flow. Metadata: collectionProgress (CodeProgress) The progress of the data collection. dateAcquired (Date) The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915). verified (String255) Whether or not the feature has been verified. The type of project or work activity that installed or first recorded the location of this projectType (CodeProjectType) feature. projectId (String20) A unique identifier associated with the project or work activity that installed or first recorded the location of this feature. status (CodeStatus) A temporal description of the operational status of the feature. Alternative (Integer) Discriminator used to tie features of a plan or proposal together into a version. userFlag (String254) An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE]. qualityLevel (CodeSueQualityLevel) The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02. dataSource (CodeDataSource) The primary source of the data in this record. dataSource2 (CodeDataSource) The secondary source of the data in this record. sourceStatement (String255) A statement providing additional details about the source of the data. editorName (String50) The name of the individual who last edited this data. lastUpdate (Date) The date upon which any data associated with this record was last updated. System Keys: guid (String60) A globally unique identifier applied to each feature in the database for reference. metaId (Integer) An identifier used to refer to a metadata record that provide additional information about the data in this record.

Electrical : Generator

 (Database Feature Class Name = ElectricalGenerator)

 Geometry Type: Point
 Accuracy: +/-1Ft.
 Sensitivity: Secret

 A machine which converts mechanical energy into electrical energy.
 [SDSFIE FGDC Utilities Classification].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
modelNumber (String12)	The Model, Product, Catalog, or Item Number of subject item.
serialNumber (String15)	The manufacturer's serial, or unique identification number of the subject item.
facilityName (String65)	A commonly used name for the facility.[HSIP].
Attributes:	
coolType (<u>CodeEquipmentCooling</u>)	The type of cooling for the generator engine.
autotran (<u>CodeBoolean</u>)	An indicator as to whether or not an automatic transfer switch exist. (yes or no) An automatic transfer switch is an electromechanical device used to automatically change states in the event of a power failure on the primary electrical service to use an
genType (<u>CodeGeneratorType</u>)	This value differentiates similar entities by use or type.
engModel (String20)	The engine Model, Product, Catalog, or Item Number.
engSerNo (String20)	The engine serial number.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the

	utility asset.[Adopted from SDSFIE].
engineHp (Integer)	The power rating of the prime mover of the generator in horsepower.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
powerFact (Double)	The cosine of the phase angle between the voltage and the current that the generator creates.
fuelType (<u>CodeFuel</u>)	The type of fuel required to operate the prime mover of the generator.
hertz (Double)	The frequency of the electrical signal that the generator creates.
oilCapacity (Double)	The manufacturer recommended amount of oil that the generator engine requires to operate properly.
voltage (<u>CodeVoltage</u>)	The potential of the electrical energy that the generator creates.
kvaRate (Integer)	The rating of the complex power that the generator creates.
kwRate (Integer)	The rating of the Double power that the generator creates.
noPhases (Integer)	The number of phases to which this device provides reactive power.
sound (<u>CodeBoolean</u>)	An indicator as to whether or not Insulation was added to dampen the transmission of noise. (yes or no)
phaseLeter (CodeElectricPhaseType)	The letter(s) of the phase(s) for the subject item.
numPipes (Integer)	The number of powerlines entering the power plant.[HSIP].
pwrsource (String65)	The source of the power used by the plant to generate electricity.[HSIP].
fuelDel (CodeFuelDeliveryMethodType)	The delivery method of the fuel used at the power plant.[HSIP].
numLines (Integer)	The total number of powerlines exiting the power plant.[HSIP].
numStat (Integer)	The total number of substations associated with the power plant.[HSIP].
genCapacity (Double)	The total generating capacity of the power plant.[HSIP].
comAff (String80)	The name of the company that operates the power plant.[HSIP].
numGen (Integer)	The total number of generators at the power plant.[HSIP].
description (String255)	A description or other unique information concerning the subject item.
material (String16)	The material of the subject item.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
Metadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Electrical : Ground Point

(Database Feature Class Name = ElectricalGround)		
Geometry Type: Point	Accuracy: +/-1Ft.	Sensitivity: Secret

The location where the electrical configuration is grounded. [SDSFIE Air Force].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
<u>attributes:</u>	
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
description (String255)	Any brief description of the feature.
material (String16)	The material of the subject item.
size (Integer)	The size of the subject item.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
junctionType (CodeJunctionType)	An indicator as to whether the feature serves as a source, sink or neither in the network.
letadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (<u>CodeDataSource</u>)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
ystem Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Electrical : Head Bolt Outlet

(Database Feature Class Name = ElectricalHeadBoltOutlet)Geometry Type: PointAccuracy: +/-1Ft.

Geometry Type: Point Accuracy: +/-1Ft. Sensitivity: Secret A device which supplies electric current in cold weather climates for vehicle heating. [SDSFIE FGDC Utilities Classification].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
Attributes:	
type (String16)	The type of head bold outlet.[Air Force].
voltage (<u>CodeVoltage</u>)	The type of voltage used.[Air Force].
noPlugs (Integer)	The number of plug-ins available.[Air Force].
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
description (String255)	A description or other unique information concerning the subject item.[Air Force].

material (String16)	The material of the subject item.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
Metadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (CodeStatus)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (<u>CodeDataSource</u>)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Electrical : Junction

(Database Feature Class Name = ElectricalJunction)Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretA box or small vault (usually concrete, brick, or metal) typically located below grade with abovegrade access in which cables intersect, connect, or pass through. [SDSFIE FGDC UtilitiesClassification].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
<u>Attributes:</u>	
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
featureUse (String16)	Discriminator. An attribute that differentiates the use of the subject item.
mhDia (Double)	The diameter dimension of the subject item, measured from inside face of wall to inside face of opposite wall.
drainType (<u>CodeDrainType</u>)	The type of subject item drain.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
floorElv (Double)	The top surface elevation of the subject item's interior floor/bottom in feet (English units) or meters (SI units) above some datum.
Material (String16)	The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc.
type (String16)	A field indicating the kind, class, or group of manhole for the subject utility.
noCables (Integer)	The number of the cables entering and exiting the subject item.
rimElevation (Double)	The elevation of exterior top surface of the subject item's lid, hatch, rim, or roof in feet (English units) or meters (SI units) above some datum.

description (String255)	A description or other unique information concerning the subject item.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
juncType (CodeJuncType)	The type of junction (e.g. manhole, handhole, other)
Metadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (<u>CodeDataSource</u>)	The primary source of the data in this record.
dataSource2 (<u>CodeDataSource</u>)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Electrical : Light

 (Database Feature Class Name = ElectricalLight)

 Geometry Type: Point
 Accuracy: +/-1Ft.

 Sensitivity: Secret

 Locations of point sources of general external lighting (excuding airfield lights). [SDSFIE FGDC

 Utilities Classification].

<u>Names and Identifiers:</u>	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
Attributes:	
sensor (<u>CodeBoolean</u>)	A Boolean code indicating whether or not the light has a night sensor.[USACE OPERATIONS].
watts (CodeLightWatts)	The light fixture wattage specification.
voltage (<u>CodeVoltage</u>)	The system voltage applied to the light fixture.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
noLamps (Integer)	The total number of lamps in fixture.
fixtureHt (Double)	The height above the ground/base surface of the light fixture.
mountHeight (Double)	The fixture mounting height.
description (String255)	A description or other unique information concerning the subject item.
coordX (Double)	The coordinate in the east-west plane, expressed in decimal degrees.
coordY (Double)	The coordinate in the north-south plane, expressed in decimal degrees.
coordZ (Double)	The coordinate in the vertical plane.
litType (<u>CodeExternalLight</u>)	The type of the light.
oldMaaAlias (String50)	The old MAA alias.
material (String16)	The material of the subject item.

disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.),
(<u>Coursession (Coursession Cojee</u>)	from lists or entered from field inspections.
junctionType (CodeJunctionType)	An indicator as to whether the feature serves as a source, sink or neither in the network.
<u>Metadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (<u>CodeDataSource</u>)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Electrical : Marker

(Database Feature Class Name = ElectricalMarker)

Geometry Type: Point Accuracy: +/-1Ft. Sensitivity: Secret A sign, concrete monument, etc. installed either directly above or immediately adjacent to underground lines, bends, fittings, etc., identifying the location of the electrical equipment. [SDSFIE FGDC Utilities Classification].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
Attributes:	
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
description (String255)	Any brief description of the feature.
material (String16)	The material of the subject item.
size (Integer)	The size of the subject item.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
junctionType (CodeJunctionType)	An indicator as to whether the feature serves as a source, sink or neither in the network.
<u>Metadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.

	status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
	Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
	userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
	qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
	dataSource (CodeDataSource)	The primary source of the data in this record.
	dataSource2 (CodeDataSource)	The secondary source of the data in this record.
	sourceStatement (String255)	A statement providing additional details about the source of the data.
	editorName (String50)	The name of the individual who last edited this data.
	lastUpdate (Date)	The date upon which any data associated with this record was last updated.
Sys	stem Keys:	
	guid (String60)	A globally unique identifier applied to each feature in the database for reference.
	metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Electrical : Meter

(Database Feature Class Name = ElectricalMeter)Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretA device installed in a line for measuring the electrical power supplied to a facility or through a section of line. [SDSFIE FGDC Utilities Classification].Sensitivity: Secret

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
modelNumber (String12)	The Model, Product, Catalog, or Item Number of subject item.
serialNumber (String15)	The manufacturer's serial, or unique identification number of the subject item.
Attributes:	
ampRate (Integer)	The maximum continuous current rating of the meter.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
capacityKva (Double)	The limit of the complex power which the demand meter can record.
meterType (String20)	A label describing the features of the electrical system that the meter is measuring.
hertz (Double)	The frequency of the electrical system on which the meter should be used.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
voltage (<u>CodeVoltage</u>)	The potential of the electrical system on which the meter may be used.
kwRate (Integer)	The power rating on the meter based on the current and potential transformer ratios.
mtrConst (Integer)	The multiplication factor by which one must multiply the difference in present and previous meter readings to determine actual power consumed.
mtrUse (<u>CodeElectricDeviceUse</u>)	An indication of the type of service the meter is monitoring.
noPhases (Integer)	The number of phases that the meter monitors.
phaseLeter (CodeElectricPhaseType)	The letter(s) of the phase(s) for the subject item.
drgvesty (<u>CodeVesselType</u>)	The types of dredging vessels.[USACE].
description (String255)	A description or other unique information concerning the subject item.
material (String16)	The material of the subject item.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
<u>letadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.

status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Electrical : Motor

(Database Feature Class Name = ElectricalMotor)Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretA machine that converts electrical energy into mechanical energy.[SDSFIE FGDC UtilitiesClassification].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
modelNumber (String12)	The Model, Product, Catalog, or Item Number of subject item.
serialNumber (String15)	The manufacturer's serial, or unique identification number of the subject item.
<u>Attributes:</u>	
enclty (CodeElectricMotorEnclTy	<u>(pe)</u> The type enclosure the motor has to protect it from outside elements like the weather.
disposition (CodeDispositionObje	tect The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
powerFact (Double)	The nameplate power factor at which the motor operates at full load. The power factor is the cosine of the phase angle between the voltage and the current.
voltage (<u>CodeVoltage</u>)	The nameplate voltage rating of the motor.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
insulCl (CodeElectricMotorInsul	(ype) The classification of the motor's insulation.
startType (CodeElectricMotorSta	t <u>Type</u>) The startup configuration for the motor.
motorHp (Double)	The output power rating of the motor in units of horsepower.
motorType (String20)	A label representing the name of a certain category of motors in which the motor fits based on common features of construction with other motors in the same category.
noPhases (Integer)	The number of phases at which the motor was designed to operate.
phaseLeter (CodeElectricPhaseTy	<u>pe</u>) The letter(s) of the phase(s) for the subject item.
windType (CodeWindingConnect	ionType) A label representing the configuration of the stator winding connections.
description (String255)	A description or other unique information concerning the subject item.
hertz (<u>CodeHertz</u>)	The frequency of the electrical signal that the motor creates.
material (String16)	The material of the subject item.
junctionType (<u>CodeJunctionType</u>) An indicator as to whether the feature serves as a source, sink or neither in the network.
<u>Metadata:</u>	
collectionProgress (CodeProgress	
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first

	recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Electrical : Pedestal

(Database Feature Class Name = ElectricalPedestal)Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretAn above ground enclosure which provides access to underground cables. [SDSFIE FGDCUtilities Classification].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
serialNumber (String15)	The manufacturer's serial, or unique identification number of the subject item.
maaAlias (String60)	An alternative or former name by which the feature is refered.
modelNumber (String12)	The Model, Product, Catalog, or Item Number of subject item.
Attributes:	
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset. [Adopted from SDSFIE].
description (String255)	A description or other unique information concerning the subject item.
material (String16)	The material of the subject item.
size (Integer)	The size of the subject item.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
<u>Metadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (CodeStatus)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.

editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
<u>System Keys:</u>	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Electrical : Utility Pole Guy

(Database Feature Class Name = ElectricalPoleGuyConnectionPoi)Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretA support configuration, which generally includes connecting hardware, cables, and anchorcomponents, used to stabilize structures (poles, towers, etc.). Down guys typically connect to thestructures at key stress points and extend to an anchor at the gro [SDSFIE Anteon].

ames and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
ttributes:	
anchorAtt (String15)	The type of anchor attachment to the pole or tower.
anchorType (String15)	The type of anchor used with this guy.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
design (String16)	Discriminator. The design code for a utility guy.
cblDia (Double)	The nominal diameter of the cable.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
guyLength (Double)	The length of the guy cable from pole connection to anchor.
cblMaterial (CodeElectricCable)	The material composition of the cable.
cblSht (CodeSheathInsulateType)	The type sheath attached to the guy cable.
cblTen (Double)	The tensile force applied to the guy cable.
cblType (String16)	The type of cable use for the guy.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
guyType (<u>CodeUtilityGuyType</u>)	A code indicating the configuration of the guy construction.
description (String255)	A description or other unique information concerning the subject item.
size (Integer)	The size of the subject item.
junctionType (CodeJunctionType)	An indicator as to whether the feature serves as a source, sink or neither in the network.
etadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
	-
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
qualityLevel (<u>CodeSueQualityLevel</u>) dataSource (<u>CodeDataSource</u>)	
	ASCE38-02.

editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
<u>System Keys:</u>	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Electrical : Utility Pole Guy Line

 (Database Feature Class Name = ElectricalPoleGuyLine)

 Geometry Type: Line
 Accuracy: +/-5Ft.
 Sensitivity: Secret

 A support configuration that spans between two structures, which generally includes connecting hardware, cables, and anchor components. [SDSFIE FGDC Utilities Classification].

 Nomes and Identification

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
Attributes:	
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
directionality (CodeDirectionality)	The directionality of flow with repsect to the line's geometry.
material (String16)	The material of the subject item.
description (String255)	A description or other unique information concerning the subject item.
size (Integer)	The size of the subject item.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
impedance (Double)	The number representing the total opposition to flow.
<u>Aetadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (<u>CodeDataSource</u>)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
ystem Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Electrical : Utility Pole Tower Site

(Database Feature Class Name = ElectricalPoleTower)Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretA structure used to elevate wires, cables, or other lines above the ground surface. [SDSFIE].

Names and Identifiers:

maaID (String30)

maaAlias (String60)

Attributes:

condition (<u>CodePoleCondition</u>)

design (String16) capped (<u>CodeBoolean</u>) dateTreat (Date)

dateAcquired (Date)

owner (String60)

grounded (<u>CodeBoolean</u>) poleLength (Double) poleHeight (Double) material (String16)

pClass (CodePoleClassificationType)

treatType (<u>CodePoleTreatmentType</u>) type (String16) area (Double) perimeter (Double) description (String255) disposition (<u>CodeDispositionObject</u>)

junctionType (<u>CodeJunctionType</u>)

<u>Metadata:</u> collectionProgress (<u>CodeProgress</u>)

> verified (String255) projectType (<u>CodeProjectType</u>)

projectId (String20)

dateAcquired (Date)

status (<u>CodeStatus</u>) Alternative (Integer) userFlag (String254)

qualityLevel (CodeSueQualityLevel)

```
dataSource (<u>CodeDataSource</u>)
dataSource2 (<u>CodeDataSource</u>)
sourceStatement (String255)
editorName (String50)
lastUpdate (Date)
```

System Keys:

guid (String60) metaId (Integer) A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value) An alternative or former name by which the feature is refered. Indicates a state of being, or readiness for use of the subject item (e.g., good, fair, poor), from lists or field inspections. Discriminator. The design code for types of poles. Indicates whether or not the pole is capped (yes/no). The date that the pole was last treated. Format for date is YYYYMMDD (i.e. September 15, 1994 = 19940915). The date on which the subject item was originally acquired or purchased. Format for date

is YYYYMMDD (i.e., September 15, 1994 = 19940915). A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].

An indicator as to whether or not the pole is grounded. (yes or no)

The overall length of the pole from tip to tip.

The height of the pole measured from the ground surface to the top.

The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc.

A classification of the pole diameter, and consequently the breaking strength, of wooden poles.

Defines any treatment applied to the pole to improve its life.

A field indicating the kind, class, or group of the subject item.

The size of the area, zone, or polygon in square units.

The distance around the boundary of the area, zone, or subject item in linear units.

A description or other unique information concerning the subject item.

The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.

An indicator as to whether the feature serves as a source, sink or neither in the network.

```
The progress of the data collection.
```

The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).

Whether or not the feature has been verified.

The type of project or work activity that installed or first recorded the location of this feature.

A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.

A temporal description of the operational status of the feature.

Discriminator used to tie features of a plan or proposal together into a version.

An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].

The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.

The primary source of the data in this record.

The secondary source of the data in this record.

A statement providing additional details about the source of the data.

The name of the individual who last edited this data.

The date upon which any data associated with this record was last updated.

A globally unique identifier applied to each feature in the database for reference. An identifier used to refer to a metadata record that provide additional information about the data in this record.

Electrical : Regulator

(Database Feature Class Name = ElectricalRegulator)

Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretAn electrical device that maintains its output voltage at a certain level even though its input
voltage varies in a certain range over time. [SDSFIE FGDC Utilities Classification].

Names and Identifiers: maaID (String30)

maaAlias (String60) modelNumber (String12) serialNumber (String15)

Attributes:

dateManufactured (Date)

coolType (<u>CodeEquipmentCooling</u>) installType (<u>CodePumpSta</u>) disposition (<u>CodeDispositionObject</u>)

owner (String60)

fuseRate (Integer) fuseType (<u>CodeElectricSwitchType</u>) oilCapacity (Double)

prcntTap (Double)

kvaRate (Integer) secVolt (<u>CodeVoltage</u>) noPhases (Integer) noTaps (Integer)

priVolt (<u>CodeVoltage</u>) phaseLeter (<u>CodeElectricPhaseType</u>) regType (<u>CodeElectricVoltRegulType</u>) regUse (<u>CodeElectricDeviceUse</u>) regWeight (Integer) description (String255) material (String16) size (Integer) junctionType (<u>CodeJunctionType</u>)

Metadata:

collectionProgress (<u>CodeProgress</u>) dateAcquired (Date)

verified (String255) projectType (<u>CodeProjectType</u>)

projectId (String20)

status (<u>CodeStatus</u>) Alternative (Integer) userFlag (String254)

qualityLevel (CodeSueQualityLevel)

dataSource (<u>CodeDataSource</u>) dataSource2 (<u>CodeDataSource</u>) sourceStatement (String255) editorName (String50) A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value) An alternative or former name by which the feature is refered. The Model, Product, Catalog, or Item Number of subject item. The manufacturer's serial, or unique identification number of the subject item. The date of manufacturer for the subject item. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915) The method of controlling the temperature of the regulator. The type installation of the subject item. The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections. A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE]. The current rating of the fuse protecting the regulator. This will be on the primary side. A label chosen from a standard list of labels describing the characteristics of the fuse. The manufacturer suggested volume of oil that should be maintained inside the regulator to assure safe and efficient operation. The percentage of the voltage that will be changed by moving the connection up or down one tap. The maximum continuous complex power rating of the regulator. The voltage on the load side of the regulator with the associated units given. The number of phases regulated by this device. The number of available points of connection on the regulator which may be used to change the voltage. The voltage on the source side of the regulator with the associated units given. The letter(s) of the phase(s) for the subject item. The type of voltage regulator. An indication of whether the regulator is on a line or in a substation. The force of the regulator toward the center of the earth due to the regulator's mass. A description or other unique information concerning the subject item. The material of the subject item.. The size of the subject item. An indicator as to whether the feature serves as a source, sink or neither in the network. The progress of the data collection. The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915). Whether or not the feature has been verified. The type of project or work activity that installed or first recorded the location of this feature. A unique identifier associated with the project or work activity that installed or first recorded the location of this feature. A temporal description of the operational status of the feature. Discriminator used to tie features of a plan or proposal together into a version. An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE]. The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02 The primary source of the data in this record. The secondary source of the data in this record. A statement providing additional details about the source of the data.

lastUpdate (Date)	The date upon which any data associated with this record was last updated.
<u>System Keys:</u>	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Electrical : Riser

(Database Feature Class Name = ElectricalRiser)

Geometry Type: Point Accuracy: +/-1Ft. Sensitivity: Secret The location where underground cable transitions to overhead. [SDSFIE FGDC Utilities Classification].

Names and Identifiers: maaID (String30) A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value) maaAlias (String60) An alternative or former name by which the feature is refered. **Attributes:** material (String16) The material composition of the pole riser. installDate (Date) The date the riser was installed. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915) owner (String60) A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE]. description (String255) Any brief description of the feature. size (Integer) The size of the subject item. The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), disposition (CodeDispositionObject) from lists or entered from field inspections. junctionType (CodeJunctionType) An indicator as to whether the feature serves as a source, sink or neither in the network. Metadata: collectionProgress (CodeProgress) The progress of the data collection. The date on which the subject item was originally acquired or purchased. Format for date dateAcquired (Date) is YYYYMMDD (i.e., September 15, 1994 = 19940915). verified (String255) Whether or not the feature has been verified. projectType (CodeProjectType) The type of project or work activity that installed or first recorded the location of this feature. A unique identifier associated with the project or work activity that installed or first projectId (String20) recorded the location of this feature. status (CodeStatus) A temporal description of the operational status of the feature. Alternative (Integer) Discriminator used to tie features of a plan or proposal together into a version. userFlag (String254) An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE]. qualityLevel (CodeSueQualityLevel) The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02. dataSource (CodeDataSource) The primary source of the data in this record. dataSource2 (CodeDataSource) The secondary source of the data in this record. sourceStatement (String255) A statement providing additional details about the source of the data. editorName (String50) The name of the individual who last edited this data. lastUpdate (Date) The date upon which any data associated with this record was last updated. System Keys: guid (String60) A globally unique identifier applied to each feature in the database for reference. metaId (Integer) An identifier used to refer to a metadata record that provide additional information about the data in this record.

Electrical : Splice

(Database Feature Class Name = H	ElectricalSplice)	
Geometry Type: Point	Accuracy: +/-1Ft.	Sensitivity: Secret

The connection of two separate cables at their ends or the tapping of a conductor along the path of another conductor. [SDSFIE FGDC Utilities Classification].

	-
ames and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
ttributes:	
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
description (String255)	Any brief description of the feature.
material (String16)	The material of the subject item.
size (Integer)	The size of the subject item.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
etadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
stem Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Electrical : Substation

(Database Feature Class Name = ElectricalSubstation)

Geometry Type: PolygonAccuracy: +/-1Ft.Sensitivity: SecretA facility in an electrical system where the voltage is reduced from transmission levels to
distribution levels. [SDSFIE FGDC Utilities Classification].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String30)	Any commonly used name for the substation.[USGS].
maaAlias (String60)	An alternative or former name by which the feature is refered.
facilityName (String65)	A commonly used name for the facility.[HSIP].
Attributes:	
voltOut (<u>CodeVoltage</u>)	The line-to-line output voltage of the substation.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.

capacityOper (Double)	The normal continuous amount of complex power that the substation provides.
capacityRate (Double)	The maximum continuous amount of complex power that the substation provides.
owner (String60)	
owner (Stringbo)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
noTrans (Integer)	The total number of transformers presently in use at the substation.
noCircuit (Integer)	The total number of circuits that are being fed by the substation.
sstType (CodeSubstationType)	A label indicating the type of service that the substation performs (e.g. distribution substation, facility substation).
noSpares (Integer)	The number of spare bays for possible substation expansion.
voltIn (<u>CodeVoltage</u>)	The line-to-line voltage of the transmission line that is the source for the substation.
area (Double)	The size of the area, zone, or polygon in square units.
perimeter (Double)	The distance around the boundary of the area, zone, or subject item in linear units.
description (String255)	A description or other unique information concerning the subject item.
material (String16)	The material of the subject item.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
Metadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (CodeStatus)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (<u>CodeDataSource</u>)	The primary source of the data in this record.
dataSource2 (<u>CodeDataSource</u>)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Electrical : Switch

(Database Feature Class Name = ElectricalSwitch)Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretA device which closes and opens (connects and disconnects) an electrical circuit. [SDSFIEFGDC Utilities Classification].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
modelNumber (String12)	The Model, Product, Catalog, or Item Number of subject item.
serialNumber (String15)	The manufacturer's serial, or unique identification number of the subject item.
Attributes:	
installType (String16)	Discriminator. The installation type code.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
voltage (<u>CodeVoltage</u>)	The system voltage of the electrical line at the point in which the switch is inserted.

owner	(Strin	g60)
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noPhases (Integer) noSwitch (Integer) phaseLeter (CodeElectricPhaseType) swCubNo (String20) switchDim (String20)

switchRat (Integer) swtSta (CodeStatusElectricSwitch)

swtType (CodeElectricSwitchType) swtWeight (Integer) fuseSize (Double) description (String255) material (String16) size (Integer) junctionType (CodeJunctionType)

Metadata:

collectionProgress (CodeProgress) dateAcquired (Date)

verified (String255) projectType (CodeProjectType)

projectId (String20)

status (CodeStatus) Alternative (Integer) userFlag (String254)

qualityLevel (CodeSueQualityLevel)

dataSource (CodeDataSource) dataSource2 (CodeDataSource) sourceStatement (String255) editorName (String50) lastUpdate (Date) System Keys:

metaId (Integer)

A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].

The number of phases opened by the switch

The number of switches at this installation. Each switch has its own record.

The letter(s) of the phase(s) for the subject item.

A locally assigned switching cubicle number or designator.

A three dimensional description of the amount of space which a switch occupies (e.g., 2 x 1 x 4).

The maximum continuous amount of current to which the switch should be subjected. The positional condition of a switch during normal circuit conditions (e.g., normallyopen, normally closed).

A label chosen from a standard list of labels indicating the characteristics of a switch. The force of the switch toward the center of the earth due to the switch's mass.

The size of the fuse associated with the switch.[Air Force].

A description or other unique information concerning the subject item.

An indicator as to whether the feature serves as a source, sink or neither in the network.

The progress of the data collection.

The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).

Whether or not the feature has been verified.

The type of project or work activity that installed or first recorded the location of this feature.

A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.

A temporal description of the operational status of the feature.

Discriminator used to tie features of a plan or proposal together into a version.

An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].

The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.

The primary source of the data in this record.

The secondary source of the data in this record.

A statement providing additional details about the source of the data.

The name of the individual who last edited this data.

The date upon which any data associated with this record was last updated.

guid (String60)

A globally unique identifier applied to each feature in the database for reference. An identifier used to refer to a metadata record that provide additional information about the data in this record.

Electrical : Transformr Bank

(Database Feature Class Name = ElectricalTransformerBank) Geometry Type: Point Accuracy: +/-1Ft. Sensitivity: Secret A location containing one or more transformers. [SDSFIE FGDC Utilities Classification]. Names and Identifiers: A unique identifier used by needle to refer to this feature (note: this is not a system maaID (Stain a20)

	maanD (Strings0)	primary or foreign key value)
	maaAlias (String60)	An alternative or former name by which the feature is refered.
At	tributes:	
	disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
	noTrans (Integer)	The number of transformers in the transformer bank.
	secVolt (CodeVoltage)	The line-to-line voltage of the electrical system that the transformer bank serves.

tranCap1 (Double)

owner (String60)

tranCap2 (Double)

tranCap3 (Double)

mount (<u>CodeElectricTranbnk</u>) totalKva (Double) feederNo (String20)

priVolt (CodeVoltage)

dateInstalled (Date) dateLastInspected (Date)

condition (<u>CodePoleCondition</u>) phase1 (<u>CodeElectricPhase</u>) kva1 (<u>CodeElectricKvar</u>)

noTfrs1 (Integer) phase2 (<u>CodeElectricPhase</u>) noTfrs2 (Integer) kva2 (<u>CodeElectricKvar</u>)

pcb (CodeBoolean)

description (String255) material (String16) junctionType (<u>CodeJunctionType</u>)

Metadata:

collectionProgress (<u>CodeProgress</u>) dateAcquired (Date)

verified (String255) projectType (<u>CodeProjectType</u>)

projectId (String20)

status (<u>CodeStatus</u>) Alternative (Integer) userFlag (String254)

qualityLevel (CodeSueQualityLevel)

dataSource (<u>CodeDataSource</u>) dataSource2 (<u>CodeDataSource</u>) sourceStatement (String255) editorName (String50) lastUpdate (Date)

System Keys:

guid (String60) metaId (Integer) The capacity of the first transformer contained in the transformer bank. Used exclusively for displaying the capacities in the bank.

A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].

The capacity of the second transformer contained in the transformer bank. Used exclusively for displaying the capacities in the bank.

The capacity of the third transformer contained in the transformer bank. Used exclusively for displaying the capacities in the bank.

Discriminator. The type of mounting for the transformer bank.

The total kva rate for all transformers attached to the transformer bank.

An operator generated identifier locally used to identify the feeder to the transformer bank.

The line-to-line voltage of the electrical system that serves as the source for the transformer bank.

The date on which the feature was originally installed.

The last inspection date of the subject item. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915)

The condition of the subject item when last inspected.

The phase number for the first transformer group.

The capacity of each transformer in a group. (i.e. 2-50kva / 1-25kva, 50 is the capacity of each transformer in the first group - 25 is the capacity of each transformer in the second group.) There can be no more than two groups in a bank.

The number of transformers in the first group.

The phase number for the second transformer group.

The number of transformers in the second group.

The capacity of each transformer in a group. (i.e. 2-50kva / 1-25kva, 50 is the capacity of each transformer in the first group - 25 is the capacity of each transformer in the second group.) There can be no more than two groups in a bank.

A boolean indicating whether the transformer contains PCB's and can be classified as wet or not (YES = Y and NO = N)?[Air Force].

A description or other unique information concerning the subject item.

The material of the subject item.

An indicator as to whether the feature serves as a source, sink or neither in the network.

The progress of the data collection.

The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).

Whether or not the feature has been verified.

The type of project or work activity that installed or first recorded the location of this feature.

A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.

A temporal description of the operational status of the feature.

Discriminator used to tie features of a plan or proposal together into a version.

An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].

The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.

The primary source of the data in this record.

The secondary source of the data in this record.

A statement providing additional details about the source of the data.

The name of the individual who last edited this data.

The date upon which any data associated with this record was last updated.

A globally unique identifier applied to each feature in the database for reference. An identifier used to refer to a metadata record that provide additional information about the data in this record.

Electrical : Transformer Vault

(Database Feature Class Name = ElectricalTransformerVault) Geometry Type: Point Accuracy: +/-1Ft. Sensitivity: Secret An enclosure housing one or more transformers. [SDSFIE FGDC Utilities Classification]. Names and Identifiers: maaID (String30) A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value) maaAlias (String60) An alternative or former name by which the feature is refered. serialNumber (String15) The manufacturer's serial, or unique identification number of the subject item. modelNumber (String12) The Model, Product, Catalog, or Item Number of subject item. **Attributes:** disposition (CodeDispositionObject) The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections. noTrans (Integer) The number of transformers housed inside the transformer vault. owner (String60) A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE]. description (String255) A description or other unique information concerning the subject item. material (String16) The material of the subject item. junctionType (CodeJunctionType) An indicator as to whether the feature serves as a source, sink or neither in the network. Metadata: collectionProgress (CodeProgress) The progress of the data collection. dateAcquired (Date) The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915). verified (String255) Whether or not the feature has been verified. The type of project or work activity that installed or first recorded the location of this projectType (CodeProjectType) feature. projectId (String20) A unique identifier associated with the project or work activity that installed or first recorded the location of this feature. status (CodeStatus) A temporal description of the operational status of the feature. Discriminator used to tie features of a plan or proposal together into a version. Alternative (Integer) userFlag (String254) An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE]. qualityLevel (CodeSueQualityLevel) The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02. dataSource (CodeDataSource) The primary source of the data in this record. dataSource2 (CodeDataSource) The secondary source of the data in this record. sourceStatement (String255) A statement providing additional details about the source of the data. editorName (String50) The name of the individual who last edited this data. The date upon which any data associated with this record was last updated. lastUpdate (Date) System Keys: guid (String60) A globally unique identifier applied to each feature in the database for reference. metaId (Integer) An identifier used to refer to a metadata record that provide additional information about the data in this record.

Electrical : Utility Electric Utility Site

elutname (String50)

(Database Feature Class Name = Ele	ctricalUtilitySite)	
Geometry Type: Point	Accuracy: +/-1Ft.	Sensitivity: Secret
An electrical power utility company or organization's certificated area of jurisdiction or		
responsibility as approved by a federal, state, or local utility regulatory authority. [SDSFIE].		
Names and Identifiers:		
maaID (String30)	A unique identifier used by people to refer to this primary or foreign key value)	feature (note: this is not a system
maaAlias (String60)	An alternative or former name by which the featu	re is refered.

Name of electrical power utility or system.

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Attributes:

numPipes (Integer) numLines (Integer) numGen (Integer) numStat (Integer) area (Double) owner (String60)

reConnect (Integer) coConnect (Integer) populationServed (Integer) elecutmaaID (String30)

elecutcap (Double) utilown (<u>CodeUtilityOwnershipType</u>) elecsource (String50)

perimeter (Double) material (String16) description (String255) junctionType (<u>CodeJunctionType</u>) disposition (<u>CodeDispositionObject</u>)

Metadata:

collectionProgress (<u>CodeProgress</u>) dateAcquired (Date)

verified (String255) projectType (<u>CodeProjectType</u>)

projectId (String20)

status (<u>CodeStatus</u>) Alternative (Integer) userFlag (String254)

qualityLevel (CodeSueQualityLevel)

dataSource (<u>CodeDataSource</u>) dataSource2 (<u>CodeDataSource</u>) sourceStatement (String255) editorName (String50) lastUpdate (Date)

System Keys: guid (String60)

metaId (Integer)

Number of pipelines entering facility.[HSIP]. Number of powerlines existing on a facility.[HSIP]. Total number of power generators at the plant.[HSIP]. Number of substations at the facility.[HSIP]. The size of the area, zone, or polygon in square units. A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE]. Total number of residential type service connections. Total number of commercial (i.e., businesses, industrial) type service connections. Population served by electrical power utility or system. Identifier assigned to the electrical power utility or system by the appropriate federal, state, or local regulatory authority. Total design capacity of the electrical power utility or system (e.g. megawatts per day). General category or type of electric utility or system owner. Source of electrical power distributed by electric utility (e.g., electrical power plants owned by utility, electrical power purchased from other utilities). The distance around the boundary of the area, zone, or subject item in linear units. The material of the subject item. A description or other unique information concerning the subject item. An indicator as to whether the feature serves as a source, sink or neither in the network. The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections. The progress of the data collection. The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915). Whether or not the feature has been verified. The type of project or work activity that installed or first recorded the location of this feature. A unique identifier associated with the project or work activity that installed or first recorded the location of this feature. A temporal description of the operational status of the feature. Discriminator used to tie features of a plan or proposal together into a version. An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE]. The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02. The primary source of the data in this record.

The secondary source of the data in this record.

A statement providing additional details about the source of the data.

The name of the individual who last edited this data.

The date upon which any data associated with this record was last updated.

A globally unique identifier applied to each feature in the database for reference. An identifier used to refer to a metadata record that provide additional information about the data in this record.

Data Set: EMCS

EMCS : Cable

(Database Feature Class Name = EnergyCtrlMonCable)Geometry Type: LineAccuracy: +/-5Ft.Sensitivity: SecretData transmission media, typically fiber optics or shielded twisted-pair. [SDSFIE FGDC UtilitiesClassification].

Names and Identifiers:

maaID (String30)

maaAlias (String60)

Attributes:

cblDim (CodeCableDimension) cblLength (Double) cblMaterial (<u>CodeElectricCable</u>) cblSht (<u>CodeSheathInsulateType</u>) cblType (String16) owner (String60)

loosbuf (<u>CodeBoolean</u>) dbLoss (Double) disposition (<u>CodeDispositionObject</u>)

installType (String16) noLinks (Integer) noPairs (Integer) description (String255) directionality (<u>CodeDirectionality</u>) impedance (Double)

Metadata:

collectionProgress (<u>CodeProgress</u>) dateAcquired (Date)

verified (String255)
projectType (CodeProjectType)

projectId (String20)

status (<u>CodeStatus</u>) Alternative (Integer) userFlag (String254)

qualityLevel (CodeSueQualityLevel)

dataSource (<u>CodeDataSource</u>) dataSource2 (<u>CodeDataSource</u>) sourceStatement (String255) editorName (String50) lastUpdate (Date)

System Keys:

guid (String60) metaId (Integer) A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value) An alternative or former name by which the feature is refered. The cable dimension. The overall cable length. The material composition of the cable. The type of cable sheathing or insulation. The type of cable connecting the devices. A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE]. An indicator as to whether or not the cable is loose buffered (yes/no). Loss of a signal over a conductor expressed in decibels. The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections. Discriminator. The installation type code. Number of links in the cable. The number of pairs in a twisted pair cable. A description or other unique information concerning the subject item. The directionality of flow with repsect to the line's geometry. The number representing the total opposition to flow. The progress of the data collection. The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915). Whether or not the feature has been verified. The type of project or work activity that installed or first recorded the location of this feature. A unique identifier associated with the project or work activity that installed or first recorded the location of this feature. A temporal description of the operational status of the feature. Discriminator used to tie features of a plan or proposal together into a version. An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE]. The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02. The primary source of the data in this record. The secondary source of the data in this record. A statement providing additional details about the source of the data. The name of the individual who last edited this data. The date upon which any data associated with this record was last updated.

A globally unique identifier applied to each feature in the database for reference. An identifier used to refer to a metadata record that provide additional information about the data in this record.

EMCS : Device

(Database Feature Class Name = EnergyCtrlMonDevice) Geometry Type: Point Accuracy: +/-1Ft. Sensitivity: Secret Devices used in an energy monitoring/control system to collect, process or transmit data signals. [SDSFIE FGDC Utilities Classification]. Names and Identifiers:

maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.

serialNumber (String15) modelNumber (String12)

Attributes:

anlgIn (Integer) anlgInSp (Integer) anlgOt (Integer) anlgOtSp (Integer) dateManufactured (Date)

owner (String60)

disposition (CodeDispositionObject)

devType (CodeEcmDevice) installType (CodePumpSta) dgtlIn (Integer) dgtlInSp (Integer) dgtlOt (Integer) dgtlOtSp (Integer) readout (CodeDisplayType) noPairlnk (Integer) description (String255) locationDesc (String50) manufacturerName (String60) sensorNumber (Integer) inspectionFormNo (String50) material (String16) size (Integer) impedance (Double) junctionType (CodeJunctionType)

Metadata:

collectionProgress (<u>CodeProgress</u>) dateAcquired (Date)

verified (String255) projectType (<u>CodeProjectType</u>)

projectId (String20)

status (<u>CodeStatus</u>) Alternative (Integer) userFlag (String254)

qualityLevel (CodeSueQualityLevel)

dataSource (<u>CodeDataSource</u>) dataSource2 (<u>CodeDataSource</u>) sourceStatement (String255) editorName (String50) lastUpdate (Date)

System Keys:

guid (String60) metaId (Integer) The manufacturer's serial, or unique identification number of the subject item. The Model, Product, Catalog, or Item Number of subject item.

The total number of analog-in ports on the device. The number of spare analog-in ports. The total number of analog-out ports on the device. The number of spare analog-out ports. The date of manufacturer for the subject item. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915) A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE]. The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections. Discriminator: This value differentiates similar entities by use or type. The type installation of the subject item. The total number of digital-in ports on the device. The number of spare digital-in ports. The total number of digital-out ports on the device. The number of spare digital-out ports. The type of display or readout for the device. The number of twisted pair linked to the device. A description or other unique information concerning the subject item. Text description of location of item Manufacturer's name Sensor number associated with item Form number used by inspectorswhen inspecting the item, The material of the subject item. The size of the subject item. The overall device resistance measured in ohms. An indicator as to whether the feature serves as a source, sink or neither in the network. The progress of the data collection. The date on which the subject item was originally acquired or purchased. Format for date

The type of project or work activity that installed or first recorded the location of this feature. A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.

A temporal description of the operational status of the feature.

Discriminator used to tie features of a plan or proposal together into a version.

An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].

The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.

The primary source of the data in this record.

The secondary source of the data in this record.

A statement providing additional details about the source of the data.

The name of the individual who last edited this data.

The date upon which any data associated with this record was last updated.

A globally unique identifier applied to each feature in the database for reference. An identifier used to refer to a metadata record that provide additional information about the data in this record.

EMCS : Ductbank

(Database Feature Class Name = EnergyCtrlMonDuctbank)

Accuracy: +/-5Ft.

Sensitivity: Secret

Geometry Type: Line A structure containing multiple conduits used to protect underground cables. [SDSFIE FGDC Utilities Classification]

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
Attributes:	
ductMat (CodePipeMaterial)	The material composition of the ductbank.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
dbkLength (Double)	The total length of the ductbank from source to load. Manholes and pullboxes should not break the measurement.
dbkSize (Double)	A two dimensional description of the physical size of the ductbank including units of measure (e.g., 2 ft x 2 ft, 3 m x 3 m).
voltage (<u>CodeVoltage</u>)	The voltage of the electrical control monitoring ductbank.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
noDucts (Integer)	The total number of ducts in the ductbank.
noSpares (Integer)	The total number of ducts not used in the ductbank.
description (String255)	A description or other unique information concerning the subject item.
directionality (CodeDirectionality)	The directionality of flow with repsect to the line's geometry.
impedance (Double)	The number representing the total opposition to flow.
<u>letadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

EMCS : Junction

(Database Feature Class Name = EnergyCtrlMonJunction) Accuracy: +/-1Ft.

Sensitivity: Secret

A box or small vault located below grade with above grade access where cables intersect, connect, or pass through. [SDSFIE FGDC Utilities Classification].

Names and Identifiers:

ivanes and identifiers.	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
modelNumber (String12)	The Model, Product, Catalog, or Item Number of subject item.
maaAlias (String60)	An alternative or former name by which the feature is refered.
serialNumber (String15)	The manufacturer's serial, or unique identification number of the subject item.
Attributes:	
disposition (<u>CodeDispositionObject</u>)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset. [Adopted from SDSFIE].
type (String16)	Discriminator. The code that represents the type of Junction.
description (String255)	A description or other unique information concerning the subject item.
material (CodePipeMaterial)	The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc.
size (Integer)	
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
<u>Metadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (<u>CodeDataSource</u>)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

EMCS : Marker

(Database Feature Class Name = EnergyCtrlMonMarker)

Geometry Type: Point Accuracy: +/-1Ft. Sensitivity: Secret A sign, concrete monument, etc. installed either directly above or immediately adjacent to underground lines, bends, fittings, etc to indicate the presence of an energy control monitoring station. [SDSFIE NGA/NIMA].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
Attributes:	

owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
description (String255)	A description or other unique information concerning the subject item.
material (String16)	The material of the subject item.
size (Integer)	The size of the subject item.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
<u>Metadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
<u>System Keys:</u>	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Data Set: FAA

FAA : Cable

(Database Feature Class Name = CableLine)Geometry Type: LineAccuracy: +/-5Ft.Sensitivity: SecretA group of conductors used to carry electrical energy or transmit communications from point to point.

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String30)	Any commonly used name for the feature.
maaAlias (String60)	An alternative or former name by which the feature is refered.
Attributes:	
condSize (<u>CodeCableDimension</u>)	The size of a single ungrounded conductor in the cable group in American Wire Gauge (AWG) units.
cblType (<u>CodeElectricCable</u>)	This value differentiates similar entities by use or type.[REEGIS].
catnav (CodeNavigationLineType)	Category of navigation line[S-57].
cblLength (Double)	The length of the cable between nodes.
cblMaterial (CodeElectricCable)	The material composition of the cable.
cfgType (CodeElectricConfigType)	The cable mounting configuration on the pole or tower.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.

owner (String60)

voltage (<u>CodeVoltage</u>) installType (<u>CodeElectricCable</u>) insulMaterial (<u>CodeSheathInsulateType</u>)

neutSize (CodeCableDimension) noConduct (Integer) noNeutral (Integer) noPhases (Integer) phaseLeter (CodeElectricPhaseType) description (String255) directionality (CodeDirectionality) impedance (Double) cabUse (CodeCableUse) diameter (Double) cabElev (CodeCableElevation) verticalClearance (Double)

cblSht (<u>CodeSheathInsulateType</u>) coffset (Double)

icefacClr (Double)

<u>Metadata:</u>

collectionProgress (CodeProgress) The progress of the data collection. dateAcquired (Date) The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915). verified (String255) Whether or not the feature has been verified. The type of project or work activity that installed or first recorded the location of this projectType (CodeProjectType) feature. projectId (String20) A unique identifier associated with the project or work activity that installed or first recorded the location of this feature. status (CodeStatus) A temporal description of the operational status of the feature. Alternative (Integer) Discriminator used to tie features of a plan or proposal together into a version. An operator defined work area. This attribute can be used by the operator for user defined userFlag (String254) system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE]. qualityLevel (CodeSueQualityLevel) The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02. dataSource (CodeDataSource) The primary source of the data in this record. dataSource2 (CodeDataSource) The secondary source of the data in this record. sourceStatement (String255) A statement providing additional details about the source of the data. editorName (String50) The name of the individual who last edited this data. lastUpdate (Date) The date upon which any data associated with this record was last updated. System Keys: A globally unique identifier applied to each feature in the database for reference. guid (String60) metaId (Integer) An identifier used to refer to a metadata record that provide additional information about the data in this record.

A person, organization, or agency with legal control or management responsibility of the

The type of material with which the conductors are insulated from each other and from

The size of a single neutral conductor in American Wire Gauge (AWG) units.

A description or other unique information concerning the subject item.

The width of a cylindrical or circular cable.[Tinker Air Force Base].

The type of cable sheathing or insulation.[Tinker Air Force Base].

The clearance in feet between the lowest point under the cable line and the water's surface at Mean High Water (MHW) referenced to a reading on the appropriate

The distance to the cable as measured from the edge of a paved surface.[Tinker Air Force

The clearance in feet between the lowest point under the cable line and the ice facility

The directionality of flow with repsect to the line's geometry.

The vertical location of the cable.[Tinker Air Force Base].

utility asset.[Adopted from SDSFIE].

their surroundings.

gage.[REEGIS].

surface.[S-57].

Basel.

The system voltage applied to the cable group.

The total number of ungrounded conductors in the cable.

The total number of grounded conductors in a ductbank.

The number of phases routed by this cable group.

The letter(s) of the phase(s) for the subject item.

The number representing the total opposition to flow. Discriminator - The overall use of the cable.

Discriminator. The installation type code.

FAA : Ductbank

 (Database Feature Class Name = Ductbank)

 Geometry Type: Line
 Accuracy: +/-5Ft.

 A tubular structure that provides protection for underground cables contained in conduit.

 Names and Identifiers:

maaID (String30)

name (String30) maaAlias (String60)

Attributes:

ductMat (<u>CodePipeMaterial</u>) dbkLength (Double)

dbkSize (Double)

disposition (CodeDispositionObject)

voltage (<u>CodeVoltage</u>) owner (String60)

noDucts (Integer) noSpares (Integer) description (String255) directionality (<u>CodeDirectionality</u>) impedance (Double) noDucts (Integer) noDuHigh (Integer) noDuWide (Integer) noSpares (Integer) concEnc (<u>CodeBoolean</u>)

diameter (Double) width (Double) height (Double)

Metadata:

collectionProgress (<u>CodeProgress</u>) dateAcquired (Date)

verified (String255) projectType (<u>CodeProjectType</u>)

projectId (String20)

status (<u>CodeStatus</u>) Alternative (Integer) userFlag (String254)

qualityLevel (CodeSueQualityLevel)

dataSource (<u>CodeDataSource</u>) dataSource2 (<u>CodeDataSource</u>) sourceStatement (String255) editorName (String50) lastUpdate (Date)

System Keys:

guid (String60) metaId (Integer) A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value) Name of the electrical underground conduit.[REEGIS]. An alternative or former name by which the feature is refered. An indication of the type of material of which the duct is composed.

The total length of the ductbank from source to load. Manholes and pullboxes should not break the measurement. A two dimensional description of the physical size of the ductbank including units of measure (e.g., 2 ft x 2 ft, 3 m x 3 m). The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections. The maximum voltage in the ductbank. A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE]. An indicator of the number of conduits or wireways found in the ductbank. The number of spare ducts enclosed in the ductbank for future use. A description or other unique information concerning the subject item. The directionality of flow with repsect to the line's geometry. The number representing the total opposition to flow. The total number of ducts in the ductbank. The number of ducts in the y-direction The number of ducts in the x-direction The total number of ducts not used in the ductbank. A Boolean indicating whether the ductbank is encased in concrete.[Tinker Air Force Base]. Diameter (if round).[AIR FORCE]. Width of horizontal cross section.[AIR FORCE].

The progress of the data collection.

Height.[AIR FORCE].

The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).

Whether or not the feature has been verified.

The type of project or work activity that installed or first recorded the location of this feature.

A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.

A temporal description of the operational status of the feature.

Discriminator used to tie features of a plan or proposal together into a version.

An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].

The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.

The primary source of the data in this record.

The secondary source of the data in this record.

A statement providing additional details about the source of the data.

The name of the individual who last edited this data.

The date upon which any data associated with this record was last updated.

A globally unique identifier applied to each feature in the database for reference. An identifier used to refer to a metadata record that provide additional information about the data in this record.

FAA : Junction

(Database Feature Class Name = ElectricalJunction)Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretA box or small vault (usually concrete, brick, or metal) typically located below grade with abovegrade access in which cables intersect, connect, or pass through. [SDSFIE FGDC UtilitiesClassification].

ames and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
tributes:	
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
featureUse (String16)	Discriminator. An attribute that differentiates the use of the subject item.
mhDia (Double)	The diameter dimension of the subject item, measured from inside face of wall to inside face of opposite wall.
drainType (<u>CodeDrainType</u>)	The type of subject item drain.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
floorElv (Double)	The top surface elevation of the subject item's interior floor/bottom in feet (English units or meters (SI units) above some datum.
Material (String16)	The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc.
type (String16)	A field indicating the kind, class, or group of manhole for the subject utility.
noCables (Integer)	The number of the cables entering and exiting the subject item.
rimElevation (Double)	The elevation of exterior top surface of the subject item's lid, hatch, rim, or roof in feet (English units) or meters (SI units) above some datum.
description (String255)	A description or other unique information concerning the subject item.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
juncType (CodeJuncType)	The type of junction (e.g. manhole, handhole, other)
etadata:	
collectionProgress (<u>CodeProgress</u>)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for dat is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user define system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined i ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
stem Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information abou the data in this record

the data in this record.

Data Set: Fuel

Fuel : Air Eliminator

(Database Feature Class Name = FuelAirEliminator)Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretA device or structure placed in the fuel distribution system to separate air from petroleumproducts. [SDSFIE FGDC Utilities Classification].

Names and Identifiers: maaID (String30) A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value) maaAlias (String60) An alternative or former name by which the feature is refered. Attributes: owner (String60) A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE]. description (String255) Any brief description of the feature. The material of the subject item. material (String16) size (Integer) The size of the subject item. The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), disposition (CodeDispositionObject) from lists or entered from field inspections. junctionType (CodeJunctionType) An indicator as to whether the feature serves as a source, sink or neither in the network. Metadata: collectionProgress (CodeProgress) The progress of the data collection. dateAcquired (Date) The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915). verified (String255) Whether or not the feature has been verified. projectType (CodeProjectType) The type of project or work activity that installed or first recorded the location of this feature. A unique identifier associated with the project or work activity that installed or first projectId (String20) recorded the location of this feature. status (CodeStatus) A temporal description of the operational status of the feature. Alternative (Integer) Discriminator used to tie features of a plan or proposal together into a version. An operator defined work area. This attribute can be used by the operator for user defined userFlag (String254) system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE]. qualityLevel (CodeSueQualityLevel) The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02. dataSource (CodeDataSource) The primary source of the data in this record. dataSource2 (CodeDataSource) The secondary source of the data in this record. sourceStatement (String255) A statement providing additional details about the source of the data. editorName (String50) The name of the individual who last edited this data. lastUpdate (Date) The date upon which any data associated with this record was last updated. System Keys: guid (String60) A globally unique identifier applied to each feature in the database for reference. metaId (Integer) An identifier used to refer to a metadata record that provide additional information about the data in this record.

Fuel : Anode

(Database Feature Class Name = FuelAnode)Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretA material used for fuel distribution systems that is electrically connected to a lesselectrolytically active material so that it will oxidize in the place of the less active material.[SDSFIE FGDC Utilities Classification].

Names and Identifiers:

maaID (String30)

A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)

maaAlias (String60)	An alternative or former name by which the feature is refered.	
Attributes:		
anodeWeight (Double)	The initial weight of the anode or anode packet.	
material (CodeAnodes)	The type of material composition of the anode or anode packet.	
owner (String60)	A person, organization, or agency with legal control or management responsibility of utility asset.[Adopted from SDSFIE].	
description (String255)	A description or other unique information concerning the subject item.	
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.	
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.	
Metadata:		
collectionProgress (CodeProgress)	The progress of the data collection.	
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for da is YYYYMMDD (i.e., September 15, 1994 = 19940915).	
verified (String255)	Whether or not the feature has been verified.	
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.	
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.	
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.	
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.	
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defin system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].	
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined i ASCE38-02.	
dataSource (CodeDataSource)	The primary source of the data in this record.	
dataSource2 (CodeDataSource)	The secondary source of the data in this record.	
sourceStatement (String255)	A statement providing additional details about the source of the data.	
editorName (String50)	The name of the individual who last edited this data.	
lastUpdate (Date)	The date upon which any data associated with this record was last updated.	
System Keys:		
guid (String60)	A globally unique identifier applied to each feature in the database for reference.	
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.	

Fuel : Anode Test Station

ruer. Anoue rest Station		
(Database Feature Class Name = Fu	elAnodeTestStation)	
Geometry Type: Point	Accuracy: +/-1Ft.	Sensitivity: Secret
A central location where anodes are	tested for performance in fuel sys	tems. [SDSFIE HSIP].
Names and Identifiers:		
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)	
maaAlias (String60)	An alternative or former name by which the feature	are is refered.
Attributes:		
noTerm (Integer)	The total number of terminal connections at the t	est station.
type (String16)	The type of anode test station configuration use.	
owner (String60)	A person, organization, or agency with legal con- utility asset.[Adopted from SDSFIE].	trol or management responsibility of the
wireSize (CodeCableDimension)	The AWG size designation for the wire connecting test station.	ng the anode/anode packet to the anode

wireType (String16)	The conductor configuration, typically solid or stranded.
description (String255)	A description or other unique information concerning the subject item.
installType (CodeSheathInsulateType)	The type of insulate installed.
material (String16)	The material of the subject item.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.

junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
<u>Metadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (CodeStatus)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
<u>System Keys:</u>	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Fuel : Farm Site

(Database Feature Class Name = FuelFarmLocation)

Geometry Type: Point Accuracy: +/-1Ft. Sensitivity: Secret An area designated for the storage of POL products which normally includes multiple tanks (above or below ground), berms, and monitoring wells. [SDSFIE FGDC Utilities Classification].

A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value) A commonly used name for the feature.[HSIP]. An alternative or former name by which the feature is refered. The size of the area, zone, or polygon in square units. The distance around the boundary of the area, zone, or subject item in linear units. A person, organization, or agency with legal control or management responsibility of the
primary or foreign key value) A commonly used name for the feature.[HSIP]. An alternative or former name by which the feature is refered. The size of the area, zone, or polygon in square units. The distance around the boundary of the area, zone, or subject item in linear units.
An alternative or former name by which the feature is refered. The size of the area, zone, or polygon in square units. The distance around the boundary of the area, zone, or subject item in linear units.
The size of the area, zone, or polygon in square units. The distance around the boundary of the area, zone, or subject item in linear units.
The distance around the boundary of the area, zone, or subject item in linear units.
The distance around the boundary of the area, zone, or subject item in linear units.
A person, organization, or agency with legal control or management responsibility of the
utility asset.[Adopted from SDSFIE].
The quantity of pipes that access the fuel farm.[HSIP].
The quantity of jet fuel that can be stored in the facility.[HSIP].
The total storage capacity of lubricants at the fuel farm.[HSIP].
The total gas storage capacity for the fuel farm.[HSIP].
The total number of tanks in the fuel farm.[HSIP].
The quantity of oil that can be stored in the facility.[HSIP].
A boolean indicating whether the farm is a part of the Strategic Petroleum Reserve (Y - is a part of the reserve, N - is not a part of the reserve)?[HSIP].
A description or other unique information concerning the subject item.
The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
An indicator as to whether the feature serves as a source, sink or neither in the network.
The progress of the data collection.

dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Fuel : Filter Strainer

(Database Feature Class Name = FuelFilterStrainer)Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretA device through which fuel is passed to remove impurities to the fuel.Usually placed in fuellines near fill points.[SDSFIE FGDC Utilities Classification].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
Attributes:	
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
description (String255)	Any brief description of the feature.
material (String16)	The material of the subject item.
size (Integer)	The size of the subject item.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
junctionType (CodeJunctionType)	An indicator as to whether the feature serves as a source, sink or neither in the network.
<u>Ietadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.

dataSource (<u>CodeDataSource</u>) dataSource2 (<u>CodeDataSource</u>) sourceStatement (String255) editorName (String50)

lastUpdate (Date)

System Keys:

guid (String60) metaId (Integer)

Fuel : Fitting

The primary source of the data in this record. The secondary source of the data in this record. A statement providing additional details about the source of the data. The name of the individual who last edited this data. The date upon which any data associated with this record was last updated.

A globally unique identifier applied to each feature in the database for reference. An identifier used to refer to a metadata record that provide additional information about the data in this record.

(Database Feature Class Name = FuelFitting)Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretA fitting is an item used to connect, cap, plug or otherwise alter a pipe carrying fuel. [SDSFIEFGDC Utilities Classification].

Names and Identifiers:

maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
modelNumber (String12)	The Model, Product, Catalog, or Item Number of subject item.
serialNumber (String15)	The manufacturer's serial, or unique identification number of the subject item.
Attributes:	
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
material (CodePipeMaterial)	The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc.
fitWidth (Double)	The width dimension of the subject item measured at its' widest point.
fitLength (Double)	The overall length of the fitting.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
size (CodePipeDiameter)	The manufacturers designated size, or nominal (i.e., rounded to the nearest unit) diameter for the subject item (e.g., 1 gas hydrant, 2 meter, 6 pipe).
type (String16)	A field indicating the kind, class, or group of the subject item.
coverDepth (Double)	Depth of cover. The depth measured from top of ground's surface (or grade) to top of underground fuel line fitting.[Air Force].
description (String255)	A description or other unique information concerning the subject item.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
<u>Metadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection.
verified (String255)	Whether or not the feature has been verified
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.

lastUpdate (Date)	The date upon which any data associated with this record was last updated.
<u>System Keys:</u>	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Fuel : Hydrant

(Database Feature Class Name = FuelHydrant)			
Geometry Type: Point	Accuracy: +/-1Ft.	Sensitivity: Secret	
Location where fuel is control discharged to users. [SDSFIE FGDC Utilities Classification].			

Names and Identifiers:		
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)	
modelNumber (String12)	The Model, Product, Catalog, or Item Number of subject item.	
maaAlias (String60)	An alternative or former name by which the feature is refered.	
nozzleNr (Integer)	The number of fuel system hydrant cart nozzles.[Air Force].	
Attributes:		
hydrantType (<u>CodeHydrantType</u>)	The particular kind, class, or group of hydrant.	
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].	
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.	
outcon1dia (Double)	The diameter of the hydrant outlet, or for hydrants with more than one outlet, the diameter of the largest hydrant outlet.	
outcon2dia (Double)	The diameter of the hydrant outlet, or for hydrants with more than one outlet, the diameter of the second largest hydrant outlet.	
outcon3dia (Double)	The diameter of the hydrant outlet, or for hydrants with more than one outlet, the diameter of the smallest hydrant outlet.	
pressResd (Double)	The measured pressure at a hydrant or connection during a flow test conducted at the subject hydrant or connection.	
pressStat (Double)	The numeric pressure head on the subject item under static (i.e., no flow or demand) conditions in the utility system.	
valveSt (<u>CodeStyleValve</u>)	The style of the valve.	
noHydrnts (Integer)	The number of Refill for the hydrants.[Air Force].	
nozzlType (<u>CodeNozzleType</u>)	Fuel System Hydrant Cart Nozzle Type Code.[Air Force].	
truckNr (Integer)	The number of the cart truck.[Air Force].	
truckType (<u>CodeTruckType</u>)	The different code types of the cart truck.[Air Force].	
description (String255)	A description or other unique information concerning the subject item.	
remarks (String255)	Any narrative remarks about the fuel hydrant .[Air Force].	
hydrantElvevation (Integer)	The elevation of the hydrant.	
material (String16)	The material of the subject item.	
size (Integer)	The size of the subject item.	
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.	
<u>Metadata:</u>		
collectionProgress (CodeProgress)	The progress of the data collection.	
verified (String255)	Whether or not the feature has been verified	
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for dat is YYYYMMDD (i.e., September 15, 1994 = 19940915).	
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.	
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.	
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.	
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.	
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user define system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].	

qualityLevel (CodeSueQualityLevel)

dataSource (<u>CodeDataSource</u>) dataSource2 (<u>CodeDataSource</u>) sourceStatement (String255) editorName (String50) lastUpdate (Date)

System Keys:

guid (String60) metaId (Integer) The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02. The primary source of the data in this record. The secondary source of the data in this record. A statement providing additional details about the source of the data. The name of the individual who last edited this data. The date upon which any data associated with this record was last updated.

A globally unique identifier applied to each feature in the database for reference. An identifier used to refer to a metadata record that provide additional information about the data in this record.

Fuel : Junction

(Database Feature Class Name = FuelJunction) Geometry Type: Point Accuracy: +/-1Ft. Sensitivity: Secret A box or small vault (usually concrete, brick, or cast iron) in fuel systems located below grade with above grade access where pipes intersect. The manhole also houses associated fittings, valves, meters, etc. [SDSFIE FGDC Utilities Classification].

Names and Identifiers:

maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)	
maaAlias (String60)	An alternative or former name by which the feature is refered.	
modelNumber (String12)	The Model, Product, Catalog, or Item Number of subject item.	
Attributes:		
airrfValve (<u>CodeBoolean</u>)	Indicates whether or not there is an air relief valve installed on subject item? (yes/no)	
drainType (<u>CodeDrainType</u>)	The type of subject item drain.	
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.	
material (CodePipeMaterial)	The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc.	
mhDia (Double)	The diameter dimension of the subject item, measured from inside face of wall to inside face of opposite wall.	
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset. [Adopted from SDSFIE].	
featureUse (String16)	Discriminator. An attribute that differentiates the use of the subject item.	
noValves (Integer)	The number of valves inside the subject item.	
mhLength (Double)	The length dimension of the subject item, from outside face of exterior wall/side to outside face of opposite exterior wall/side.	
mhWidth (Double)	The width dimension of the subject item, from outside face of exterior wall/side to outside face of opposite exterior wall/side.	
invertElv (Double)	The top surface elevation of the subject item's interior floor/bottom in feet (English units) or meters (SI units) above some datum.	
status (CodeStatus)	The status of the manhole indicating its' usability.	
noPipes (Integer)	The number of the pipes entering and exiting the subject item.	
rimElevation (Double)	The elevation of exterior top surface of the subject item's lid, hatch, rim, or roof in feet (English units) or meters (SI units) above some datum.	
type (String16)	A field indicating the kind, class, or group of manhole for the subject utility.	
area (Double)	The size of the area, zone, or polygon in square units.	
perimeter (Double)	The distance around the boundary of the area, zone, or subject item in linear units.	
description (String255)	A description or other unique information concerning the subject item.	
size (Integer)	The size of the subject item.	
junctionType (CodeJunctionType)	An indicator as to whether the feature serves as a source, sink or neither in the network.	
Metadata:		
collectionProgress (CodeProgress)	The progress of the data collection.	
verified (String255)	Whether or not the feature has been verified.	
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).	

projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (CodeStatus)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (<u>CodeDataSource</u>)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Fuel : Line

(Database Feature Class Name = FuelLine) Geometry Type: Line Accuracy: +/-5Ft. Sensitivity: Secret A pipe used to carry fuel from location to location (main line, service line, vent line, etc). [SDSFIE FGDC Utilities Classification]. Names and Identifiers:

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
modelNumber (String12)	The Model, Product, Catalog, or Item Number of subject item.
Attributes:	
pipeLength (Double)	The length of pipe, measured from node to node along the pipe centerline .
material (CodePipeMaterial)	The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
catProt (<u>CodeBoolean</u>)	Indicates whether or not the pipe has been provided with cathodic protection? (yes or no).
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
fuelType (<u>CodeFuel</u>)	The type of fuel transported in this pipe.
pressNorm (Double)	The normal operating pressure of the fuel pipe.
invElv1 (Double)	The elevation of the bottom of pipe (i.e., pipe invert) at node_id_1 in feet (English units) or meters (SI units) above some datum.[Derived from SDSFIE].
invElv2 (Double)	The elevation of the bottom of pipe (i.e., pipe invert) at node_id_2 in feet (English units) or meters (SI units) above some datum.
featureUse (String16)	Discriminator. The use code for a fuel line.
slopeBot (Double)	The slope of the bottom of the subject item expressed as a percentage.
pressMax (Double)	The manufacturer's or industry standard's maximum pressure rating of the subject item.
size (CodePipeDiameter)	The manufacturers designated size, or nominal (i.e., rounded to the nearest unit) diameter for the subject item (e.g., 1 gas hydrant, 2 meter, 6 pipe).
type (String16)	A field indicating the kind, class, or group of the subject item.
piplty (<u>CodePipelineLocationType</u>)	The location of the pipeline in relevance to the earth's surface.[USGS].
coverDepth (Double)	Depth of cover. The depth measured from top of ground's surface (or grade) to top of underground fuel line pipe.[Air Force].
description (String255)	A description or other unique information concerning the subject item.
directionality (CodeDirectionality)	The directionality of flow with repsect to the line's geometry.

impedance (Double)	The number representing the total opposition to flow.
tadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for datis YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defin system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
tem Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information abo the data in this record.

Fuel : Marker

(Database Feature Class Name = FuelMarker) Geometry Type: Point Accuracy: +/-1Ft. Sensitivity: Secret A sign, concrete monument, etc. installed either directly above or immediately adjacent to underground lines, bends, fittings, etc to indicate the presence of fuel lines. [SDSFIE FGDC Utilities Classification].

ames and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
<u>Attributes:</u>	
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
material (String16)	The material of the subject item.
description (String255)	A description or other unique information concerning the subject item.
size (Integer)	The size of the subject item.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
etadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
verified (String255)	Whether or not the feature has been verified
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.

userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (<u>CodeDataSource</u>)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metald (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Fuel : Meter

(Database Feature Class Name = FuelMeter)Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretA device installed in a line for measuring the quantity and or rate of fuel to a facility or through a section of line. [SDSFIE FGDC Utilities Classification].Sensitivity: Secret

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
modelNumber (String12)	The Model, Product, Catalog, or Item Number of subject item.
meterCustomer (String20)	The name of the individual, company, or government agency served by the subject item.
serialNumber (String15)	The manufacturer's serial, or unique identification number of the subject item.
Attributes:	
installType (CodePumpSta)	The type installation of the subject item.
meterElv (Double)	The elevation at the centerline of the meter, in feet (English units) or meters (SI units) above some datum.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
size (<u>CodePipeDiameter</u>)	The manufacturers designated size, or nominal (i.e., rounded to the nearest unit) diameter for the subject item (e.g., 1 gas hydrant, 2 meter, 6 pipe).
srvcMtr (<u>CodeBoolean</u>)	An indicator as to whether or not the meter is installed on a service line? (yes or no)
type (String16)	A field indicating the kind, class, or group of the subject item.
description (String255)	A description or other unique information concerning the subject item.
material (String16)	The material of the subject item.
junctionType (CodeJunctionType)	An indicator as to whether the feature serves as a source, sink or neither in the network.
<u>Metadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (CodeStatus)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in

	ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Fuel : Oil Water Separator

 (Database Feature Class Name = FuelOilWaterSeparator)

 Geometry Type: Point
 Accuracy: +/-1Ft.

 Sensitivity: Secret

 A filtering device placed in the fuel stream specifically to remove oil and water from the fuel.

 [SDSFIE FGDC Utilities Classification].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
sepName (String12)	The site specific identification name or number assigned to the subject item.
Attributes:	
datePerX (Date)	The date the current permit expires for the subject item. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915)
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
disposal (String30)	Brief description of how the waste is disposed.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
grtchbr (<u>CodeBoolean</u>)	An indicator as to whether or not the subject item has a grit chamber. (yes or no)
flowCapacity (Double)	The flow capacity of the subject item.
oilCapacity (Double)	The retention capacity of the oil-water separator.
sepCode (String2)	The oil-water separator code. Usually defined as OW.
sepContnt (String20)	Separator contents
tempOptim (Double)	The optimum operating temperature for the subject item.
separationProcess (String30)	The specific type of separation process.
sepVolume (Double)	The volume of the oil-water separator.
type (String16)	A field indicating the kind, class, or group of the subject item.
description (String255)	A description or other unique information concerning the subject item.
coordX (Double)	The coordinate in the east-west plane, expressed in decimal degrees.
coordY (Double)	The coordinate in the north-south plane, expressed in decimal degrees.
material (String16)	The material of the subject item.
junctionType (CodeJunctionType)	An indicator as to whether the feature serves as a source, sink or neither in the network.
<u>Metadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be

	used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Fuel : Pump

(Database Feature Class Name = FuelPump)Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretA mechanical device for a fuel system that draws material into itself through an entrance portand forces the material out through an exhaust port. [SDSFIE FGDC Utilities Classification].

U	
ames and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
modelNumber (String12)	The Model, Product, Catalog, or Item Number of subject item.
serialNumber (String15)	The manufacturer's serial, or unique identification number of the subject item.
tributes:	
outflwAct (Double)	The actual measured pump flow output.
coolMethod (CodeEquipmentCooling)	The method by which the pump is cooled.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
capacityRate (Double)	The manufacturer's pump capacity (e.g., gpm) rating at a specific design total dynamic head (TDH), usually depicted by a pump curve.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
featureUse (String16)	The particular application, or use the subject item.
pumpElevation (Double)	The elevation measured at centerline of the pump, in feet (English units) or meters (SI units) above some datum.
primeMethod (String15)	The method by which the pump is primed.
primRqd (<u>CodeBoolean</u>)	An indicator as to whether or not the pump has to be primed? (yes or no).
pumpHp (Double)	The power generated by the pump, equal in the U.S. to 746 watts and nearly equivalent to the English gravitational unit of the same name that equals 550 foot-pounds of work per second.
type (String16)	A field indicating the kind, class, or group of the subject item.
bank (CodeBankSide)	The bankside of the river that the feature is located on.[USACE].
riverMile (Double)	River mile marker.[USACE].
description (String255)	A description or other unique information concerning the subject item.
material (String16)	The material of the subject item.
junctionType (CodeJunctionType)	An indicator as to whether the feature serves as a source, sink or neither in the network.
etadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.

Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Fuel : Pump Booster Station

(Database Feature Class Name = FuelPumpBoosterStation)Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretA building in which one or more pumps operate to supply material flowing at adequate pressureto or from a fuel distribution system. [SDSFIE FGDC Utilities Classification].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String30)	Any commonly used name for the fuel pump booster station point.[USGS].
maaAlias (String60)	An alternative or former name by which the feature is refered.
Attributes:	
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
condition (CodePoleCondition)	Indicates a state of being, or readiness for use of the subject item (e.g., good, fair, poor), from lists or field inspections.
design (<u>CodePumpSta</u>)	Discriminator. The design of the pump/booster station.
capacityAlrm (Double)	Capacity alarm level.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset. [Adopted from SDSFIE].
fuelSrc (CodeSourceListFuelGas)	The source of fuel for the pumps.
nodalElv (Double)	The elevation of subject node, which is used in performing computer analyses of the water distribution system. The node elevation is usually the ground elevation at the subject node, or the elevation of the subject item located at the subject node (e.g.,
pumpElevation (Double)	The elevation measured at centerline of the pump, in feet (English units) or meters (SI units) above some datum.
staCapacity (Double)	The pump station's output capacity (e.g., gpm) rating (with all pumps operating) at a specific total dynamic head (TDH), which correlates to normal system pressure head or design pressure head.
staLength (Double)	The length dimension of the station, measured from outside face of the exterior wall/side to outside face of the opposite exterior wall/side.
staType (<u>CodePumpSta</u>)	The type of station.
staWidth (Double)	The width dimension of the station, measured from outside face of the exterior wall/side to outside face of the opposite exterior wall/side.
noPumps (Integer)	The total number of pumps located at the subject item.
prodct (CodePipelineProduct)	The product being pumped or carried by the pipeline.[HSIP].
description (String255)	A description or other unique information concerning the subject item.
material (String16)	The material of the subject item.
junctionType (CodeJunctionType)	An indicator as to whether the feature serves as a source, sink or neither in the network.
<u>Aetadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).

verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Fuel : Rectifier

(Database Feature Class Name = FuelRectifier)

Geometry Type: Point Accuracy: +/-1Ft. Sensitivity: Secret A device that changes alternating current to direct current for an impressed current cathodic protection system on an element of the fuel distribution system. [SDSFIE FGDC Utilities Classification].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
Attributes:	
coolMethod (CodeEquipmentCooling)	The method by which the rectifier is cooled, typically air or oil.
enclType (CodeElectricMotorEnclType)	The type of enclosure used to protect the rectifier.
voltIn (CodeVoltage)	The input AC voltage to the rectifier.
currntOut (Double)	The output direct current from the rectifier to the anode system.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
voltOut (<u>CodeVoltage</u>)	The output DC voltage from the rectifier to the anode system.
internalMeter (CodeBoolean)	An indicator as to whether or not the rectifier has an internal meter, yes/no.
noPhases (Integer)	The number of phases to which this device provides reactive power.
phaseLeter (CodeElectricPhaseType)	The letter(s) of the phase(s) for the subject item.
description (String255)	A description or other unique information concerning the subject item.
material (String16)	The material of the subject item.
size (Integer)	The size of the subject item.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
Metadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
verified (String255)	Whether or not the feature has been verified
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.

projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (<u>CodeDataSource</u>)	The primary source of the data in this record.
dataSource2 (<u>CodeDataSource</u>)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Fuel : Regulator Reducer

 (Database Feature Class Name = FuelRegulatorReducer)

 Geometry Type: Point
 Accuracy: +/-1Ft.

 Sensitivity: Secret

 A pressure regulator located in the fuel line automatically reduces the pressure on the

 downstream side of the valve to a preset magnitude. [SDSFIE FGDC Utilities Classification].

Names and Identifiers:			
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)		
maaAlias (String60)	An alternative or former name by which the feature is refered.		
modelNumber (String12)	The Model, Product, Catalog, or Item Number of subject item.		
serialNumber (String15)	The manufacturer's serial, or unique identification number of the subject item.		
Attributes:			
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.		
pressIn (Double)	The design fuel system pressure in the line on inlet side of the pressure regulator.		
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].		
pressOut (Double)	The design or maximum system pressure in the line on outlet side of the pressure reducing station.		
size (CodePipeDiameter)	The manufacturers designated size, or nominal (i.e., rounded to the nearest unit) diameter for the subject item (e.g., 1 gas hydrant, 2 meter, 6 pipe).		
pressReqd (Double)	The required maximum outlet pressure setting for the regulator.		
type (String16)	Discriminator. The kind, class, or group of the subject item.		
description (String255)	A description or other unique information concerning the subject item.		
material (String16)	The material of the subject item.		
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.		
Metadata:			
collectionProgress (CodeProgress)	The progress of the data collection.		
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).		
verified (String255)	Whether or not the feature has been verified.		
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.		
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.		
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.		
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.		
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined		

	system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
<u>System Keys:</u>	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Fuel : Source

(Database Feature Class Name = FuelSource)Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretThe point from which the fuel is supplied a product for processing and distribution. [SDSFIEFGDC Utilities Classification].

maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)			
name (CodeFuelSource)	The site specific identification name or number assigned to the subject item.			
maaAlias (String60)	An alternative or former name by which the feature is refered.			
Attributes:				
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.			
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].			
type (String16)	A field indicating the kind, class, or group of the subject item.			
description (String255)	A description or other unique information concerning the subject item.			
material (String16)	The material of the subject item.			
size (Integer)	The size of the subject item.			
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.			
Metadata:				
collectionProgress (CodeProgress)	The progress of the data collection.			
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).			
verified (String255)	Whether or not the feature has been verified			
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.			
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.			
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.			
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.			
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user define system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].			
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.			
dataSource (<u>CodeDataSource</u>)	The primary source of the data in this record.			
dataSource2 (CodeDataSource)	The secondary source of the data in this record.			
sourceStatement (String255)	A statement providing additional details about the source of the data.			
editorName (String50)	The name of the individual who last edited this data.			
lastUpdate (Date)	The date upon which any data associated with this record was last updated.			
System Keys:				
guid (String60)	A globally unique identifier applied to each feature in the database for reference.			

metaId	(Integer)
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An identifier used to refer to a metadata record that provide additional information about the data in this record.

Fuel : Tank

(Database Feature Class Name = FuelTank) Geometry Type: Point Accuracy: +/-1Ft. Sensitivity: Secret An above or below grade receptacle or chamber for holding fuels on a temporary basis prior to transfer or use. [SDSFIE FGDC Utilities Classification].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
modelNumber (String12)	The Model, Product, Catalog, or Item Number of subject item.
serialNumber (String15)	The manufacturer's serial, or unique identification number of the subject item.
Attributes:	
altValve (<u>CodeBoolean</u>)	Indicates whether or not the tank has an altitude valve which controls the flow into the tank? (yes or no).
area (Double)	The size of the area, zone, or polygon in square units.
ovrflwElevation (Double)	The elevation measured at the point of overflow, or entrance, into the tank overflow pipe,, in feet (English units) or meters (SI units) above some datum.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
material (CodePipeMaterial)	The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc.
headNorm (Double)	The normal operating head for the subject item.
fuelType (<u>CodeFuel</u>)	The type fuel stored in the tank.
pressNorm (Double)	The normal operating pressure of the fuel tank.
invertElv (Double)	The elevation measured at bottom of the tank, in feet (English units) or meters (SI units) above some datum. mean sea level.
tankSt (<u>CodeStyleTank</u>)	The particular kind, class, or group of tank (e.g., elevated, hydropneumatic, etc.).
tankUse (<u>CodeTankUse</u>)	The particular kind or use of the tank.
tankWidth (Double)	The exterior width dimension of the tank, measured from outside face of the exterior wall/side to outside face of the opposite exterior wall/side.
rimElevation (Double)	The elevation of exterior top surface of the subject item's lid, hatch, rim, or roof in feet (English units) or meters (SI units) above some datum.
tankCapacity (Double)	The tank's storage capacity (e.g., gallons, ft3, etc).
tankDiameter (Double)	The inside diameter of the tank, measured from the interior wall surface to the opposite interior wall surface.
tankLength (Double)	The length dimension of the tank, measured from outside face of the exterior wall/side to outside face of the opposite exterior wall/side.
strgpet (<u>CodeBoolean</u>)	A boolean indicating whether there is a Strategic Petroleum Reserve ($Y = YES$ or $N = NO$).[HSIP].
numTanks (Integer)	Maximum number of storage tanks, all POL.[HSIP].
numPipes (Integer)	Number of pipelines entering/exiting facility.[HSIP].
perimeter (Double)	The distance around the boundary of the area, zone, or subject item in linear units.
fllstandrt (Integer)	The Rate of the Fillstand.[Air Force].
resplyCap (Double)	The Resupply Capacity.[Air Force].
secCont (<u>CodeBoolean</u>)	A boolean indicating whether or not the secondary containment that is present ($Y = YES$ or $N = NO$).[AIR FORCE].
secContam (String255)	A description of the secondary containment that is present.[Army].
description (String255)	A description or other unique information concerning the subject item.
remarks (String255)	The narrative remarks about the fuel tank.[Air Force].
color (<u>CodeColor</u>)	The color of the fuel tank.
lightCode (String1)	The light code of the tank.
lightingType (CodeLightingConfiguration	onType) Thetype of lighting configuration.

markingFeatureType (CodeMarkingFeature	<u>eType</u>) The type of the marking		
topElevation (Double)	The elevation of exterior top surface of the subject item's lid, hatch, rim, or roof in feet (English units) or meters (SI units) above some datum.		
verticalStructureMaterial (String16)	The vertical structure material.		
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.		
<u>Metadata:</u>			
collectionProgress (CodeProgress)	The progress of the data collection.		
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).		
verified (String255)	Whether or not the feature has been verified.		
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.		
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.		
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.		
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.		
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].		
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.		
dataSource (CodeDataSource)	The primary source of the data in this record.		
dataSource2 (CodeDataSource)	The secondary source of the data in this record.		
sourceStatement (String255)	A statement providing additional details about the source of the data.		
editorName (String50)	The name of the individual who last edited this data.		
lastUpdate (Date)	The date upon which any data associated with this record was last updated.		
System Keys:			
guid (String60)	A globally unique identifier applied to each feature in the database for reference.		
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.		

Fuel : Transmission Pipeline

(Data	abas	se	Feature	Class Name	= FuelTrans	Pipeline)	
a		T	. .				

Geometry Type: Line Accuracy: +/-5Ft. Sensitivity: Secret An interstate or intrastate transmission line through which gas, oil, or hazardous liquid is transported for the purpose of supplying a local utility. [SDSFIE DOT - NPMS].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String30)	Any commonly used name for the pipeline.[USGS].
maaAlias (String60)	An alternative or former name by which the feature is refered.
sysName (String40)	The name of a single pipeline system.[DOT - NPMS].
Attributes:	
operNm (String40)	The name of the company or organization that physically operates the pipeline system.[DOT - NPMS].
catPipe (<u>CodePipeCategory</u>)	Category of pipe[S-57].
verticalClearance (Double)	Vertical Clearance of pipeline[S-57].
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
piprod (CodePipelineProduct)	Discriminator. The type of product carried by pipeline.[HSIP].
diameter (Double)	The diameter of the pipeline in either mm or cm.[HSIP].
tankSt (<u>CodeStyleTank</u>)	The particular kind, class, or group of tank (e.g. elevated, on ground, below ground, floating, on water body bottom.).[HSIP].
capacity (Double)	The capacity of the pipeline.[HSIP].
intersta (<u>CodeBoolean</u>)	Indication whether or not (yes or no) pipeline is an interstate pipeline. Yes = interstate, No = Intrastate.[DOT - NPMS].
cmdtyDesc (String255)	Comma separated list of the names of commodities carried by the pipeline system.[DOT -

NPMS]. Code designation for the primary commodity carried by the pipeline system.[DOT commody1 (CodePipelineProduct) NPMS]. commody2 (CodePipelineProduct) Code designation for a secondary commodity carried by the pipeline system (if applicable). Empty (EMT) is not valid.[DOT - NPMS]. commody3 (CodePipelineProduct) Code designation for an additional secondary commodity carried by the pipeline system (if applicable). Empty (EMT) is not valid.[DOT - NPMS]. prodct (String255) A description of the product that is being carried in pipeline.[S-57]. length (Double) The overall length of the feature.[Center]. vertLoc (CodeVerticalLocation) The vertical location for the pipeline relative to the surface.[USGS]. description (String255) A description or other unique information concerning the subject item. directionality (CodeDirectionality) The directionality of flow with repsect to the line's geometry. material (String16) The material of the subject item. impedance (Double) The number representing the total opposition to flow. disposition (CodeDispositionObject) The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections. Metadata: collectionProgress (CodeProgress) The progress of the data collection. dateAcquired (Date) The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915). verified (String255) Whether or not the feature has been verified projectType (CodeProjectType) The type of project or work activity that installed or first recorded the location of this feature. projectId (String20) A unique identifier associated with the project or work activity that installed or first recorded the location of this feature. status (CodeStatus) A temporal description of the operational status of the feature. Alternative (Integer) Discriminator used to tie features of a plan or proposal together into a version. An operator defined work area. This attribute can be used by the operator for user defined userFlag (String254) system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE]. qualityLevel (CodeSueQualityLevel) The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02. dataSource (CodeDataSource) The primary source of the data in this record. dataSource2 (CodeDataSource) The secondary source of the data in this record. sourceStatement (String255) A statement providing additional details about the source of the data. editorName (String50) The name of the individual who last edited this data. lastUpdate (Date) The date upon which any data associated with this record was last updated. System Keys: guid (String60) A globally unique identifier applied to each feature in the database for reference. metaId (Integer) An identifier used to refer to a metadata record that provide additional information about the data in this record.

Fuel : Transmission Pipeline Segment Line

(Database Feature Class Name = FuelTransPipelineSegmentLine)

Geometry Type: Line Accuracy: +/-5Ft. Sensitivity: Secret A linear feature representing part or all of a pipeline system. A pipeline segment must have only two ends. No branches are allowed. A pipeline segment may be a straight line or may have any number of vertices. Each pipeline segment must be uniquely i [SDSFIE CGDII].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
<u>Attributes:</u>	
size (<u>CodePipeDiameter</u>)	The manufacturers designated size, or nominal (i.e., rounded to the nearest unit) diameter for the subject item (e.g., 1 in gas hydrant, 2 in meter, 6 in pipe).[DOT - NPMS].
posAcc (<u>CodePosAccuracyQuality</u>)	Estimated positional accuracy of the feature.[DOT - NPMS].
length (Double)	The length of pipe, measured from node to node along the pipeline segment

	centerline.[DOT - NPMS].
subsysNm (String40)	Name for the pipeline segment, or smaller sub-section of the pipeline system.[DOT - NPMS].
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
description (String255)	A description or other unique information concerning the subject item.
directionality (CodeDirectionality)	The directionality of flow with repsect to the line's geometry.
material (String16)	The material of the subject item.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
impedance (Double)	The number representing the total opposition to flow.
<u>Metadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (CodeStatus)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (<u>CodeDataSource</u>)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Fuel : Refinery Site

h2Prod (Double)

cokeProd (Double)

elTransRefinery)	
Accuracy: +/-1Ft. Sen	nsitivity: Secret
are refined. [SDSFIE FGDC Utilities	Classification].
A unique identifier used by people to refer to this feature primary or foreign key value)	re (note: this is not a system
An alternative or former name by which the feature is r	refered.
The name of the refinery.	
The size of the area, zone, or polygon in square units.	
The distance around the boundary of the area, zone, or	subject item in linear units.
The co-generation capacity of the refinery in Kw.[HSIF	P].
A person, organization, or agency with legal control or utility asset.[Adopted from SDSFIE].	management responsibility of the
The total production capacity of helium for the refinery	/.[HSIP].
The total production capacity for the refinery.[HSIP].	
The total sulpher production produced at the refinery.[H	HSIP].
	Accuracy: +/-1Ft. Ser are refined. [SDSFIE FGDC Utilities A unique identifier used by people to refer to this featu primary or foreign key value) An alternative or former name by which the feature is a The name of the refinery. The size of the area, zone, or polygon in square units. The distance around the boundary of the area, zone, or The co-generation capacity of the refinery in Kw.[HSII A person, organization, or agency with legal control or utility asset.[Adopted from SDSFIE]. The total production capacity of the refinery.[HSIP].

The total production capacity of hydrogen for the refinery.[HSIP].

The total coke production capacity of the refinery.[HSIP].

	co2Prod (Integer)	The total carbon dioxide production capacity of the refinery.[HSIP].
	chrgCap (Double)	The total charge capacity of the refinery.[HSIP].
	distillateProduction (Double)	The total distillate production capacity of the refinery.[HSIP].
	asphProd (Double)	The production capacity of asphalt for the refinery.[HSIP].
	capacity (Double)	The Plant capacity.[HSIP].
	sprAccess (String32)	Access to Strategic Petroleum Reserve: none, water, pipeline.[HSIP].
	distillateType (CodeDistallateProductioType	<u>e</u>) The different Distillate Production Types.[HSIP].
	description (String255)	A description or other unique information concerning the subject item.
	junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
	disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
Me	tadata:	
	collectionProgress (CodeProgress)	The progress of the data collection.
	dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
	verified (String255)	Whether or not the feature has been verified.
	projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
	projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
	status (CodeStatus)	A temporal description of the operational status of the feature.
	Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
	userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
	qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
	dataSource (CodeDataSource)	The primary source of the data in this record.
	dataSource2 (CodeDataSource)	The secondary source of the data in this record.
	sourceStatement (String255)	A statement providing additional details about the source of the data.
	editorName (String50)	The name of the individual who last edited this data.
	lastUpdate (Date)	The date upon which any data associated with this record was last updated.
Sys	stem Keys:	
	guid (String60)	A globally unique identifier applied to each feature in the database for reference.
	metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Fuel : Valve

(Database Feature Class Name = FuelValve)Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretA fitting or device used for shutting or throttling flow through a fuel line. [SDSFIE FGDCUtilities Classification].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String30)	Any commonly used name for the fuel valve point.[USGS].
maaAlias (String60)	An alternative or former name by which the feature is refered.
Attributes:	
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
valveElv (Double)	The elevation measured at centerline of the valve, in feet (English units) or meters (SI units) above some datum.
featureUse (String16)	The site specific use of the valve.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
valveDiameter (CodePipeDiameter)	The manufacturer's nominal diameter.
valveSt (CodeStyleValve)	The particular kind, class, or group of valve (e.g., gate, check, etc.).

coverDepth (Double)	The depth of cover. The depth measured from top of ground's surface (or grade) to top of underground fuel line valve.[Air Force].
description (String255)	A description or other unique information concerning the subject item.
material (String16)	The material of the subject item.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
valveOpen (<u>CodeValveOpen</u>)	The direction a valve must be turned to open
operatingStatus (CodeValveStatus)	The normal operating status of the valve
Metadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Data Set: Gas

Gas : Anode

(Database Feature Class Name = GasAnode)Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretA material used for natural gas distribution systems that is electrically connected to a lesselectrolytically active material so that it will oxidize in the place of the less active material.[SDSFIE FGDC Utilities Classification].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
Attributes:	
anodeWeight (Double)	The initial weight of the anode or anode packet.
material (CodeAnodes)	The type of material composition of the anode or anode packet.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
description (String255)	A description or other unique information concerning the subject item.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
Metadata:	
collectionProgress (CodeProgress)	The progress of the data collection.

dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, $1994 = 19940915$).
verified (String255)	The material of the subject item
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record

Gas : Anode Test Station

(Database Feature Class Name = GasAnodeTestStation)Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretA central location where anodes are tested for performance in natural gas systems. [SDSFIEFGDC Utilities Classification].

A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
An alternative or former name by which the feature is refered.
The type of insulation covering the conductor.
The total number of terminal connections at the test station.
The type of anode test station configuration use.
A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
The AWG size designation for the wire connecting the anode/anode packet to the anode test station.
The conductor configuration, typically solid or stranded.
A description or other unique information concerning the subject item.
The material of the subject item.
The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
An indicator as to whether the feature serves as a source, sink or neither in the network.
The progress of the data collection.
The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
The material of the subject item
The type of project or work activity that installed or first recorded the location of this feature.
A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
A temporal description of the operational status of the feature.

Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defin system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (<u>CodeDataSource</u>)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
<u>System Keys:</u>	
guid (String60) metaId (Integer)	A globally unique identifier applied to each feature in the database for reference. An identifier used to refer to a metadata record that provide additional information about the data in this record.
Gas : Fill Point	
(Database Feature Class Name = C	GasFillPoint)
Geometry Type: Point	Accuracy: +/-1Ft. Sensitivity: Secret
Location where gas is control discl	
Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
modelNumber (String12)	The Model, Product, Catalog, or Item Number of subject item.
Attributes:	
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
hydrantType (CodeHydrantType)	The particular kind, class, or group of hydrant.
outcon1dia (Double)	The diameter of the hydrant outlet, or for hydrants with more than one outlet, the diameter of one of the hydrant outlets.
owner (String60)	A person, organization, or agency with legal control or management responsibility of th utility asset.[Adopted from SDSFIE].
outcon2dia (Double)	The diameter of the hydrant outlet, or for hydrants with more than one outlet, the diameter of one of the hydrant outlets.
outcon3dia (Double)	The diameter of the hydrant outlet, or for hydrants with more than one outlet, the diameter of one of the hydrant outlets.
gasType (<u>CodeFuel</u>)	The type of fuel or gas dispensed, carried, used or otherwise handled by the subject iten
hydrantElvevation (Double)	The elevation of the hydrant, measured at the hydrant outlet, in feet (English units) or meters (SI units) above some datum.
source (<u>CodeSourceListFuelGas</u>)	The source of fuel for the subject item.
pressResd (Double)	The measured pressure at a hydrant or connection during a flow test conducted at the subject hydrant or connection.
pressStat (Double)	The numeric pressure head on the subject item under static (i.e., no flow or demand) conditions in the utility system.
valveSt (<u>CodeStyleValve</u>)	The style of the valve.
capacity (Double)	The storage capacity of the hydrant.
description (String255)	A description or other unique information concerning the subject item.
material (String16)	The material of the subject item.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
Metadata:	
collectionProgress (<u>CodeProgress</u>)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for da is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	The material of the subject item
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first

	recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Gas : Fitting

(Database Feature Class Name = GasFitting)Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretHardware used to cap, plug, or join pieces of pipe. [SDSFIE FGDC Utilities Classification].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
modelNumber (String12)	The Model, Product, Catalog, or Item Number of subject item.
serialNumber (String15)	The manufacturer's serial, or unique identification number of the subject item.
Attributes:	
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
fittinLength (Double)	The overall length of the fitting.
material (CodePipeMaterial)	The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc.
fitWidth (Double)	The width dimension of the subject item measured at its' widest point.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
size (CodePipeDiameter)	The manufacturers designated size, or nominal (i.e., rounded to the nearest unit) diameter for the subject item (e.g., 1 gas hydrant, 2 meter, 6 pipe).
type (String16)	Discriminator. The kind, class, or group of the subject item.
coverDepth (Double)	The depth of cover. The depth measured from top of ground's surface (or grade) to top of underground fuel line valve.[Air Force].
description (String255)	A description or other unique information concerning the subject item.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
<u>Metadata:</u>	
collectionProgress (CodeProgress)	
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	The material of the subject item
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].

qualityLevel (<u>CodeSueQualityLevel</u>)

dataSource (<u>CodeDataSource</u>) dataSource2 (<u>CodeDataSource</u>) sourceStatement (String255) editorName (String50) lastUpdate (Date)

System Keys:

guid (String60) metaId (Integer) The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02. The primary source of the data in this record. The secondary source of the data in this record. A statement providing additional details about the source of the data. The name of the individual who last edited this data. The date upon which any data associated with this record was last updated.

A globally unique identifier applied to each feature in the database for reference. An identifier used to refer to a metadata record that provide additional information about the data in this record.

Gas : Junction

(Database Feature Class Name = GasJunction)

Geometry Type: Point Accuracy: +/-1Ft. Sensitivity: Secret A box or small vault (usually concrete, brick, or cast iron) in natural gas systems located below grade with above grade access where pipes intersect. The manhole also houses associated fittings, valves, meters, etc. [SDSFIE FGDC Utilities Classification].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
modelNumber (String12)	The Model, Product, Catalog, or Item Number of subject item.
Attributes:	
airrfValve (<u>CodeBoolean</u>)	Indicates whether or not there is an air relief valve installed on subject item? (yes/no)
drainType (<u>CodeDrainType</u>)	The type of subject item drain.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
material (CodePipeMaterial)	The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc.
mhDia (Double)	The diameter dimension of the subject item, measured from inside face of wall to inside face of opposite wall.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
noValves (Integer)	The number of valves inside the subject item.
mhLength (Double)	The length dimension of the subject item, from outside face of exterior wall/side to outside face of opposite exterior wall/side.
mhWidth (Double)	The width dimension of the subject item, from outside face of exterior wall/side to outside face of opposite exterior wall/side.
invertElv (Double)	The top surface elevation of the subject item's interior floor/bottom in feet (English units or meters (SI units) above some datum.
featureUse (String16)	Discriminator. An attribute that differentiates the use of the subject item.
noPipes (Integer)	The number of the pipes entering and exiting the subject item.
rimElevation (Double)	The elevation of exterior top surface of the subject item's lid, hatch, rim, or roof in feet (English units) or meters (SI units) above some datum.
type (String16)	A field indicating the kind, class, or group of manhole for the subject utility.
description (String255)	A description or other unique information concerning the subject item.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
<u>letadata:</u>	
collectionProgress (CodeProgress)	
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for da is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	The material of the subject item
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.

status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (<u>CodeDataSource</u>)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Gas : Light

(Database Feature Class Name = GasLight)Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretA point graphic representing the location of a gas light fixture.A gas light fixture utilizes gas asit's energy source and contains a flame used for illumination of an area.[SDSFIE FGDC UtilitiesClassification].

ames and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
modelNumber (String12)	The Model, Product, Catalog, or Item Number of subject item.
tributes:	
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
fixHeight (Double)	The height of the fixture above a given reference, usually the grounds surface.
fixType (String20)	The type of fixture.
fixUse (<u>CodeGasFixtureUse</u>)	The use or purpose of the gas fixture.
owner (String60)	A person, organization, or agency with legal control or management responsibility of th utility asset.[Adopted from SDSFIE].
gasType (<u>CodeFuel</u>)	The type of fuel or gas dispensed, carried, used or otherwise handled by the subject iten
useRate (Integer)	The fuel/gas usage rate for the subject item.
description (String255)	A description or other unique information concerning the subject item.
material (String16)	The material of the subject item.
size (Integer)	The size of the subject item.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network
etadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for datis YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	The material of the subject item
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defin system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined

dataSource (<u>CodeDataSource</u>) dataSource2 (<u>CodeDataSource</u>) sourceStatement (String255) editorName (String50) lastUpdate (Date)

System Keys:

guid (String60) metaId (Integer)

Gas : Line

(Database Feature Class Name = GasLine) Geometry Type: Line Accuracy: +/-5Ft. Sensitivity: Secret A pipe used to carry natural gas from location to location (main line, service line, vent line, etc). [SDSFIE FGDC Utilities Classification].

the data in this record.

The primary source of the data in this record.

The secondary source of the data in this record.

The name of the individual who last edited this data.

A statement providing additional details about the source of the data.

The date upon which any data associated with this record was last updated.

A globally unique identifier applied to each feature in the database for reference.

An identifier used to refer to a metadata record that provide additional information about

ASCE38-02.

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
modelNumber (String12)	The Model, Product, Catalog, or Item Number of subject item.
Attributes:	
pipeLength (Double)	The length of pipe, measured from node to node along the pipe centerline .
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
material (CodePipeMaterial)	The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc.
catProt (<u>CodeBoolean</u>)	Indicates whether or not the pipe has been provided with cathodic protection? (yes or no)
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset. [Adopted from SDSFIE].
pressMax (Double)	The manufacturer's or industry standard's maximum pressure rating of the subject item.
gasType (<u>CodeFuel</u>)	The type of fuel or gas dispensed, carried, used or otherwise handled by the subject item.
pressNorm (Double)	The normal operating pressure of the gas pipe.
invElv1 (Double)	The elevation of the bottom of pipe (i.e., pipe invert) at node_id_1 in feet (English units) or meters (SI units) above some datum.[Derived from SDSFIE].
invElv2 (Double)	The elevation of the bottom of pipe (i.e., pipe invert) at node_id_2 in feet (English units) or meters (SI units) above some datum.
featureUse (String16)	Discriminator. The use code for natural gas pipes.
source (CodeSourceListFuelGas)	The source of fuel for the subject item.
size (CodePipeDiameter)	The manufacturers designated size, or nominal (i.e., rounded to the nearest unit) diameter for the subject item (e.g., 1 in gas hydrant, 2 in meter, 6 in pipe).
type (String16)	A field indicating the kind, class, or group of the subject item.
piplty (CodePipelineLocationType)	The location of the pipeline in relevance to the earth's surface.[USGS].
coverDepth (Double)	The depth of cover. The depth measured from top of ground's surface (or grade) to top of underground fuel line valve. [Air Force].
description (String255)	A description or other unique information concerning the subject item.
mapLevel (Integer)	From the MES database, it denotes the numeric Level that the feature is associated with; i.e., 6 for Level 6, etc.
mapColor (<u>CodeColor</u>)	From the MES database, it denotes the numeric Level that the feature is associated with; i.e., 6 for Level 6, etc.
mapLayerNo (Integer)	From the MES database, it denotes the textual (label) Level that the feature is associated with; i.e., Level 6 for 6, etc.)
entityType (String16)	From the MES database,
directionality (CodeDirectionality)	The directionality of flow with repsect to the line's geometry.
impedance (Double)	The number representing the total opposition to flow.
<u>letadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection.

dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	The material of the subject item
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metald (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Gas : Marker

(Database Feature Class Name = GasMarker)Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretA sign, concrete monument, etc. installed either directly above or immediately adjacent tounderground lines, bends, fittings, etc to indicate natural gas. [SDSFIE FGDC UtilitiesClassification].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
Attributes:	
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
material (String16)	The material of the subject item.
description (String255)	A description or other unique information concerning the subject item.
size (Integer)	The size of the subject item
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
junctionType (CodeJunctionType)	An indicator as to whether the feature serves as a source, sink or neither in the network.
<u>Metadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	The material of the subject item
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].

qualityLevel (<u>CodeSueQualityLevel</u>)

dataSource (CodeDataSource)

dataSource2 (<u>CodeDataSource</u>) sourceStatement (String255) editorName (String50)

lastUpdate (Date)

System Keys:

guid (String60) metaId (Integer) The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02. The primary source of the data in this record. The secondary source of the data in this record.

A statement providing additional details about the source of the data.

The name of the individual who last edited this data.

The date upon which any data associated with this record was last updated.

A globally unique identifier applied to each feature in the database for reference. An identifier used to refer to a metadata record that provide additional information about the data in this record.

Gas : Meter

(Database Feature Class Name = GasMeter)Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretA device installed in a line for measuring the quantity and or rate of gas to a facility or through a section of line. [SDSFIE FGDC Utilities Classification].Sensitivity: Secret

Names and Identifiers:

maaID (String30) A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value) maaAlias (String60) An alternative or former name by which the feature is refered. modelNumber (String12) The Model, Product, Catalog, or Item Number of subject item. meterCustomer (String20) The name of the individual, company, or government agency served by the subject item. serialNumber (String15) The manufacturer's serial, or unique identification number of the subject item. **Attributes:** disposition (CodeDispositionObject) The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections. installType (<u>CodePumpSta</u>) The type installation of the subject item. meterElv (Double) The elevation of the meter above a specific datum. A person, organization, or agency with legal control or management responsibility of the owner (String60) utility asset.[Adopted from SDSFIE]. source (CodeSourceListFuelGas) The source of fuel for the subject item. The manufacturers designated size, or nominal (i.e., rounded to the nearest unit) diameter size (CodePipeDiameter) for the subject item (e.g., 1in gas hydrant, 2in meter, 6in pipe). srvcMtr (CodeBoolean) An indicator as to whether or not the meter is installed on a service line? (yes or no) type (String16) A field indicating the kind, class, or group of the subject item. pressMax (Double) Maximum working pressure. capacity (Double) Capacity of the gas meter. description (String255) A description or other unique information concerning the subject item. material (String16) The material of the subject item. junctionType (CodeJunctionType) An indicator as to whether the feature serves as a source, sink or neither in the network. Metadata: collectionProgress (CodeProgress) The progress of the data collection. The date on which the subject item was originally acquired or purchased. Format for date dateAcquired (Date) is YYYYMMDD (i.e., September 15, 1994 = 19940915). verified (String255) The material of the subject item The type of project or work activity that installed or first recorded the location of this projectType (CodeProjectType) feature. projectId (String20) A unique identifier associated with the project or work activity that installed or first recorded the location of this feature. status (CodeStatus) A temporal description of the operational status of the feature. Alternative (Integer) Discriminator used to tie features of a plan or proposal together into a version. userFlag (String254) An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].

qualityLevel (CodeSueQualityLevel)The subsurface utility engineering quality level assigned to utilities features as defined in
ASCE38-02.

dataSource (<u>CodeDataSource</u>) dataSource2 (<u>CodeDataSource</u>) sourceStatement (String255) editorName (String50) lastUpdate (Date)

System Keys:

guid (String60) metaId (Integer)

Gas : Pump

The primary source of the data in this record. The secondary source of the data in this record. A statement providing additional details about the source of the data. The name of the individual who last edited this data. The date upon which any data associated with this record was last updated. A globally unique identifier applied to each feature in the database for reference.

A globally unique identifier applied to each feature in the database for reference. An identifier used to refer to a metadata record that provide additional information about the data in this record.

(Database Feature Class Name = GasPump)Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretA mechanical device for natural gas system that draws material into itself through an entranceport and forces the material out through an exhaust port. [SDSFIE FGDC UtilitiesClassification].

maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system
	primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
modelNumber (String12)	The Model, Product, Catalog, or Item Number of subject item.
serialNumber (String15)	The manufacturer's serial, or unique identification number of the subject item.
ributes:	
outflwAct (Double)	The actual measured pump flow output.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
coolMethod (CodeEquipmentCooling)	The method by which the pump is cooled.
owner (String60)	A person, organization, or agency with legal control or management responsibility of th utility asset.[Adopted from SDSFIE].
flowRate (Double)	The manufacturer's pump capacity (e.g., gpm) rating at a specific design total dynamic head (TDH), usually depicted by a pump curve.
featureUse (String16)	The particular application, or use the subject item.
pumpElevation (Double)	The elevation measured at centerline of the pump, in feet (English units) or meters (SI units) above some datum.
primRqd (<u>CodeBoolean</u>)	An indicator as to whether or not the pump has to be primed? (yes or no).
primeMethod (String15)	The method by which the pump is primed.
pumpHp (Double)	The power generated by the pump, equal in the U.S. to 746 watts and nearly equivalent the English gravitational unit of the same name that equals 550 foot-pounds of work pe second.
type (String16)	A field indicating the kind, class, or group of the subject item.
description (String255)	A description or other unique information concerning the subject item.
material (String16)	The material of the subject item.
size (Integer)	The size of the subject item.
junctionType (CodeJunctionType)	An indicator as to whether the feature serves as a source, sink or neither in the network
tadata:	
collectionProgress (CodeProgress)	
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date SYYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	The material of the subject item
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defin system processes. It does not affect the subject items data integrity and should not be

	used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Gas : Pump Station

(Database Feature Class Name = GasPumpStation)Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretA building in which one or more pumps operate to maintain flow at adequate pressure within anatural gas distribution system. [SDSFIE FGDC Utilities Classification].

maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system
	primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
ttributes:	
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
condition (CodePoleCondition)	Indicates a state of being, or readiness for use of the subject item (e.g., good, fair, poor from lists or field inspections.
capacityAlrm (Double)	Capacity alarm level.
owner (String60)	A person, organization, or agency with legal control or management responsibility of t utility asset.[Adopted from SDSFIE].
nodalElv (Double)	The elevation of subject node, which is used in performing computer analyses of the water distribution system. The node elevation is usually the ground elevation at the subject node, or the elevation of the subject item located at the subject node (e.g.,
staCapacity (Double)	The pump station's output capacity (e.g., gpm) rating (with all pumps operating) at a specific total dynamic head (TDH), which correlates to normal system pressure head design pressure head.
staLength (Double)	The length dimension of the station, measured from outside face of the exterior wall/s to outside face of the opposite exterior wall/side.
staType (String16)	Discriminator. The type of station.
staWidth (Double)	The width dimension of the station, measured from outside face of the exterior wall/si to outside face of the opposite exterior wall/side.
noPumps (Integer)	The total number of pumps located at the subject item.
pressOper (Double)	The normal operating gas system pressure in the gas line on the inline side of the stati
pressOut (Double)	The design or maximum system pressure in the line on outlet side of the pumping stat
source (CodeSourceListFuelGas)	The source of fuel for the subject item.
area (Double)	The size of the area, zone, or polygon in square units.
perimeter (Double)	The distance around the boundary of the area, zone, or subject item in linear units.
description (String255)	A description or other unique information concerning the subject item.
material (String16)	The material of the subject item.
junctionType (CodeJunctionType)	An indicator as to whether the feature serves as a source, sink or neither in the networ
etadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for a is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	The material of the subject item
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.

projectId (String20)	A unique identifier associated with the project or work activity that installed or first
	recorded the location of this feature.
status (CodeStatus)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (<u>CodeDataSource</u>)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Gas : Rectifier

(Database Feature Class Name = GasRectifier)Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretA device that changes alternating current to direct current for an impressed current cathodicprotection system on an element of the natural gas distribution system. [SDSFIE FGDC UtilitiesClassification].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
Attributes:	
coolMethod (CodeEquipmentCooling)	The method by which the rectifier is cooled, typically air or oil.
enclType (CodeElectricMotorEnclType)	The type of enclosure used to protect the rectifier.
voltIn (<u>CodeVoltage</u>)	The input AC voltage to the rectifier.
voltOut (<u>CodeVoltage</u>)	The output DC voltage from the rectifier to the anode system.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
currntOut (Double)	The output direct current from the rectifier to the anode system.
internalMeter (<u>CodeBoolean</u>)	An indicator as to whether or not the rectifier has an internal meter, yes/no.
noPhases (Integer)	The number of phases to which this device provides reactive power.
phaseLeter (CodeElectricPhaseType)	The letter(s) of the phase(s) for the subject item.
description (String255)	A description or other unique information concerning the subject item.
material (String16)	The material of the subject item.
size (Integer)	The size of the subject item.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
junctionType (CodeJunctionType)	An indicator as to whether the feature serves as a source, sink or neither in the network.
Metadata:	
collectionProgress (CodeProgress)	The progress of the data collection
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	The material of the subject item
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.

Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Gas : Reducer

(Database Feature Class Name = GasReducer)Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretA pressure regulator automatically reduces the pressure on the downstream side of the valve to apreset magnitude. [SDSFIE FGDC Utilities Classification].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
modelNumber (String12)	The Model, Product, Catalog, or Item Number of subject item.
serialNumber (String15)	The manufacturer's serial, or unique identification number of the subject item.
Attributes:	
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
pressIn (Double)	The design gas system pressure in the line on inlet side of the pressure regulator.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset. [Adopted from SDSFIE].
pressOut (Double)	The design or maximum system pressure in the line on outlet side of the pressure reducing station.
size (CodePipeDiameter)	The manufacturers designated size, or nominal (i.e., rounded to the nearest unit) diameter for the subject item (e.g., 1 in gas hydrant, 2 in meter, 6 in pipe).
pressReqd (Double)	The required maximum outlet pressure setting for the regulator.
type (String16)	Discriminator. The kind, class, or group of the subject item.
description (String255)	A description or other unique information concerning the subject item.
material (String16)	The material of the subject item.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
<u>Metadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	The material of the subject item
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (CodeStatus)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in

dataSource (<u>CodeDataSource</u>) dataSource2 (<u>CodeDataSource</u>) sourceStatement (String255) editorName (String50) lastUpdate (Date)

System Keys:

guid (String60) metaId (Integer)

Gas : Source

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The primary source of the data in this record. The secondary source of the data in this record. A statement providing additional details about the source of the data. The name of the individual who last edited this data. The date upon which any data associated with this record was last updated.

A globally unique identifier applied to each feature in the database for reference. An identifier used to refer to a metadata record that provide additional information about the data in this record.

(Database Feature Class Name = GasSource)Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretThe point from which natural gas is supplied for processing and distribution. [SDSFIE FGDCUtilities Classification].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String16)	The site specific identification name or number assigned to the subject item.
maaAlias (String60)	An alternative or former name by which the feature is refered.
Attributes:	
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
type (<u>CodeFuel</u>)	A field indicating the kind, class, or group of the subject item.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
description (String255)	A description or other unique information concerning the subject item.
material (String16)	The material of the subject item
size (Integer)	The size of the subject item
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
<u>Aetadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	The material of the subject item
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (CodeStatus)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
ystem Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Gas : Tank

(Database Feature Class Name = GasTank)Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretAn above or below grade receptacle or chamber used for holding natural gas on a temporarybasis prior to transfer or use. [SDSFIE FGDC Utilities Classification].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
modelNumber (String12)	The Model, Product, Catalog, or Item Number of subject item.
serialNumber (String15)	The manufacturer's serial, or unique identification number of the subject item.
Attributes:	
altValve (<u>CodeBoolean</u>)	Indicates whether or not the tank has an altitude valve which controls the flow into the tank? (yes or no).
area (Double)	The size of the area, zone, or polygon in square units.
ovrflwElevation (Double)	The elevation measured at the point of overflow, or entrance, into the tank overflow pipe,, in feet (English units) or meters (SI units) above some datum.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
material (CodePipeMaterial)	The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
headNorm (Double)	The normal operating head for the subject item.
pressNorm (Double)	The manufacturer's (as rated by American Society of Mechanical Engineers (ASME) testing procedures) maximum pressure rating of the gas tank.
invertElv (Double)	The elevation measured at bottom of the tank, in feet (English units) or meters (SI units) above some datum. mean sea level.
topElevation (Double)	The elevation of exterior top surface of the subject item's lid, hatch, rim, or roof in feet (English units) or meters (SI units) above some datum.
tankLength (Double)	The length dimension of the tank, measured from outside face of the exterior wall/side to outside face of the opposite exterior wall/side.
tankSt (CodeStyleTank)	The particular kind, class, or group of tank (e.g., elevated, hydropneumatic, etc.).
tankUse (CodeTankUse)	The particular kind or use of the tank.
tankWidth (Double)	The exterior width dimension of the tank, measured from outside face of the exterior wall/side to outside face of the opposite exterior wall/side.
tankCapacity (Double)	The tank's storage capacity (e.g., gallons, ft3, etc).
tankDiameter (Double)	The inside diameter of the tank, measured from the interior wall surface to the opposite interior wall surface.
numStruct (Integer)	The total number of gas storage structures that exist on the plant.[HSIP].
featureUse (String16)	The Descriptive Shape Code.[Army].
lngFac (CodeBoolean)	LNG facility (Y or N).[HSIP].
description (String255)	A description or other unique information concerning the subject item.
ustSensor (<u>CodeBoolean</u>)	Whether or not a sensor exists on the tank.
color (<u>CodeColor</u>)	The color of the gas tank.
lightCode (String1)	The light code of the tank.
lightingType (CodeLightingConfigurationT	ype) Thetype of lighting configuration.
markingFeatureType (<u>CodeMarkingFeature</u>	
verticalStructureMaterial (String16)	The vertical structure material.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
<u>Metadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	The material of the subject item
source (String255)	The source of the feature.
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this

		feature.
	projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
	status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
	Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
	userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
	qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
	dataSource (CodeDataSource)	The primary source of the data in this record.
	dataSource2 (CodeDataSource)	The secondary source of the data in this record.
	sourceStatement (String255)	A statement providing additional details about the source of the data.
	editorName (String50)	The name of the individual who last edited this data.
	lastUpdate (Date)	The date upon which any data associated with this record was last updated.
Sys	stem Keys:	
	guid (String60)	A globally unique identifier applied to each feature in the database for reference.
	metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Gas : Valve

(Database Feature Class Name = GasValve)Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretA fitting or device used for shutting or throttling flow through a natural gas line. [SDSFIENGA/NIMA].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
Attributes:	
disposition (<u>CodeDispositionObject</u>)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
valveElv (Double)	The elevation measured at centerline of the valve, in feet (English units) or meters (SI units) above some datum.
featureUse (String16)	Discriminator. The site specific use of the valve.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset. [Adopted from SDSFIE].
valveDiameter (CodePipeDiameter)	The manufacturer's nominal diameter.
valveSt (CodeStyleValve)	The particular kind, class, or group of valve (e.g., gate, check, etc.).
coverDepth (Double)	The depth of cover. The depth measured from top of ground's surface (or grade) to top of underground fuel line valve.[CENTER].
endDate (Date)	The date the evacuation route ended. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).[NGA/NIMA].
branchSys (String12)	An operator generated identifier that is a unique site specific name or number designation of a branch or isolated area of a natural gas distribution system.
description (String255)	A description or other unique information concerning the subject item.
coordX (Double)	The coordinate in the east-west plane, expressed in decimal degrees.
coordY (Double)	The coordinate in the north-south plane, expressed in decimal degrees.
material (String16)	The material of the subject item.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
valveOpen (<u>CodeValveOpen</u>)	The direction a valve must be turned to open
operatingStatus (CodeValveStatus)	The normal operating status of the valve
<u>Ietadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	The material of the subject item

projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (CodeStatus)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Data Set: HCS

HCS: Anchor

 (Database Feature Class Name = HeatCoolAnchorPoint)

 Geometry Type: Point
 Accuracy: +/-1Ft.

 Sensitivity: Secret

 A structure, typically concrete, used to either guide the expansion of pipes or used to fix the movement of some part of the expansion section. [SDSFIE FGDC Utilities Classification].

 Names and Identifiers:

ames and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
Attributes:	
anchType (CodeHcsAnchor)	Discriminator. This value differentiates similar entities by use or type.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
description (String255)	A description or other unique information concerning the subject item.
material (String16)	
size (Integer)	
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
<u>Aetadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915)
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].

dataSource (<u>CodeDataSource</u>) dataSource2 (<u>CodeDataSource</u>) sourceStatement (String255) editorName (String50) lastUpdate (Date)

System Keys:

guid (String60) metaId (Integer)

HCS : Anode

The secondary source of the data in this record. A statement providing additional details about the source of the data. The name of the individual who last edited this data. The date upon which any data associated with this record was last updated. A globally unique identifier applied to each feature in the database for reference.

An identifier used to refer to a metadata record that provide additional information about the data in this record.

(Database Feature Class Name = HeatCoolAnode) Geometry Type: Point Accuracy: +/-1Ft. Sensitivity: Secret A device used in utility distribution systems that is electrically connected to a less electrolytically active material so that it will oxidize in the place of the less active material. [SDSFIE FGDC Utilities Classification].

The primary source of the data in this record.

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Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
Attributes:	
anodeWeight (Double)	The initial weight of the anode or anode packet.
material (CodeAnodes)	The type of material composition of the anode or anode packet.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset. [Adopted from SDSFIE].
description (String255)	A description or other unique information concerning the subject item.
size (Integer)	
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
junctionType (CodeJunctionType)	An indicator as to whether the feature serves as a source, sink or neither in the network.
<u>Metadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915)
verified (String255)	Whether or not the feature has been verified.
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

HCS : Anode Test Station

(Database Feature Class Name = HeatCoolAnodeTestStation)

Accuracy: +/-1Ft.

Sensitivity: Secret

Geometry Type: Point A central location where anodes are tested for performance in heating/cooling systems. [SDSFIE FGDC Utilities Classification].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
Attributes:	
installType (CodeSheathInsulateType)	The type of insulation covering the conductor.
noTerm (Integer)	The total number of terminal connections at the test station.
type (String16)	The type of anode test station configuration use.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
wireSize (CodeCableDimension)	The AWG size designation for the wire connecting the anode/anode packet to the anode test station.
wireType (String16)	The conductor configuration, typically solid or stranded.
description (String255)	A description or other unique information concerning the subject item.
material (String16)	
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
<u>Metadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915)
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (<u>CodeDataSource</u>)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

HCS : Fitting

(Database Feature Class Name = HeatCoolFitting) Geometry Type: Point Accuracy: +/-1Ft. Sensitivity: Secret A fitting is an item used to connect, cap, plug or otherwise attach to a heating and cooling system pipe. [SDSFIE FGDC Utilities Classification].

Names and Identifiers:

maaID (String30)

maaAlias (String60) serialNumber (String15) modelNumber (String12)

Attributes:

disposition (CodeDispositionObject)

fitElv (Double)

diaIn (Double) owner (String60)

groundElevation (Double)

fitLength (Double) fitWidth (Double) material (<u>CodePipeMaterial</u>)

size (CodePipeDiameter)

type (String16) coverDepth (Double)

description (String255)
junctionType (CodeJunctionType)

Metadata:

collectionProgress (<u>CodeProgress</u>) dateAcquired (Date)

verified (String255) projectType (<u>CodeProjectType</u>)

projectId (String20)

status (<u>CodeStatus</u>) Alternative (Integer) userFlag (String254)

qualityLevel (CodeSueQualityLevel)

dataSource (<u>CodeDataSource</u>) dataSource2 (<u>CodeDataSource</u>) sourceStatement (String255) editorName (String50) lastUpdate (Date)

System Keys:

guid (String60) metaId (Integer) A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value) An alternative or former name by which the feature is refered. The manufacturer's serial, or unique identification number of the subject item. The Model, Product, Catalog, or Item Number of subject item. The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections. The elevation measured at centerline of the fitting, in feet (English units) or meters (SI units) above some datum. The inside, or interior, diameter of the fitting. A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE]. The elevation of the ground surface in feet (English units) or meters (SI units) above some datum. The overall length of the fitting. The width dimension of the subject item measured at its' widest point. The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc. The manufacturers designated size, or nominal (i.e., rounded to the nearest unit) diameter for the subject item (e.g., 1in gas hydrant, 2in meter, 6in pipe). Discriminator. The kind, class, or group of the subject item. The depth of cover. The depth measured from top of ground's surface (or grade) to top of underground heating and cooling system line fitting.[Air Force]. A description or other unique information concerning the subject item. An indicator as to whether the feature serves as a source, sink or neither in the network. The progress of the data collection. The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915) Whether or not the feature has been verified. The type of project or work activity that installed or first recorded the location of this feature

A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.

A temporal description of the operational status of the feature.

Discriminator used to tie features of a plan or proposal together into a version.

An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].

The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.

The primary source of the data in this record.

The secondary source of the data in this record.

- A statement providing additional details about the source of the data.
- The name of the individual who last edited this data.
- The date upon which any data associated with this record was last updated.

A globally unique identifier applied to each feature in the database for reference. An identifier used to refer to a metadata record that provide additional information about the data in this record.

HCS : Junction

(Database Feature Class Name = HeatCoolJunction) Geometry Type: Point Accuracy: +/-1Ft.

Sensitivity: Secret

A box or small vault (usually concrete, brick, or cast iron) in heating/cooling systems located below grade with above grade access where pipes intersect. The manhole also houses associated fittings, valves, meters, etc. [SDSFIE FGDC Utilities Classification].

Names and Identifiance	
<u>Names and Identifiers:</u> maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system
	primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
modelNumber (String12)	The Model, Product, Catalog, or Item Number of subject item.
Attributes:	
airrfValve (CodeBoolean)	Indicates whether or not there is an air relief valve installed on subject item? (yes/no)
drainType (<u>CodeDrainType</u>)	The type of subject item drain.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
groundElevation (Double)	The elevation of the ground surface in feet (English units) or meters (SI units) above some datum.
noValves (Integer)	The number of valves inside the subject item.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
featureUse (String16)	Discriminator. An attribute that differentiates the use of the subject item.
mhDia (Double)	The diameter dimension of the subject item, measured from inside face of wall to inside face of opposite wall.
mhLength (Double)	The length dimension of the subject item, from outside face of exterior wall/side to outside face of opposite exterior wall/side.
mhWidth (Double)	The width dimension of the subject item, from outside face of exterior wall/side to outside face of opposite exterior wall/side.
invertElv (Double)	The top surface elevation of the subject item's interior floor/bottom in feet (English units) or meters (SI units) above some datum.
material (CodePipeMaterial)	The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc.
noPipes (Integer)	The number of the pipes entering and exiting the subject item.
rimElevation (Double)	The elevation of exterior top surface of the subject item's lid, hatch, rim, or roof in feet (English units) or meters (SI units) above some datum.
type (String16)	A field indicating the kind, class, or group of manhole for the subject utility.
area (Double)	The size of the area, zone, or polygon in square units.[Cherry Point].
perimeter (Double)	The distance around the boundary of the area, zone, or subject item in linear units.[Cherry Point].
description (String255)	A description or other unique information concerning the subject item.
junctionType (CodeJunctionType)	An indicator as to whether the feature serves as a source, sink or neither in the network.
Metadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915)
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.

lastUpdate (Date)	The date upon which any data associated with this record was last updated.
<u>System Keys:</u>	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

HCS : Line

(Database Feature Class Name = HeatCoolLine)

Geometry Type: Line Accuracy: +/-5Ft. Sensitivity: Secret A pipe used to carry a heating/cooling substances from location to location (main line, service line, vent line, etc). [SDSFIE FGDC Utilities Classification].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
modelNumber (String12)	The Model, Product, Catalog, or Item Number of subject item.
Attributes:	
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
catProt (<u>CodeBoolean</u>)	Indicates whether or not the pipe has been provided with cathodic protection? (yes or no).
expLoop (<u>CodeBoolean</u>)	The expansion loop of the heating and cooling system.
pipeLength (Double)	The length of pipe, measured from node to node along the pipe centerline .
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset. [Adopted from SDSFIE].
pressMax (Double)	The manufacturer's or industry standard's maximum pressure rating of the subject item.
groundElevation1 (Double)	The elevation of the ground surface at node_id_1, in feet (English units) or meters (SI units) above some datum.
groundElevation2 (Double)	The elevation of the ground surface at node_id_2, in feet (English units) or meters (SI units) above some datum.
invElv1 (Double)	The elevation of the bottom of pipe (i.e., pipe invert) at node_id_1 in feet (English units) or meters (SI units) above some datum.[Derived from SDSFIE].
invElv2 (Double)	The elevation of the bottom of pipe (i.e., pipe invert) at node_id_2 in feet (English units) or meters (SI units) above some datum.
material (CodePipeMaterial)	The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc.
slopeBot (Double)	The slope of the bottom of the subject item expressed as a percentage.
tape (<u>CodeBoolean</u>)	Location marker tape or wire is installed above underground pipe to facilitate locating with a magnetometer? (yes or no).
featureUse (String16)	Discriminator. The use code for heating and cooling pipes.
pressNorm (Double)	The normal operating pressure of the heating and cooling system pipe.
tempNorm (Double)	The normal operating temperature of the subject item.
tempMax (Double)	The manufacturer's or industry standard's maximum temperature rating of the subject item.
size (CodePipeDiameter)	The manufacturers designated size, or nominal (i.e., rounded to the nearest unit) diameter for the subject item (e.g., 1 in gas hydrant, 2 in meter, 6 in pipe).
type (String16)	A field indicating the kind, class, or group of the subject item.
coverDepth (Double)	The depth of cover. The depth measured from top of ground's surface (or grade) to top of underground heating and cooling system line pipe.[Air Force].
description (String255)	Narrative text providing a brief description of the feature. [Cherry Point].
directionality (<u>CodeDirectionality</u>)	The directionality of flow with repsect to the line's geometry.
impedance (Double)	The number representing the total opposition to flow.
Metadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915)
verified (String255)	Whether or not the feature has been verified.
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this

	feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

HCS : Marker

(Database Feature Class Name = HeatCoolMarker) Geometry Type: Point Accuracy: +/-1Ft. Sensitivity: Secret A sign, concrete monument, etc., installed either directly above or immediately adjacent heating/cooling equipment marking its location. [SDSFIE FGDC Utilities Classification]. Names and Identifiers:

IN	ames and Identifiers:	
	maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
	maaAlias (String60)	An alternative or former name by which the feature is refered.
A	ttributes:	
	owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
	material (String16)	
	description (String255)	A description or other unique information concerning the subject item.
	size (Integer)	
	disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
	junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
Μ	etadata:	
	collectionProgress (CodeProgress)	The progress of the data collection.
	dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915)
	verified (String255)	Whether or not the feature has been verified.
	projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
	projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
	status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
	Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
	userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
	qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
	dataSource (CodeDataSource)	The primary source of the data in this record.
	dataSource2 (CodeDataSource)	The secondary source of the data in this record.
	sourceStatement (String255)	A statement providing additional details about the source of the data.

editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
<u>System Keys:</u>	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metald (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

HCS : Meter

(Database Feature Class Name = HeatCoolMeter)Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretA device installed in a line for measuring the quantity and or rate of water to a facility or through
a section of line. [SDSFIE FGDC Utilities Classification].Sensitivity: Secret

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
serialNumber (String15)	The manufacturer's serial, or unique identification number of the subject item.
modelNumber (String12)	The Model, Product, Catalog, or Item Number of subject item.
meterCustomer (String20)	The name of the individual, company, or government agency served by the subject item.
Attributes:	
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
installType (<u>CodePumpSta</u>)	The type installation of the subject item.
meterElv (Double)	The elevation at the centerline of the meter, in feet (English units) or meters (SI units) above some datum.
groundElevation (Double)	The elevation of the ground surface in feet (English units) or meters (SI units) above some datum.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
srvcMtr (<u>CodeBoolean</u>)	An indicator as to whether or not the meter is installed on a service line? (yes or no)
size (<u>CodePipeDiameter</u>)	The manufacturers designated size, or nominal (i.e., rounded to the nearest unit) diameter for the subject item (e.g., 1 in gas hydrant, 2 in meter, 6 in pipe).
type (String16)	A field indicating the kind, class, or group of the subject item.
description (String255)	A description or other unique information concerning the subject item.
material (String16)	
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
<u>letadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915)
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (<u>CodeDataSource</u>)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.

System Keys:

guid (String60) metaId (Integer) A globally unique identifier applied to each feature in the database for reference. An identifier used to refer to a metadata record that provide additional information about the data in this record.

HCS : Plant Area

(Database Feature Class Name = HeatCoolPlantArea)

Geometry Type: Polygon Accuracy: +/-5Ft. Sensitivity: Confidential A building or structure containing boilers, furnaces, chillers, pumps and appurtenant equipment to produce the water temperature/pressure combinations which are distributed to other buildings and facilities. [SDSFIE FGDC Utilities Classification].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String16)	The site specific identification name or number assigned to the subject item.
maaAlias (String60)	An alternative or former name by which the feature is refered.
Attributes:	
capacCool (Double)	The plant's rated capacity (e.g., tons), which signifies the peak constant cooling ability of the plant.
capacHeat (Double)	The plant's rated capacity (e.g. boiler_hp), which signifies the peak constant heating ability of the plant.
area (Double)	The size of the area, zone, or polygon in square units.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
disposition (<u>CodeDispositionObject</u>)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
groundElevation (Double)	The elevation of the ground surface in feet (English units) or meters (SI units) above some datum.
pressCool (Double)	The nominal chilled water pressure leaving the plant.
pressHeat (Double)	The nominal hot water or steam pressure leaving the plant.
prodType (<u>CodeHeating-CoolingType</u>)	The type of product (chilled water, high temp, etc) produced at this plant.
tempCool (Double)	The nominal chilled water temperature leaving the plant.
tempHeat (Double)	The nominal hot water temperature leaving the plant.
perimeter (Double)	The distance around the boundary of the area, zone, or subject item in linear units.
plantElv (Double)	The finished floor elevation of the energy plant, in feet (English units) or meters (SI units) above some datum.
plantLength (Double)	The overall length dimension of the energy plant.
plantwidth (Double)	The overall width dimension of the energy plant.
type (String16)	Discriminator. The kind, class, or group of the subject item.
description (String255)	A description or other unique information concerning the subject item.
Aetadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915)
verified (String255)	Whether or not the feature has been verified.
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.

sourceStatement (String255)A statement providing additional details about the source of the data.editorName (String50)The name of the individual who last edited this data.lastUpdate (Date)The date upon which any data associated with this record was last updated.System Keys:guid (String60)guid (String60)A globally unique identifier applied to each feature in the database for reference	
lastUpdate (Date)The date upon which any data associated with this record was last updated.System Keys:guid (String60)A globally unique identifier applied to each feature in the database for reference	
System Kevs: guid (String60) A globally unique identifier applied to each feature in the database for reference	
guid (String60) A globally unique identifier applied to each feature in the database for reference	
metald (Integer) An identifier used to refer to a metadata record that provide additional informati the data in this record.	on about

HCS : Pump

(Database Feature Class Name = HeatCoolPump)

Geometry Type: Point Accuracy: +/-1Ft. Sensitivity: Secret A mechanical device for heating and cooling system that draws material into itself through an entrance port and forces the material out through an exhaust port. [SDSFIE FGDC Utilities Classification].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
serialNumber (String15)	The manufacturer's serial, or unique identification number of the subject item.
modelNumber (String12)	The Model, Product, Catalog, or Item Number of subject item.
Attributes:	
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
coolMethod (CodeEquipmentCooling)	The method by which the pump is cooled.
capacityAct (Double)	The measured capacity of the pump operating under actual normal head and flow conditions.
capacityRate (Double)	The manufacturer's pump capacity (e.g., gpm) rating at a specific design total dynamic head (TDH), usually depicted by a pump curve.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
groundElevation (Double)	The elevation of the ground surface in feet (English units) or meters (SI units) above some datum.
pwrReq (<u>CodeVoltage</u>)	The voltage of the electrical power required by the subject item.
primeMethod (String15)	The method by which the pump is primed.
primRqd (<u>CodeBoolean</u>)	An indicator as to whether or not the pump has to be primed? (yes or no).
tdhRated (Double)	The total dynamic head upon which the capacity_rated is based.
featureUse (String16)	The particular application, or use the subject item.
pumpElevation (Double)	The elevation measured at centerline of the pump, in feet (English units) or meters (SI units) above some datum.
type (String16)	A field indicating the kind, class, or group of the subject item.
description (String255)	A description or other unique information concerning the subject item.
material (String16)	
junctionType (CodeJunctionType)	An indicator as to whether the feature serves as a source, sink or neither in the network.
<u>Metadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915)
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (CodeStatus)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be

	used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

HCS : Rectifier

 (Database Feature Class Name = HeatCoolRectifier)

 Geometry Type: Point
 Accuracy: +/-1Ft.

 Sensitivity: Secret

 A device that changes alternating current to direct current for an impressed current cathodic

 protection system. [SDSFIE FGDC Utilities Classification].

ames and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
ttributes:	
coolMethod (CodeEquipmentCooling)	The method by which the rectifier is cooled, typically air or oil.
enclType (CodeElectricMotorEnclType)	The type of enclosure used to protect the rectifier.
voltIn (CodeVoltage)	The input AC voltage to the rectifier.
voltOut (CodeVoltage)	The output DC voltage from the rectifier to the anode system.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
currntOut (Double)	The output direct current from the rectifier to the anode system.
internalMeter (<u>CodeBoolean</u>)	An indicator as to whether or not the rectifier has an internal meter, yes/no.
noPhases (Integer)	The number of phases to which this device provides reactive power.
phaseLeter (CodeElectricPhaseType)	The letter(s) of the phase(s) for the subject item.
description (String255)	A description or other unique information concerning the subject item.
material (String16)	
size (Integer)	
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
etadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915)
verified (String255)	Whether or not the feature has been verified.
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	
	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	system processes. It does not affect the subject items data integrity and should not be
qualityLevel (<u>CodeSueQualityLevel</u>) dataSource (<u>CodeDataSource</u>)	system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE]. The subsurface utility engineering quality level assigned to utilities features as defined in

sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
<u>System Keys:</u>	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

HCS : Regulator

 (Database Feature Class Name = HeatCoolRegulator)

 Geometry Type: Point
 Accuracy: +/-1Ft.

 Sensitivity: Secret

 A regulator located in the heating/cooling line that automatically reduces the pressure on the downstream side of the valve to a preset magnitude. [SDSFIE FGDC Utilities Classification].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
serialNumber (String15)	The manufacturer's serial, or unique identification number of the subject item.
modelNumber (String12)	The Model, Product, Catalog, or Item Number of subject item.
Attributes:	
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
groundElevation (Double)	The elevation of the ground surface in feet (English units) or meters (SI units) above some datum.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
pressIn (Double)	The design water system pressure in the waterline on inlet side of the pressure regulator.
pressOut (Double)	The design water system pressure in the waterline on outlet side of the pressure regulator.
pressReqd (Double)	The required maximum outlet pressure setting for the regulator.
regElevation (Double)	The elevation of the pressure regulator, measured at the regulator centerline.
size (CodePipeDiameter)	The manufacturers designated size, or nominal (i.e., rounded to the nearest unit) diameter for the subject item (e.g., 1in gas hydrant, 2in meter, 6in pipe).
type (String16)	The kind, class, or group of the subject item.
description (String255)	A description or other unique information concerning the subject item.
material (String16)	
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
<u>Metadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915)
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (<u>CodeDataSource</u>)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.

System Keys:

guid (String60) metaId (Integer) A globally unique identifier applied to each feature in the database for reference. An identifier used to refer to a metadata record that provide additional information about the data in this record.

HCS : Valve

(Database Feature Class Name = HeatCoolValve)Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretA fitting or device used for shutting or throttling flow through a heating and cooling line.[SDSFIE FGDC Utilities Classification].

Names and Identifiers:

maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
Attributes:	
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
groundElevation (Double)	The elevation of the ground surface in feet (English units) or meters (SI units) above some datum.
valveElv (Double)	The elevation measured at centerline of the valve, in feet (English units) or meters (SI units) above some datum.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset. [Adopted from SDSFIE].
featureUse (String16)	The site specific use of the valve.
valveSize (Double)	The manufacturer's nominal size designation.
valveSt (CodeStyleValve)	The particular kind, class, or group of valve (e.g., gate, check, etc.).
coverDepth (Double)	The depth of cover. The depth measured from top of ground's surface (or grade) to top of underground heating and cooling system line valve.[Air Force].
description (String255) material (String16)	A description or other unique information concerning the subject item.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
valveOpen (<u>CodeValveOpen</u>)	The direction a valve must be turned to open
operatingStatus (<u>CodeValveStatus</u>)	The normal operating status of the valve
Metadata:	
collectionProgress (<u>CodeProgress</u>)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915)
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (CodeStatus)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (<u>CodeDataSource</u>)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	· · ·
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metald (Integer)	An identifier used to refer to a metadata record that provide additional information about

the data in this record.

HCS : Vault

(Database Feature Class Name = HeatCoolVault) Geometry Type: Polygon Accuracy: +/-5Ft.

Sensitivity: Confidential

Names and Identifiers:

maaID (String30)

maaAlias (String60)

Attributes:

airrfValve (CodeBoolean) area (Double) disposition (CodeDispositionObject) drainType (CodeDrainType) groundElevation (Integer) invertElv (Double)

junctionType (CodeJunctionType) material (CodePipeMaterial)

mhDia (Double) mhLength (Double) mhWidth (Double)

modelNumber (String20) description (String255) noPipes (Integer) noValves (Integer) owner (String60)

perimeter (Integer) rimElevation (Double)

size (Integer) type (String16) use (String50)

Metadata:

collectionProgress (CodeProgress) dateAcquired (Date)

verified (String255) projectType (CodeProjectType)

projectId (String20)

status (CodeStatus) Alternative (Integer) userFlag (String254)

qualityLevel (CodeSueQualityLevel)

dataSource (CodeDataSource) dataSource2 (CodeDataSource) sourceStatement (String255)

A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value) An alternative or former name by which the feature is refered.

The size of the area, zone, or polygon in square units.

The top surface elevation of the subject item's interior floor/bottom in feet (English units) or meters (SI units) above some datum.

The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc.

The width dimension of the subject item, from outside face of exterior wall/side to outside face of opposite exterior wall/side. The model number of the feature.

A description or other unique information concerning the subject item.

The number of the pipes entering and exiting the subject item.

The number of the valves. A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].

The elevation of exterior top surface of the subject item's lid, hatch, rim, or roof in feet (English units) or meters (SI units) above some datum. The size of the subject item

Use of the feature.

The progress of the data collection. The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915) Whether or not the feature has been verified.

The type of project or work activity that installed or first recorded the location of this feature.

A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.

A temporal description of the operational status of the feature.

Discriminator used to tie features of a plan or proposal together into a version.

An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].

The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.

The primary source of the data in this record.

The secondary source of the data in this record.

A statement providing additional details about the source of the data.

editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
<u>System Keys:</u>	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Data Set: Industrial_Waste

Industrial_Waste : Anode

(Database Feature Class Name = IndustrialWasteAnode)

Geometry Type: Point Accuracy: +/-1Ft. Sensitivity: Secret A material used in industrial waste distribution systems that is electrically connected to a less electrolytically active material so that it will oxidize in the place of the less active material. [SDSFIE FGDC Utilities Classification].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
Attributes:	
anodeWeight (Double)	The initial weight of the anode or anode packet.[FGDC Utilities Classification].
material (CodeAnodes)	The type of material composition of the anode or anode packet.[FGDC Utilities Classification].
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
dateInstalled (Date)	The date on which the feature was originally installed.
dateLastInspected (Date)	The date the anode was last inspected or checked. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
description (String255)	A description or other unique information concerning the subject item.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
<u>Aetadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915)
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
<u>ystem Keys:</u>	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about

the	data	in	this	record.
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Industrial_Waste : Anode Test Station

(Database Feature Class Name = IndustrialWasteAnodeTestSta)

Geometry Type: Point Accuracy: +/-1Ft. Sensitivity: Secret A central location where anodes are tested for performance in industrial waste system. [SDSFIE FGDC Utilities Classification].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
Attributes:	
installType (CodeSheathInsulateType)	The type of insulation covering the conductor.[FGDC Utilities Classification].
noTerm (Integer)	The total number of terminal connections at the test station.[FGDC Utilities Classification].
type (String16)	The type of anode test station configuration use.[FGDC Utilities Classification].
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
wireSize (CodeCableDimension)	The AWG size designation for the wire connecting the anode/anode packet to the anode test station.[FGDC Utilities Classification].
wireType (String16)	The conductor configuration, typically solid or stranded.[FGDC Utilities Classification].
description (String255)	A description or other unique information concerning the subject item.[FGDC Utilities Classification].
material (String16)	The material of the subject item.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
junctionType (CodeJunctionType)	An indicator as to whether the feature serves as a source, sink or neither in the network.
<u>Aetadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915)
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (CodeStatus)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (<u>CodeDataSource</u>)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Industrial_Waste : Discharge Point

(Database Feature Class Name	= IndustrialWasteDischargePoint)
Geometry Type: Point	Accuracy: +/-1Ft.

Sensitivity: Secret

Any location where industrial waste water pipes directly discharge effluent. [SDSFIE].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
tributaryId (String20)	An operator generated identifier used locally to identify a tributary subsystem of the main utility system.
Attributes:	
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
type (String16)	A field indicating the kind, class, or group of the subject item.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
description (String255)	A description or other unique information concerning the subject item.
material (String16)	The material of the subject item.
size (Integer)	The size of the subject item.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
<u>fetadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915)
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
ystem Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Industrial_Waste : Fitting

(Database Feature Class Name = IndustrialWasteFitting)			
Geometry Type: Point	Accuracy: +/-1Ft.	Sensitivity: Secret	
A fitting is an item used to connect, cap, plug or otherwise alter a pipe carrying industrial waste.			
[SDSFIE FGDC Utilities Classif	fication].		

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
modelNumber (String12)	The Model, Product, Catalog, or Item Number of subject item.
tributaryId (String20)	An operator generated identifier used locally to identify a tributary subsystem of the main utility system.
serialNumber (String15)	The manufacturer's serial, or unique identification number of the subject item.

Attributes:

fitDepth (Double) disposition (CodeDispositionObject)

fitLength (Double) fitWidth (Double) owner (String60)

material (CodePipeMaterial)

size (CodePipeDiameter)

type (String16) fitloc (CodeWasteFittingLocation) estimatedDischarge (Integer) dischargedMaterial (String20) coverDepth (Double)

description (String255) junctionType (CodeJunctionType)

Metadata:

collectionProgress (CodeProgress) dateAcquired (Date)

verified (String255) projectType (CodeProjectType)

projectId (String20)

status (CodeStatus) Alternative (Integer) userFlag (String254)

qualityLevel (CodeSueQualityLevel)

dataSource (CodeDataSource) dataSource2 (CodeDataSource) sourceStatement (String255) editorName (String50) lastUpdate (Date)

System Keys:

guid (String60) metaId (Integer)

The depth below the ground surface or cover measured from the top of the subject item. The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.

The overall length of the fitting.

The width dimension of the subject item measured at its' widest point.

A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].

The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc.

The manufacturers designated size, or nominal (i.e., rounded to the nearest unit) diameter for the subject item (e.g., 1in gas hydrant, 2in meter, 6in pipe).

Discriminator. The kind, class, or group of the subject item.

A coded value designating the location of the fitting.[Cherry Point].

Estimated discharge through, or from, fitting.[Cherry Point].

Material being discharged, or potentially discharged.[Cherry Point].

The depth of cover. The depth measured from top of ground's surface (or grade) to top of underground heating and cooling system line valve.[Air Force].

A description or other unique information concerning the subject item.

An indicator as to whether the feature serves as a source, sink or neither in the network.

The progress of the data collection.

The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915)

Whether or not the feature has been verified.

The type of project or work activity that installed or first recorded the location of this feature.

A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.

A temporal description of the operational status of the feature.

Discriminator used to tie features of a plan or proposal together into a version.

An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].

The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.

The primary source of the data in this record.

The secondary source of the data in this record.

A statement providing additional details about the source of the data.

The name of the individual who last edited this data.

The date upon which any data associated with this record was last updated.

A globally unique identifier applied to each feature in the database for reference. An identifier used to refer to a metadata record that provide additional information about the data in this record.

Industrial Waste : Grit Chamber

(Database Feature Class Name = IndustrialWasteGritChamber)

Geometry Type: Point Accuracy: +/-1Ft. Sensitivity: Secret A chamber designed to remove sand, gravel, or other heavy solids that have subsiding velocities or specific gravities substantially greater that those of the organic solids in the waste water in the industrial waste system. [SDSFIE].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
tributaryId (String20)	An operator generated identifier used locally to identify a tributary subsystem of the main

	utility system.
ttributes:	
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
oWSep (<u>CodeBoolean</u>)	An indicator as to whether or not grit chamber has an integrated oil-water separator. (yes or no)
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset. [Adopted from SDSFIE].
flowCapacity (Double)	The flow capacity of the subject item.
gritType (String12)	The predominate type of grit collected in the grit chamber.
storCapacity (Double)	The grit chamber overall storage capacity.
description (String255)	A description or other unique information concerning the subject item.
material (String16)	The material of the subject item.
junctionType (CodeJunctionType)	An indicator as to whether the feature serves as a source, sink or neither in the network.
tadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915)
verified (String255)	Whether or not the feature has been verified.
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
tem Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Industrial_Waste : Headwall Line

(Database Feature Class Name = IndustrialWasteHeadwallLine)

Geometry Type: Line Accuracy: +/-5Ft. Sensitivity: Secret A wall (of any material) depicted as a line at the end of a culvert or drain to serve one or more of the following purposes: protect fill from scour or undermining; increase hydraulic efficiency, divert direction of flow, and serve as a retaining wall. [SDSFIE].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
Attributes:	
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
directionality (CodeDirectionality)	The directionality of flow with repsect to the line's geometry.
material (String16)	The material of the subject item.
description (String255)	A description or other unique information concerning the subject item.
size (Integer)	The size of the subject item.

disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
impedance (Double)	The number representing the total opposition to flow.
Metadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915)
verified (String255)	Whether or not the feature has been verified.
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Industrial_Waste : Headwall

(Database Feature Class Name = IndustrialWasteHeadwallPoint)

Geometry Type: Point Accuracy: +/-1Ft. Sensitivity: Secret A wall (of any material) depicted as a point at the end of a culvert or drain to serve one or more of the following purposes: protect fill from scour or undermining; increase hydraulic efficiency, divert direction of flow, and serve as a retaining wall. [SDSFIE].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
Attributes:	
topElevation (Double)	The elevation of the top of wall above the pipe.
length (Double)	The overall length of the feature.[Center].
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
description (String255)	A brief description of the feature.
material (String16)	The material of the subject item.
size (Integer)	The size of the subject item.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
Metadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915)
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.

projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (CodeStatus)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Industrial_Waste : Inlet

(Database Feature Class Name = IndustrialWasteInlet)

Geometry Type: Point	Accuracy: +/-1Ft.	Sensitivity: Secret
The location where water is c	collected and received into the utili	ty system. [SDSFIE].

Names and Identifiers:

Names and Identifiers.	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
modelNumber (String12)	The Model, Product, Catalog, or Item Number of subject item.
tributaryId (String20)	An operator generated identifier used locally to identify a tributary subsystem of the main utility system.
Attributes:	
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
capacityDgn (Double)	The design flow capacity of the subject item.
inletSt (CodeInlets)	The step domain code for an inlet.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
invertElv (Double)	The top surface elevation of the subject item's interior floor/bottom in feet (English units) or meters (SI units) above some datum.
weirElevation (Double)	Elevation of the weir invert.
estimatedDischarge (Integer)	Estimated quantity of discharge to inlet.[Cherry Point].
dischargedMaterial (String20)	Material being discharged, or potentially discharged.[Cherry Point].
description (String255)	A description or other unique information concerning the subject item.
material (String16)	The material of the subject item.
size (Integer)	The size of the subject item.
junctionType (CodeJunctionType)	An indicator as to whether the feature serves as a source, sink or neither in the network.
<u>Metadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915)
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.

userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (<u>CodeDataSource</u>)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Industrial_Waste : Junction

(Database Feature Class Name = IndustrialWasteJunction)Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretA box or small vault (usually concrete, brick, or cast iron) in industrial waste systems locatedbelow grade with above grade access where pipes intersect. The manhole also houses associatedfittings, valves, meters, etc. [SDSFIE].

mes and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
modelNumber (String12)	The Model, Product, Catalog, or Item Number of subject item.
tributaryId (String20)	An operator generated identifier used locally to identify a tributary subsystem of the main utility system.
tributes:	
drainType (<u>CodeDrainType</u>)	The type of subject item drain.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
mhDia (Double)	The diameter dimension of the subject item, measured from inside face of wall to inside face of opposite wall.
featureUse (String16)	Discriminator. An attribute that differentiates the use of the subject item.
linerType (CodeManholeLinerType)	The type of liner used if the pit/manhole is used for neutralizing chemicals.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset. [Adopted from SDSFIE].
mhLength (Double)	The length dimension of the subject item, from outside face of exterior wall/side to outside face of opposite exterior wall/side.
mhWidth (Double)	The width dimension of the subject item, from outside face of exterior wall/side to outside face of opposite exterior wall/side.
invertElv (Double)	The top surface elevation of the subject item's interior floor/bottom in feet (English units) or meters (SI units) above some datum.
material (CodePipeMaterial)	The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc.
reactant (String30)	The chemical in the incoming waste stream being neutralized.
neutAgent (String30)	The chemical agent in the pit which chemically neutralizes the in stream reactant.
noPipes (Integer)	The number of the pipes entering and exiting the subject item.
rimElevation (Double)	The elevation of exterior top surface of the subject item's lid, hatch, rim, or roof in feet (English units) or meters (SI units) above some datum.
type (String16)	A field indicating the kind, class, or group of manhole for the subject utility.
estimatedDischarge (Integer)	Estimated quantity of discharge from subject feature.[Cherry Point].
dischargedMaterial (String20)	Material being discharged, or potentially discharged.[Cherry Point].
condition (CodePoleCondition)	Indicates a state of being, or readiness for use of the subject item (e.g., good, fair, poor), from lists or field inspections.[USMC].
azimuth (Double)	A direction clockwise in degrees from magnetic north indicating location of pipe opening

	in manhole.[USMC].
description (String255)	A description or other unique information concerning the subject item.
size (Integer)	The size of the subject item.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
<u>Metadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915)
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (<u>CodeDataSource</u>)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Industrial_Waste : Lagoon

(Database Feature Class Name = IndustrialWasteLagoon)Geometry Type: PolygonAccuracy: +/-5Ft.Sensitivity: ConfidentialA shallow man made pool or pond for the purpose of holding industrial waste. [SDSFIE].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String16)	The site specific identification name or number assigned to the subject item.
maaAlias (String60)	An alternative or former name by which the feature is refered.
labName (CodeLaboratory)	The name of the laboratory primarily responsible for completing the required tests for the subject item.
monAgency (String15)	The regulator agency that monitors inflow, containment, and discharge for the subject item.
tributaryId (String20)	An operator generated identifier used locally to identify a tributary subsystem of the main utility system.
Attributes:	
aerator (CodeBoolean)	Indicates whether or not the lagoon has aerators. (yes/no)
aeratorPow (Double)	The power rating for the aerator, usually in terms of horse power (hp).
area (Double)	The size of the area, zone, or polygon in square units.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
dateAnl (Date)	Date on which water quality analyses were performed. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915)
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset. [Adopted from SDSFIE].
dateConstructed (Date)	The date on which the subject item construction was complete and user occupancy provided. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915)
depthAvg (Double)	The average depth of containment measured from normal operating pool.

lgnLength (Double) lgnWidth (Double) manageOff (String12) testType (<u>CodeSewageTestType</u>) invElvAv (Double) labType (<u>CodeLaboratoryType</u>)

userInd (CodeBoolean) userSan (CodeBoolean) smplFreq (Integer) soilCdn (CodeSoilConsistency) werOutl (CodeBoolean) xDikes (CodeBoolean) outCntr (String12) noPipesI (Integer) noPipesO (Integer) noPumps (Integer) perimeter (Double) soilEro (CodeSoilsErosionK) soilFam (CodeSoilsFamily) soilTex (CodeSoilsTexture) pipOutl (CodeBoolean) type (String16) description (String255) material (CodePipeMaterial) size (Integer) disposition (CodeDispositionObject)

Metadata:

collectionProgress (CodeProgress)
verified (String255)
projectType (CodeProjectType)

projectId (String20)

status (<u>CodeStatus</u>) Alternative (Integer) userFlag (String254)

qualityLevel (CodeSueQualityLevel)

dataSource (<u>CodeDataSource</u>) dataSource2 (<u>CodeDataSource</u>) sourceStatement (String255) editorName (String50) lastUpdate (Date)

System Keys:

guid (String60) metaId (Integer) The average length of the lagoon. The average width dimension of the lagoon, measured from top of opposite side slopes. The managing office/organization. The type of test used to evaluate the contained material. The average elevation of the bottom of the lagoon. The type of the laboratory primarily responsible for completing the required tests for the subject item. An indicator as to whether or not the lagoon is used for industrial wastewater. (yes or no) An indicator as to whether or not the lagoon is used for wastewater. (yes or no) The frequency at which material sampling is conducted. The consistency of the soil indicating soil condition and strength. An indicator as to whether or not the subject item has weir outlets. (yes or no) An indicator whether cross dikes exists in the subject item or not (yes or no). The outlet control. The number of pipes discharging into the subject item. The number of pipes carrying material/fluid out of the subject item. The total number of pumps located at the subject item. The distance around the boundary of the area, zone, or subject item in linear units. The erosion potential of the soil. The soil family. The soil texture. An indicator as to whether or not the lagoon has pipe outlets. (yes or no) A field indicating the kind, class, or group of the subject item. A description or other unique information concerning the subject item. The material of the subject item. The size of the subject item. The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections. The progress of the data collection. Whether or not the feature has been verified. The type of project or work activity that installed or first recorded the location of this feature. A unique identifier associated with the project or work activity that installed or first recorded the location of this feature. A temporal description of the operational status of the feature. Discriminator used to tie features of a plan or proposal together into a version. An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].

The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.

The primary source of the data in this record.

The secondary source of the data in this record.

A statement providing additional details about the source of the data.

The name of the individual who last edited this data.

The date upon which any data associated with this record was last updated.

A globally unique identifier applied to each feature in the database for reference. An identifier used to refer to a metadata record that provide additional information about the data in this record.

Industrial_Waste : Line

(Database Feature Class Name = IndustrialWasteLine)		
Geometry Type: Line	Accuracy: +/-5Ft.	Sensitivity: Secret

A pipe used to carry industrial waste material from location to location (main line, service line, force main line, etc). [SDSFIE].

Names and Identifiers:

maaID (String30)

maaAlias (String60) modelNumber (String12) tributaryId (String20)

Attributes:

disposition (CodeDispositionObject)

drainagePattern (<u>CodeDrainagePattern</u>) drainageTexture (<u>CodeDrainageDensity</u>) pressMax (Double) owner (String60)

pipeLength (Double) lined (<u>CodeBoolean</u>) invElv1 (Double)

invElv2 (Double)

material (CodePipeMaterial)

featureUse (String16) slopeBot (Double) pressNorm (Double) size (CodePipeDiameter)

type (String16) coverDepth (Double)

description (String255) directionality (<u>CodeDirectionality</u>) impedance (Double)

Metadata:

collectionProgress (<u>CodeProgress</u>) dateAcquired (Date)

verified (String255) projectType (<u>CodeProjectType</u>)

projectId (String20)

status (<u>CodeStatus</u>) Alternative (Integer) userFlag (String254)

qualityLevel (CodeSueQualityLevel)

dataSource (<u>CodeDataSource</u>) dataSource2 (<u>CodeDataSource</u>) sourceStatement (String255) editorName (String50) lastUpdate (Date) **System Keys:** A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value) An alternative or former name by which the feature is refered. The Model, Product, Catalog, or Item Number of subject item. An operator generated identifier used locally to identify a tributary subsystem of the main utility system.

The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.

The drainage pattern of the material surrounding the pipe.

The texture of the material surrounding the pipe.

The manufacturer's or industry standard's maximum pressure rating of the subject item. A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].

The length of pipe, measured from node to node along the pipe centerline .

An indicator as to whether the pipe is lined or not (yes/no).

The elevation of the bottom of pipe (i.e., pipe invert) at node_id_1 in feet (English units) or meters (SI units) above some datum.[Derived from SDSFIE].

The elevation of the bottom of pipe (i.e., pipe invert) at node_id_2 in feet (English units) or meters (SI units) above some datum.

The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc.

Discriminator. The use code for wastewater lines.

The slope of the bottom of the subject item expressed as a percentage.

The normal operating pressure of the industrial waste water pipe.

The manufacturers designated size, or nominal (i.e., rounded to the nearest unit) diameter for the subject item (e.g., 1in gas hydrant, 2in meter, 6in pipe).

A field indicating the kind, class, or group of the subject item.

The depth of cover. The depth measured from top of ground's surface (or grade) to top of underground industrial waste line pipe.[Air Force].

A description or other unique information concerning the subject item.

The directionality of flow with repsect to the line's geometry.

The number representing the total opposition to flow.

The progress of the data collection.

The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915)

Whether or not the feature has been verified.

The type of project or work activity that installed or first recorded the location of this feature.

A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.

A temporal description of the operational status of the feature.

Discriminator used to tie features of a plan or proposal together into a version.

An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].

The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.

The primary source of the data in this record.

The secondary source of the data in this record.

A statement providing additional details about the source of the data.

The name of the individual who last edited this data.

The date upon which any data associated with this record was last updated.

guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Industrial_Waste : Marker

(Database Feature Class Name = IndustrialWasteMarker)Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretA sign, concrete monument, etc. installed either directly above or immediately adjacent tounderground lines, bends, fittings, etc to indicate industrial waste. [SDSFIE].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
Attributes:	
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
material (String16)	The material of the subject item.
description (String255)	A description or other unique information concerning the subject item.
size (Integer)	The size of the subject item.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
junctionType (CodeJunctionType)	An indicator as to whether the feature serves as a source, sink or neither in the network.
Metadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915)
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metald (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Industrial_Waste : Meter

(Database Feature Class Name = IndustrialWasteMeter) Geometry Type: Point Accuracy: +/-1Ft. Sensitivity: Secret A device installed in a line for measuring the quantity and or rate of waste through a section of line. [SDSFIE].

Names and Identifiers:

maaID (String30)

A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)

maaAlias (String60) modelNumber (String12) serialNumber (String15)

Attributes:

design (String16) disposition (CodeDispositionObject)

installType (<u>CodePumpSta</u>) meterElv (Double) owner (String60)

groundElevation (Double) meterDepth (Double) meterLength (Double) meterWidth (Double) size (CodePipeDiameter)

type (String16) description (String255) material (String16) junctionType (<u>CodeJunctionType</u>)

Metadata:

collectionProgress (<u>CodeProgress</u>) dateAcquired (Date)

verified (String255) projectType (<u>CodeProjectType</u>)

projectId (String20)

status (<u>CodeStatus</u>) Alternative (Integer) userFlag (String254)

qualityLevel (CodeSueQualityLevel)

dataSource (<u>CodeDataSource</u>) dataSource2 (<u>CodeDataSource</u>) sourceStatement (String255) editorName (String50) lastUpdate (Date)

System Keys:

guid (String60) metaId (Integer) An alternative or former name by which the feature is refered. The Model, Product, Catalog, or Item Number of subject item. The manufacturer's serial, or unique identification number of the subject item. Discriminator: The design of the water meter. The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections. The type installation of the subject item. The elevation of the meter above a specific datum. A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE]. The ground elevation at the subject item. The depth below the ground surface or cover measured from the top of the subject item. The overall length of the meter. The overall width dimension of the subject item. The manufacturers designated size, or nominal (i.e., rounded to the nearest unit) diameter for the subject item (e.g., 1in gas hydrant, 2in meter, 6in pipe). A field indicating the kind, class, or group of the subject item. A description or other unique information concerning the subject item. The material of the subject item. An indicator as to whether the feature serves as a source, sink or neither in the network. The progress of the data collection. The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915) Whether or not the feature has been verified. The type of project or work activity that installed or first recorded the location of this feature. A unique identifier associated with the project or work activity that installed or first recorded the location of this feature. A temporal description of the operational status of the feature. Discriminator used to tie features of a plan or proposal together into a version. An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE]. The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.

The primary source of the data in this record.

The secondary source of the data in this record.

A statement providing additional details about the source of the data.

The name of the individual who last edited this data.

The date upon which any data associated with this record was last updated.

A globally unique identifier applied to each feature in the database for reference. An identifier used to refer to a metadata record that provide additional information about the data in this record.

Industrial_Waste : Neutralizer

(Database Feature Class Name = IndustrialWasteNeutralizer)

Geometry Type: Point Accuracy: +/-1Ft. Sensitivity: Secret A receptacle or chamber, which by chemical reactions with reactant materials in the receptacle, makes liquid waste passing through the receptacle chemically neutral for industrial waste systems. [SDSFIE].

Names and Identifiers: maaID (String30)

A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)

maaAlias (String60) modelNumber (String12) tributaryId (String20)

Attributes:

drainType (<u>CodeDrainType</u>) disposition (<u>CodeDispositionObject</u>)

linerType (<u>CodeManholeLinerType</u>) invertElv (Double)

owner (String60)

neutDiameter (Double)

neutLength (Double)

neutWidth (Double)

material (CodePipeMaterial)

reactant (String30) neutAgent (String30) noPipes (Integer) rimElevation (Double)

type (String16) description (String255) size (Integer) junctionType (<u>CodeJunctionType</u>)

Metadata:

collectionProgress (<u>CodeProgress</u>) dateAcquired (Date)

verified (String255) projectType (<u>CodeProjectType</u>)

projectId (String20)

status (<u>CodeStatus</u>) Alternative (Integer) userFlag (String254)

qualityLevel (CodeSueQualityLevel)

dataSource (<u>CodeDataSource</u>) dataSource2 (<u>CodeDataSource</u>) sourceStatement (String255) editorName (String50) lastUpdate (Date)

System Keys:

guid (String60) metaId (Integer) An alternative or former name by which the feature is refered. The Model, Product, Catalog, or Item Number of subject item. An operator generated identifier used locally to identify a tributary subsystem of the main utility system.

The type of subject item drain.

The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.

The type of liner used if the pit/manhole is used for neutralizing chemicals.

The top surface elevation of the subject item's interior floor/bottom in feet (English units) or meters (SI units) above some datum.

A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].

The diameter dimension of the subject item, measured from inside face of wall to inside face of opposite wall.

The length dimension of the subject item, from outside face of exterior wall/side to outside face of opposite exterior wall/side.

The width dimension of the subject item, from outside face of exterior wall/side to outside face of opposite exterior wall/side.

The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc.

The chemical in the incoming waste stream being neutralized.

The chemical agent in the pit which chemically neutralizes the in stream reactant.

The number of the pipes entering and exiting the subject item. The elevation of exterior top surface of the subject item's lid, hatch, rim, or roof in feet (English units) or meters (SI units) above some datum.

A field indicating the kind, class, or group of manhole/pit for the subject utility.

A description or other unique information concerning the subject item.

The size of the subject item.

An indicator as to whether the feature serves as a source, sink or neither in the network.

The progress of the data collection.

The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915)

Whether or not the feature has been verified.

The type of project or work activity that installed or first recorded the location of this feature.

A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.

A temporal description of the operational status of the feature.

Discriminator used to tie features of a plan or proposal together into a version. An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].

The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.

The primary source of the data in this record.

The secondary source of the data in this record.

A statement providing additional details about the source of the data.

The name of the individual who last edited this data.

The date upon which any data associated with this record was last updated.

A globally unique identifier applied to each feature in the database for reference. An identifier used to refer to a metadata record that provide additional information about the data in this record.

Industrial_Waste : Oil Water Separator

(Database Feature Class Name = IndustrialWasteOilWatSep)

Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretA device or structure placed in the industrial waste stream to separate water from oil products.[SDSFIE].

Names and Identifiers:

maaID (String30)

maaAlias (String60) tributaryId (String20)

sepName (String12)

Attributes: datePerX (Date)

disposition (<u>CodeDispositionObject</u>)

disposal (String30) owner (String60)

grtchbr (CodeBoolean)

flowCapacity (Double) oilCapacity (Double) sepCode (String2) sepContnt (String20) tempOptim (Double) separationProcess (String30) sepVolume (Double) type (String16) area (Double) perimeter (Double) probDescription (String255) datePumpd (Date)

estimatedDischarge (Integer) shopNo (String20) dischargedMaterial (String20) disType (String20) description (String255) coordX (Double) coordY (Double) material (String16) junctionType (CodeJunctionType)

Metadata:

collectionProgress (<u>CodeProgress</u>) dateAcquired (Date)

verified (String255) projectType (<u>CodeProjectType</u>)

projectId (String20)

status (<u>CodeStatus</u>) Alternative (Integer) userFlag (String254)

qualityLevel (CodeSueQualityLevel)

A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value) An alternative or former name by which the feature is refered. An operator generated identifier used locally to identify a tributary subsystem of the main utility system. The site specific identification name or number assigned to the subject item. The date the current permit expires for the subject item. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915) The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections. Brief description of how the waste is disposed. A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE]. An indicator as to whether or not the subject item has a grit chamber. (yes or no) The flow capacity of the subject item. The retention capacity of the oil-water separator. The oil-water separator code. Usually defined as OW. Separator contents The optimum operating temperature for the subject item. The specific type of separation process. The volume of the oil-water separator. A field indicating the kind, class, or group of the subject item. The size of the area, zone, or polygon in square units. The distance around the boundary of the area, zone, or subject item in linear units. Text describing a problem with the oil and water separator[Cherry Point]. The date the oil and water separator was last pumped out. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).[Cherry Point]. Estimated quantity of discharge from subject feature.[Cherry Point]. Current shop number for subject item.[Cherry Point]. Material being discharged, or potentially discharged.[Cherry Point]. Type of discharge point.[Cherry Point]. A description or other unique information concerning the subject item. The coordinate in the east-west plane, expressed in decimal degrees. The coordinate in the north-south plane, expressed in decimal degrees. The material of the subject item. An indicator as to whether the feature serves as a source, sink or neither in the network. The progress of the data collection. The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915) Whether or not the feature has been verified. The type of project or work activity that installed or first recorded the location of this feature. A unique identifier associated with the project or work activity that installed or first recorded the location of this feature. A temporal description of the operational status of the feature.

Discriminator used to tie features of a plan or proposal together into a version.

An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].

The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.

dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (<u>CodeDataSource</u>)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
<u>System Keys:</u>	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Industrial_Waste : Pump

(Database Feature Class Name = IndustrialWastePump)Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretA mechanical device that draws for industrial waste system material into itself through an
entrance port and forces the material out through an exhaust port. [SDSFIE].

Names and Identifiers:

maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
modelNumber (String12)	The Model, Product, Catalog, or Item Number of subject item.
tributaryId (String20)	An operator generated identifier used locally to identify a tributary subsystem of the main utility system.
serialNumber (String15)	The manufacturer's serial, or unique identification number of the subject item.
<u>Attributes:</u>	
coolMethod (CodeEquipmentCooling)	The method by which the pump is cooled.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
capacityAct (Double)	The measured capacity of the pump operating under actual normal head and flow conditions.
capacityRate (Double)	The manufacturer's pump capacity (e.g., gpm) rating at a specific design total dynamic head (TDH), usually depicted by a pump curve.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
pumpElevation (Double)	The elevation measured at centerline of the pump, in feet (English units) or meters (SI units) above some datum.
primRqd (<u>CodeBoolean</u>)	An indicator as to whether or not the pump has to be primed? (yes or no).
primeMethod (String15)	The method by which the pump is primed.
featureUse (String16)	The particular application, or use of the subject item.
pumpHp (Double)	The power generated by the pump, equal in the U.S. to 746 watts and nearly equivalent to the English gravitational unit of the same name that equals 550 foot-pounds of work per second.
type (String16)	A field indicating the kind, class, or group of the subject item.
description (String255)	A description or other unique information concerning the subject item.
material (String16)	The material of the subject item.
junctionType (CodeJunctionType)	An indicator as to whether the feature serves as a source, sink or neither in the network.
Metadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915)
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined

	system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Industrial_Waste : Pumpstation Ejector

(Database Feature Class Name = IndustrialWastePumpstnEjector)Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretA building in which one or more pumps operate to supply industrial waste flowing at adequatepressure to or from a distribution system. [SDSFIE FGDC Utilities Classification].

mes and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
tributaryId (String20)	An operator generated identifier used locally to identify a tributary subsystem of the ma utility system.
ributes:	
alrmlvlelv (Double)	The elevation in the wet well that triggers an alarm indicating no additional storage capacity.
condition (<u>CodePoleCondition</u>)	Indicates a state of being, or readiness for use of the subject item (e.g., good, fair, poor) from lists or field inspections.
design (String16)	Discriminator. The design of the pump station.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
owner (String60)	A person, organization, or agency with legal control or management responsibility of th utility asset. [Adopted from SDSFIE].
hiWaterElevation (Double)	The high water or overflow elevation of the storage tank at the pumping station, in feet (English units) or meters (SI units) above some datum.
nodalElv (Double)	The elevation of subject node, which is used in performing computer analyses of the water distribution system. The node elevation is usually the ground elevation at the subject node, or the elevation of the subject item located at the subject node (e.g.,
staLength (Double)	The overall length of the pump station plant area.
wetwlCapacity (Double)	The wet well capacity.
staWidth (Double)	The width dimension of the station, measured from outside face of the exterior wall/side to outside face of the opposite exterior wall/side.
noPumps (Integer)	The total number of pumps located at the subject item.
type (String16)	A field indicating the kind, class, or group of the subject item.
description (String255)	A description or other unique information concerning the subject item.
material (String16)	The material of the subject item.
junctionType (CodeJunctionType)	An indicator as to whether the feature serves as a source, sink or neither in the network
tadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for d is YYYYMMDD (i.e., September 15, 1994 = 19940915)
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.

status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Industrial_Waste : Rect Point

(Database Feature Class Name = IndustrialWasteRectPoint)Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretA device that changes alternating current to direct current for an impressed current cathodicprotection system on an element of the industrial waste distribution system. [SDSFIE FGDCUtilities Classification].

ames and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
tributes:	
coolMethod (CodeEquipmentCooling)	The method by which the rectifier is cooled, typically air or oil.[FGDC Utilities Classification].
currntOut (Double)	The output direct current from the rectifier to the anode system.[FGDC Utilities Classification].
enclType (CodeElectricMotorEnclType)	The type of enclosure used to protect the rectifier.[FGDC Utilities Classification].
owner (String60)	A person, organization, or agency with legal control or management responsibility of t utility asset.[Adopted from SDSFIE].
internalMeter (<u>CodeBoolean</u>)	An indicator as to whether or not the rectifier has an internal meter, yes/no.[FGDC Utilities Classification].
noPhases (Integer)	The number of phases to which this device provides reactive power.[FGDC Utilities Classification].
phaseLeter (CodeElectricPhaseType)	The letter(s) of the phase(s) for the subject item.[FGDC Utilities Classification].
voltIn (<u>CodeVoltage</u>)	The input AC voltage to the rectifier.[FGDC Utilities Classification].
voltOut (CodeVoltage)	The output DC voltage from the rectifier to the anode system.[FGDC Utilities Classification].
description (String255)	A description or other unique information concerning the subject item.[FGDC Utilities Classification].
material (String16)	The material of the subject item.
size (Integer)	The size of the subject item.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network
etadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for d is YYYYMMDD (i.e., September 15, 1994 = 19940915)
verified (String255)	Whether or not the feature has been verified.
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.

projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (CodeStatus)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (<u>CodeDataSource</u>)	The primary source of the data in this record.
dataSource2 (<u>CodeDataSource</u>)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Industrial_Waste : Storage Area

(Database Feature Class Name = IndustrialWasteStorageArea)

Geometry Type: Polygon	Accuracy: +/-5Ft.	Sensitivity: Confidential
A structure used to contain and	hold industrial waste. [SDS	SFIE FGDC Utilities Classification].
Names and Identifiers:		

	maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
	maaAlias (String60)	An alternative or former name by which the feature is refered.
	facilityNumber (String20)	The organization specific identification code from Army's IFS-M, Air Force's WIMS, or Navy's Property Record Code Number.
	labName (<u>CodeLaboratory</u>)	The name of the laboratory primarily responsible for completing the required tests for the subject item.
	monAgency (String15)	The regulator agency that monitors inflow, containment, and discharge for the subject item.
At	tributes:	
	dateInstalled (Date)	The date on which the feature was originally installed.
	dateLastInspected (Date)	The last inspection date of the subject item. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915)
	condition (CodePoleCondition)	The condition of the subject item when last inspected.
	owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
	userInd (<u>CodeBoolean</u>)	An indicator as to whether or not the vault is used for industrial wastewater. (yes or no)
	userSan (<u>CodeBoolean</u>)	An indicator as to whether or not the vault is used for wastewater. (yes or no)
	depthAvg (Double)	The average depth of containment.
	vltLength (Double)	The average length of the vault.
	vltWidth (Double)	The average width dimension of the vault, measured from top of opposite side slopes.
	invElv (Double)	The elevation of the bottom of the vault.
	aerator (CodeBoolean)	Indicates whether or not the vault has aerators. (yes/no)
	aeratorPow (Double)	The power rating for the aerator, usually in terms of horse power (hp).
	noPumps (Integer)	The total number of pumps located at the subject item.
	noPipesI (Integer)	The number of pipes discharging into the subject item.
	noPipesO (Integer)	The number of pipes carrying material/fluid out of the subject item.
	outCntr (String12)	The outlet control.
	pipOutl (<u>CodeBoolean</u>)	An indicator as to whether or not the vault has pipe outlets. (yes or no)
	werOutl (<u>CodeBoolean</u>)	An indicator as to whether or not the subject item has weir outlets. (yes or no)
	smplFreq (Integer)	The frequency at which material sampling is conducted.
	testType (<u>CodeSewageTestType</u>)	The type of test used to evaluate the contained material.
	dateAnl (Date)	Date on which water quality analyses were performed. Format for date is YYYYMMDD

labType (<u>CodeLaboratoryType</u>)

manageOff (String12) area (Double) perimeter (Double) description (String255) size (Integer) disposition (<u>CodeDispositionObject</u>)

Metadata:

collectionProgress (<u>CodeProgress</u>) dateAcquired (Date)

verified (String255)
projectType (CodeProjectType)

projectId (String20)

status (<u>CodeStatus</u>) Alternative (Integer) userFlag (String254)

qualityLevel (CodeSueQualityLevel)

dataSource (<u>CodeDataSource</u>) dataSource2 (<u>CodeDataSource</u>) sourceStatement (String255) editorName (String50) lastUpdate (Date)

System Keys:

guid (String60) metaId (Integer) (i.e., September 15, 1994 = 19940915) The type of the laboratory primarily responsible for completing the required tests for the subject item. The managing office/organization. The size of the area, zone, or polygon in square units. The distance around the boundary of the area, zone, or subject item in linear units. A description or other unique information concerning the subject item. The size of the subject item. The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections. The progress of the data collection. The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915) Whether or not the feature has been verified. The type of project or work activity that installed or first recorded the location of this feature A unique identifier associated with the project or work activity that installed or first recorded the location of this feature. A temporal description of the operational status of the feature. Discriminator used to tie features of a plan or proposal together into a version.

An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].

The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.

The primary source of the data in this record.

The secondary source of the data in this record.

A statement providing additional details about the source of the data.

The name of the individual who last edited this data.

The date upon which any data associated with this record was last updated.

A globally unique identifier applied to each feature in the database for reference. An identifier used to refer to a metadata record that provide additional information about the data in this record.

Industrial_Waste : Tank

(Database Feature Class Name = IndustrialWasteTank)Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretAn above or below grade receptacle or chamber used for holding industrial waste on a temporarybasis prior to disposal. [SDSFIE FGDC Utilities Classification].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
modelNumber (String12)	The Model, Product, Catalog, or Item Number of subject item.
tributaryId (String20)	An operator generated identifier used locally to identify a tributary subsystem of the main utility system.
serialNumber (String15)	The manufacturer's serial, or unique identification number of the subject item.
Attributes:	
altValve (<u>CodeBoolean</u>)	Indicates whether or not the tank has an altitude valve which controls the flow into the tank? (yes or no).
area (Double)	The size of the area, zone, or polygon in square units.
ovrflwElevation (Double)	The elevation measured at the point of overflow, or entrance, into the tank overflow pipe,, in feet (English units) or meters (SI units) above some datum.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.

owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
headNorm (Double)	The normal operating head for the subject item.
invertElv (Double)	The elevation measured at bottom of the tank, in feet (English units) or meters (SI units) above some datum. mean sea level.
material (CodePipeMaterial)	The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc.
topElevation (Double)	The elevation of exterior top surface of the subject item's lid, hatch, rim, or roof in feet (English units) or meters (SI units) above some datum.
tankLength (Double)	The length dimension of the tank, measured from outside face of the exterior wall/side to outside face of the opposite exterior wall/side.
tankSt (CodeStyleTank)	This value differentiates similar entities by use or type.
tankUse (<u>CodeTankUse</u>)	The particular kind or use of the industrial waste water tank.
tankWidth (Double)	The exterior width dimension of the tank, measured from outside face of the exterior wall/side to outside face of the opposite exterior wall/side.
tankCapacity (Double)	The tank's storage capacity (e.g., gallons, ft3, etc).
tankDepth (Double)	The depth below the ground surface or cover measured from the top of the subject item.
tankDiameter (Double)	The inside diameter of the tank, measured from the interior wall surface to the opposite interior wall surface.
description (String255)	A description or other unique information concerning the subject item.
color (<u>CodeColor</u>)	The color of the industrial waste tank.
lightCode (String1)	The light code of the tank.
lightingType (CodeLightingConfigurationTy	
markingFeatureType (CodeMarkingFeatureT	<u>Type</u>) The type of the marking
verticalStructureMaterial (String16)	The vertical structure material.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
Metadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915)
verified (String255)	Whether or not the feature has been verified.
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metald (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Industrial_Waste : Treatment Plant

(Database Feature Class Name = IndustrialWasteTreatmentPlant)Geometry Type: PolygonAccuracy: +/-5Ft.Sensitivity: ConfidentialA structure containing equipment used to treat and remove unwanted constituents from industrialwaste.. [SDSFIE FGDC Utilities Classification].

Names and Identifiers:

maaID (String30)

name (String16) maaAlias (String60)

Attributes:

area (Double) condition (<u>CodePoleCondition</u>)

disposition (<u>CodeDispositionObject</u>)

bypass (<u>CodeBoolean</u>) owner (String60)

flowAct (Double)

flowRated (Double)

type (String16) noPumps (Integer) perimeter (Double) plantElv (Double)

plantLength (Double) plantwidth (Double) description (String255)

Metadata:

collectionProgress (<u>CodeProgress</u>) dateAcquired (Date)

verified (String255) projectType (<u>CodeProjectType</u>)

projectId (String20)

status (<u>CodeStatus</u>) Alternative (Integer) userFlag (String254)

qualityLevel (CodeSueQualityLevel)

dataSource (<u>CodeDataSource</u>) dataSource2 (<u>CodeDataSource</u>) sourceStatement (String255) editorName (String50) lastUpdate (Date) <u>System Keys:</u> guid (String60) metaId (Integer)

The site specific identification name or number assigned to the subject item. An alternative or former name by which the feature is refered. The size of the area, zone, or polygon in square units. Indicates a state of being, or readiness for use of the subject item (e.g., good, fair, poor), from lists or field inspections. The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections. Indicates whether or not the treatment plant has a bypass line? (yes or no). A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE]. The measured peak treatment capacity of the water treatment plant when installation has been completed and it is operating under normal inflow and demand conditions. The plant manufacturer's rated treatment plant capacity (e.g., gpm), which signifies the peak constant or daily flow of raw water that the plant can treat and transform to the specified water quality requirements. A field indicating the kind, class, or group of the subject item. The total number of pumps located at the subject item. The distance around the boundary of the area, zone, or subject item in linear units. The finished floor elevation of the treatment plant, in feet (English units) or meters (SI units) above some datum. The overall length dimension of the treatment plant. The overall width dimension of the water treatment plant. A description or other unique information concerning the subject item. The progress of the data collection. The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915) Whether or not the feature has been verified. The type of project or work activity that installed or first recorded the location of this feature. A unique identifier associated with the project or work activity that installed or first recorded the location of this feature. A temporal description of the operational status of the feature. Discriminator used to tie features of a plan or proposal together into a version. An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE]. The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02. The primary source of the data in this record. The secondary source of the data in this record. A statement providing additional details about the source of the data. The name of the individual who last edited this data.

A unique identifier used by people to refer to this feature (note: this is not a system

primary or foreign key value)

The date upon which any data associated with this record was last updated.

A globally unique identifier applied to each feature in the database for reference. An identifier used to refer to a metadata record that provide additional information about the data in this record.

Industrial_Waste : Valve

(Database Feature Class Name = IndustrialWasteValve) Geometry Type: Point Accuracy: +/-1Ft.

Sensitivity: Secret

A fitting or device used for shutting or throttling flow through a industrial waste line. [SDSFIE FGDC Utilities Classification].

A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
An alternative or former name by which the feature is refered.
An operator generated identifier used locally to identify a tributary subsystem of the main utility system.
The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
The manufacturers designated size, or nominal (i.e., rounded to the nearest unit) diameter for the subject item (e.g., 1in gas hydrant, 2in meter, 6in pipe).
The elevation measured at centerline of the valve, in feet (English units) or meters (SI units) above some datum.
A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
The particular application, or use the subject item.
The particular kind, class, or group of valve (e.g., gate, check, etc.).
The depth of cover. The depth measured from top of ground's surface (or grade) to top of underground industrial waste line valve.[Air Force].
A description or other unique information concerning the subject item.
The material of the subject item.
An indicator as to whether the feature serves as a source, sink or neither in the network.
The direction a valve must be turned to open
The normal operating status of the valve
The progress of the data collection.
The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915)
Whether or not the feature has been verified.
The type of project or work activity that installed or first recorded the location of this feature.
A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
A temporal description of the operational status of the feature.
Discriminator used to tie features of a plan or proposal together into a version.
An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
The primary source of the data in this record.
The secondary source of the data in this record.
A statement providing additional details about the source of the data.
The name of the individual who last edited this data.
The date upon which any data associated with this record was last updated.
A globally unique identifier applied to each feature in the database for reference.
An identifier used to refer to a metadata record that provide additional information about the data in this record.

Data Set: Storm

Storm : Storm Ceptor

(Database Feature Class Name = StormCeptor) Geometry Type: Point Accuracy: +/-5Ft.

Sensitivity: Confidential

A patented water quality structure that takes the place of a conventional manhole with in a storm drain system.

Names and Identifiers: maaID (String30)

maaAlias (String60) sepName (String50)

Attributes:

area (Double) coordX (Double) coordY (Double) coordZ (Double) datePerX (Date)

disposal (String50) disposition (<u>CodeDispositionObject</u>)

enabled (<u>CodeBoolean</u>) flowCapacity (Integer) grtchbr (<u>CodeBoolean</u>) inspectionPhase (String16) invertElv (Double)

invertFeet (Double) junctionType (<u>CodeJunctionType</u>) material (String16) description (String255) oilCapacity (Integer) oldMAAAlias (String50) owner (String60)

perimeter (Integer) separationProcess (String50) sepCode (String2) sepContnt (String20) sepVolume (Integer) tempOptim (Integer) type (String16)

Metadata:

collectionProgress (<u>CodeProgress</u>) verified (String255) dateAcquired (Date)

projectType (<u>CodeProjectType</u>)

projectId (String20)

status (<u>CodeStatus</u>) Alternative (Integer) userFlag (String254)

qualityLevel (CodeSueQualityLevel)

dataSource (<u>CodeDataSource</u>) dataSource2 (<u>CodeDataSource</u>) sourceStatement (String255) A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value) An alternative or former name by which the feature is refered. The name of the storm captor.

The size of the area, zone, or polygon in square units. The coordinate in the east-west plane, expressed in decimal degrees. The coordinate in the north-south plane, expressed in decimal degrees. The coordinate in the vertical plane. The date the current permit expires for the subject item. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915) Brief description of how the waste is disposed. The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections. Flag used for networking functionality in MES application. The flow capacity of the subject item. An indicator as to whether or not the subject item has a grit chamber. The phase of the inspection. The top surface elevation of the subject item's interior floor/bottom in feet (English units) or meters (SI units) above some datum. Measurement from the top of the manhole to the bottom An indicator as to whether the feature serves as a source, sink or neither in the network. The material of the subject item. A description or other unique information concerning the subject item. The capacity of the storm captor for storing oil. The old MAA alias. A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE]. The distance around the boundary of the area, zone, or subject item in linear units. The specific type of separation process. The oil-water separator code. Usually defined as OW. Separator contents The volume of the oil-water separator. The optimum operating temperature for the subject item. Discriminator. The kind, class, or group of the subject item. The progress of the data collection. Whether or not the feature has been verified. The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915). The type of project or work activity that installed or first recorded the location of this feature. A unique identifier associated with the project or work activity that installed or first recorded the location of this feature. A temporal description of the operational status of the feature. Discriminator used to tie features of a plan or proposal together into a version. An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE]. The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.

The primary source of the data in this record.

The secondary source of the data in this record.

A statement providing additional details about the source of the data.

editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
<u>System Keys:</u>	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Storm : Discharge Point

(Database Feature Class Name = StormDischargePoint) Geometry Type: Point Accuracy: +/-1Ft. Sensitivity: Secret Any location where storm sewer pipes directly discharge effluent. [SDSFIE FGDC Utilities Classification]. <u>Names and Identifiers:</u>

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String40)	Descriptive text of the item
maaAlias (String60)	An alternative or former name by which the feature is refered.
Attributes:	
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
type (String16)	A field indicating the kind, class, or group of the subject item.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
sysType (String16)	The type of stormwater discharge system. [USACE OPERATIONS].
description (String255)	A description or other unique information concerning the subject item.
coordX (Double)	The coordinate in the east-west plane, expressed in decimal degrees.
coordY (Double)	The coordinate in the north-south plane, expressed in decimal degrees.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
coordZ (Double)	The coordinate in the vertical plane.
enabled (CodeBoolean)	Flag used for networking functionality in MES application.
iDDE (String10)	
inspectionPhase (String16)	The phase of the inspection.
invertFeet (Double)	Measurement from the top of the manhole to the bottom
oldMaaAlias (String50)	The old MAA alias.
material (String16)	The material of the subject item.
size (Integer)	The size of the subject item.
Metadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
verified (String255)	Whether or not the feature has been verified.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (<u>CodeDataSource</u>)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.

lastUpdate (Date)	The date upon which any data associated with this record was last updated.
<u>System Keys:</u>	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Storm : Downspout

(Database Feature Class Name = StormDownspout)

Geometry Type: Point Accuracy: +/-1Ft. Sensitivity: Secret A pipe normally attached to the side of a building or structure which conveys rainfall runoff from the roof area to the ground surface or the storm sewer system. [SDSFIE FGDC Utilities Classification].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
modelNumber (String12)	The Model, Product, Catalog, or Item Number of subject item.
Attributes:	
dnsptLength (Double)	The length of the downspout, measured from highest point to its discharge point.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
baseElevation (Double)	The elevation of the discharge point of the downspout in feet (English units) or meters (SI units) above some datum.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
groundElevation (Double)	The elevation of the ground surface at the discharge point, in feet (English units) or meters (SI units) above some datum.
material (CodePipeMaterial)	The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc.
size (<u>CodePipeDiameter</u>)	The manufacturers designated size, or nominal (i.e., rounded to the nearest unit) diameter for the subject item (e.g., 1in gas hydrant, 2in meter, 6in pipe).
type (String16)	A field indicating the kind, class, or group of the subject item.
description (String255)	A description or other unique information concerning the subject item.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
<u>Metadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection.
verified (String255)	Whether or not the feature has been verified.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (CodeStatus)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (<u>CodeDataSource</u>)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.

metaId (Integer)	An identifier used to refer to a metada the data in this record.	ata record that provide additional information about		
Storm : Drainage Basin				
(Database Feature Class Nar	ne = StormDrainageBasin)			
Geometry Type: Polygon	Accuracy: +/-5Ft.	Sensitivity: Confidential		
An area in which surface runoff collects and from which it is carried by a drainage system.				
[SDSFIE FGDC Utilities Cla	assification].			
Names and Identifiers:				

ames and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
ttributes:	
area (Double)	The size of the area, zone, or polygon in square units.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
gradeMean (Double)	The average grade in the drainage basin.
gradeMin (Double)	The minimum or shallowest grade in the drainage basin.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
gradeMax (Double)	The maximum or steepest grade in the drainage basin.
perimeter (Double)	The distance around the boundary of the area, zone, or subject item in linear units.
description (String255)	A description or other unique information concerning the subject item.
acres (Double)	The size of the drainage basin in acres.
etadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
verified (String255)	Whether or not the feature has been verified.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
vstem Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Storm : Drainage Divide Line

(Database Feature Class Name = StormDrainageDivideLine)Geometry Type: LineAccuracy: +/-5Ft.Sensitivity: SecretThe border of a drainage basin where one side directs runoff to one basin and the other sidedirects runoff to a different basin. [SDSFIE FGDC Utilities Classification].

Names and Identifiers: maaID (String30) A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value) maaAlias (String60) An alternative or former name by which the feature is refered. Attributes: owner (String60) A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE]. description (String255) Any brief description of the feature. enabled (CodeBoolean) Flag used for networking functionality in MES application. directionality (CodeDirectionality) The directionality of flow with repsect to the line's geometry. material (String16) The material of the subject item. size (Integer) The size of the subject item. disposition (CodeDispositionObject) The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections. impedance (Double) The number representing the total opposition to flow. Metadata: collectionProgress (CodeProgress) The progress of the data collection. verified (String255) Whether or not the feature has been verified. dateAcquired (Date) The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915). projectType (CodeProjectType) The type of project or work activity that installed or first recorded the location of this feature projectId (String20) A unique identifier associated with the project or work activity that installed or first recorded the location of this feature. status (CodeStatus) A temporal description of the operational status of the feature. Alternative (Integer) Discriminator used to tie features of a plan or proposal together into a version. userFlag (String254) An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE]. qualityLevel (CodeSueQualityLevel) The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02. dataSource (CodeDataSource) The primary source of the data in this record. dataSource2 (CodeDataSource) The secondary source of the data in this record. sourceStatement (String255) A statement providing additional details about the source of the data. editorName (String50) The name of the individual who last edited this data. lastUpdate (Date) The date upon which any data associated with this record was last updated. System Keys: guid (String60) A globally unique identifier applied to each feature in the database for reference. metaId (Integer) An identifier used to refer to a metadata record that provide additional information about the data in this record.

Storm : Storm Filter

(Database Feature Class Name = StormFilter)Geometry Type: PointAccuracy: +/-5Ft.Sensitivity: ConfidentialA filter to remove target pollutants using a variety of sustainable media designed to meetregulatory requirements.

1	Names and Identifiers:	
	maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
	maaAlias (String60)	An alternative or former name by which the feature is refered.
	sepName (String50)	
A	Attributes:	
	area (Double)	The size of the area, zone, or polygon in square units.
	coordX (Double)	The coordinate in the east-west plane, expressed in decimal degrees.
	coordY (Double)	The coordinate in the north-south plane, expressed in decimal degrees.
	coordZ (Double)	The coordinate in the vertical plane.
	datePerX (Date)	The date the current permit expires for the subject item. Format for date is

disposal (String50) disposition (CodeDispositionObject)

enabled (<u>CodeBoolean</u>) flowCapacity (Integer) grtchbr (<u>CodeBoolean</u>) inspectionPhase (String16) invertElv (Double)

invertFeet (Double) junctionType (<u>CodeJunctionType</u>) material (String16) description (String255) numFilters (Integer) oilCapacity (Integer) oldMAAAlias (String50) owner (String60)

perimeter (Integer) separationProcess (String50) sepCode (String2) sepContnt (String20) sepVolume (Integer) tempOptim (Integer) type (String16)

Metadata:

collectionProgress (<u>CodeProgress</u>) verified (String255) dateAcquired (Date)

projectType (<u>CodeProjectType</u>)

projectId (String20)

status (<u>CodeStatus</u>) Alternative (Integer) userFlag (String254)

qualityLevel (CodeSueQualityLevel)

dataSource (<u>CodeDataSource</u>) dataSource2 (<u>CodeDataSource</u>) sourceStatement (String255) editorName (String50) lastUpdate (Date) <u>System Keys:</u> guid (String60)

metaId (Integer)

YYYYMMDD (i.e., September 15, 1994 = 19940915) Brief description of how the waste is disposed. The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections. Flag used for networking functionality in MES application. The flow capacity of the subject item. An indicator as to whether or not the subject item has a grit chamber. The phase of the inspection. The top surface elevation of the subject item's interior floor/bottom in feet (English units) or meters (SI units) above some datum. Measurement from the top of the manhole to the bottom An indicator as to whether the feature serves as a source, sink or neither in the network. The material of the subject item. A description or other unique information concerning the subject item. The number of filters in place. The capacity of the storm filter for capturing oil. The old MAA alias. A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE]. The distance around the boundary of the area, zone, or subject item in linear units. The specific type of separation process. The oil-water separator code. Usually defined as OW. Separator contents The volume of the oil-water separator. The optimum operating temperature for the subject item. Discriminator. The kind, class, or group of the subject item. The progress of the data collection. Whether or not the feature has been verified. The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915). The type of project or work activity that installed or first recorded the location of this feature A unique identifier associated with the project or work activity that installed or first recorded the location of this feature. A temporal description of the operational status of the feature. Discriminator used to tie features of a plan or proposal together into a version. An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE]. The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02 The primary source of the data in this record. The secondary source of the data in this record. A statement providing additional details about the source of the data. The name of the individual who last edited this data. The date upon which any data associated with this record was last updated. A globally unique identifier applied to each feature in the database for reference. An identifier used to refer to a metadata record that provide additional information about the data in this record.

Storm : Fitting

(Database Feature Class Name = StormFitting)Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretA fitting is an item used to connect, cap, plug or otherwise alter a pipe carrying storm sewage.[SDSFIE FGDC Utilities Classification].

Names and Identifiers:

maaID (String30)

maaAlias (String60) modelNumber (String12) serialNumber (String15)

Attributes:

fitDepth (Double) fitLength (Double) disposition (<u>CodeDispositionObject</u>)

fitWidth (Double) owner (String60)

size (CodePipeDiameter)

material (CodePipeMaterial)

type (String16) coverDepth (Double)

description (String255) enabled (<u>CodeBoolean</u>) oldMaaAlias (String50) junctionType (<u>CodeJunctionType</u>)

Metadata:

collectionProgress (<u>CodeProgress</u>) verified (String255) dateAcquired (Date)

projectType (<u>CodeProjectType</u>)

projectId (String20)

status (<u>CodeStatus</u>) Alternative (Integer) userFlag (String254)

qualityLevel (CodeSueQualityLevel)

dataSource (<u>CodeDataSource</u>) dataSource2 (<u>CodeDataSource</u>) sourceStatement (String255) editorName (String50) lastUpdate (Date)

System Keys: guid (String60)

metaId (Integer)

A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value) An alternative or former name by which the feature is refered. The Model, Product, Catalog, or Item Number of subject item. The manufacturer's serial, or unique identification number of the subject item. The depth below the ground surface or cover measured from the top of the subject item. The overall length of the fitting. The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections. The width dimension of the subject item measured at its' widest point. A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE]. The manufacturers designated size, or nominal (i.e., rounded to the nearest unit) diameter for the subject item (e.g., 1in gas hydrant, 2in meter, 6in pipe). The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc. Discriminator. The kind, class, or group of the subject item. The depth of cover. The depth measured from top of ground's surface (or grade) to top of underground storm water line fitting.[Air Force]. A description or other unique information concerning the subject item. Flag used for networking functionality in MES application. The old MAA alias. An indicator as to whether the feature serves as a source, sink or neither in the network. The progress of the data collection. Whether or not the feature has been verified. The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915). The type of project or work activity that installed or first recorded the location of this feature. A unique identifier associated with the project or work activity that installed or first recorded the location of this feature. A temporal description of the operational status of the feature. Discriminator used to tie features of a plan or proposal together into a version. An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE]. The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02. The primary source of the data in this record. The secondary source of the data in this record. A statement providing additional details about the source of the data. The name of the individual who last edited this data. The date upon which any data associated with this record was last updated. A globally unique identifier applied to each feature in the database for reference. An identifier used to refer to a metadata record that provide additional information about the data in this record.

Storm : Flow Control Device

 (Database Feature Class Name = StormFlowControlDevice)

 Geometry Type: Point
 Accuracy: +/-1Ft.
 Sensitivity: Secret

 Devices for a storm water system to control the pressure in and out of the open channel.
 [SDSFIE FGDC Utilities Classification].

 Names and Identifiers:
 Names and Identifiers:

Names and Identifiers:

maaID (String30)

maaAlias (String60) modelNumber (String12) serialNumber (String15)

Attributes:

cntrlElv (Double)

disposition (CodeDispositionObject)

installType (CodePumpSta) fctDepth (Double) owner (String60)

fctLength (Double) fctWidth (Double) size (CodePipeDiameter)

type (String100) description (String255) oldMaaAlias (String50) material (String16) junctionType (CodeJunctionType)

Metadata:

collectionProgress (CodeProgress) verified (String255) dateAcquired (Date)

projectType (CodeProjectType)

projectId (String20)

status (CodeStatus) Alternative (Integer) userFlag (String254)

qualityLevel (CodeSueQualityLevel)

dataSource (CodeDataSource) dataSource2 (CodeDataSource) sourceStatement (String255) editorName (String50) lastUpdate (Date)

System Keys:

guid (String60) metaId (Integer)

A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value) An alternative or former name by which the feature is refered. The Model, Product, Catalog, or Item Number of subject item.

The manufacturer's serial, or unique identification number of the subject item.

The elevation at the centerline of the flow control device, in feet (English units) or meters (SI units) above some datum.

The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.

The type installation of the subject item.

The depth below the ground surface or cover measured from the top of the subject item. A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].

The overall length of the flow control.

The width dimension of the subject item, measured from opposite inside faces.

The manufacturers designated size, or nominal (i.e., rounded to the nearest unit) diameter for the subject item (e.g., 1in gas hydrant, 2in meter, 6in pipe).

A field indicating the kind, class, or group of the subject item.

A description or other unique information concerning the subject item.

The old MAA alias.

The material of the subject item.

An indicator as to whether the feature serves as a source, sink or neither in the network.

The progress of the data collection.

Whether or not the feature has been verified.

The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).

The type of project or work activity that installed or first recorded the location of this feature.

A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.

A temporal description of the operational status of the feature.

Discriminator used to tie features of a plan or proposal together into a version.

An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].

The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.

The primary source of the data in this record.

The secondary source of the data in this record.

A statement providing additional details about the source of the data.

The name of the individual who last edited this data.

The date upon which any data associated with this record was last updated.

A globally unique identifier applied to each feature in the database for reference. An identifier used to refer to a metadata record that provide additional information about the data in this record.

Storm : Gate

(Database Feature Class Name =	StormGate)	
Geometry Type: Point	Accuracy: +/-1Ft.	Sensitivity: Secret
A movable barrier used in an open channel. [SDSFIE FGDC Utilities Classification].		
Names and Identifiers:		
maaID (String30)	A unique identifier used by people primary or foreign key value)	e to refer to this feature (note: this is not a system
maaAlias (String60)	An alternative or former name by	which the feature is refered.

Attributes:

gateSt (CodeStyleGates) gateWidth (Double) condition (CodePoleCondition)

disposition (CodeDispositionObject)

owner (String60)

gateLength (Double) gateCapacity (Double) invertElv (Double)

size (CodePipeDiameter)

material (CodePipeMaterial)

description (String255) oldMaaAlias (String50) junctionType (CodeJunctionType)

Metadata:

collectionProgress (CodeProgress) verified (String255) dateAcquired (Date)

projectType (CodeProjectType)

projectId (String20)

status (CodeStatus) Alternative (Integer) userFlag (String254)

qualityLevel (CodeSueQualityLevel)

dataSource (CodeDataSource) dataSource2 (CodeDataSource) sourceStatement (String255) editorName (String50) lastUpdate (Date)

System Keys:

guid (String60) metaId (Integer) A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE]. The overall length of the storm gate. The flow capacity of the storm gate. The top surface elevation of the subject item's interior floor/bottom in feet (English units) or meters (SI units) above some datum. The manufacturers designated size, or nominal (i.e., rounded to the nearest unit) diameter for the subject item (e.g., 1in gas hydrant, 2in meter, 6in pipe). The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc.

The width dimension of the subject item, measured from opposite inside faces.

Indicates a state of being, or readiness for use of the subject item (e.g., good, fair, poor),

The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.),

A description or other unique information concerning the subject item. The old MAA alias.

An indicator as to whether the feature serves as a source, sink or neither in the network.

The progress of the data collection. Whether or not the feature has been verified.

The particular kind, class, or group of gate.

from lists or entered from field inspections.

from lists or field inspections.

The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).

The type of project or work activity that installed or first recorded the location of this feature.

A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.

A temporal description of the operational status of the feature.

Discriminator used to tie features of a plan or proposal together into a version.

An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].

The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.

The primary source of the data in this record.

The secondary source of the data in this record.

A statement providing additional details about the source of the data.

The name of the individual who last edited this data.

The date upon which any data associated with this record was last updated.

A globally unique identifier applied to each feature in the database for reference. An identifier used to refer to a metadata record that provide additional information about the data in this record.

Storm : Headwall Line

(Database Feature Class Name = StormHeadwallLine)

Geometry Type: Line Accuracy: +/-5Ft. Sensitivity: Secret A wall (of any material) depicted as a line at the end of a culvert or drain to serve one or more of the following purposes: protect fill from scour or undermining; increase hydraulic efficiency, divert direction of flow, and serve as a retaining wall. [SDSFIE FGDC Utilities Classification].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
Attributes:	

owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
directionality (CodeDirectionality)	The directionality of flow with repsect to the line's geometry.
material (String16)	The material of the subject item.
description (String255)	A description or other unique information concerning the subject item.
size (Integer)	The size of the subject item.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
impedance (Double)	The number representing the total opposition to flow.
Metadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
verified (String255)	Whether or not the feature has been verified.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (<u>CodeDataSource</u>)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Storm : Headwall

(Database Feature Class Name = StormHeadwallPoint)Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretA wall (of any material) depicted as a point at the end of a culvert or drain to serve one or moreof the following purposes: protect fill from scour or undermining; increase hydraulic efficiency,divert direction of flow, and serve as a retaining wall. [SDSFIE FGDC Utilities Classification].

A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
Any commonly used name for the storm sewer headwall.[REEGIS].
An alternative or former name by which the feature is refered.
River mile marker.[REEGIS].
Pollution type.[REEGIS].
A person, organization, or agency with legal control or management responsibility of the utility asset. [Adopted from SDSFIE].
The elevation of the top of wall above the pipe.
The overall length of the feature.[Center].
Any brief description of the feature.
The old MAA alias.
The material of the subject item.

size (Integer)	The size of the subject item.
disposition (<u>CodeDispositionObject</u>)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
junctionType (CodeJunctionType)	An indicator as to whether the feature serves as a source, sink or neither in the network.
Metadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
verified (String255)	Whether or not the feature has been verified.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (<u>CodeDataSource</u>)	The primary source of the data in this record.
dataSource2 (<u>CodeDataSource</u>)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Storm : Inlet

(Database Feature Class Name = StormInlet) Geometry Type: Point Accuracy: +/-1Ft. Sensitivity: Secret The location where water is collected and received into the utility system. [SDSFIE FGDC Utilities Classification].

Na	mes and Identifiers:	
	maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
	maaAlias (String60)	An alternative or former name by which the feature is refered.
	modelNumber (String12)	The Model, Product, Catalog, or Item Number of subject item.
At	tributes:	
	disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
	capacityDgn (Double)	The design flow capacity of the subject item.
	inletSt (CodeInlets)	Discriminator. The step domain code for an inlet.
	owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
	invertElv (Double)	The top surface elevation of the subject item's interior floor/bottom in feet (English units) or meters (SI units) above some datum.
	weirElevation (Double)	Elevation of the weir invert.
	description (String255)	A description or other unique information concerning the subject item.
	coordX (Double)	The coordinate in the east-west plane, expressed in decimal degrees.
	coordY (Double)	The coordinate in the north-south plane, expressed in decimal degrees.
	garageInlet (<u>CodeBoolean</u>)	Indicator as to whether the inlet is located within a garage or not. This is important to the MES database.
	coordZ (Double)	The coordinate in the vertical plane.
	enabled (CodeBoolean)	Flag used for networking functionality in MES application.

inspectionPhase (String16)	The phase of the inspection.
invertFeet (Double)	Measurement from the top of the manhole to the bottom
oldMaaAlias (String50)	The old MAA alias.
material (String16)	The material of the subject item.
size (Integer)	The size of the subject item.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
<u>Metadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection.
verified (String255)	Whether or not the feature has been verified.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMDD (i.e., September 15, 1994 = 19940915).
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (<u>CodeDataSource</u>)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
<u>System Keys:</u>	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Storm : Junction

(Database Feature Class Name = StormJunction)

Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretA box or small vault (usually concrete, brick, or cast iron) in storm sewer systems located belowgrade with above grade access where pipes intersect.The manhole also houses associatedfittings, valves, meters, etc. [SDSFIE FGDC Utilities Classification].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
modelNumber (String12)	The Model, Product, Catalog, or Item Number of subject item.
Attributes:	
type (String100)	A field indicating the kind, class, or group of manhole for the subject utility.
drainType (CodeDrainType)	The type of subject item drain.
featureUse (String16)	Discriminator. An attribute that differentiates the use of the subject item.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
disposition (<u>CodeDispositionObject</u>)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
description (String255)	A description or other unique information concerning the subject item.
material (CodePipeMaterial)	The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc.
mhLength (Double)	The length dimension of the subject item, from outside face of exterior wall/side to outside face of opposite exterior wall/side.
mhWidth (Double)	The width dimension of the subject item, from outside face of exterior wall/side to

	outside face of opposite exterior wall/side.
rimElevation (Double)	The elevation of exterior top surface of the subject item's lid, hatch, rim, or roof in feet (English units) or meters (SI units) above some datum.
invertElv (Double)	The top surface elevation of the subject item's interior floor/bottom in feet (English units) or meters (SI units) above some datum.
noPipes (Integer)	The number of the pipes entering and exiting the subject item.
coordX (Double)	The coordinate in the east-west plane, expressed in decimal degrees.
coordY (Double)	The coordinate in the north-south plane, expressed in decimal degrees.
coordZ (Double)	The coordinate in the vertical plane.
enabled (<u>CodeBoolean</u>)	Flag used for networking functionality in MES application.
inspectionPhase (String16)	The phase of the inspection.
invertFeet (Double)	Measurement from the top of the manhole to the bottom
mhDia (Integer)	The diameter of the manhole.
oldMaaAlias (String50)	The old MAA alias.
size (Integer)	The size of the subject item.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
Metadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
verified (String255)	Whether or not the feature has been verified.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMDD (i.e., September 15, 1994 = 19940915).
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Storm : Line

(Database Feature Class Name = StormLine)Geometry Type: LineAccuracy: +/-5Ft.Sensitivity: SecretA pipe used to carry storm sewer water from location to location (main line, service line, ventline, etc). [SDSFIE FGDC Utilities Classification].

maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String30)	Any commonly used name of the culvert.[REEGIS].
maaAlias (String60)	An alternative or former name by which the feature is refered.
modelNumber (String12)	The Model, Product, Catalog, or Item Number of subject item.
idDwnStrmFeat (String50)	The ID of the downstream storm feature.
idDwnStrmStruct (String50)	The ID of the downstream storm structure.
idUpStrmFeat (String50)	The ID of the upstream storm feature.

idUpStrmStruct (String50)

The ID of the upstream storm structure.

Attributes:	
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
drainageZone (CodeDrainageZone)	Local name of assigned hydrographic drainage zones.
drainagePattern (CodeDrainagePattern)	The drainage pattern of the material surrounding the pipe.
drainageTexture (CodeDrainageDensity)	The texture of the material surrounding the pipe.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
pressMax (Double)	The manufacturer's or industry standard's maximum pressure rating of the subject item.
pipeLength (Double)	The length of pipe, measured from node to node along the pipe centerline .
pipeWidth (Double)	The width dimension of the subject item, measured from opposite inside faces.
lined (<u>CodeBoolean</u>)	An indicator as to whether the pipe is lined or not (yes/no).
invElv1 (Double)	The elevation of the bottom of pipe (i.e., pipe invert) at node_id_1 in feet (English units) or meters (SI units) above some datum.[Derived from SDSFIE].
invElv2 (Double)	The elevation of the bottom of pipe (i.e., pipe invert) at node_id_2 in feet (English units) or meters (SI units) above some datum.
size (CodePipeDiameter)	The manufacturers designated size, or nominal (i.e., rounded to the nearest unit) diameter for the subject item (e.g., 1in gas hydrant, 2in meter, 6in pipe).
material (CodePipeMaterial)	The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc.
scrnType (<u>CodeCulvertScreenType</u>)	The type of screen used to cover the end of the culvert.
type (String16)	A field indicating the kind, class, or group of the subject item.
slopeBot (Double)	The slope of the bottom of the subject item expressed as a percentage.
featureUse (String16)	Discriminator. The use code for storm sewer line.
pressNorm (Double)	The normal operating pressure of the storm system pipe.
coverDepth (Double)	The depth of cover. The depth measured from top of ground's surface (or grade) to top of underground storm water line pipe.[Air Force].
description (String255)	A description or other unique information concerning the subject item.
fromCoordX (Double)	The from, or downstream, coordinate of the pipe in the east-west plane in as measured by GPS equipment.
fromCoordY (Double)	The from, or downstream, coordinate of the pipe in the north-south plane in as measured by GPS equipment.
fromCoordZ (Double)	The from, or downstream, coordinate of the pipe in the vertical plane in as measured by GPS equipment.
toCoordX (Double)	The to, or upstream, coordinate of the pipe in the east-west plane in as measured by GPS equipment.
toCoordY (Double)	The to or upstream, coordinate of the pipe in the north-south plane in as measured by GPS equipment.
toCoordZ (Double)	The to, or upstream, coordinate of the pipe in the vertical plane in as measured by GPS equipment.
dwnStrmStructType (String10)	The type of the downstream structure, if any
upStrmStructType (String10)	The type of the downstream structure, if any
immediateOutFall (String20)	Identifying tag of the immediate outfall to which the pipe leads.
finalOutFall (String20)	Identifying tag of the final outfall to which the pipe leads.
enabled (CodeBoolean)	Flag used for networking functionality in MES application.
inspectionPhase (String16)	The phase of the inspection.
directionality (CodeDirectionality)	The directionality of flow with repsect to the line's geometry.
impedance (Double)	The number representing the total opposition to flow.
Metadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
verified (String255)	Whether or not the feature has been verified.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.

Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Storm : Marker

(Database Feature Class Name = StormMarker)Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretA sign, concrete monument, etc. installed either directly above or immediately adjacent tounderground lines, bends, fittings, etc to indicate the presence of nearby storm sewer. [SDSFIEFGDC Utilities Classification].

maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system
(Stringe ()	primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
<u>.ttributes:</u>	
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
coordX (Double)	The coordinate in the east-west plane, expressed in decimal degrees.
coordY (Double)	The coordinate in the north-south plane, expressed in decimal degrees.
coordZ (Double)	The coordinate in the vertical plane.
oldMaaAlias (String50)	The old MAA alias.
material (String16)	The material of the subject item.
description (String255)	A description or other unique information concerning the subject item.
size (Integer)	The size of the subject item.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
junctionType (CodeJunctionType)	An indicator as to whether the feature serves as a source, sink or neither in the network.
letadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
verified (String255)	Whether or not the feature has been verified.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.

sourceStatement (String255)	A statement providing additional details about the source of the data.	
editorName (String50)	The name of the individual who last edited this data.	
lastUpdate (Date)	The date upon which any data associated with this record was last updated.	
<u>System Keys:</u>		
guid (String60)	A globally unique identifier applied to each feature in the database for reference.	
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.	

Storm : Oil Water Separator

(Database Feature Class Name = StormOilWaterSeparator)Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretA device or structure placed in the storm sewer stream to separate water from oil products.[SDSFIE USMC].

maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system	
inaliz (Sunges)	primary or foreign key value)	
maaAlias (String60)	An alternative or former name by which the feature is refered.	
sepName (String12)	The site specific identification name or number assigned to the subject item.	
tributes:		
datePerX (Date)	The date the current permit expires for the subject item. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915)	
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.	
disposal (String30)	Brief description of how the waste is disposed.	
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].	
grtchbr (<u>CodeBoolean</u>)	An indicator as to whether or not the subject item has a grit chamber. (yes or no)	
flowCapacity (Double)	The flow capacity of the subject item.	
oilCapacity (Double)	The retention capacity of the oil-water separator.	
sepCode (String2)	The oil-water separator code. Usually defined as OW.	
type (String16)	A field indicating the kind, class, or group of the subject item.	
tempOptim (Double)	The optimum operating temperature for the subject item.	
sepContnt (String20)	Separator contents	
separationProcess (String30)	The specific type of separation process.	
sepVolume (Double)	The volume of the oil-water separator.	
area (Double)	The size of the area, zone, or polygon in square units.	
perimeter (Double)	The distance around the boundary of the area, zone, or subject item in linear units.	
description (String255)	A description or other unique information concerning the subject item.	
coordX (Double)	The coordinate in the east-west plane, expressed in decimal degrees.	
coordY (Double)	The coordinate in the north-south plane, expressed in decimal degrees.	
coordZ (Double)	The coordinate in the vertical plane.	
enabled (<u>CodeBoolean</u>)	Flag used for networking functionality in MES application.	
inspectionPhase (String16)	The phase of the inspection.	
invertElv (Double)	The top surface elevation of the subject item's interior floor/bottom in feet (English unit or meters (SI units) above some datum.	
invertFeet (Double)	Measurement from the top of the manhole to the bottom	
oldMaaAlias (String50)	The old MAA alias.	
material (String16)	The material of the subject item.	
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.	
etadata:		
collectionProgress (CodeProgress)	The progress of the data collection.	
verified (String255)	Whether or not the feature has been verified.	
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for da is YYYYMMDD (i.e., September 15, $1994 = 19940915$).	
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.	

projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (CodeStatus)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (<u>CodeDataSource</u>)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Storm : Open Drainage Area

(Database Feature Class Name = StormOpenDrainageArea)Geometry Type: PolygonAccuracy: +/-5Ft.Sensitivity: ConfidentialInterception and removal area of ground water or surface water.[SDSFIE FGDC Utilities

Classification].

ames and Identifiers:		
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)	
maaAlias (String60)	An alternative or former name by which the feature is refered.	
vegMaintID (String16)	The vegetation maintenance ID.	
ttributes:		
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].	
acreage (Integer)	The size of the open draining area in acres.	
inspectionPhase (String16)	The phase of the inspection.	
maintRequirements (String255)	Maintenance requirements of the open drainage area.	
oldMaaAlias (String50)	The old MAA alias.	
structureType (String16)	The type of structure.	
material (String16)	The material of the subject item	
description (String255)	A description or other unique information concerning the subject item.	
size (Integer)	The size of the subject item	
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.	
etadata:		
collectionProgress (CodeProgress)	The progress of the data collection.	
verified (String255)	Whether or not the feature has been verified.	
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).	
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.	
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.	
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.	
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.	
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined	
	system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].	

dataSource (<u>CodeDataSource</u>) dataSource2 (<u>CodeDataSource</u>) sourceStatement (String255) editorName (String50) lastUpdate (Date)

System Keys:

guid (String60) metaId (Integer)

ASCE38-02.

The primary source of the data in this record. The secondary source of the data in this record. A statement providing additional details about the source of the data. The name of the individual who last edited this data. The date upon which any data associated with this record was last updated.

A globally unique identifier applied to each feature in the database for reference. An identifier used to refer to a metadata record that provide additional information about the data in this record.

Storm : Open Drainage Line

(Database Feature Class Name = StormOpenDrainageLine)Geometry Type: LineAccuracy: +/-5Ft.Sensitivity: SecretInterception and removal of ground water or surface water by natural means. [SDSFIE FGDCUtilities Classification].

Names and Identifiers:		
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)	
maaAlias (String60)	An alternative or former name by which the feature is refered.	
reachName (String20)	An operator generated identifier for the reach of an open channel.	
idDwnStrmFeat (String50)	The ID of the downstream storm feature.	
idUpStrmFeat (String50)	The ID of the upstream storm feature.	

Attributes:

tti ibutes.		
chanLength (Double)	The overall length of the open channel.	
chanSt (CodeStyleOpenChannel)	The style or geometric configuration of the channel	
bedMaterial (CodeBedMaterial)	The type of bedding material beneath the channel armor.	
bankArm (CodeBankArmorLining)	The type of channel armor used.	
design (String16)	Discriminator. The design code for open channel.	
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].	
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.	
drainageZone (<u>CodeDrainageZone</u>)	Local name of assigned hydrographic drainage zones.	
bottomWidth (Double)	The bottom width of the open channel measured from the base of opposite side slopes.	
fldZon (CodeDrainageZone)	Local name of assigned hydrographic drainage zones.	
flmeanElv (Double)	The elevation of the mean flow above a specific datum.	
flmeanTop (Double)	The average top width of the mean flow.	
flmeanXar (Double)	The cross section area of the mean flow for the open channel.	
flooddepth (Double)	The average depth of the specific flood.	
flowMean (Double)	The mean or average flow rate for the open channel.	
invElv1 (Double)	The elevation of the bottom of pipe (i.e., pipe invert) at node_id_1 in feet (English units) or meters (SI units) above some datum.[Derived from SDSFIE].	
invElv2 (Double)	The elevation of the bottom of channel at node_id_2 in feet (English units) or meters (SI units) above some datum.	
noFloods (Integer)	The total number of floods recorded for this channel.	
slopeBot (Double)	The slope of the bottom of the subject item expressed as a percentage.	
slopeLeft (Double)	The slope of the left channel side expressed as a percentage.	
slopeRght (Double)	The slope of the right channel side expressed as a percentage.	
topWidth (Double)	The top width of the open channel measured from the top of opposite side slopes.	
perimeter (Double)	The distance around the boundary of the area, zone, or subject item in linear units.[USMC].	
area (Double)	The size of the area, zone, or polygon in square units.[USMC].	
photoFileName (String30)	File location of photo (if applicable)	
wellDiameter (Double)	MAA requirement The diameter of the monitoring well in the infiltration trench.	

description (String255)	A description or other unique information concerning the subject item.	
wellDepth (Double)	MAA requirement The depth of the monitoring well in the infiltration trench.	
1 · · · · · ·	MAA requirement, text description of location of trench	
enabled (CodeBoolean)	Flag used for networking functionality in MES application.	
fromCoordX (Double)	The from, or downstream, coordinate of the pipe in the east-west plane in as measured by GPS equipment.	
fromCoordY (Double)	The from, or downstream, coordinate of the pipe in the north-south plane in as measured by GPS equipment.	
fromCoordZ (Double)	The from, or downstream, coordinate of the pipe in the vertical plane in as measured by GPS equipment.	
inspectionPhase (String16)	The phase of the inspection.	
oldMaaAlias (String50)	The old MAA alias.	
structureType (String16)	The type of structure.	
toCoordX (Double)	The to, or upstream, coordinate of the pipe in the east-west plane in as measured by GPS equipment.	
toCoordY (Double)	The to or upstream, coordinate of the pipe in the north-south plane in as measured by GPS equipment.	
toCoordZ (Double)	The to, or upstream, coordinate of the pipe in the vertical plane in as measured by GPS equipment.	
directionality (CodeDirectionality)	The directionality of flow with repsect to the line's geometry.	
impedance (Double)	The number representing the total opposition to flow.	
<u>Metadata:</u>		
collectionProgress (CodeProgress)	The progress of the data collection.	
verified (String255)	Whether or not the feature has been verified.	
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).	
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.	
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.	
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.	
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.	
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].	
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.	
dataSource (CodeDataSource)	The primary source of the data in this record.	
dataSource2 (<u>CodeDataSource</u>)	The secondary source of the data in this record.	
sourceStatement (String255)	A statement providing additional details about the source of the data.	
editorName (String50)	The name of the individual who last edited this data.	
lastUpdate (Date)	The date upon which any data associated with this record was last updated.	
System Keys:		
guid (String60)	A globally unique identifier applied to each feature in the database for reference.	
metald (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.	

Storm : Oil Water Separator Diversion Vault

Storm: On water Separator	Diversion vault	
(Database Feature Class Name	= StormOWSDiversionVault)	
Geometry Type: Polygon	Accuracy: +/-5Ft.	Sensitivity: Confidential
<u>Names and Identifiers:</u> maaID (String30)	1 211	refer to this feature (note: this is not a system
	primary or foreign key value)	
name (String50)	The name of the feature.	
maaAlias (String60)	An alternative or former name by wh	ich the feature is refered.
mapGrid (String20)	The map grid that the feature resides within.	
pipeWidth (Integer)	The width of the pipe.	

vaultWidth (Integer)	The widget of the vault.	
Attributes:		
airReleasePresent (CodeBoolean)	Indicates whether or not an air release valve is present	
coordX (Double)	The coordinate in the east-west plane, expressed in decimal degrees.	
coordY (Double)	The coordinate in the north-south plane, expressed in decimal degrees.	
dateConstructed (Date)	The date on which the subject item construction was complete and user occupancy provided. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915)	
depthAvg (Integer)	Average depth of the feature.	
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.	
enabled (<u>CodeBoolean</u>)	Flag used for networking functionality in MES application.	
description (String255)	A description or other unique information concerning the subject item.	
pierCode (String20)	The code of the pier associated with the feature.	
pipeMaterial (CodePipeMaterial)	Material of which inlet pipe is made	
pumpOutPresent (<u>CodeBoolean</u>)	Indicates whether or not a pump out conection is present	
size (Integer)	The size of the subject item.	
vaultLength (Integer)	The length of the vault.	
vaultType (<u>CodeVaultType</u>)	The type of the vault.	
<u>Metadata:</u>		
collectionProgress (CodeProgress)	The progress of the data collection.	
verified (String255)	Whether or not the feature has been verified.	
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).	
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.	
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.	
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.	
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.	
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].	
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.	
dataSource (CodeDataSource)	The primary source of the data in this record.	
dataSource2 (<u>CodeDataSource</u>)	The secondary source of the data in this record.	
sourceStatement (String255)	A statement providing additional details about the source of the data.	
editorName (String50)	The name of the individual who last edited this data.	
lastUpdate (Date)	The date upon which any data associated with this record was last updated.	
System Keys:		
guid (String60)	A globally unique identifier applied to each feature in the database for reference.	
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.	

Storm : Pump

(Database Feature Class Name = StormPump)

Geometry Type: Point Accuracy: +/-1Ft. Sensitivity: Secret A mechanical device for storm sewer system that draws material into itself through an entrance port and forces the material out through an exhaust port. [SDSFIE FGDC Utilities Classification].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
modelNumber (String12)	The Model, Product, Catalog, or Item Number of subject item.
serialNumber (String15)	The manufacturer's serial, or unique identification number of the subject item.

Attributes:

outflwAct (Double) The actual measured pump flow output. coolMethod (CodeEquipmentCooling) The method by which the pump is cooled. disposition (CodeDispositionObject) The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections. owner (String60) A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE]. flowRate (Double) The manufacturer's pump capacity (e.g., gpm) rating at a specific design total dynamic head (TDH), usually depicted by a pump curve. A field indicating the kind, class, or group of the subject item. type (String16) primRqd (CodeBoolean) An indicator as to whether or not the pump has to be primed? (yes or no). primeMethod (String15) The method by which the pump is primed. featureUse (String16) The particular application, or use the subject item. pumpElevation (Double) The elevation measured at centerline of the pump, in feet (English units) or meters (SI units) above some datum. pumpHp (Double) The power generated by the pump, equal in the U.S. to 746 watts and nearly equivalent to the English gravitational unit of the same name that equals 550 foot-pounds of work per second. description (String255) A description or other unique information concerning the subject item. enabled (CodeBoolean) Flag used for networking functionality in MES application. inspectionPhase (String16) The phase of the inspection. oldMaaAlias (String50) The old MAA alias. material (String16) The material of the subject item. junctionType (CodeJunctionType) An indicator as to whether the feature serves as a source, sink or neither in the network. Metadata: collectionProgress (CodeProgress) The progress of the data collection. verified (String255) Whether or not the feature has been verified. The date on which the subject item was originally acquired or purchased. Format for date dateAcquired (Date) is YYYYMMDD (i.e., September 15, 1994 = 19940915). projectType (CodeProjectType) The type of project or work activity that installed or first recorded the location of this feature. projectId (String20) A unique identifier associated with the project or work activity that installed or first recorded the location of this feature. status (CodeStatus) A temporal description of the operational status of the feature. Alternative (Integer) Discriminator used to tie features of a plan or proposal together into a version. An operator defined work area. This attribute can be used by the operator for user defined userFlag (String254) system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE]. qualityLevel (CodeSueQualityLevel) The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02. dataSource (CodeDataSource) The primary source of the data in this record. dataSource2 (CodeDataSource) The secondary source of the data in this record. sourceStatement (String255) A statement providing additional details about the source of the data. editorName (String50) The name of the individual who last edited this data. lastUpdate (Date) The date upon which any data associated with this record was last updated. System Keys: guid (String60) A globally unique identifier applied to each feature in the database for reference. metaId (Integer) An identifier used to refer to a metadata record that provide additional information about the data in this record.

Storm : Pump Station

(Database Feature Class Name = StormPumpStation) Geometry Type: Point Accuracy: +/-1Ft. Sensitivity: Secret A building in which one or more pumps operate to supply material flowing at adequate pressure to or from a storm sewer distribution system. [SDSFIE FGDC Utilities Classification].

Names and Identifiers: maaID (String30)

A unique identifier used by people to refer to this feature (note: this is not a system

primary or foreign key value) name (String30) Any commonly used name for the storm sewer pump station.[REEGIS]. maaAlias (String60) An alternative or former name by which the feature is refered. **Attributes:** alrmlvlelv (Double) The elevation in the wet well that triggers an alarm indicating no additional storage capacity. condition (CodePoleCondition) Indicates a state of being, or readiness for use of the subject item (e.g., good, fair, poor), from lists or field inspections. disposition (CodeDispositionObject) The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections. owner (String60) A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE]. hiWaterElevation (Double) The high water or overflow elevation of the storage tank at the pumping station, in feet (English units) or meters (SI units) above some datum. nodalElv (Double) The elevation of subject node, which is used in performing computer analyses of the water distribution system. The node elevation is usually the ground elevation at the subject node, or the elevation of the subject item located at the subject node (e.g., invertElv (Double) The top surface elevation of the subject item's interior floor/bottom in feet (English units) or meters (SI units) above some datum. staWidth (Double) The width dimension of the station, measured from outside face of the exterior wall/side to outside face of the opposite exterior wall/side. staLength (Double) The overall length of the pump station plant area. wetwlCapacity (Double) The wet well capacity. The size of the area, zone, or polygon in square units. area (Double) type (String16) A field indicating the kind, class, or group of the subject item. perimeter (Double) The distance around the boundary of the area, zone, or subject item in linear units. noPumps (Integer) The total number of pumps located at the subject item. riverMile (Double) River mile marker.[REEGIS]. pumpElevation (Double) The elevation measured at centerline of the pump, in feet (English units) or meters (SI units) above some datum. mxDsgnHd (Double) The water elevation of the maximum design head of the pump in feet NGVD.[REEGIS]. dateEnd (Date) The date the project was actually completed. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915)[REEGIS]. capacity (Double) The pumping capacity at the maximum design head in cfs.[REEGIS]. description (String255) A description or other unique information concerning the subject item. oldMaaAlias (String50) The old MAA alias. material (String16) The material of the subject item. junctionType (CodeJunctionType) An indicator as to whether the feature serves as a source, sink or neither in the network. Metadata: collectionProgress (CodeProgress) The progress of the data collection. verified (String255) Whether or not the feature has been verified. The date on which the subject item was originally acquired or purchased. Format for date dateAcquired (Date) is YYYYMMDD (i.e., September 15, 1994 = 19940915). projectType (CodeProjectType) The type of project or work activity that installed or first recorded the location of this feature. A unique identifier associated with the project or work activity that installed or first projectId (String20) recorded the location of this feature. status (CodeStatus) A temporal description of the operational status of the feature. Alternative (Integer) Discriminator used to tie features of a plan or proposal together into a version. userFlag (String254) An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE]. The subsurface utility engineering quality level assigned to utilities features as defined in qualityLevel (CodeSueQualityLevel) ASCE38-02. dataSource (CodeDataSource) The primary source of the data in this record. dataSource2 (CodeDataSource) The secondary source of the data in this record. sourceStatement (String255) A statement providing additional details about the source of the data. editorName (String50) The name of the individual who last edited this data. lastUpdate (Date) The date upon which any data associated with this record was last updated.

System Keys:

guid (String60) metaId (Integer) A globally unique identifier applied to each feature in the database for reference. An identifier used to refer to a metadata record that provide additional information about the data in this record.

Storm : Reservoir

(Database Feature Class Name = StormReservoirLocation)			
Geometry Type: Point	Accuracy: +/-1Ft.	Sensitivity: Secret	
The location where storm sewer water is collected. [SDSFIE FGDC Utilities Classification].			

Names and Identifiers:

Ivalles and Identifiers.	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String16)	The site specific identification name or number assigned to the subject item.
maaAlias (String60)	An alternative or former name by which the feature is refered.
Attributes:	
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
dateConstructed (Date)	The date on which the subject item construction was complete and user occupancy provided. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915)
depthAvg (Double)	The average depth of containment measured from normal operating pool.
invElvAv (Double)	The average elevation of the bottom of the reservoir.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset. [Adopted from SDSFIE].
xDikes (<u>CodeBoolean</u>)	An indicator whether cross dikes exists in the subject item or not (yes or no).
outCntr (String12)	The outlet control.
featureUse (String16)	The particular application, or use the subject item.
resLength (Double)	The overall length of the reservoir.
resType (<u>CodeReservoirType</u>)	The type or classification of the reservoir.
resWidth (Double)	The average width dimension of the reservoir, measured from top of opposite side slopes.
description (String255)	A description or other unique information concerning the subject item.
oldMaaAlias (String50)	The old MAA alias.
material (String16)	The material of the subject item.
size (Integer)	The size of the subject item.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
Metadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
verified (String255)	Whether or not the feature has been verified.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	-
guid (String60)	A globally unique identifier applied to each feature in the database for reference.

Storm : Stilling Basin	
(Database Feature Class Name = Sto	rmStillingBasin)
Geometry Type: Point	Accuracy: +/-1Ft. Sensitivity: Secret
	turbulent water flow is reduced. [SDSFIE FGDC Utilities
Classification].	
Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String16)	The site specific identification name or number assigned to the subject item.
maaAlias (String60)	An alternative or former name by which the feature is refered.
Attributes:	
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
dateConstructed (Date)	The date on which the subject item construction was complete and user occupancy provided. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915)
depthAvg (Double)	The average depth of containment measured from normal operating pool.
outCntr (String12)	The outlet control.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
invElvAv (Double)	The average elevation of the bottom of the stilling basin.
sbnLength (Double)	The overall length of the stilling basin.
sbnWidth (Double)	The average width dimension of the stilling basin, measured from top of opposite side slopes.
type (String16)	A field indicating the kind, class, or group of the subject item.
area (Double)	The size of the area, zone, or polygon in square units.
perimeter (Double)	The distance around the boundary of the area, zone, or subject item in linear units.
xDikes (<u>CodeBoolean</u>)	An indicator whether cross dikes exists in the subject item or not (yes or no).
description (String255)	A description or other unique information concerning the subject item.
oldMaaAlias (String50)	The old MAA alias.
material (String16)	The material of the subject item.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
Metadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
verified (String255)	Whether or not the feature has been verified.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (<u>CodeDataSource</u>)	The primary source of the data in this record.
dataSource2 (<u>CodeDataSource</u>)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	· · ·
guid (String60)	A globally unique identifier applied to each feature in the database for reference.

An identifier used to refer to a metadata record that provide additional information about the data in this record.

metaId (Integer)

metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.
Storm : Storm Trench Drain Line	
(Database Feature Class Name = Sto	rmTrenchDrainLine)
Geometry Type: Line	Accuracy: +/-5Ft. Sensitivity: Confidential
Geometry Type. Ente	Accuracy. 17-51 t. Sensitivity. Confidential
Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String50)	The name of the feature.
maaAlias (String60)	An alternative or former name by which the feature is refered.
idDwnStrmFeat (String50)	The ID of the downstream storm feature.
idDwnStrmStruct (String50)	The ID of the downstream storm structure.
idUpStrmFeat (String50)	The ID of the upstream storm feature.
idUpStrmStruct (String50)	The ID of the upstream storm structure.
trenchWidth (Integer)	The width of the trench.
Attributes:	
coverDepth (Double)	Depth of cover. The depth measured from top of ground's surface (or grade) to top of underground fuel line pipe.
directionality (<u>CodeDirectionality</u>)	The directionality of flow with repsect to the line's geometry.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
drainagePattern (CodeDrainagePattern)	The drainage pattern of the material surrounding the culvert.
drainageTexture (<u>CodeDrainageDensity</u>)	The texture of the material surrounding the grease trap.
drainageZone (<u>CodeDrainageZone</u>)	The local name of assigned the hydrographic drainage zone.
dwnStrmStructType (String20)	The type of the downstream structure, if any.
enabled (<u>CodeBoolean</u>)	Flag used for networking functionality in MES application.
finalOutFall (String50)	Final outfall.
fromCoordX (Double)	The from, or downstream, coordinate of the pipe in the east-west plane in as measured by GPS equipment.
fromCoordY (Double)	The from, or downstream, coordinate of the pipe in the north-south plane in as measured by GPS equipment.
fromCoordZ (Double)	The from, or downstream, coordinate of the pipe in the vertical plane in as measured by GPS equipment.
immediateOutFall (String50)	Immediate outfall.
impedance (Integer)	The number representing the total opposition to flow.
inspectionPhase (String16)	The phase of the inspection.
invElv1 (Double)	The elevation of the bottom of pipe (i.e., pipe invert) at node_id_1 in feet (English units) or meters (SI units) above some datum.[Derived from SDSFIE].
invElv2 (Integer)	The elevation of the bottom of pipe (i.e., pipe invert) at node_id_2 in feet (English units) or meters (SI units) above some datum.[Derived from SDSFIE].
lined (<u>CodeBoolean</u>)	An indicator as to whether the pipe is lined or not (yes/no).
material (<u>CodePipeMaterial</u>)	The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc.
modelNumber (String20)	The model number of the feature.
description (String255)	A description or other unique information concerning the subject item.
oldMAAAlias (String50)	The old MAA alias.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
pressMax (Integer)	The maximum pressure.
pressNorm (Integer)	The normal pressure.
scrnType (<u>CodeCulvertScreenType</u>)	The type of screen used to cover the end of the culvert.
size (<u>CodePipeDiameter</u>)	The manufacturers designated size, or nominal (i.e., rounded to the nearest unit) diameter for the subject item (e.g., 1in gas hydrant, 2in meter, 6in pipe).
slopeBot (Integer)	The bottom slope of the feature.
toCoordX (Double)	The to, or upstream, coordinate of the pipe in the east-west plane in as measured by GPS equipment.

toCoordY (Double)	The to or upstream, coordinate of the pipe in the north-south plane in as measured by GPS equipment.
toCoordZ (Double)	The to, or upstream, coordinate of the pipe in the vertical plane in as measured by GPS equipment.
trenchLength (Integer)	The length of the trench.
type (String16)	A field indicating the kind, class, or group of the subject item.
upStrmStructType (String16)	Upstream storm structure type.
use (String50)	Use of the feature.
Metadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
verified (String255)	Whether or not the feature has been verified.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Storm : Valve

(Database Feature Class Name = StormValve)Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretA fitting or device used for shutting or throttling flow through a storm sewer line. [SDSFIEFGDC Utilities Classification].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
Attributes:	
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
size (CodePipeDiameter)	The manufacturers designated size, or nominal (i.e., rounded to the nearest unit) diameter for the subject item (e.g., 1 in gas hydrant, 2 in meter, 6 in pipe).
valveElv (Double)	The elevation measured at centerline of the valve, in feet (English units) or meters (SI units) above some datum.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
featureUse (String16)	The particular application, or use the subject item.
coverDepth (Double)	The depth of cover. The depth measured from top of ground's surface (or grade) to top of underground storm water line valve.[Air Force].
description (String255)	A description or other unique information concerning the subject item.
oldMaaAlias (String50)	The old MAA alias.

valveSt (CodeStyleValve)	The particular kind, class, or group of valve (e.g., gate, check, etc.).
·/	
material (String16)	The material of the subject item.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
valveOpen (CodeValveOpen)	The direction a valve must be turned to open
operatingStatus (CodeValveStatus)	The normal operating status of the valve
Metadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
verified (String255)	Whether or not the feature has been verified.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (<u>CodeDataSource</u>)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Data Set: Wastewater

Wastewater : Anode

(Database Feature Class Name = WastewaterAnode)Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretA material used in waste water distribution systems that is electrically connected to a lesselectrolytically-active material so that it will oxidize in the place of the less active material.[SDSFIE FGDC Utilities Classification].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
Attributes:	
anodeWeight (Double)	The initial weight of the anode or anode packet.[FGDC Utilities Classification].
dateInstalled (Date)	The date on which the feature was originally installed.
dateLastInspected (Date)	The date the anode was last inspected or checked. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).[FGDC Utilities Classification].
material (<u>CodeAnodes</u>)	The type of material composition of the anode or anode packet.[FGDC Utilities Classification].
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
description (String255)	A description or other unique information concerning the subject item.[FGDC Utilities Classification].
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.

junctionType (<u>CodeJunctionType</u>)

An indicator as to whether the feature serves as a source, sink or neither in the network.

The date on which the subject item was originally acquired or purchased. Format for date

The type of project or work activity that installed or first recorded the location of this

A unique identifier associated with the project or work activity that installed or first

An operator defined work area. This attribute can be used by the operator for user defined

Discriminator used to tie features of a plan or proposal together into a version.

Metadata:

collectionProgress (<u>CodeProgress</u>) dateAcquired (Date)

verified (String255) projectType (<u>CodeProjectType</u>)

projectId (String20)

status (<u>CodeStatus</u>) Alternative (Integer) userFlag (String254)

usen nag (Sunng2.54)	system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
<u>System Keys:</u>	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

The progress of the data collection.

recorded the location of this feature.

feature.

Whether or not the feature has been verified.

is YYYYMMDD (i.e., September 15, 1994 = 19940915).

A temporal description of the operational status of the feature.

Wastewater : Anode Test Station

(Database Feature Class Name = WastewaterAnodeTestStation)

Geometry Type: Point Accuracy: +/-1Ft. Sensitivity: Secret A central location where anodes are tested for performance in wastewater systems. [SDSFIE FGDC Utilities Classification].

maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system
(primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
ttributes:	
installType (CodeSheathInsulateType)	The type of insulation covering the conductor.[FGDC Utilities Classification].
noTerm (Integer)	The total number of terminal connections at the test station.[FGDC Utilities Classification].
type (String16)	The type of anode test station configuration use.[FGDC Utilities Classification].
owner (String60)	A person, organization, or agency with legal control or management responsibility o utility asset.[Adopted from SDSFIE].
wireSize (CodeCableDimension)	The AWG size designation for the wire connecting the anode/anode packet to the ar test station.[FGDC Utilities Classification].
wireType (String16)	The conductor configuration, typically solid or stranded.[FGDC Utilities Classificat
description (String255)	A description or other unique information concerning the subject item.[FGDC Utilit Classification].
material (String16)	The material of the subject item.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc from lists or entered from field inspections.
junctionType (CodeJunctionType)	An indicator as to whether the feature serves as a source, sink or neither in the netw
etadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format fo is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.

projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (CodeStatus)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (<u>CodeDataSource</u>)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Wastewater : Discharge Point

(Database Feature Class Name = WastewaterDischargePoint)Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretAny location where wastewater pipes directly discharge effluent. [SDSFIE FGDC UtilitiesClassification].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
tributaryId (String20)	An operator generated identifier used locally to identify a tributary subsystem of the main utility system.
Attributes:	
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
type (String16)	A field indicating the kind, class, or group of the subject item.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
sysType (String16)	The type of wastewater system.[USACE OPERATIONS].
description (String255)	A description or other unique information concerning the subject item.
material (String16)	The material of the subject item.
size (Integer)	The size of the subject item.
junctionType (CodeJunctionType)	An indicator as to whether the feature serves as a source, sink or neither in the network.
Metadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].

qualityLevel (CodeSueQualityLevel)

dataSource (<u>CodeDataSource</u>) dataSource2 (<u>CodeDataSource</u>)

sourceStatement (String255) editorName (String50) lastUpdate (Date)

System Keys:

guid (String60) metaId (Integer) The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.

The primary source of the data in this record.

The secondary source of the data in this record.

A statement providing additional details about the source of the data.

The name of the individual who last edited this data.

The date upon which any data associated with this record was last updated.

A globally unique identifier applied to each feature in the database for reference. An identifier used to refer to a metadata record that provide additional information about the data in this record.

Wastewater : Disposal Tank

(Database Feature Class Name = WastewaterDisposalTank) Geometry Type: Point Accuracy: +/-1Ft. Sensitivity: Secret An above or below grade receptacle or chamber for holding waste water on a temporary basis prior to transfer or use. [SDSFIE FGDC Utilities Classification].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
serialNumber (String15)	The manufacturer's serial, or unique identification number of the subject item.
modelNumber (String12)	The Model, Product, Catalog, or Item Number of subject item.
tributaryId (String20)	An operator generated identifier used locally to identify a tributary subsystem of the main utility system.
Attributes:	
altValve (<u>CodeBoolean</u>)	Indicates whether or not the tank has an altitude valve which controls the flow into the tank? (yes or no).
area (Double)	The size of the area, zone, or polygon in square units.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
ovrflwElevation (Double)	The elevation measured at the point of overflow, or entrance, into the tank overflow pipe,, in feet (English units) or meters (SI units) above some datum.
headNorm (Double)	The normal operating head for the subject item.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
topElevation (Double)	The elevation of exterior top surface of the subject item's lid, hatch, rim, or roof in feet (English units) or meters (SI units) above some datum.
invertElv (Double)	The elevation measured at bottom of the tank, in feet (English units) or meters (SI units) above some datum. mean sea level.
material (CodePipeMaterial)	The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc.
tankLength (Double)	The length dimension of the tank, measured from outside face of the exterior wall/side to outside face of the opposite exterior wall/side.
tankUse (<u>CodeTankUse</u>)	The particular kind or use of the waste water tank.
tankWidth (Double)	The exterior width dimension of the tank, measured from outside face of the exterior wall/side to outside face of the opposite exterior wall/side.
pressNorm (Double)	The manufacturer's (as rated by American Society of Mechanical Engineers (ASME) testing procedures) maximum pressure rating of the waste water tank.
perimeter (Double)	The distance around the boundary of the area, zone, or subject item in linear units.
tankCapacity (Double)	The tank's storage capacity (e.g., gallons, ft3, etc).
tankDepth (Double)	The depth below the ground surface or cover measured from the top of the subject item.
tankDes (CodeWastewaterTankType)	This value differentiates similar entities by use or type.
tankDiameter (Double)	The inside diameter of the tank, measured from the interior wall surface to the opposite interior wall surface.
description (String255)	A description or other unique information concerning the subject item.
tankSt (CodeStyleTank)	This value differentiates similar entities by use or type.

color (<u>CodeColor</u>)	The color of the disposal tank.
lightCode (String1)	The light code of the tank.
lightingType (CodeLightingConfigurationT	ype) Thetype of lighting configuration.
markingFeatureType (CodeMarkingFeature	Type) The type of the marking
verticalStructureMaterial (String16)	The vertical structure material.
junctionType (CodeJunctionType)	An indicator as to whether the feature serves as a source, sink or neither in the network.
Metadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (<u>CodeDataSource</u>)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Wastewater : Downspout

(Database Feature Class Name = WastewaterDownspout)

Geometry Type: Point Accuracy: +/-1Ft. Sensitivity: Secret A pipe normally attached to the side of a building or structure which conveys rainfall runoff from the roof area to the ground surface or an underground collection system for wastewater. [SDSFIE FGDC Utilities Classification].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
modelNumber (String12)	The Model, Product, Catalog, or Item Number of subject item.
Attributes:	
dnsptLength (Double)	The length of the downspout, measured from highest point to its discharge point.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
baseElevation (Double)	The elevation of the discharge point of the downspout in feet (English units) or meters (SI units) above some datum.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset. [Adopted from SDSFIE].
groundElevation (Double)	The elevation of the ground surface at the discharge point, in feet (English units) or meters (SI units) above some datum.
material (CodePipeMaterial)	The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc.
size (<u>CodePipeDiameter</u>)	The manufacturers designated size, or nominal (i.e., rounded to the nearest unit) diameter for the subject item (e.g., 1 in gas hydrant, 2 in meter, 6 in pipe).

type (String16)	A field indicating the kind, class, or group of the subject item.
description (String255)	A description or other unique information concerning the subject item.
junctionType (CodeJunctionType)	An indicator as to whether the feature serves as a source, sink or neither in the network.
Metadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (<u>CodeDataSource</u>)	The primary source of the data in this record.
dataSource2 (<u>CodeDataSource</u>)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Wastewater : Drain Field

(Database Feature Class Name = WastewaterDrainField)

Geometry Type: Polygon Accuracy: +/-5Ft. Sensitivity: Confidential The area of influence where perforated pipe placed in gravel trenches carries effluent from a waste storage containment for percolation into the earth. [SDSFIE FGDC Utilities Classification].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
<u>Attributes:</u>	
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
description (String255)	A description or other unique information concerning the subject item.
size (Integer)	The size of the subject item.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
Metadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.

userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Wastewater : Filtration Bed

(Database Feature Class Name = WastewaterFiltrationBed)Geometry Type: PolygonAccuracy: +/-5Ft.Sensitivity: ConfidentialA below grade system consisting of perforated piping installed in sand or gravel beds or trenchesdesigned to permit the uniform distribution and absorption of effluent from a septic tank oraerobic unit into the soil. [SDSFIE FGDC Utilities Classification].

ames and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
ttributes:	
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
material (CodePipeMaterial)	The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc.
description (String255)	A description or other unique information concerning the subject item.
size (Integer)	The size of the subject item.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
letadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
vstem Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.

Wastewater : Fitting		
(Database Feature Class Name = Wa	stewaterFitting)	
Geometry Type: Point	Accuracy: +/-1Ft. Sens	sitivity: Secret
A fitting is an item used to connect,	cap, plug or otherwise alter a pipe carry	ying wastewater.
SDSFIE FGDC Utilities Classificat		
Names and Identifiers:].	
maaID (String30)	A unique identifier used by people to refer to this feature	e (note: this is not a system
initial (Stringet)	primary or foreign key value)	
maaAlias (String60)	An alternative or former name by which the feature is real	fered.
modelNumber (String12)	The Model, Product, Catalog, or Item Number of subject	t item.
tributaryId (String20)	An operator generated identifier used locally to identify a utility system.	
serialNumber (String15)	The manufacturer's serial, or unique identification number	er of the subject item.
<u>Attributes:</u>		
fitDepth (Double)	The depth below the ground surface or cover measured f	
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporar from lists or entered from field inspections.	y, proposed, abandoned, etc.),
fitLength (Double)	The overall length of the fitting.	
fitWidth (Double)	The width dimension of the subject item measured at its'	•
owner (String60)	A person, organization, or agency with legal control or n utility asset.[Adopted from SDSFIE].	
size (<u>CodePipeDiameter</u>)	The manufacturers designated size, or nominal (i.e., rour for the subject item (e.g., 1 in gas hydrant, 2 in meter, 6 in	pipe).
material (<u>CodePipeMaterial</u>)	The material composition of the subject item, such as we plastic, etc.	ood, concrete, steel, cast iron,
type (String100)	Discriminator. The kind, class, or group of the subject ite	
coverDepth (Double)	The depth of cover. The depth measured from top of grounderground wastewater line fitting.[Air Force].	und's surface (or grade) to top of
description (String255)	A description or other unique information concerning the	e subject item.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source,	, sink or neither in the network.
<u>Metadata:</u>		
collectionProgress (CodeProgress)	The progress of the data collection.	
dateAcquired (Date)	The date on which the subject item was originally acquir is YYYYMMDD (i.e., September 15, 1994 = 19940915)	
verified (String255)	Whether or not the feature has been verified.	
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first feature.	
projectId (String20)	A unique identifier associated with the project or work as recorded the location of this feature.	ctivity that installed or first
status (<u>CodeStatus</u>)	A temporal description of the operational status of the fe	
Alternative (Integer)	Discriminator used to tie features of a plan or proposal to	0
userFlag (String254)	An operator defined work area. This attribute can be used system processes. It does not affect the subject items data used to store the subject items data.[SDSFIE].	
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned ASCE38-02.	to utilities features as defined in
dataSource (CodeDataSource)	The primary source of the data in this record.	
dataSource2 (CodeDataSource)	The secondary source of the data in this record.	
sourceStatement (String255)	A statement providing additional details about the source	e of the data.
editorName (String50)	The name of the individual who last edited this data.	
lastUpdate (Date)	The date upon which any data associated with this record	d was last updated.
System Keys:		
guid (String60)	A globally unique identifier applied to each feature in the	e database for reference.
metald (Integer)	An identifier used to refer to a metadata record that prov	ide additional information about

An identifier used to refer to a metadata record that provide additional information about the data in this record.

metaId (Integer)

the data in this record.

Wastewater : Grease Trap

(Database Feature Class Name = WastewaterGreaseTrap)

Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretA tank which separates grease from water, collects the grease for removal, and allows the waterto exit. [SDSFIE FGDC Utilities Classification].

Nomes and Identificate	1.
Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
tributaryId (String20)	An operator generated identifier used locally to identify a tributary subsystem of the main utility system.
Attributes:	
dstbx (<u>CodeBoolean</u>)	Indicates whether or not a distribution box exists for the subject item. (yes or no)
dstbxIEl (Double)	The invert elevation of the inside bottom of the distribution box.
drnflSt (CodeStyleDrainField)	The style of field drain system indicating the configuration and layout of the drain lines.
condition (CodePoleCondition)	Indicates a state of being, or readiness for use of the subject item (e.g., good, fair, poor), from lists or field inspections.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
drainagePattern (CodeDrainagePattern)	The drainage pattern of the material surrounding the grease trap.
drainageTexture (<u>CodeDrainageDensity</u>)	The texture of the material surrounding the grease trap.
manhole (CodeBoolean)	An indication as to whether or not is part of a manhole or has access via a manhole (yes/no).
gtpWidth (Double)	The width dimension of the subject item, measured from opposite inside faces.
latDiTot (Double)	The total diameter of all drainage laterals
latdimean (Double)	The average diameter of all drainage laterals
laterlSlp (Double)	The average slope of all drainage laterals.
laterlTot (Double)	The total (sum) length of all drainage laterals.
laterlmean (Double)	The mean or average length of the drainage laterals.
flowRate (Double)	The flow rate of the feature.
gtpCapacity (Double)	The grease trap's storage capacity (e.g., gallons, ft3, etc).
gtpDepth (Double)	The depth below the ground surface or cover measured from the top of the subject item.
gtpLength (Double)	The overall length of the grease trap.
invElv1 (Double)	The elevation of the bottom of pipe (i.e., pipe invert) at node_id_1 in feet (English units) or meters (SI units) above some datum.[Derived from SDSFIE].
invElv2 (Double)	The elevation of the bottom of pipe (i.e., pipe invert) at node_id_2 in feet (English units) or meters (SI units) above some datum.
material (CodePipeMaterial)	The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc.
noLateral (Integer)	The total number of laterals.
trapSt (<u>CodeStyleTank</u>)	The particular kind, class, or group of tank (e.g., elevated, hydropneumatic, etc.).
trenchWid (Double)	The trench width excavated for the field drains.
soilPerc (Double)	The percolation rate of the soil in which the drain field lines are placed.
description (String255)	A description or other unique information concerning the subject item.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
Metadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first

		recorded the location of this feature.
	status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
	Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
	userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
	qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
	dataSource (CodeDataSource)	The primary source of the data in this record.
	dataSource2 (CodeDataSource)	The secondary source of the data in this record.
	sourceStatement (String255)	A statement providing additional details about the source of the data.
	editorName (String50)	The name of the individual who last edited this data.
	lastUpdate (Date)	The date upon which any data associated with this record was last updated.
Sys	tem Keys:	
	guid (String60)	A globally unique identifier applied to each feature in the database for reference.
	metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Wastewater : Grit Chamber

(Database Feature Class Name = WastewaterGritChamber) Geometry Type: Point Accuracy: +/-1Ft. Sensitivity: Secret A chamber designed to remove sand, gravel, or other heavy solids that have subsiding velocities or specific gravities substantially greater than those of the organic solids in the waste water system. [SDSFIE FGDC Utilities Classification].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
tributaryId (String20)	An operator generated identifier used locally to identify a tributary subsystem of the main utility system.
Attributes:	
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
oWSep (<u>CodeBoolean</u>)	An indicator as to whether or not grit chamber has an integrated oil-water separator. (yes or no)
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
flowCapacity (Double)	The flow capacity of the subject item.
gritType (String12)	The predominate type of grit collected in the grit chamber.
storCapacity (Double)	The grit chamber overall storage capacity.
description (String255)	A description or other unique information concerning the subject item.
material (String16)	The material of the subject item.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
<u>Metadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].

qualityLevel (CodeSueQualityLevel)

dataSource (CodeDataSource)

dataSource2 (<u>CodeDataSource</u>) sourceStatement (String255) editorName (String50) lastUpdate (Date)

System Keys:

guid (String60) metaId (Integer) The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02. The primary source of the data in this record. The secondary source of the data in this record. A statement providing additional details about the source of the data. The name of the individual who last edited this data. The date upon which any data associated with this record was last updated.

A globally unique identifier applied to each feature in the database for reference. An identifier used to refer to a metadata record that provide additional information about the data in this record.

Wastewater : Inlet

(Database Feature Class Name = WastewaterInlet) Geometry Type: Point Accuracy: +/-1Ft. Sensitivity: Secret The location where waste water is collected and received into the utility system. [SDSFIE FGDC Utilities Classification].

intes clussification].	
Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
modelNumber (String12)	The Model, Product, Catalog, or Item Number of subject item.
tributaryId (String20)	An operator generated identifier used locally to identify a tributary subsystem of the main utility system.
Attributes:	
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
capacityDgn (Double)	The design flow capacity of the subject item.
inletSt (String16)	Discriminator: This value differentiates similar entities by use or type.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
invertElv (Double)	The top surface elevation of the subject item's interior floor/bottom in feet (English units) or meters (SI units) above some datum.
weirElevation (Double)	Elevation of the weir invert.
description (String255)	A description or other unique information concerning the subject item.
material (String16)	
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
<u>Metadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.

lastUpdate (Date)	The date upon which any data associated with this record was last updated.
<u>System Keys:</u>	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Wastewater : Junction

(Database Feature Class Name = WastewaterJunction)

Geometry Type: Point Accuracy: +/-1Ft. Sensitivity: Secret A box or small vault (usually concrete, brick, or cast iron) in wastewater systems located below grade with above grade access where pipes intersect. The manhole also houses associated fittings, valves, meters, etc. [SDSFIE FGDC Utilities Classification].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
modelNumber (String12)	The Model, Product, Catalog, or Item Number of subject item.
tributaryId (String20)	An operator generated identifier used locally to identify a tributary subsystem of the main utility system.
highLevelAlarmId (String50)	The high level alarm ID.
idDestMH (String50)	The ID of the destination manhole.
tributes:	
drainType (<u>CodeDrainType</u>)	The type of subject item drain.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
featureUse (String16)	Discriminator. An attribute that differentiates the use of the subject item.
linerType (CodeManholeLinerType)	The type of liner used if the pit/manhole is used for neutralizing chemicals.
mhDia (Double)	The diameter dimension of the subject item, measured from inside face of wall to inside face of opposite wall.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
mhLength (Double)	The length dimension of the subject item, from outside face of exterior wall/side to outside face of opposite exterior wall/side.
mhWidth (Double)	The width dimension of the subject item, from outside face of exterior wall/side to outside face of opposite exterior wall/side.
invertElv (Double)	The top surface elevation of the subject item's interior floor/bottom in feet (English units) or meters (SI units) above some datum.
material (CodePipeMaterial)	The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc.
reactant (String30)	The chemical in the incoming waste stream being neutralized.
neutAgent (String30)	The chemical agent in the pit which chemically neutralizes the in stream reactant.
noPipes (Integer)	The number of the pipes entering and exiting the subject item.
type (String16)	A field indicating the kind, class, or group of manhole for the subject utility.
rimElevation (Double)	The elevation of exterior top surface of the subject item's lid, hatch, rim, or roof in feet (English units) or meters (SI units) above some datum.
noSteps (Integer)	Number of manhole steps.[Cherry Point].
illict (<u>CodeBoolean</u>)	Indication whether or not (yes/no) illicit flow was detected in manhole or box.[Cherry Point].
description (String255)	The text describing a wastewater manhole.[Cherry Point].
coordX (Double)	The coordinate in the east-west plane, expressed in decimal degrees.
coordY (Double)	The coordinate in the north-south plane, expressed in decimal degrees.
coordZ (Double)	The coordinate in the vertical plane in as measured by GPS equipment.
highLevelAlarmFlag (<u>CodeBoolean</u>)	Indicator whether manhole is (or has?) a high level alarm
apronTroughMaterial (CodeManholeMater	ial) The material of the apron trough.
corbelWallsMaterial (CodeManholeMateria	al) The material of the corbel walls.
coverMaterial (<u>CodeManholeCoverType</u>)	The cover material.
effluentPipeDestination (String50)	The effulent pipe destination.

	effluentPipeDiameter (<u>CodePipeDiameter</u>)	The effulent pipe diameter.
	effluentPipeInvert (Double)	The effluent pipe invert.
	effluentPipeMaterial (CodePipeMaterial)	Material of which the pipe is made.
	influentPipe1Diameter (CodePipeDiameter)	The influent pipe diameter.
	influentPipe1Invert (Double)	The influent pipe invert.
	influentPipe1Material (CodePipeMaterial)	The influent pipe material.
	influentPipe1Origin (String50)	The influent pipe origin.
	influentPipe2Diameter (CodePipeDiameter)	The second influent pipe diameter.
	influentPipe2Invert (Double)	The second influent pipe invert.
	influentPipe2Material (CodePipeMaterial)	The second influent pipe material.
	influentPipe2Origin (String50)	The second influent pipe origin.
	influentPipe3Diameter (CodePipeDiameter)	The third influent pipe origin.
	influentPipe3Invert (Double)	The third influent pipe invert.
	influentPipe3Material (CodePipeMaterial)	The third influent pipe material.
	influentPipe3Origin (String50)	The third influent pipe origin.
	influentPipe4Diameter (CodePipeDiameter)	
	influentPipe4Invert (Double)	The fourth influent pipe invert.
	influentPipe4Material (CodePipeMaterial)	The fourth influent pipe material.
	influentPipe4Origin (String50)	The fourth influent pipe origin.
	influentPipe5Diameter (CodePipeDiameter)	
	influentPipe5Invert (Double)	The fifth influent pipe invert.
	influentPipe5Material (CodePipeMaterial)	The fifth influent pipe material.
	influentPipe5Origin (String50)	The fifth influent pipe origin.
	manholeSteps (String50)	The number of steps in the manhole.
	junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
Met	adata:	······
	collectionProgress (<u>CodeProgress</u>)	The progress of the data collection.
	dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date
	· · · · · · · · · · · · · · · · · · ·	is YYYYMMDD (i.e., September 15, 1994 = 19940915).
	verified (String255)	Whether or not the feature has been verified.
	projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
	projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
	status (CodeStatus)	A temporal description of the operational status of the feature.
	Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
	userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
	qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
	dataSource (CodeDataSource)	The primary source of the data in this record.
	dataSource2 (CodeDataSource)	The secondary source of the data in this record.
	sourceStatement (String255)	A statement providing additional details about the source of the data.
	editorName (String50)	The name of the individual who last edited this data.
	lastUpdate (Date)	The date upon which any data associated with this record was last updated.
Syst	tem Keys:	· · · ·
	guid (String60)	A globally unique identifier applied to each feature in the database for reference.
	metald (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Wastewater : Lagoon

(Database Feature Class Name = WastewaterLagoon)Geometry Type: PolygonAccuracy: +/-5Ft.Sensitivity: ConfidentialA shallow man made pool or pond for the purpose of providing treatment of domesticwastewater. [SDSFIE FGDC Utilities Classification].

Names and Identifiers:

maaID (String30)

name (String16) maaAlias (String60) labName (<u>CodeLaboratory</u>)

monAgency (String15)

tributaryId (String20)

Attributes:

aerator (<u>CodeBoolean</u>) aeratorPow (Double) area (Double) dateAnl (Date)

owner (String60)

dateConstructed (Date)

depthAvg (Double) lgnLength (Double) lgnWidth (Double) outCntr (String12) manageOff (String12) testType (<u>CodeSewageTestType</u>) invElvAv (Double) labType (<u>CodeLaboratoryType</u>)

userInd (CodeBoolean) userSan (CodeBoolean) smplFreq (Integer) soilCdn (CodeSoilConsistency) werOutl (CodeBoolean) xDikes (CodeBoolean) noPumps (Integer) perimeter (Double) soilFro (CodeSoilsErosionK) soilFram (CodeSoilsFamily) soilTex (CodeSoilsTexture) type (String16) pipOutl (CodeBoolean) description (String255) material (CodePipeMaterial)

disposition (CodeDispositionObject)

Metadata:

collectionProgress (<u>CodeProgress</u>) dateAcquired (Date)

verified (String255) projectType (<u>CodeProjectType</u>)

projectId (String20)

status (CodeStatus)

A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)

The site specific identification name or number assigned to the subject item. An alternative or former name by which the feature is refered.

The name of the laboratory primarily responsible for completing the required tests for the subject item.

The regulator agency that monitors inflow, containment, and discharge for the subject item.

An operator generated identifier used locally to identify a tributary subsystem of the main utility system.

Indicates whether or not the lagoon has aerators. (yes/no)

The power rating for the aerator, usually in terms of horse power (hp).

The size of the area, zone, or polygon in square units.

Date on which water quality analyses were performed. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915)

A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].

The date on which the subject item construction was complete and user occupancy provided. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915)

The average depth of containment measured from normal operating pool. The average length of the lagoon.

The average width dimension of the lagoon, measured from top of opposite side slopes. The outlet control.

The office/organization responsible for managing the lagoon.

The type of test used to evaluate the contained material.

The average elevation of the bottom of the lagoon.

The type of the laboratory primarily responsible for completing the required tests for the subject item.

An indicator as to whether or not the lagoon is used for industrial wastewater. (yes or no) An indicator as to whether or not the lagoon is used for wastewater. (yes or no)

The frequency at which material sampling is conducted.

The consistency of the soil indicating soil condition and strength.

An indicator as to whether or not the subject item has weir outlets. (yes or no)

An indicator whether cross dikes exists in the subject item or not (yes or no).

The total number of pumps located at the subject item.

The distance around the boundary of the area, zone, or subject item in linear units. The erosion potential of the soil.

The soil family.

The soil texture.

A field indicating the kind, class, or group of the subject item.

An indicator as to whether or not the lagoon has pipe outlets. (yes or no)

A description or other unique information concerning the subject item.

The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc.

The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.

The progress of the data collection.

The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).

Whether or not the feature has been verified.

The type of project or work activity that installed or first recorded the location of this feature.

A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.

A temporal description of the operational status of the feature.

Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.			
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].			
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.			
dataSource (CodeDataSource)	The primary source of the data in this record.			
dataSource2 (CodeDataSource)	The secondary source of the data in this record.			
sourceStatement (String255)	A statement providing additional details about the source of the data.			
editorName (String50)	The name of the individual who last edited this data.			
lastUpdate (Date)	The date upon which any data associated with this record was last updated.			
System Keys:				
guid (String60)	A globally unique identifier applied to each feature in the database for reference.			
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.			

Wastewater : Line

(Database Feature Class Name = WastewaterLine)Geometry Type: LineAccuracy: +/-5Ft.Sensitivity: SecretA pipe used to carry waste water from location to location (main line, service line, force mainline, etc). [SDSFIE FGDC Utilities Classification].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
modelNumber (String12)	The Model, Product, Catalog, or Item Number of subject item.
tributaryId (String20)	An operator generated identifier used locally to identify a tributary subsystem of the main utility system.
idDwnStrmMH (String50)	The ID of the downstream manhole.
idUpStrmMH (String50)	The ID of the upstream manhole.
<u>Attributes:</u>	
area (Double)	The size of the area, zone, or polygon in square units.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
drainageTexture (CodeDrainageDensity)	The texture of the material surrounding the pipe.
drainagePattern (CodeDrainagePattern)	The drainage pattern of the material surrounding the pipe.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
pipeLength (Double)	The length of pipe, measured from node to node along the pipe centerline .
lined (CodeBoolean)	An indicator as to whether the pipe is lined or not (yes/no).
pressMax (Double)	The manufacturer's or industry standard's maximum pressure rating of the subject item.
invElv1 (Double)	The elevation of the bottom of pipe (i.e., pipe invert) at node_id_1 in feet (English units) or meters (SI units) above some datum.[Derived from SDSFIE].
invElv2 (Double)	The elevation of the bottom of pipe (i.e., pipe invert) at node_id_2 in feet (English units) or meters (SI units) above some datum.
material (CodePipeMaterial)	The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc.
slopeBot (Double)	The slope of the bottom of the subject item expressed as a percentage.
featureUse (String16)	Discriminator. The use code for wastewater lines.
perimeter (Double)	The distance around the boundary of the area, zone, or subject item in linear units.
pressNorm (Double)	The normal operating pressure of the waste water system pipe.
type (<u>CodeWastewaterLineType</u>)	A field indicating the kind, class, or group of the subject item.
size (CodePipeDiameter)	The manufacturers designated size, or nominal (i.e., rounded to the nearest unit) diameter for the subject item (e.g., 1in gas hydrant, 2in meter, 6in pipe).
piplty (CodePipelineLocationType)	The location of the pipeline in relevance to the earth's surface.[USGS].
coverDepth (Double)	The depth of cover. The depth measured from top of ground's surface (or grade) to top of underground wastewater line pipe.[Air Force].

description (String255)	A description or other unique information concerning the subject item.
directionality (CodeDirectionality)	The directionality of flow with repsect to the line's geometry.
impedance (Double)	The number representing the total opposition to flow.
Metadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Wastewater : Marker

(Database Feature Class Name = WastewaterMarker)Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretA sign, concrete monument, etc. installed either directly above or immediately adjacent tounderground lines, bends, fittings, etc to indicate the presence of waste water. [SDSFIE FGDCUtilities Classification].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
Attributes:	
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
material (String16)	The material of the subject item.
description (String255)	A description or other unique information concerning the subject item.
size (Integer)	The size of the subject item.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
junctionType (CodeJunctionType)	An indicator as to whether the feature serves as a source, sink or neither in the network.
<u>Ietadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.

status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Wastewater : Meter

(Database Feature Class Name = WastewaterMeter) Geometry Type: Point Accuracy: +/-1Ft. Sensitivity: Secret A device installed in a line for measuring the quantity and or rate of water through a section of line. [SDSFIE FGDC Utilities Classification].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
modelNumber (String12)	The Model, Product, Catalog, or Item Number of subject item.
serialNumber (String15)	The manufacturer's serial, or unique identification number of the subject item.
<u>Attributes:</u>	
design (String16)	Discriminator: The design of the water meter.
disposition (<u>CodeDispositionObject</u>)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
installType (CodePumpSta)	The type installation of the subject item.
meterElv (Double)	The elevation at the centerline of the meter, in feet (English units) or meters (SI units) above some datum.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
meterDepth (Double)	The depth below the ground surface or cover measured from the top of the subject item.
meterLength (Double)	The overall length of the meter.
meterWidth (Double)	The overall width dimension of the subject item.
type (String16)	A field indicating the kind, class, or group of the subject item.
size (CodePipeDiameter)	The manufacturers designated size, or nominal (i.e., rounded to the nearest unit) diameter for the subject item (e.g., 1 in gas hydrant, 2 in meter, 6 in pipe).
description (String255)	A description or other unique information concerning the subject item.
material (String16)	
junctionType (CodeJunctionType)	An indicator as to whether the feature serves as a source, sink or neither in the network.
<u>letadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (CodeStatus)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.

userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (<u>CodeDataSource</u>)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Wastewater : Neutralizer

(Database Feature Class Name = WastewaterNeutralizer)Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretA receptacle or chamber where chemicals react with reactant materials, resulting in makingliquid waste passing through chemically neutral for wastewater systems. [SDSFIE FGDCUtilities Classification].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
modelNumber (String12)	The Model, Product, Catalog, or Item Number of subject item.
tributaryId (String20)	An operator generated identifier used locally to identify a tributary subsystem of the main utility system.
Attributes:	
drainType (<u>CodeDrainType</u>)	The type of subject item drain.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
linerType (CodeManholeLinerType)	The type of liner used if the pit/manhole is used for neutralizing chemicals.
invertElv (Double)	The top surface elevation of the subject item's interior floor/bottom in feet (English units) or meters (SI units) above some datum.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
neutDiameter (Double)	The diameter dimension of the subject item, measured from inside face of wall to inside face of opposite wall.
neutLength (Double)	The length dimension of the subject item, from outside face of exterior wall/side to outside face of opposite exterior wall/side.
neutWidth (Double)	The width dimension of the subject item, from outside face of exterior wall/side to outside face of opposite exterior wall/side.
material (CodePipeMaterial)	The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc.
reactant (String30)	The chemical in the incoming waste stream being neutralized.
neutAgent (String30)	The chemical agent in the pit which chemically neutralizes the in stream reactant.
noPipes (Integer)	The number of the pipes entering and exiting the subject item.
rimElevation (Double)	The elevation of exterior top surface of the subject item's lid, hatch, rim, or roof in feet (English units) or meters (SI units) above some datum.
type (String16)	A field indicating the kind, class, or group of manhole/pit for the subject utility.
description (String255)	A description or other unique information concerning the subject item.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
<u>Ietadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).

verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Wastewater : Oil Water Separator

(Database Feature Class Name = WastewaterOilWaterSeparator)

Geometry Type: Point Accuracy: +/-1Ft. Sensitivity: Secret A device or structure placed in the waste water stream to separate water from oil products. [SDSFIE FGDC Utilities Classification].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
tributaryId (String20)	An operator generated identifier used locally to identify a tributary subsystem of the main utility system.
sepName (String12)	The site specific identification name or number assigned to the subject item.
Attributes:	
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
datePerX (Date)	The date the current permit expires for the subject item. Format for date is YYYYMDD (i.e., September 15, 1994 = 19940915)
oilCapacity (Double)	The retention capacity of the oil-water separator.
disposal (String30)	Brief description of how the waste is disposed.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset. [Adopted from SDSFIE].
grtchbr (<u>CodeBoolean</u>)	An indicator as to whether or not the subject item has a grit chamber. (yes or no)
flowCapacity (Double)	The flow capacity of the subject item.
separatorCode (String2)	The oil-water separator code. Usually defined as OW.
tempOptim (Double)	The optimum operating temperature for the subject item.
sepContnt (String20)	Separator contents
separationProcess (String30)	The specific type of separation process.
sepVolume (Double)	The volume of the oil-water separator.
type (String16)	A field indicating the kind, class, or group of the subject item.
area (Double)	The size of the area, zone, or polygon in square units.
perimeter (Double)	The distance around the boundary of the area, zone, or subject item in linear units.
size (Double)	The manufacturer's designated size, or nominal (i.e., rounded to the nearest unit) diameter for the subject item (e.g., 6 inches).[Cherry Point].
invElv1 (Double)	The elevation of the bottom of pipe (i.e., pipe invert) at node_id_1 in feet (English units)

	or meters (SI units) above some datum.[Derived from SDSFIE].
invElv2 (Double)	The elevation of the bottom of pipe (i.e., pipe invert) at node_id_2 in feet (English units) or meters (SI units) above some datum.[Cherry Point].
description (String255)	A description or other unique information concerning the subject item.
coordX (Double)	The coordinate in the east-west plane, expressed in decimal degrees.
coordY (Double)	The coordinate in the north-south plane, expressed in decimal degrees.
material (String16)	The material of the subject item.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
Metadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (<u>CodeDataSource</u>)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Wastewater : Pump

(Database Feature Class Name = WastewaterPump)Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretA mechanical device for wastewater system that draws material into itself through an entranceport and forces the material out through an exhaust port. [SDSFIE FGDC UtilitiesClassification].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String30)	Any commonly used name for the pump/lift station.[REEGIS].
maaAlias (String60)	An alternative or former name by which the feature is refered.
serialNumber (String15)	The manufacturer's serial, or unique identification number of the subject item.
modelNumber (String12)	The Model, Product, Catalog, or Item Number of subject item.
tributaryId (String20)	An operator generated identifier used locally to identify a tributary subsystem of the main utility system.
Attributes:	
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
outflwAct (Double)	The actual measured pump flow output.
outflwRat (Double)	The manufacturer's pump capacity (e.g., gpm) rating at a specific design total dynamic head (TDH), usually depicted by a pump curve.
coolMethod (CodeEquipmentCooling)	The method by which the pump is cooled.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the

	utility asset.[Adopted from SDSFIE].
primRqd (<u>CodeBoolean</u>)	An indicator as to whether or not the pump has to be primed? (yes or no).
primeMethod (String15)	The method by which the pump is primed.
featureUse (String16)	The particular application, or use the subject item.
type (String16)	A field indicating the kind, class, or group of the subject item.
pumpElevation (Double)	The elevation measured at centerline of the pump, in feet (English units) or meters (SI units) above some datum.
pumpHp (Double)	The power generated by the pump, equal in the U.S. to 746 watts and nearly equivalent to the English gravitational unit of the same name that equals 550 foot-pounds of work per second.
riverMile (Double)	River mile marker.[REEGIS].
noPumps (Integer)	The number of pumps located at the station.[REEGIS].
description (String255)	A description or other unique information concerning the subject item.
material (String16)	The material of the subject item.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
<u>Metadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Wastewater : Pump Ejector Station

(Database Feature Class Name = WastewaterPumpEjectorStation)Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretA building in which one or more pumps operate to pump wastewater flowing at adequatepressure to or from a distribution system. [SDSFIE FGDC Utilities Classification].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
tributaryId (String20)	An operator generated identifier used locally to identify a tributary subsystem of the main utility system.
Attributes:	
alrmlvlelv (Double)	The elevation in the wet well that triggers an alarm indicating no additional storage capacity.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.

condition (CodePoleCondition)	Indicates a state of being, or readiness for use of the subject item (e.g., good, fair, poor), from lists or field inspections.
design (String16)	Discriminator. The design of the pump station.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
hiWaterElevation (Double)	The high water or overflow elevation of the storage tank at the pumping station, in feet (English units) or meters (SI units) above some datum.
nodalElv (Double)	The elevation of subject node, which is used in performing computer analyses of the water distribution system. The node elevation is usually the ground elevation at the subject node, or the elevation of the subject item located at the subject node (e.g.,
invertElv (Double)	The top surface elevation of the subject item's interior floor/bottom in feet (English units) or meters (SI units) above some datum.
wetwlCapacity (Double)	The wet well capacity.
staWidth (Double)	The width dimension of the station, measured from outside face of the exterior wall/side to outside face of the opposite exterior wall/side.
noPumps (Integer)	The total number of pumps located at the subject item.
staLength (Double)	The overall length of the pump station plant area.
pumpElevation (Double)	The elevation measured at centerline of the pump, in feet (English units) or meters (SI units) above some datum.
type (String16)	A field indicating the kind, class, or group of the subject item.
area (Double)	The size of the area, zone, or polygon in square units.
perimeter (Double)	The distance around the boundary of the area, zone, or subject item in linear units.
description (String255)	A description or other unique information concerning the subject item.
material (String16)	The material of the subject item.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
Metadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (CodeStatus)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (<u>CodeDataSource</u>)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Wastewater : Rectifier

(Database Feature Class Name = WastewaterRectifier)

Geometry Type: Point Accuracy: +/-1Ft. Sensitivity: Secret A device that changes alternating current to direct current for an impressed current cathodic protection system on an element of the wastewater distribution system. [SDSFIE FGDC Utilities Classification].

manD (String30) A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value) manAlits (String60) An alternative or former name by which the feature is refered. Attributes: The output DC voltage from the rectifier to the anode system.[FGDC Utilities Classification]. collMethod (CodeEquipmentCodim) The output DC voltage from the rectifier is cooled, typically air or oil.[FGDC Utilities Classification]. owner (String60) Aperson, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFE]. encTrype (CodeElectricMotorEncTrype) The type of enclosure used to protect the rectifier.[FGDC Utilities Classification]. noPhases (Integer) The number of phases to which this device provides reactive power.[FGDC Utilities Classification]. nutl(CodeVoltage) The input AC voltage to the rectifier [FGDC Utilities Classification]. nutle (CodeElectricPhaseType) The input AC voltage to the rectifier [FGDC Utilities Classification]. nutcing16) The mather of phases to which this device provides reactive power.[FGDC Utilities Classification]. nutcing17) Phe input AC voltage to the rectifier [FGDC Utilities Classification]. nutcing16) The input AC voltage to the rectifier [FGDC Utilities Classification]. nutcing16) The input AC voltage to the rectifier [FGDC Utilities Classification].	Names and Identifiers:	
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sourceStatement (String255)A statement providing additional details about the source of the data.editorName (String50)The name of the individual who last edited this data.lastUpdate (Date)The date upon which any data associated with this record was last updated.System Keys:guid (String60)metaId (Integer)A globally unique identifier applied to each feature in the database for reference.An identifier used to refer to a metadata record that provide additional information about	dataSource (CodeDataSource)	The primary source of the data in this record.
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lastUpdate (Date)The date upon which any data associated with this record was last updated.System Keys:guid (String60)A globally unique identifier applied to each feature in the database for reference.metaId (Integer)An identifier used to refer to a metadata record that provide additional information about	sourceStatement (String255)	A statement providing additional details about the source of the data.
System Keys: guid (String60) A globally unique identifier applied to each feature in the database for reference. metaId (Integer) An identifier used to refer to a metadata record that provide additional information about	editorName (String50)	The name of the individual who last edited this data.
guid (String60)A globally unique identifier applied to each feature in the database for reference.metaId (Integer)An identifier used to refer to a metadata record that provide additional information about	lastUpdate (Date)	The date upon which any data associated with this record was last updated.
metaId (Integer) An identifier used to refer to a metadata record that provide additional information about	System Keys:	
metaId (Integer) An identifier used to refer to a metadata record that provide additional information about	guid (String60)	A globally unique identifier applied to each feature in the database for reference.
	metaId (Integer)	

Wastewater : Septic Tank

(Database Feature Class Name = WastewaterSepticTank)Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretTypically, a below grade receptacle or chamber in which solid organic waste is decomposed andpurified by anaerobic bacteria. [SDSFIE FGDC Utilities Classification].

Names and Identifiers:

maaID (String30)

maaAlias (String60) tributaryId (String20)

Attributes:

area (Double) dstbx (CodeBoolean) dstbxIEl (Double) disposition (CodeDispositionObject)

condition (CodePoleCondition)

owner (String60)

drainageTexture (CodeDrainageDensity) drnflSt (CodeStyleDrainField) drainagePattern (CodeDrainagePattern) manhole (CodeBoolean)

laterlSlp (Double) laterlTot (Double) laterlmean (Double) flowRate (Double) invElv1 (Double)

invElv2 (Double)

material (CodePipeMaterial)

noLateral (Integer) trenchWid (Double) tankLength (Double)

tankSt (CodeStyleTank) tankWidth (Double)

featureUse (CodeWastewaterTankType) perimeter (Double) soilPerc (Double) tankCapacity (Double) tankDepth (Double) description (String255) color (CodeColor) lightCode (String1) The light code of the tank. lightingType (CodeLightingConfigurationType) markingFeatureType (CodeMarkingFeatureType) topElevation (Double) verticalStructureMaterial (String16) The vertical structure material. junctionType (CodeJunctionType) An indicator as to whether the feature serves as a source, sink or neither in the network.

Metadata:

collectionProgress (CodeProgress) dateAcquired (Date)

verified (String255) projectType (CodeProjectType) A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value) An alternative or former name by which the feature is refered. An operator generated identifier used locally to identify a tributary subsystem of the main utility system. The size of the area, zone, or polygon in square units. Indicates whether or not a distribution box exists for the subject item. (yes or no) The invert elevation of the inside bottom of the distribution box. The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections. Indicates a state of being, or readiness for use of the subject item (e.g., good, fair, poor), from lists or field inspections. A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE]. The texture of the material surrounding the tank. The style of field drain system indicating the configuration and layout of the drain lines. The drainage pattern of the material surrounding the tank. An indication as to whether or not is part of a manhole or has access via a manhole (ves/no). The average slope of all drainage laterals. The total (sum) length of all drainage laterals. The mean or average length of the drainage laterals. The rate of flow through the device or pipe. The elevation of the bottom of pipe (i.e., pipe invert) at node_id_1 in feet (English units) or meters (SI units) above some datum.[Derived from SDSFIE]. The elevation of the bottom of pipe (i.e., pipe invert) at node_id_2 in feet (English units) or meters (SI units) above some datum. The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc. The total number of laterals. The trench width excavated for the field drains.

The length dimension of the tank, measured from outside face of the exterior wall/side to outside face of the opposite exterior wall/side.

The particular kind, class, or group of tank (e.g., elevated, hydropneumatic, etc.). The exterior width dimension of the tank, measured from outside face of the exterior wall/side to outside face of the opposite exterior wall/side.

This value differentiates similar entities by use or type.

The distance around the boundary of the area, zone, or subject item in linear units.

The percolation rate of the soil in which the drain field lines are placed.

The tank's storage capacity (e.g., gallons, ft3, etc).

The depth below the ground surface or cover measured from the top of the subject item. A description or other unique information concerning the subject item.

The color of the septic tank.

Thetype of lighting configuration.

The type of the marking

The elevation of exterior top surface of the subject item's lid, hatch, rim, or roof in feet (English units) or meters (SI units) above some datum.

The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).

Whether or not the feature has been verified.

The progress of the data collection.

The type of project or work activity that installed or first recorded the location of this feature.

projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Wastewater : Service Area

(Database Feature Class Name = WastewaterServiceArea)

Geometry Type: Polygon Accuracy: +/-1Ft. Sensitivity: Secret A wastewater utility company or organization's certificated area of jurisdiction or responsibility as approved by a federal, state, or local utility regulatory authority. [SDSFIE FGDC Utilities Classification].

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Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
wwutilname (String50)	Name of the wastewater utility or system.[EPA].
Attributes:	
area (Double)	The size of the area, zone, or polygon in square units.
perimeter (Double)	The distance around the boundary of the area, zone, or subject item in linear units.
www.tilmaaID (String30)	Identifier assigned to the water utility by the appropriate federal, state, or local regulatory authority.[EPA].
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
city (String40)	The name of the incorporated municipality (city, township, or other local government, excluding counties) in which the address is physically located.[FGDC Street Address Data Standard].
state (String2)	Name of state where wastewater utility or system provides service.[EPA].
populationServed (Integer)	Population served by wastewater system or utility.[EPA].
wwPlant (Integer)	Total number of wastewater treatment plants serving wastewater utility or system.
dtreatcap (Double)	Total design capacity of wastewater treatment plants serving wastewater utility or system Usually expressed in mgd.
reConnect (Integer)	Total number of residential type service connections.
coConnect (Integer)	Total number of commercial (i.e., businesses, industrial) type service connections.
wwsystem (CodeWastewaterSystemType)	General type or category of a wastewater system or utility.[EPA].
utilown (CodeUtilityOwnershipType)	General category of type of utility owner.
material (String16)	The material of the subject item.
description (String255)	A description or other unique information concerning the subject item.
junctionType (CodeJunctionType)	An indicator as to whether the feature serves as a source, sink or neither in the network.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
<u>letadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date

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	is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (CodeStatus)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (<u>CodeDataSource</u>)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Wastewater : Sludge Bed

(Database Feature Class Name = WastewaterSludgeBed) Geometry Type: Polygon Accuracy: +/-5Ft. Sensitivity: Confidential An area used for spreading and drying waste sludge. [SDSFIE FGDC Utilities Classification]. Names and Identifiers:

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String30)	Any commonly used name for the wastewater sludge bed area.[USGS].
maaAlias (String60)	An alternative or former name by which the feature is refered.
tributaryId (String20)	An operator generated identifier used locally to identify a tributary subsystem of the main utility system.
Attributes:	
bedWidth (Double)	The exterior width dimension of the sludge bed, measured from outside face of the exterior wall/side to outside face of the opposite exterior wall/side.
bedLength (Double)	The length dimension of the sludge bed, measured from outside face of the exterior wall/side to outside face of the opposite exterior wall/side.
bedDia (Double)	The inside diameter of the sludge bed, measured from the interior wall surface to the opposite interior wall surface.
bedDepth (Double)	The depth measured from the top of the subject item.
invertElv (Double)	The elevation measured at bottom of the sludge bed, in feet (English units) or meters (SI units) above some datum. mean sea level.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset. [Adopted from SDSFIE].
bedCapacity (Double)	The sludge bed's storage capacity (e.g., gallons, ft3, etc).
area (Double)	The size of the area, zone, or polygon in square units.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
material (CodePipeMaterial)	The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc.
perimeter (Double)	The distance around the boundary of the area, zone, or subject item in linear units.
description (String255)	A description or other unique information concerning the subject item.
Metadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).

verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Wastewater : Treatment Plant

(Database Feature Class Name = WastewaterTreatmentPlant)

Geometry Type: PolygonAccuracy: +/-1Ft.Sensitivity: SecretA structure containing equipment used to treat and remove unwanted constituents fromwastewater. [SDSFIE FGDC Utilities Classification].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
Attributes:	
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset. [Adopted from SDSFIE].
material (String16)	The material of the subject item.
description (String255)	A description or other unique information concerning the subject item.
size (Integer)	The size of the subject item.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
<u>Metadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (<u>CodeDataSource</u>)	The primary source of the data in this record.

dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
<u>System Keys:</u>	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Wastewater : Treatment Unit

(Database Feature Class Name = WastewaterTreatmentUnit)Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretA waste water treatment plant and all appurtenant equipment, buildings, and facilities relating to
water treatment. [SDSFIE FGDC Utilities Classification].Sensitivity: Secret

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String80)	Indicates the name for the sewage treatment plant.[HSIP].
maaAlias (String60)	An alternative or former name by which the feature is refered.
Attributes:	
area (Double)	The size of the area, zone, or polygon in square units.
bypass (CodeBoolean)	Indicates whether or not the treatment plant has a bypass line? (yes or no).
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
condition (<u>CodePoleCondition</u>)	Indicates a state of being, or readiness for use of the subject item (e.g., good, fair, poor), from lists or field inspections.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
flowRated (Double)	The plant manufacturer's rated treatment plant capacity (e.g., gpm), which signifies the peak constant or daily flow of raw water that the plant can treat and transform to the specified water quality requirements.
flowAct (Double)	The measured peak treatment capacity of the water treatment plant when installation has been completed and it is operating under normal inflow and demand conditions.
noPumps (Integer)	The total number of pumps located at the subject item.
perimeter (Double)	The distance around the boundary of the area, zone, or subject item in linear units.
plantElv (Double)	The finished floor elevation of the treatment plant, in feet (English units) or meters (SI units) above some datum.
plantLength (Double)	The overall length dimension of the treatment plant.
plantwidth (Double)	The overall width dimension of the water treatment plant.
type (String16)	A field indicating the kind, class, or group of the subject item.
remMth (String32)	The method used to remove solids from the wastewater during processing.[HSIP].
trtLev (CodeWaterTreatmentLevel)	The overall level of treatment for the wastewater process.[HSIP].
comAff (String80)	The name of the company that operates the wastewater treatment facility.[HSIP].
chlorint (<u>CodeBoolean</u>)	Chlorination (Y/N)?[HSIP].
maxCapacity (Double)	Capacity rate of the plant.[HSIP].
capacityRate (Double)	Maximum waste water treatment capacity.[HSIP].
description (String255)	A description or other unique information concerning the subject item.
material (String16)	The material of the subject item.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
<u>Metadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMDDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first

	recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Wastewater : Valve

(Database Feature Class Name = WastewaterValve)Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretA fitting or device used for shutting or throttling flow through a wastewater line. [SDSFIEFGDC Utilities Classification].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
tributaryId (String20)	An operator generated identifier used locally to identify a tributary subsystem of the main utility system.
<u>Attributes:</u>	
disposition (<u>CodeDispositionObject</u>)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
valveElv (Double)	The elevation measured at centerline of the valve, in feet (English units) or meters (SI units) above some datum.
featureUse (String16)	The particular application, or use the subject item.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset. [Adopted from SDSFIE].
size (CodePipeDiameter)	The manufacturers designated size, or nominal (i.e., rounded to the nearest unit) diameter for the subject item (e.g., 1in gas hydrant, 2in meter, 6in pipe).
valveSt (CodeStyleValve)	The particular kind, class, or group of valve (e.g., gate, check, etc.).
coverDepth (Double)	The depth of cover. The depth measured from top of ground's surface (or grade) to top of underground wastewater line valve.[Air Force].
description (String255)	A description or other unique information concerning the subject item.
material (String16)	
junctionType (CodeJunctionType)	An indicator as to whether the feature serves as a source, sink or neither in the network.
valveOpen (<u>CodeValveOpen</u>)	The direction a valve must be turned to open
operatingStatus (CodeValveStatus)	The normal operating status of the valve
<u>Metadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.

Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
<u>System Keys:</u>	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Data Set: Water

Water : Anode

(Database Feature Class Name = WaterAnode)Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretA material used for water distribution systems that is electrically connected to a lesselectrolytically active material so that it will oxidize in the place of the less active material.[SDSFIE FGDC Utilities Classification].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
Attributes:	
anodeWeight (Double)	The initial weight of the anode or anode packet.
material (CodeAnodes)	The type of material composition of the anode or anode packet.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
description (String255)	A description or other unique information concerning the subject item.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
junctionType (CodeJunctionType)	An indicator as to whether the feature serves as a source, sink or neither in the network.
<u>Metadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.

editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
<u>System Keys:</u>	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metald (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Water : Anode Test Station

(Database Feature Class Name = WaterAnodeTestStation)Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretA central location where anodes are tested for performance in water systems. [SDSFIE FGDCUtilities Classification].

maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
<u>Attributes:</u>	
installType (CodeSheathInsulateType)	The type of insulation covering the conductor.
noTerm (Integer)	The total number of terminal connections at the test station.
type (String16)	The type of anode test station configuration use.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
wireSize (<u>CodeCableDimension</u>)	The AWG size designation for the wire connecting the anode/anode packet to the anode test station.
wireType (String16)	The conductor configuration, typically solid or stranded.
description (String255)	A description or other unique information concerning the subject item.
material (String16)	The material of the subject item.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
letadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (CodeStatus)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
ystem Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Water : Drinking Water Sample Point

(Database Feature Class Name = WaterDrinkingWaterSamplePoint)Geometry Type: PointAccuracy: +/-1Ft.Sens

Sensitivity: Secret

A point location where one or more water samples are collected from a water utility or system. [SDSFIE].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
dwslocname (String50)	Commonly used name for the location where a drinking water sample was collected.[EPA].
maaAlias (String60)	An alternative or former name by which the feature is refered.
Attributes:	
dwslocty (CodeDrinkingWaterSamLoc)	Code designating the type of location where a drinking water sample was collected.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
material (String16)	The material of the subject item.
description (String255)	A description or other unique information concerning the subject item.
size (Integer)	The size of the subject item.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
<u>Metadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (<u>CodeDataSource</u>)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Water : Fire Connection Point

(Database Feature Class Name = WaterFireConnectionPoint)Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretAn apparatus which dispenses fluids for use in fire management. [SDSFIE FGDC UtilitiesClassification].

Names and Identifiers: maaID (String30)

A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)

maaAlias (String60) modelNumber (String12) roadName (String30)

Attributes:

fireFlow (Double) hydrantType (<u>CodeHydrantType</u>) location (String255) hydclass (<u>CodeHydrantClass</u>)

disposition (CodeDispositionObject)

owner (String60)

inletDiameter (Double) conType (<u>CodeFireConnection</u>) measType (<u>CodeDiameterMeasureType</u>)

outcon1dia (Double)

outcon2dia (Double)

outcon3dia (Double)

flowTest (Integer)

pressMax (Double) groundElevation (Double)

hydrantElvevation (Double)

size (CodePipeDiameter)

pressResd (Double)

pressStat (Double)

valveSt (<u>CodeStyleValve</u>) condition (<u>CodePoleCondition</u>)

verify (CodeBoolean)

description (String255) material (String16) junctionType (<u>CodeJunctionType</u>)

<u>Metadata:</u>

collectionProgress (<u>CodeProgress</u>) dateAcquired (Date)

verified (String255) projectType (<u>CodeProjectType</u>)

projectId (String20)

status (<u>CodeStatus</u>) Alternative (Integer) userFlag (String254) An alternative or former name by which the feature is refered. The Model, Product, Catalog, or Item Number of subject item. A common name or street name used to refer to the stretch of road that the hydrant is facing.[FGDC]. The code or regulation required fire flow rate from a fire hydrant or fire flow connection. The particular kind, class, or group of hydrant. A textual description of the location of this feature. The hydrant classification according to their rated capacity according to the National Fire Protection Association. The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections. A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE]. The diameter of the hydrant inlet connection. Discriminator. This value differentiates fire connections by use or type. This attribute provides information concerning the basis for the subject item's inlet and outlet dimensions (e.g., inside diameter, outside diameter, nominal). The diameter of the hydrant outlet, or for hydrants with more than one outlet, the diameter of one of the hydrant outlets. The diameter of the hydrant outlet, or for hydrants with more than one outlet, the diameter of one of the hydrant outlets. The diameter of the hydrant outlet, or for hydrants with more than one outlet, the diameter of one of the hydrant outlets. The date of the last fire flow test conducted at the subject fire hydrant or fire department connection. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915). The manufacturer's or industry standard's maximum pressure rating of the subject item. The elevation of the ground surface in feet (English units) or meters (SI units) above some datum. The elevation of the hydrant, measured at the hydrant outlet, in feet (English units) or meters (SI units) above some datum. The manufacturers designated size, or nominal (i.e., rounded to the nearest unit) diameter for the subject item (e.g., 1in gas hydrant, 2in meter, 6in pipe). The measured pressure at a hydrant or connection during a flow test conducted at the subject hydrant or connection. The numeric pressure head on the subject item under static (i.e., no flow or demand) conditions in the utility system. The style of the valve. Indicates a state of being, or readiness for use of the subject item (e.g., good, fair, poor), from lists or field inspections.[FGDC]. A boolean indicating whether the blue reflectors was placed correctly in the street (Y = YES and N = NO.[FGDC]. A description or other unique information concerning the subject item. The material of the subject item. An indicator as to whether the feature serves as a source, sink or neither in the network. The progress of the data collection. The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915). Whether or not the feature has been verified. The type of project or work activity that installed or first recorded the location of this feature. A unique identifier associated with the project or work activity that installed or first recorded the location of this feature. A temporal description of the operational status of the feature. Discriminator used to tie features of a plan or proposal together into a version.

An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].

The subsurface utility engineering quality level assigned to utilities features as defined in

qualityLevel (<u>CodeSueQualityLevel</u>)

dataSource (<u>CodeDataSource</u>) dataSource2 (<u>CodeDataSource</u>) sourceStatement (String255) editorName (String50) lastUpdate (Date)

System Keys:

guid (String60) metaId (Integer)

Water : Fitting

CE38-02. e primary source of the dat

The primary source of the data in this record. The secondary source of the data in this record. A statement providing additional details about the source of the data. The name of the individual who last edited this data. The date upon which any data associated with this record was last updated.

A globally unique identifier applied to each feature in the database for reference. An identifier used to refer to a metadata record that provide additional information about the data in this record.

A unique identifier used by people to refer to this feature (note: this is not a system

(Database Feature Class Name = WaterFitting)Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretA fitting is an item used to connect, cap, plug or otherwise alter a pipe carrying water. [SDSFIEFGDC Utilities Classification].

primary or foreign key value)

Names and Identifiers:

maaID (String30)

ASCE38-02.

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maaAlias (String60) An alternative or former name by which the feature is refered. modelNumber (String12) The Model, Product, Catalog, or Item Number of subject item. serialNumber (String15) The manufacturer's serial, or unique identification number of the subject item. Attributes: fitElv (Double) The elevation measured at centerline of the fitting, in feet (English units) or meters (SI units) above some datum. disposition (CodeDispositionObject) The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections. diaIn (Double) The inside, or interior, diameter of the fitting. owner (String60) A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE]. fitLength (Double) The overall length of the fitting. fitWidth (Double) The width dimension of the subject item measured at its' widest point. groundElevation (Double) The elevation of the ground surface in feet (English units) or meters (SI units) above some datum. The manufacturers designated size, or nominal (i.e., rounded to the nearest unit) diameter size (CodePipeDiameter) for the subject item (e.g., 1in gas hydrant, 2in meter, 6in pipe). material (CodePipeMaterial) The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc. type (String16) Discriminator. The kind, class, or group of the subject item. drawingNo (Integer) The drawing number of the Pig Drawing. This is a separate field from media_id. The depth of cover. The depth measured from top of ground's surface (or grade) to top of coverDepth (Double) underground waterline fitting.[Air Force]. description (String255) A description or other unique information concerning the subject item. mapGrid (String5) Number of grid on map on which item is shown on An indicator as to whether the feature serves as a source, sink or neither in the network. junctionType (CodeJunctionType) Metadata: collectionProgress (CodeProgress) The progress of the data collection. The date on which the subject item was originally acquired or purchased. Format for date dateAcquired (Date) is YYYYMMDD (i.e., September 15, 1994 = 19940915). verified (String255) Whether or not the feature has been verified. projectType (CodeProjectType) The type of project or work activity that installed or first recorded the location of this feature. projectId (String20) A unique identifier associated with the project or work activity that installed or first recorded the location of this feature. status (CodeStatus) A temporal description of the operational status of the feature. Alternative (Integer) Discriminator used to tie features of a plan or proposal together into a version. userFlag (String254) An operator defined work area. This attribute can be used by the operator for user defined

	system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
<u>System Keys:</u>	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Water : Hydrant

(Database Feature Class Name = WaterHydrant) Geometry Type: Point Accuracy: +/-1Ft. Sensitivity: Secret An apparatus which dispenses fluids. [SDSFIE IENC]. Names and Identifiers: maaID (String30) A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value) maaAlias (String60) An alternative or former name by which the feature is refered. modelNumber (String12) The Model, Product, Catalog, or Item Number of subject item. Attributes: fireFlow (Double) The code or regulation required fire flow rate from a fire hydrant or fire flow connection. flowStandard (CodeFireFlow) National Fire Protection Association classification for flow rate of a fire hydrant or fire flow connection. disposition (CodeDispositionObject) The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections. measType (CodeDiameterMeasureType) This attribute provides information concerning the basis for the subject item's inlet and outlet dimensions (e.g., inside diameter, outside diameter, nominal). design (String16) Discriminator. The design code for a water hydrant. hydrantType (CodeHydrantType) The particular kind, class, or group of hydrant. owner (CodeHydrantOrg) The agency that owns the hydrant. hydrantElvevation (Double) The elevation of the hydrant, measured at the hydrant outlet, in feet (English units) or meters (SI units) above some datum. sourceDiameter (Double) Diameter of source main in inches. outcon1dia (Double) The diameter of the hydrant outlet, or for hydrants with more than one outlet, the diameter of one of the hydrant outlets. outcon2dia (Double) The diameter of the hydrant outlet, or for hydrants with more than one outlet, the diameter of one of the hydrant outlets. outcon3dia (Double) The diameter of the hydrant outlet, or for hydrants with more than one outlet, the diameter of one of the hydrant outlets. flowTest (Integer) The date of the last fire flow test conducted at the subject fire hydrant or fire department connection. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915). groundElevation (Double) The elevation of the ground surface in feet (English units) or meters (SI units) above some datum. pressMax (Double) The manufacturer's or industry standard's maximum pressure rating of the subject item. size (CodePipeDiameter) The manufacturers designated size, or nominal (i.e., rounded to the nearest unit) diameter for the subject item (e.g., 1in gas hydrant, 2in meter, 6in pipe). connectSize (CodeConnectSize) The size of the hydrant connection pressResd (Double) The residual pressure of the hydrant in psi format. pressStat (Double) The static pressure of the hydrant in psi format. valveSt (CodeStyleValve) The style of the valve. bldgLevel (CodeBldgLevel) Level of the building where the hydrant is located. maintAgency (CodeHydrantOrg) The agency that is responsible for maintenance of the hydrant.

The manufacturer of the hydrant.

Manufacturer (String255)

firePumpArea (CodePumpArea) The fire pump coverage area at BWI. description (String255) A description or other unique information concerning the subject item. coordX (Double) The coordinate in the east-west plane, expressed in decimal degrees. coordY (Double) The coordinate in the north-south plane, expressed in decimal degrees. mapGrid (String5) Number of grid on map on which item is shown on locationDesc (String255) MAA requirement, text description of location of trench material (String16) The material of the subject item. An indicator as to whether the feature serves as a source, sink or neither in the network. junctionType (CodeJunctionType) Metadata: collectionProgress (CodeProgress) The progress of the data collection. The date on which the subject item was originally acquired or purchased. Format for date dateAcquired (Date) is YYYYMMDD (i.e., September 15, 1994 = 19940915). verified (String255) Whether or not the feature has been verified. projectType (CodeProjectType) The type of project or work activity that installed or first recorded the location of this feature. projectId (String20) A unique identifier associated with the project or work activity that installed or first recorded the location of this feature. physicalStatus (CodeStatus) A temporal description of the operational status of the feature. Alternative (Integer) Discriminator used to tie features of a plan or proposal together into a version. userFlag (String254) An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE]. qualityLevel (CodeSueQualityLevel) The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02. dataSource (CodeDataSource) The primary source of the data in this record. dataSource2 (CodeDataSource) The secondary source of the data in this record. sourceStatement (String255) A statement providing additional details about the source of the data. editorName (String50) The name of the individual who last edited this data. lastUpdate (Date) The date upon which any data associated with this record was last updated. System Keys: guid (String60) A globally unique identifier applied to each feature in the database for reference. metaId (Integer) An identifier used to refer to a metadata record that provide additional information about the data in this record.

Water : Intake

(Database Feature Class Name = Wa	aterIntake)	
Geometry Type: Point	Accuracy: +/-1Ft.	Sensitivity: Secret
The location where water is allowed	into the water distribution system.	
Classification].		
Names and Identifiers:		
maaID (String30)	A unique identifier used by people to refer to this primary or foreign key value)	feature (note: this is not a system
maaAlias (String60)	An alternative or former name by which the feature	re is refered.
Attributes:		
owner (String60)	A person, organization, or agency with legal contr utility asset.[Adopted from SDSFIE].	ol or management responsibility of the
material (String16)	The material of the subject item.	
description (String255)	A description or other unique information concern	ing the subject item.
size (Integer)	The size of the subject item.	
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, ter from lists or entered from field inspections.	nporary, proposed, abandoned, etc.),
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a	source, sink or neither in the network.
Metadata:		
collectionProgress (CodeProgress)	The progress of the data collection.	
dateAcquired (Date)	The date on which the subject item was originally is YYYYMMDD (i.e., September 15, 1994 = 199	
verified (String255)	Whether or not the feature has been verified.	

projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (CodeStatus)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metald (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Water : Intake Line

(Database Feature Class Name = WaterIntakeLine)Geometry Type: LineAccuracy: +/-5Ft.Sensitivity: SecretThe location where water is allowed into the water distribution system.[SDSFIE FGDC UtilitiesClassification].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
Attributes:	
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
description (String255)	A description or other unique information concerning the subject item.
directionality (CodeDirectionality)	The directionality of flow with repsect to the line's geometry.
material (String16)	The material of the subject item.
size (<u>CodePipeDiameter</u>)	The manufacturers designated size, or nominal (i.e., rounded to the nearest unit) diameter for the subject item (e.g., 1in gas hydrant, 2in meter, 6in pipe).
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
impedance (Double)	The number representing the total opposition to flow.
<u>Metadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (CodeProjectType)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.

dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Water : Junction

(Database Feature Class Name = WaterJunction)Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretA box or small vault (usually concrete, brick, or cast iron) in water systems located below gradewith above grade access where pipes intersect. The manhole also houses associated fittings,valves, meters, etc. [SDSFIE FGDC Utilities Classification].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
modelNumber (String12)	The Model, Product, Catalog, or Item Number of subject item.
Attributes:	
airrfValve (<u>CodeBoolean</u>)	Indicates whether or not there is an air relief valve installed on subject item? (yes/no)
drainType (<u>CodeDrainType</u>)	The type of subject item drain.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
groundElevation (Double)	The elevation of the ground surface in feet (English units) or meters (SI units) above some datum.
noValves (Integer)	The number of valves inside the subject item.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
mhDia (Double)	The diameter dimension of the subject item, measured from inside face of wall to inside face of opposite wall.
mhLength (Double)	The length dimension of the subject item, from outside face of exterior wall/side to outside face of opposite exterior wall/side.
mhWidth (Double)	The width dimension of the subject item, from outside face of exterior wall/side to outside face of opposite exterior wall/side.
invertElv (Double)	The top surface elevation of the subject item's interior floor/bottom in feet (English units) or meters (SI units) above some datum.
material (CodePipeMaterial)	The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc.
type (String16)	A field indicating the kind, class, or group of manhole for the subject utility.
featureUse (String16)	Discriminator. An attribute that differentiates the use of the subject item.
noPipes (Integer)	The number of the pipes entering and exiting the subject item.
rimElevation (Double)	The elevation of exterior top surface of the subject item's lid, hatch, rim, or roof in feet (English units) or meters (SI units) above some datum.
description (String255)	A description or other unique information concerning the subject item.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
Metadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.

Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Water : Line

(Database Feature Class Name = WaterLine)Geometry Type: LineAccuracy: +/-5Ft.Sensitivity: SecretA pipe used to carry water from location to location (main line, service line, vent line, etc).[SDSFIE FGDC Utilities Classification].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
modelNumber (String12)	The Model, Product, Catalog, or Item Number of subject item.
Attributes:	
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
catProt (CodeBoolean)	Indicates whether or not the pipe has been provided with cathodic protection? (yes or no).
pipeLength (Double)	The length of pipe, measured from node to node along the pipe centerline .
pressMax (Double)	The manufacturer's or industry standard's maximum pressure rating of the subject item.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
groundElevation1 (Double)	The elevation of the ground surface at node_id_1, in feet (English units) or meters (SI units) above some datum.
groundElevation2 (Double)	The elevation of the ground surface at node_id_2, in feet (English units) or meters (SI units) above some datum.
invElv1 (Double)	The elevation of the bottom of pipe (i.e., pipe invert) at node_id_1 in feet (English units) or meters (SI units) above some datum.[Derived from SDSFIE].
invElv2 (Double)	The elevation of the bottom of pipe (i.e., pipe invert) at node_id_2 in feet (English units) or meters (SI units) above some datum.
size (CodePipeDiameter)	The manufacturers designated size, or nominal (i.e., rounded to the nearest unit) diameter for the subject item (e.g., 1in gas hydrant, 2in meter, 6in pipe).
material (CodePipeMaterial)	The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc.
type (String16)	The kind, class, or group of the subject item.
slopeBot (Double)	The slope of the bottom of the subject item expressed as a percentage.
tape (<u>CodeBoolean</u>)	This attribute indicates whether or not location marker tape or wire been installed above the waterline pipe to facilitate it's location with a magnetometer? (yes or no).
featureUse (String16)	Discriminator. The use code for water pipes.
pressNorm (Double)	The normal operating pressure of the water system pipe.
piplty (<u>CodePipelineLocationType</u>)	The location of the pipeline in relevance to the earth's surface.[USGS].
coverDepth (Double)	The depth of cover. The depth measured from top of ground's surface (or grade) to top of underground waterline pipe.[Air Force].
description (String255)	A description or other unique information concerning the subject item.
dateInstalled (Date)	The date on which the feature was originally installed.

lineType (String16)	The type of water line.
directionality (CodeDirectionality)	The directionality of flow with repsect to the line's geometry.
impedance (Double)	The number representing the total opposition to flow.
Metadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.projectType (<u>CodeProjectType</u>) The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
<u>System Keys:</u>	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Water : Marker

(Database Feature Class Name = WaterMarker)

Geometry Type: Point Accuracy: +/-1Ft. Sensitivity: Secret A sign, concrete monument, etc. installed either directly above or immediately adjacent to underground lines, bends, fittings, etc to indicate the presence of water. [SDSFIE FGDC Utilities Classification].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
modelNumber (String12)	The Model, Product, Catalog, or Item Number of subject item.
Attributes:	
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
poleMat (String16)	The material composition of the pole.
poleDepth (Double)	The depth the pole is buried in the foundation (usually the ground surface).
poleHeight (Double)	The distance the pole extends above the foundation (usually the ground surface).
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
signHeight (Double)	The height dimension of the sign.
signMaterial (String16)	The material composition of the sign.
signText (String30)	The text on the sign.
signWidth (Double)	The width dimension of the sign.
soilCnd (CodeSoilConsistency)	The soil condition indicating the soil's strength and integrity.
rockCnd (<u>CodeRockStrength</u>)	The condition of the rock relative to the rocks strength and integrity.
type (String16)	A field indicating the kind, class, or group of the subject item.
description (String255)	A description or other unique information concerning the subject item.
material (String16)	The material of the subject item.

size (Integer)	The size of the subject item.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
Metadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.projectType (<u>CodeProjectType</u>) The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
<u>System Keys:</u>	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Water : Meter

(Database Feature Class Name = WaterMeter)

Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretA device installed in a line for measuring the quantity and or rate of water flowing to a facility orthrough a section of line. [SDSFIE FGDC Utilities Classification].

Names and Identifiers:

maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system
	primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
modelNumber (String12)	The Model, Product, Catalog, or Item Number of subject item.
meterCustomer (String20)	The name of the individual, company, or government agency served by the subject item.
serialNumber (String15)	The manufacturer's serial, or unique identification number of the subject item.
Attributes:	
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
installType (CodePumpSta)	The type installation of the subject item.
meterElv (Double)	The elevation at the centerline of the meter, in feet (English units) or meters (SI units) above some datum.
groundElevation (Double)	The elevation of the ground surface in feet (English units) or meters (SI units) above some datum.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
size (<u>CodePipeDiameter</u>)	The manufacturers designated size, or nominal (i.e., rounded to the nearest unit) diameter for the subject item (e.g., 1 in gas hydrant, 2 in meter, 6 in pipe).
type (String16)	A field indicating the kind, class, or group of the subject item.
srvcMtr (<u>CodeBoolean</u>)	An indicator as to whether or not the meter is installed on a service line? (yes or no)
description (String255)	A description or other unique information concerning the subject item.
material (String16)	The material of the subject item.
junctionType (CodeJunctionType)	An indicator as to whether the feature serves as a source, sink or neither in the network.
Metadata:	

collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.projectType (<u>CodeProjectType</u>) The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Water : Pig Launch Point

(Database Feature Class Name = WaterPigLaunchPoint)Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretFittings where a pigging device is inserted in order to clean or maintain a pipe. [SDSFIE DOT -NPMS].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
<u>Attributes:</u>	
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
material (String16)	The material of the subject item.
description (String255)	A description or other unique information concerning the subject item.
size (Integer)	The size of the subject item.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
<u>Aetadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.

dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (<u>CodeDataSource</u>)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Water : Pressure Reducing Station

(Database Feature Class Name = WaterPressureReducingStation)Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretA station consists of a box/pit containing one or more pressure regulators and appurtenantshutoff valves and fittings. [SDSFIE FGDC Utilities Classification].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
modelNumber (String12)	The Model, Product, Catalog, or Item Number of subject item.
<u>Attributes:</u>	
condition (CodePoleCondition)	Indicates a state of being, or readiness for use of the subject item (e.g., good, fair, poor), from lists or field inspections.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
dateConstructed (Date)	The date on which the subject item construction was complete and user occupancy provided. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915)
groundElevation (Double)	The elevation of the ground surface in feet (English units) or meters (SI units) above some datum.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
staElevation (Double)	The top surface elevation of the subject item's interior floor/bottom in feet (English units) or meters (SI units) above some datum.
pressIn (Double)	The design or maximum water system pressure in the waterline on inlet side of the pressure reducing station.
pressOper (Double)	The normal operating water system pressure in the waterline on inlet side of the pressure reducing station.
source (String16)	The point of origin of a water system's water supply.
pressOut (Double)	The design or maximum water system pressure in the waterline on outlet side of the pressure reducing station.
description (String255)	A description or other unique information concerning the subject item.
material (String16)	The material of the subject item.
size (Integer)	The size of the subject item.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
Metadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.projectType (<u>CodeProjectType</u>) The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in

	ASCE38-02.
dataSource (<u>CodeDataSource</u>)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Water : Pump

(Database Feature Class Name = WaterPump)Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretA mechanical device for water system that draws material into itself through an entrance portand forces the material out through an exhaust port. [SDSFIE FGDC Utilities Classification].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
modelNumber (String12)	The Model, Product, Catalog, or Item Number of subject item.
serialNumber (String15)	The manufacturer's serial, or unique identification number of the subject item.
Attributes:	
coolMethod (CodeEquipmentCooling)	The method by which the pump is cooled.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
capacityAct (Double)	The measured capacity of the pump operating under actual normal head and flow conditions.
capacityRate (Double)	The manufacturer's pump capacity (e.g., gpm) rating at a specific design total dynamic head (TDH), usually depicted by a pump curve.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
groundElevation (Double)	The elevation of the ground surface in feet (English units) or meters (SI units) above some datum.
pwrGen (Double)	The power generated by the pump, equal in the U.S. to 746 watts and nearly equivalent to the English gravitational unit of the same name that equals 550 foot-pounds of work per second.
pwrReq (<u>CodeVoltage</u>)	The voltage of the electrical power required by the subject item.
type (String16)	A field indicating the kind, class, or group of the subject item.
primRqd (<u>CodeBoolean</u>)	An indicator as to whether or not the pump has to be primed? (yes or no).
primeMethod (String15)	The method by which the pump is primed.
tdhRated (Double)	The total dynamic head upon which the capacity_rated is based.
featureUse (String16)	The particular application, or use the subject item.
pumpElevation (Double)	The elevation measured at centerline of the pump, in feet (English units) or meters (SI units) above some datum.
description (String255)	A description or other unique information concerning the subject item.
material (String16)	The material of the subject item.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
Metadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.projectType (<u>CodeProjectType</u>) The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.

Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Water : Pump Station

(Database Feature Class Name = WaterPumpStation)Geometry Type: PolygonAccuracy: +/-1Ft.Sensitivity: SecretA building in which one or more pumps operate to maintain flow at adequate pressure within awater distribution system. [SDSFIE FGDC Utilities Classification].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String80)	The name of the pumping station.[HSIP].
maaAlias (String60)	An alternative or former name by which the feature is refered.
tributaryId (String20)	An operator generated identifier used locally to identify a tributary subsystem of the main utility system.
srcName (String16)	The name of the water source (e.g., Mississippi River, Bayou LaFouche, etc.).
Attributes:	
condition (CodePoleCondition)	Indicates a state of being, or readiness for use of the subject item (e.g., good, fair, poor), from lists or field inspections.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
groundElevation (Double)	The elevation of the ground surface in feet (English units) or meters (SI units) above some datum.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
hiWaterElevation (Double)	The high water or overflow elevation of the elevated water storage tank downstream of the pumping station, in feet (English units) or meters (SI units) above some datum.
nodalElv (Double)	The elevation of subject node, which is used in performing computer analyses of the water distribution system. The node elevation is usually the ground elevation at the subject node, or the elevation of the subject item located at the subject node (e.g.,
wetwlCapacity (Double)	The wet well capacity.
staWidth (Double)	The width dimension of the station, measured from outside face of the exterior wall/side to outside face of the opposite exterior wall/side.
staCapacity (Double)	The pump station's output capacity (e.g., gpm) rating (with all pumps operating) at a specific total dynamic head (TDH), which correlates to normal system pressure head or design pressure head.
staElevation (Double)	The top surface elevation of the subject item's interior floor/bottom in feet (English units) or meters (SI units) above some datum.
staType (<u>CodePumpSta</u>)	Discriminator. The type of station.
noPumps (Integer)	The total number of pumps located at the subject item.
source (String16)	The point of origin of a water system's water supply.
staLength (Double)	The length dimension of the station, measured from outside face of the exterior wall/side to outside face of the opposite exterior wall/side.
pumpElevation (Double)	The elevation measured at centerline of the pump, in feet (English units) or meters (SI units) above some datum.

tnkalrmelv (Double)	Elevation of water in upstream ground water storage tank(s) which represents a low level
	which activates a low water/pressure alarm.
area (Double)	The size of the area, zone, or polygon in square units.
perimeter (Double)	The distance around the boundary of the area, zone, or subject item in linear units.
description (String255)	A description or other unique information concerning the subject item.
mapGrid (String5)	Number of grid on map on which item is shown on
material (String16)	The material of the subject item.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
Metadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.projectType (<u>CodeProjectType</u>) The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Water : Rectifier

(Database Feature Class Name = WaterRectifier)

Geometry Type: Point Accuracy: +/-1Ft. Sensitivity: Secret A device that changes alternating current to direct current for an impressed current cathodic protection system on an element of the water distribution system. [SDSFIE FGDC Utilities Classification].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
Attributes:	
coolMethod (CodeEquipmentCooling)	The method by which the rectifier is cooled, typically air or oil.
enclType (CodeElectricMotorEnclType)	The type of enclosure used to protect the rectifier.
voltOut (<u>CodeVoltage</u>)	The output DC voltage from the rectifier to the anode system.
currntOut (Double)	The output direct current from the rectifier to the anode system.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
internalMeter (CodeBoolean)	An indicator as to whether or not the rectifier has an internal meter, yes/no.
noPhases (Integer)	The number of phases to which this device provides reactive power.
phaseLeter (CodeElectricPhaseType)	The letter(s) of the phase(s) for the subject item.
voltIn (<u>CodeVoltage</u>)	The input AC voltage to the rectifier.
description (String255)	A description or other unique information concerning the subject item.
material (String16)	The material of the subject item.

size (Integer)	The size of the subject item.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
Metadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Water : Regulator Reducer

 (Database Feature Class Name = WaterRegulatorReducer)

 Geometry Type: Point
 Accuracy: +/-1Ft.

 Sensitivity: Secret

 A pressure regulator located in the water line that automatically reduces the pressure on the downstream side of the valve to a preset magnitude. [SDSFIE FGDC Utilities Classification].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
modelNumber (String12)	The Model, Product, Catalog, or Item Number of subject item.
serialNumber (String15)	The manufacturer's serial, or unique identification number of the subject item.
Attributes:	
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
groundElevation (Double)	The elevation of the ground surface in feet (English units) or meters (SI units) above some datum.
size (CodePipeDiameter)	The manufacturers designated size, or nominal (i.e., rounded to the nearest unit) diameter for the subject item (e.g., 1in gas hydrant, 2in meter, 6in pipe).
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
pressIn (Double)	The design water system pressure in the waterline on inlet side of the pressure regulator.
type (String16)	Discriminator. The kind, class, or group of the subject item.
pressOut (Double)	The design water system pressure in the waterline on outlet side of the pressure regulator.
pressReqd (Double)	The required maximum outlet pressure setting for the regulator.
regElevation (Double)	The elevation of the pressure regulator, measured at the regulator centerline.
description (String255)	A description or other unique information concerning the subject item.
material (String16)	The material of the subject item.

junctionType	(CodeJunctionT	ype)
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Metadata:

collectionProgress (<u>CodeProgress</u>) dateAcquired (Date)

verified (String255)

projectId (String20)

status (<u>CodeStatus</u>) Alternative (Integer) userFlag (String254)

qualityLevel (<u>CodeSueQualityLevel</u>)

dataSource (<u>CodeDataSource</u>) dataSource2 (<u>CodeDataSource</u>) sourceStatement (String255) editorName (String50) lastUpdate (Date)

System Keys:

guid (String60) metaId (Integer) An indicator as to whether the feature serves as a source, sink or neither in the network.

The progress of the data collection.
The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
Whether or not the feature has been verified.projectType (<u>CodeProjectType</u>) The type of project or work activity that installed or first recorded the location of this feature. A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
A temporal description of the operational status of the feature.

Discriminator used to tie features of a plan or proposal together into a version. An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].

The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.

The primary source of the data in this record.

The secondary source of the data in this record.

A statement providing additional details about the source of the data.

The name of the individual who last edited this data.

The date upon which any data associated with this record was last updated.

A globally unique identifier applied to each feature in the database for reference. An identifier used to refer to a metadata record that provide additional information about the data in this record.

Water : Reservoir

(Database Feature Class Name = WaterReservoirArea)

Geometry Type: Polygon Accuracy: +/-5Ft. Sensitivity: Confidential A body of water which supplies water to a water distribution system. [SDSFIE FGDC Utilities Classification].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
<u>Attributes:</u>	
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
description (String255)	A description or other unique information concerning the subject item.
size (Integer)	The size of the subject item.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
Metadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.projectType (<u>CodeProjectType</u>) The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.

dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
<u>System Keys:</u>	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Water : Source Site

(Database Feature Class Name = WaterSourceSite)Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretThe point from which water is supplied for processing and distribution. [SDSFIE FGDCUtilities Classification].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String80)	The name of the water intake.[HSIP].
maaAlias (String60)	An alternative or former name by which the feature is refered.
Attributes:	
area (Double)	The size of the area, zone, or polygon in square units.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset. [Adopted from SDSFIE].
perimeter (Double)	The distance around the boundary of the area, zone, or subject item in linear units.
type (String16)	A field indicating the kind, class, or group of the subject item.
sysType (String16)	The type of water system.[USACE OPERATIONS].
catPipe (<u>CodePipeCategory</u>)	Category of pipe[S-57].
length (Double)	The overall length of the feature.[Center].
maxFlow (Double)	The intake capacity of the pipe.[HSIP].
description (String255)	A description or other unique information concerning the subject item.
material (String16)	The material of the subject item.
size (Integer)	The size of the subject item.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
<u>Metadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.projectType (<u>CodeProjectType</u>) The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (<u>CodeDataSource</u>)	The primary source of the data in this record.
dataSource2 (<u>CodeDataSource</u>)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	

guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about
	the data in this record.

Water : Tank

(Database Feature Class Name = WaterTank)Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretAn above or below grade receptacle or chamber used for holding water on a temporary basisprior to transfer or use. [SDSFIE FGDC Utilities Classification].

Names and Identifiers:	,
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String80)	Indicates the name as given for the water system control facility.[HSIP].
maaAlias (String60)	An alternative or former name by which the feature is refered.
modelNumber (String12)	The Model, Product, Catalog, or Item Number of subject item.
serialNumber (String15)	The manufacturer's serial, or unique identification number of the subject item.
Attributes:	
alarmLevel (Double)	The elevation of the preset level in a tank which activates a low water level alarm, in feet (English units) or meters (SI units) above mean sea level. Mean sea level is universally considered as the elevation reference surface although local surveys may
altValve (<u>CodeBoolean</u>)	Indicates whether or not the tank has an altitude valve which controls the flow into the tank? (yes or no).
area (Double)	The size of the area, zone, or polygon in square units.
level1On (Double)	The elevation of the preset level in a tank which activates one pump or one control valve which supplies water to the tank, in feet (English units) or meters (SI units) above some datum.
level2On (Double)	The elevation of the preset level in a tank which activates a second pump, or control valve, which operates in conjunction with the first activated pump, or control valve, to supply water to the tank, in feet or meters above some datum.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
levelOff (Double)	The elevation of the preset level in a tank which turns off the pump(s) or control valve(s) which supply water to the tank, in feet (English units) or meters (SI units) above some datum.
levelShut (Double)	The elevation of the preset level in a tank (ground storage or supply tank) which indicates a dangerously low water level in the tank and turns off all pumps which draw water from the tank, in feet (English units) or meters (SI units) above some datum.
ovrflwElevation (Double)	The elevation measured at the point of overflow, or entrance, into the tank overflow pipe,, in feet (English units) or meters (SI units) above some datum.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
headNorm (Double)	The normal operating head for the subject item.
groundElevation (Double)	The elevation of the ground surface in feet (English units) or meters (SI units) above some datum.
pressAlrm (Double)	The preset pressure setting of a tank which activates a low tank pressure alarm.
pressHigh (Double)	The preset high, or maximum, operating pressure setting of a tank. For a hydropneumatic (i.e., pressure) type tank this is the setting at which all pumps supplying water to the tank, and all air compressors supplying compressed air to the tank, are off.
invertElv (Double)	The elevation measured at bottom of the tank, in feet (English units) or meters (SI units) above some datum. mean sea level.
material (CodePipeMaterial)	The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc.
topElevation (Double)	The elevation of exterior top surface of the subject item's lid, hatch, rim, or roof in feet (English units) or meters (SI units) above some datum.
tankLength (Double)	The length dimension of the tank, measured from outside face of the exterior wall/side to outside face of the opposite exterior wall/side.
tankSt (CodeStyleTank)	The particular kind, class, or group of tank (e.g., elevated, hydropneumatic, etc.).
tankUse (<u>CodeTankUse</u>)	The particular kind or use of the tank (e.g., raw water, potable, etc.).
tankVol (Double)	The tank's storage capacity (e.g., gallons, ft3, etc).

tankWidth (Double)	The exterior width dimension of the tank, measured from outside face of the exterior wall/side to outside face of the opposite exterior wall/side.
pressLow (Double)	The preset low, or minimum, operating pressure setting of a tank. For a hydropneumatic (i.e., pressure) type tank this is the setting which activates the pump(s) supplying water to the tank. For an elevated type tank, this is the setting which activates
perimeter (Double)	The distance around the boundary of the area, zone, or subject item in linear units.
pressNorm (Double)	The manufacturer's (as rated by American Society of Mechanical Engineers (ASME) testing procedures) maximum pressure rating of the water tank.
tankDiameter (Double)	The inside diameter of the tank, measured from the interior wall surface to the opposite interior wall surface.
description (String255)	A description or other unique information concerning the subject item.
color (<u>CodeColor</u>)	The color of the water tank.
lightCode (String1)	The light code of the tank.
lightingType (CodeLightingConfigurationT	ype) Thetype of lighting configuration.
markingFeatureType (<u>CodeMarkingFeature</u>	<u>Type</u>) The type of the marking
verticalStructureMaterial (String16)	The vertical structure material.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
Metadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.projectType (<u>CodeProjectType</u>) The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (<u>CodeDataSource</u>)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Water : Treatment Plant

(Database Feature Class Name = WaterTreatmentPlant)Geometry Type: PolygonAccuracy: +/-5Ft.Sensitivity: ConfidentialA water treatment plant and all appurtenant equipment, buildings, and facilities relating to watertreatment. [SDSFIE FGDC Utilities Classification].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
Attributes:	
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset. [Adopted from SDSFIE].
description (String255)	A description or other unique information concerning the subject item.
size (Integer)	The size of the subject item.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.),

from lists or entered from field inspections.

	from lists or entered from field inspections.
<u>letadata:</u>	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.
source (String255)	The source of the feature.
projectType (<u>CodeProjectType</u>)	The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
stem Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Water : Treatment Unit

(Database Feature Class Name	= WaterTreatmentUnit)	
Geometry Type: Polygon	Accuracy: +/-5Ft.	Sensitivity: Confidential
A water separation pond or oth	er pool designed to allow solid	material decomposition. [SDSFIE
FGDC Utilities Classification]		-
Names and Identifiers:		

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String16)	The site specific identification name or number assigned to the subject item.
maaAlias (String60)	An alternative or former name by which the feature is refered.
Attributes:	
area (Double)	The size of the area, zone, or polygon in square units.
condition (CodePoleCondition)	Indicates a state of being, or readiness for use of the subject item (e.g., good, fair, poor), from lists or field inspections.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
bypass (CodeBoolean)	Indicates whether or not the treatment plant has a bypass line? (yes or no).
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
flowRated (Double)	The plant manufacturer's rated treatment plant capacity (e.g., gpm), which signifies the peak constant or daily flow of raw water that the plant can treat and transform to the specified water quality requirements.
groundElevation (Double)	The elevation of the ground surface in feet (English units) or meters (SI units) above some datum.
flowAct (Double)	The measured peak treatment capacity of the water treatment plant when installation has been completed and it is operating under normal inflow and demand conditions.
noPumps (Integer)	The total number of pumps located at the subject item.
perimeter (Double)	The distance around the boundary of the area, zone, or subject item in linear units.
source (String16)	The point of origin of a water system's water supply.

type (String16)	A field indicating the kind, class, or group of the subject item.
plantElv (Double)	The finished floor elevation of the treatment plant, in feet (English units) or meters (SI units) above some datum.
plantLength (Double)	The overall length dimension of the treatment plant.
plantwidth (Double)	The overall width dimension of the water treatment plant.
numCust (Integer)	The number of customers being served by the treatment facility.[HSIP].
description (String255)	A description or other unique information concerning the subject item.
material (String16)	The material of the subject item.
Metadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.projectType (<u>CodeProjectType</u>) The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (<u>CodeSueQualityLevel</u>)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Water : Valve

(Database Feature Class Name = WaterValve)Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretA fitting or device used for shutting or throttling flow through a water line. [SDSFIE FGDCUtilities Classification].

Names and Identifiers:	
maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
name (String20)	Descriptive identifying text
maaAlias (String60)	An alternative or former name by which the feature is refered.
Attributes:	
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
branchSys (String12)	An operator generated identifier that is a unique site specific name or number designation of a branch or isolated area of a water distribution system.
groundElevation (Double)	The elevation of the ground surface in feet (English units) or meters (SI units) above some datum.
owner (String60)	A person, organization, or agency with legal control or management responsibility of the utility asset.[Adopted from SDSFIE].
valveElv (Double)	The elevation measured at centerline of the valve, in feet (English units) or meters (SI units) above some datum.
featureUse (String16)	Discriminator. The site specific use of the valve.
valveSize (CodePipeDiameter)	A code indicating the manufacturer's nominal size designation.
valveSt (<u>CodeStyleValve</u>)	The particular kind, class, or group of valve (e.g., gate, check, etc.).

coverDepth (Double)	The depth of cover. The depth measured from top of ground's surface (or grade) to top of underground waterline valve.[Air Force].
description (String255)	A description or other unique information concerning the subject item.
coordX (Double)	The coordinate in the east-west plane, expressed in decimal degrees.
coordY (Double)	The coordinate in the north-south plane, expressed in decimal degrees.
MAA requirementmapGrid (String5)	Number of grid on map on which item is shown on
locationNotes (String255)	Notes on the location of the feature.
valveDesc (<u>CodeValveType</u>)	The valve type.
valveUse (String25)	A description of the valve's use.
material (String16)	The material of the subject item.
junctionType (<u>CodeJunctionType</u>)	An indicator as to whether the feature serves as a source, sink or neither in the network.
valveOpen (CodeValveOpen)	The direction a valve must be turned to open.
operatingStatus (CodeValveStatus)	The normal operating status of the valve.
Metadata:	
collectionProgress (CodeProgress)	The progress of the data collection.
dateAcquired (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
verified (String255)	Whether or not the feature has been verified.projectType (<u>CodeProjectType</u>) The type of project or work activity that installed or first recorded the location of this feature.
projectId (String20)	A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.
status (<u>CodeStatus</u>)	A temporal description of the operational status of the feature.
Alternative (Integer)	Discriminator used to tie features of a plan or proposal together into a version.
userFlag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].
qualityLevel (CodeSueQualityLevel)	The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.
dataSource (CodeDataSource)	The primary source of the data in this record.
dataSource2 (CodeDataSource)	The secondary source of the data in this record.
sourceStatement (String255)	A statement providing additional details about the source of the data.
editorName (String50)	The name of the individual who last edited this data.
lastUpdate (Date)	The date upon which any data associated with this record was last updated.
System Keys:	
guid (String60)	A globally unique identifier applied to each feature in the database for reference.
metaId (Integer)	An identifier used to refer to a metadata record that provide additional information about the data in this record.

Water : Vent

(Database Feature Class Name = WaterVent)

Geometry Type: PointAccuracy: +/-1Ft.Sensitivity: SecretA valve installed in a line to either release air trapped in the line, and/or allow air into a line torelieve a vacuum condition. [FGDC Utilities Classification].

maaID (String30)	A unique identifier used by people to refer to this feature (note: this is not a system primary or foreign key value)
maaAlias (String60)	An alternative or former name by which the feature is refered.
Attributes:	
owner (String60)	A person, organization, or agency with legal control or management responsibility of t utility asset. [Adopted from SDSFIE].
description (String255)	Any brief description of the feature.
material (String16)	The material of the subject item.
size (Integer)	The size of the subject item.
disposition (CodeDispositionObject)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.) from lists or entered from field inspections.
junctionType (CodeJunctionType)	An indicator as to whether the feature serves as a source, sink or neither in the network

collectionProgress (<u>CodeProgress</u>) dateAcquired (Date)

verified (String255)
projectType (CodeProjectType)

projectId (String20)

status (<u>CodeStatus</u>) Alternative (Integer) userFlag (String254)

qualityLevel (<u>CodeSueQualityLevel</u>)

dataSource (<u>CodeDataSource</u>) dataSource2 (<u>CodeDataSource</u>) sourceStatement (String255) editorName (String50) lastUpdate (Date)

System Keys:

guid (String60) metaId (Integer) The progress of the data collection.

The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).

Whether or not the feature has been verified.source (String255)

The type of project or work activity that installed or first recorded the location of this feature.

A unique identifier associated with the project or work activity that installed or first recorded the location of this feature.

A temporal description of the operational status of the feature.

Discriminator used to tie features of a plan or proposal together into a version.

An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject items data integrity and should not be used to store the subject items data.[SDSFIE].

The subsurface utility engineering quality level assigned to utilities features as defined in ASCE38-02.

The primary source of the data in this record.

The secondary source of the data in this record.

A statement providing additional details about the source of the data.

The name of the individual who last edited this data.

The date upon which any data associated with this record was last updated.

A globally unique identifier applied to each feature in the database for reference. An identifier used to refer to a metadata record that provide additional information about the data in this record.

Domain Values

This section lists the acceptable domain values for each of the attributes bound by list domains. Each list of acceptable values is an enumeration, which means that one of the values must be selected in order to be compliant with the standard. For each value there is a definition, notes, and a source. Notes are captured in parentheses and the source is provided in brackets.

CodeAirPressureDeviceType

Used by Attributes: <u>Air Pressure Device - Airp Type</u>

Value	Definition (Notes) [Source]
А	Transducer [SDSFIE V2 Austin and Pitts]
AIRFLOW_B	Meter Panel Component [SDSFIE V2 Austin and Pitts]
ALARM_PIPE	Meter Panel Component [SDSFIE V2 Austin and Pitts]
AV	Automatic Shut-Off Valve [SDSFIE V2 Austin and Pitts]
В	By-Pass [SDSFIE V2 Austin and Pitts]
BV	By-Pass Valve [SDSFIE V2 Austin and Pitts]
С	Pressure Contactor [SDSFIE V2 Austin and Pitts]
CA_3131	Gas Feeder Pipe [SDSFIE V2 Austin and Pitts]
CD	Compressed Dry Air Source [SDSFIE V2 Austin and Pitts]
СО	Central Office [SDSFIE V2 Austin and Pitts]
CT	Pressure Contactor Terminal [SDSFIE V2 Austin and Pitts]
DBV	Dual (Shutoff) Valve. [SDSFIE V2.5 AIR FORCE]
E	Pressure Contactor [SDSFIE V2 Austin and Pitts]
GT	Gas-Tight Cable Terminal [SDSFIE V2 Austin and Pitts]
GT_500CFD	Air Dryer (greater than 500 Cfd) [SDSFIE V2 Austin and Pitts]
LT_500CFD	Air Dryer (less than 500 Cfd) [SDSFIE V2 Austin and Pitts]
М	Flow Meter [SDSFIE V2 Austin and Pitts]
M_262	Manifold [SDSFIE V2 Austin and Pitts]
MF	Pipe Manifold [SDSFIE V2 Austin and Pitts]
MODEL_3000	Compressor Dehydrator [SDSFIE V2 Austin and Pitts]
MP	Meter Panel [SDSFIE V2 Austin and Pitts]
Р	Pressure Plug [SDSFIE V2 Austin and Pitts]
PRESS_C	Transducer [SDSFIE V2 Austin and Pitts]
R	Pressure Regulator [SDSFIE V2 Austin and Pitts]
RV	Excessive Pressure Relief Valve [SDSFIE V2 Austin and Pitts]
Т	Gas-Tight Cable Terminal [SDSFIE V2 Austin and Pitts]
TD	Pressure Transducer [SDSFIE V2 Austin and Pitts]
V	Pressure Testing Valve [SDSFIE V2 Austin and Pitts]
VALVE_750	Transducer [SDSFIE V2 Austin and Pitts]
VALVE_BLK	Pressure [SDSFIE V2 Austin and Pitts]
VALVE_C	Pressure [SDSFIE V2 Austin and Pitts]
VT	Cable Vent [SDSFIE V2 Austin and Pitts]

CodeAmplifierType

Used by Attributes: <u>Amplifier - Amp Type; Attenuator - Attn Type; Impedance Matching Point - Imp Type</u>

Value	Definition (Notes) [Source]
CATV	Cable Television Amplifier [SDSFIE V2 Tinker Air Force Base]
OTHER	Other [SDSFIE V2]
PHONE_LINE_AMP	Telephone Line Amplifier [SDSFIE V2 Tinker Air Force Base]
RADIO	Radio [SDSFIE V2 Tinker Air Force Base]
TBD	To Be Determined [SDSFIE V2 Tinker Air Force Base]
UNKNOWN	Unknown [SDSFIE V2]
VIDEO	Video Amplifier [SDSFIE V2 Tinker Air Force Base]

CodeAnodes

Used by Attributes: <u>Anode - Material; Anode - Material</u>

Value	Definition (Notes) [Source]
AL	aluminum [SDSFIE V1.4]
CI	cast iron [SDSFIE V1.4]
GR	graphite [SDSFIE V1.4]
MG	magnesium [SDSFIE V1.4]
OTHER	other [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]
ZN	zinc [SDSFIE V1.4]

CodeAntennaPolarization

Used by Attributes: Antenna Site - Polr Type

Value	Definition (Notes) [Source]
CLOCKWISE	Installed with the plane of polarization rotating right-hand circular. [SDSFIE V2.5 Air Force]
COUNT_CLOCKWISE	Installed with the plane of polarization rotating left-hand circular. [SDSFIE V2.5 Air Force]
HORIZONTAL	Installed with the plane of polarization parallel to earth's surface. [SDSFIE V2.5 Air Force]
OTHER	Other
TBD	To be Determined
UNKNOWN	Unknown
VERTICAL	Installed with the plane of polarization perpendicular to the earth's surface. [SDSFIE V2.5 Air
	Force]

CodeAntRadPattern

Used by Attributes: Access Point - Radiation Pattern; Antenna Site - Radiation Pattern

Value	Definition (Notes) [Source]
DIRECTIONAL	Directional Antenna. [SDSFIE V2.5 AIR FORCE]
LOS	Line of Sight. [SDSFIE V2.5 AIR FORCE]
OMNI	Omnidirectional Antenna. [SDSFIE V2.5 AIR FORCE]
OTHER	Other. [SDSFIE V2.5 AIR FORCE]
TBD	To Be Determined. [SDSFIE V2.5 AIR FORCE]
UNKNOWN	Unknown. [SDSFIE V2.5 AIR FORCE]

CodeBankArmorLining

Used by Attributes: Open Drainage Line - Bank Arm

Value	Definition (Notes) [Source]
ASPHALT	asphalt [SDSFIE V1.4]
CEMENTD_STONE	cemented stones [SDSFIE V1.4]
CONCRETE_LINED	concrete lined [SDSFIE V1.4]
DUMP_BRICK_CONC	dumped brick and concrete [SDSFIE V1.4]
DUMPED_ROCK	dumped rocks [SDSFIE V1.4]
FORMEDLINING	formed channel lining [SDSFIE V1.4]
GABIONS	gabions [SDSFIE V1.4]
OTHER	other [SDSFIE V1.4]
PILEDIKE	pile dike [SDSFIE V1.4]
PLACED_STONE	placed stone [SDSFIE V1.4]
SAND_CEMNBGRR	sand cement/bag riprap [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]
WILLOW_MAT	willow mat [SDSFIE V1.4]

CodeBankSide

Used by Attributes: <u>Pump - Bank</u>

Value

Definition (Notes) [Source]

L_DESCENDING LEFT NON_RIVERINE R_DESCENDING RIGHT Left descending bank [SDSFIE V1.8 REEGIS] left [SDSFIE V1.8 REEGIS] non riverine [SDSFIE V2.6 LEVEE DATABASE] Right descending bank [SDSFIE V1.8 REEGIS] right [SDSFIE V1.8 REEGIS]

CodeBedMaterial

Used by Attributes: Open Drainage Line - Bed Material

Value AQUATCWEED CEMENTED_STONE CLAY CONCRETE_LINED CRSAND GRAVEL EXPOSED ROCK FINE_SAND GRASSED GRAVEL_STONE ORGANIC_MUD OTHER PLACED_STONE SAND SILT_SAND TBD UNDERBRUSH UNKNOWN

Definition (Notes) [Source]

aquatic weed [SDSFIE V1.4] cemented stones [SDSFIE V1.4] clay [SDSFIE V1.4] concrete lined [SDSFIE V1.4] coarse sand and gravel [SDSFIE V1.4] exposed rock [SDSFIE V1.4] fine sand [SDSFIE V1.4] grassed [SDSFIE V1.4] gravel to larger stone [SDSFIE V1.4] organic mud [SDSFIE V1.4] other [SDSFIE V1.4] placed stone [SDSFIE V1.4] Sand. [SDSFIE V2.5 USACE] Silty sand. [SDSFIE V2.5 USACE] to be determined [SDSFIE V1.4] underbrush [SDSFIE V1.4] unknown [SDSFIE V1.4]

CodeBilKv

Used by Attributes: <u>Bus Line - Bil Rat</u>

Value
15KV
25KV
5KV
OTHER
TBD

Definition (Notes) [Source]

15kv basic insulation level [SDSFIE V1.4] 25kv basic insulation level [SDSFIE V1.4] 5kv basic insulation level [SDSFIE V1.4] other [SDSFIE V1.4] to be determined [SDSFIE V1.4]

CodeBldgLevel

Used by Attributes: <u>Hydrant – Building Level</u>

Value	Definition (Notes) [Source]
LOWER_LEVEL_TERMINAL	Lower level BWI terminal
UPPER_LEVEL_TERMINAL	Upper level BWI terminal

CodeBoolean

Used by Attributes: Lagoon - Aerator;Lagoon - Aerator;Storage Area - Aerator;Vault - Air Release Present;Junction - Airr Relief Valve Code;Oil Water Separator Diversion Vault - airReleasePresent;Junction - Airrf Valve;Junction - Airrf Valve;Junction - Airrf Valve;Vault - airrfValve;Disposal Tank - Alt Valve;Tank - Alt Valve;Tank - Alt Valve;Tank - Alt Valve;Tank - Altitude Valve;Tank - Altitude Valve;Access Point - Antenna Location;Generator - Automatic Transfer Switch Code;Pedestal Site - Bonded;Treatment Plant - Bypass;Treatment Unit - Bypass;Treatment Unit - Bypass;Utility Pole Tower Site - Capped;Line - Cat Prot;Line - Cat Prot;Line - Cat Prot;Line - Cathodic Protection;Treatment Unit - Chlorint;Ductbank - Conc Enc;Culvert Center Line - Critical;Equipment - Crypto;Video Site - Crypto;Relay Station - Deployab;Grease Trap - Dist Box Id;Valve - Diversion Vault Valve;Septic Tank - Dstbx;Riser - Duct;Discharge Point - Enabled;Drainage Divide Line -Enabled;Fitting - Enabled;Junction - Enabled;Line - Enabled;Oil Water Separator - Enabled;Oil Water Separator

Diversion Vault - enabled; Open Drainage Line - Enabled; Pump - Enabled; Storm Ceptor - enabled; Storm Filter - enabled; Storm Trench Drain Line - enabled: Vault - Enabled: Vertical Site - Endguard: Line - Exp Loop: Inlet - Garage Inlet: Vertical Site -Grdrails; Vertical Site - Grndbar; Utility Pole Tower Site - Grounded; Oil Water Separator - Grtchbr; Oil Water Separator -Grtchbr;Oil Water Separator - Grtchbr;Oil Water Separator - Grtchbr;Storm Ceptor - grtchbr;Storm Filter - grtchbr;Junction -High Level Alarm Flag; Access Point - Ids; Junction - Illict; Equipment - Int Vid; Rect Point - Internal Meter; Rectifier - Internal Meter; Rectifier - Internal Meter; Rectifier - Internal Meter; Rectifier - Internal Meter; Transmission Pipeline - Interstate;Culvert Center Line - Lined;Line - Lined;Line - Lined;Line - Lined;Line - Lined;Storm Trench Drain Line lined;Tank - Lng Fac;Cable - Loosbuf;Grease Trap - Manhole;Septic Tank - Manhole;Speaker - Multp 2 5;Speaker - Multp 7 0;Relay Station - Narrowbn;Equipment - Ncc;Grit Chamber - O W Sep;Grit Chamber - O W Sep;Marker - Passve;Transformr Bank - Pcb;Lagoon - Pip Outl;Lagoon - Pip Outl;Storage Area - Pip Outl;Pump - Prim Required;Pump - Prim Rqd;Pump - Priming Required;Vault - Pump Out Present; Oil Water Separator Diversion Vault - pumpOutPresent; Relay Station - Rf Lmrwd; Radio Receiver - Rf P 2 5C; Radio Transmitter - Rf P 2 5C; Radio Receiver - Rf P 2 5T; Radio Transmitter - Rf P 2 5T; Tank - Secondary Containment; Light -Sensor;Meter - Service Meter;Meter - Service Meter;Meter - Service Meter;Meter - Service Meter;Generator - Sound;Farm Site -Strategic Petroleum Reserve Code; Tank - Strategic Petroleum Reserve Code; Capacitor - Switch; Line - Tape; Line - Tape; Pedestal Site - Terminal;Relay Station - Trnk P 2 5;Relay Station - Tx Analg;Relay Station - Tx Digl;Lagoon - User Ind;Lagoon - User Ind;Storage Area - User Ind;Lagoon - User San;Lagoon - User San;Storage Area - User San;Tank - ustSensor;Culvert Center Line - Verified; Fire Connection Point - Verify; Speaker - Weather; Lagoon - Wer Outl; Lagoon - Wer Outl; Storage Area - Wer Outl;Lagoon - X Dikes;Lagoon - X Dikes;Reservoir - X Dikes;Reservoir - X Dikes;Stilling Basin - X Dikes

Value	Definition (Notes) [Source]
Ν	No
Y	Yes

CodeCableConnectorType

Used by Attributes: Antenna Site - Conn Type; Terminator - Connt; Media Converter - Connt 1; Media Converter - Connt 2

Value	Definition (Notes) [Source]
1 0 2 3 F	1.0/2.3, Female. [SDSFIE V2.5 AIR FORCE]
1_0_2_3_M	1.0/2.3, Male. [SDSFIE V2.5 AIR FORCE]
1_6_5_6_F	1.6/5.6, Female. [SDSFIE V2.5 AIR FORCE]
1_6_5_6_M	1.6/5.6, Male. [SDSFIE V2.5 AIR FORCE]
7_16_DIN_F	7-16 Deutsh Industries Norm (DIN), Female. [SDSFIE V2.5 AIR FORCE]
7_16_DIN_M	7-16 Deutsh Industries Norm (DIN), Male. [SDSFIE V2.5 AIR FORCE]
AMC F	Amphenol Micro Coaxial (AMC), Male. [SDSFIE V2.5 AIR FORCE]
AMC_M	Amphenol Micro Coaxial (AMC), Female. [SDSFIE V2.5 AIR FORCE]
BI_F	Bionic, Female. [SDSFIE V2.5 AIR FORCE]
BI_M	Bionic, Male. [SDSFIE V2.5 AIR FORCE]
BNC_F	Bayonet Neill Concelman (BMC), Female. [SDSFIE V2.5 AIR FORCE]
BNC_M	Bayonet Neill Concelman (BMC), Male. [SDSFIE V2.5 AIR FORCE]
C_F	C Connector, Female. [SDSFIE V2.5 AIR FORCE]
C_M	C Connector, Male. [SDSFIE V2.5 AIR FORCE]
D4_F	D4, Female. [SDSFIE V2.5 AIR FORCE]
D4_M	D4, Male. [SDSFIE V2.5 AIR FORCE]
DB_25_F	25-pin D-type connector, Female. [SDSFIE V2.5 AIR FORCE]
DB_25_M	25-pin D-type connector, Male. [SDSFIE V2.5 AIR FORCE]
DB_9_F	9-pin D-type connector, Female. [SDSFIE V2.5 AIR FORCE]
DB_9_M	9-pin D-type connector, Male. [SDSFIE V2.5 AIR FORCE]
DE_9_F	9-pin D-type connector, Female AKA DB-10. [SDSFIE V2.5 AIR FORCE]
DE_9_M	9-pin D-type connector, Male AKA DB-10. [SDSFIE V2.5 AIR FORCE]
F_TYPE_F	F TYPE, Female. [SDSFIE V2.5 AIR FORCE]
F_TYPE_M	F-M - F TYPE, Male. [SDSFIE V2.5 AIR FORCE]
FC_F	MIL-C-39012 category D type, FO connector, Female. [SDSFIE V2.5 AIR FORCE]
FC_M	MIL-C-39012 category D type, FO connector, Male. [SDSFIE V2.5 AIR FORCE]
FDDI_F	Fiber Distributed Data Interface, FO connector, Female. [SDSFIE V2.5 AIR FORCE]
FDDI_M	Fiber Distributed Data Interface, FO connector, Male. [SDSFIE V2.5 AIR FORCE]
FIREWIRE_4F	IEEE 1394 Fire wire connector, 4-pin, Female. [SDSFIE V2.5 AIR FORCE]
FIREWIRE_4M	IEEE 1394 Fire wire connector, 4-pin, Male. [SDSFIE V2.5 AIR FORCE]
FIREWIRE_6F	IEEE 1394 Fire wire connector, 6-pin, Female. [SDSFIE V2.5 AIR FORCE]
FIREWIRE_6M	IEEE 1394 Fire wire connector, 6-pin, Male. [SDSFIE V2.5 AIR FORCE]
FME_F	FME, Female. [SDSFIE V2.5 AIR FORCE]
FME_M	FME, Male. [SDSFIE V2.5 AIR FORCE]
G_TYPE_F	G-F - Type G, Female. [SDSFIE V2.5 AIR FORCE]
G_TYPE_M	G-M - Type G, Male. [SDSFIE V2.5 AIR FORCE]

HM_F	HN, weatherproof, RF connector, Female. [SDSFIE V2.5 AIR FORCE]
HN_M	HN, weatherproof, RF connector, Male. [SDSFIE V2.5 AIR FORCE]
LC_F	Limited Co-ordination Specification (LC Spec.), Female. [SDSFIE V2.5 AIR FORCE]
LC_M	Limited Co-ordination Specification (LC Spec.), Male. [SDSFIE V2.5 AIR FORCE]
MINI_UHF_F	MINI UHF, Female. [SDSFIE V2.5 AIR FORCE]
MINI_UHF_M	MINI UHF, Male. [SDSFIE V2.5 AIR FORCE]
MT_RJ_F	MT-RJ, FO, RJ45 footprint connector, Female. [SDSFIE V2.5 AIR FORCE]
MT_RJ_M	MT-RJ, FO, RJ45 footprint connector, Male. [SDSFIE V2.5 AIR FORCE]
N_TYPE_F	N TYPE, Female. [SDSFIE V2.5 AIR FORCE]
N_TYPE_M	N TYPE, Male. [SDSFIE V2.5 AIR FORCE]
OTHER	Other. [SDSFIE V2.5 AIR FORCE]
RJ21_F	RJ21, RJ21 AKA Telco 50-pin connector, Female. [SDSFIE V2.5 AIR FORCE]
RJ21_M	RJ21 AKA Telco 50-pin connector, Male. [SDSFIE V2.5 AIR FORCE]
RJ45_F	RJ45, Female. [SDSFIE V2.5 AIR FORCE]
RJ45_M	RJ45, Male. [SDSFIE V2.5 AIR FORCE]
SC_F	Plug and socket, push-pull latch, FO connector, Female. [SDSFIE V2.5 AIR FORCE]
SC_M	Plug and socket, push-pull latch, FO connector, Male. [SDSFIE V2.5 AIR FORCE]
SMA_F	SubMiniature Version A, Female. [SDSFIE V2.5 AIR FORCE]
SMA_M	Subminiature Version A, Male. [SDSFIE V2.5 AIR FORCE]
SMC_F	Subminiature Version C, Female. [SDSFIE V2.5 AIR FORCE]
SMC_M	Subminiature Version C, Male. [SDSFIE V2.5 AIR FORCE]
ST_F	ST, Female. [SDSFIE V2.5 AIR FORCE]
ST_M	ST, Male. [SDSFIE V2.5 AIR FORCE]
TBD	To Be Determined. [SDSFIE V2.5 AIR FORCE]
TNC_F	TNC Female. [SDSFIE V2.5 AIR FORCE]
TNC_M	TNC Male. [SDSFIE V2.5 AIR FORCE]
UHF_F	UHF, Female. [SDSFIE V2.5 AIR FORCE]
UHF_M	UHF, Male. [SDSFIE V2.5 AIR FORCE]
UNKNOWN	Unknown. [SDSFIE V2.5 AIR FORCE]
USB_F	Universal Serial Bus, Female. [SDSFIE V2.5 AIR FORCE]
USB_M	Universal Serial Bus, Male. [SDSFIE V2.5 AIR FORCE]

CodeCableDimension

Used by Attributes: <u>Cable - Cbl Dim;Twisted Pair Line - Cbl Size;Cable - Cond Size;Cable - Neut Size;Antenna Line - Size;Segmented Cable - Size;Bus Line - Size Neut;Anode Test Station - Wire Size;Anode Test Station - Wire Size;</u>

Value	Definition (Notes) [Source]
#1/0	#1/0 [SDSFIE V2.1 FGDC Utilities Classification]
#10	#10 [SDSFIE V2.1 FGDC Utilities Classification]
#14	#14 [SDSFIE V2.1 FGDC Utilities Classification]
#16	#16 [SDSFIE V2.1 FGDC Utilities Classification]
#18	#18 [SDSFIE V2.1 FGDC Utilities Classification]
#19	#19 [SDSFIE V2.1 FGDC Utilities Classification]
#2/0	#2/0 [SDSFIE V2.1 FGDC Utilities Classification]
#20	#20 [SDSFIE V2.1 FGDC Utilities Classification]
#22	#22 [SDSFIE V2.1 FGDC Utilities Classification]
#24	#24 [SDSFIE V2.1 FGDC Utilities Classification]
#26	#26 [SDSFIE V2.1 FGDC Utilities Classification]
#28	#28 [SDSFIE V2.1 FGDC Utilities Classification]
#3/0	#3/0 [SDSFIE V2.1 FGDC Utilities Classification]
#30	#30 [SDSFIE V2.1 FGDC Utilities Classification]
#32	#32 [SDSFIE V2.1 FGDC Utilities Classification]
#34	#34 [SDSFIE V2.1 FGDC Utilities Classification]
#36	#36 [SDSFIE V2.1 FGDC Utilities Classification]
#4/0	#4/0 [SDSFIE V2.1 FGDC Utilities Classification]
0.375	3/8 inch [SDSFIE V2.1 FGDC Utilities Classification]
0.5	0.5 inch [SDSFIE V2.1 FGDC Utilities Classification]
0.75	0.75 inch [SDSFIE V2.1 FGDC Utilities Classification]
0_375	3/8 inch [SDSFIE V2.1 FGDC Utilities Classification]
0_5	0.5 inch [SDSFIE V2.1 FGDC Utilities Classification]
0_75	0.75 inch [SDSFIE V2.1 FGDC Utilities Classification]
1	1 inch [SDSFIE V2.1 FGDC Utilities Classification]
1.25	1.25 inches [SDSFIE V2.1 FGDC Utilities Classification]
1.5	1.5 inches [SDSFIE V2.1 FGDC Utilities Classification]
1_25	1.25 inches [SDSFIE V2.1 FGDC Utilities Classification]
1_5	1.5 inches [SDSFIE V2.1 FGDC Utilities Classification]

1000_MCM	1000 K circular mils [SDSFIE V2.1 FGDC Utilities Classification]
1033.5_MCM	1033.5 K circular mils, ACSR [SDSFIE V2.1 FGDC Utilities Classification]
1113_MCM	1113 K circular mils, ACSR [SDSFIE V2.1 FGDC Utilities Classification]
12	12 inches [SDSFIE V2.1 FGDC Utilities Classification]
1272_MCM	1272 K circular mils, ACSR [SDSFIE V2.1 FGDC Utilities Classification]
1431_MCM	1431 K circular mils, ACSR [SDSFIE V2.1 FGDC Utilities Classification]
1590_MCM	1590 K circular mils, ACSR [SDSFIE V2.1 FGDC Utilities Classification]
2	2 inches [SDSFIE V2.1 FGDC Utilities Classification]
2.5	2.5 inches [SDSFIE V2.1 FGDC Utilities Classification]
2_5 2156 MCM	2.5 inches [SDSFIE V2.1 FGDC Utilities Classification] 2156 K circular mils, ACSR [SDSFIE V2.1 FGDC Utilities Classification]
2156_MCM 250_MCM	250 K circular mils, ACSK [SDSFIE V2.1 FODC Officies Classification]
266.8 MCM	266.8 K circular mils, ACSR [SDSFIE V2.1 FGDC Utilities Classification]
3	3 inches [SDSFIE V2.1 FGDC Utilities Classification]
3.5	3.5 inches [SDSFIE V2.1 FGDC Utilities Classification]
3_5	3.5 inches [SDSFIE V2.1 FGDC Utilities Classification]
300_MCM	300 K circular mils [SDSFIE V2.1 FGDC Utilities Classification]
336.4_MCM	336.4 K circular mils, ACSR [SDSFIE V2.1 FGDC Utilities Classification]
336_MCM	336 K circular mils [SDSFIE V2.1 FGDC Utilities Classification]
350_MCM	350 K circular mils [SDSFIE V2.1 FGDC Utilities Classification]
397.5_MCM	397.5 K circular mils, ACSR [SDSFIE V2.1 FGDC Utilities Classification]
4	4 inches [SDSFIE V2.1 FGDC Utilities Classification]
400_MCM	400 K circular mils [SDSFIE V2.1 FGDC Utilities Classification]
477_MCM	477 K circular mils [SDSFIE V2.1 FGDC Utilities Classification]
477_MCM_A	477 K circular mils, ACSR [SDSFIE V2.1 FGDC Utilities Classification]
5 500 MCM	5 inches [SDSFIE V2.1 FGDC Utilities Classification]
500_MCM 556.5_MCM	500 K circular mils [SDSFIE V2.1 FGDC Utilities Classification] 556.5 K circular mils, ACSR [SDSFIE V2.1 FGDC Utilities Classification]
556_5_MCM_A	556.5 K circular mils, ACSR [SDSFIE V2.1 FGDC Utilities Classification]
6	6 inches [SDSFIE V2.1 FGDC Utilities Classification]
600_MCM	600 K circular mils [SDSFIE V2.1 FGDC Utilities Classification]
636_MCM	636 K circular mils [SDSFIE V2.1 FGDC Utilities Classification]
636_MCM_A	636 K circular mils, ACSR [SDSFIE V2.1 FGDC Utilities Classification]
7	7 inches [SDSFIE V2.1 FGDC Utilities Classification]
700_MCM	700 K circular mils [SDSFIE V2.1 FGDC Utilities Classification]
750_MCM	750 K circular mils [SDSFIE V2.1 FGDC Utilities Classification]
795_MCM_A	795 K circular mils, ACSR [SDSFIE V2.1 FGDC Utilities Classification]
8	8 inches [SDSFIE V2.1 FGDC Utilities Classification]
800_MCM 9	800 K circular mils [SDSFIE V2.1 FGDC Utilities Classification]
9 900_MCM	9 inches [SDSFIE V2.1 FGDC Utilities Classification] 900 K circular mils [SDSFIE V2.1 FGDC Utilities Classification]
954_MCM_A	954 K circular mils, ACSR [SDSFIE V2.1 FGDC Utilities Classification]
BITTERN	1272 K circular mils, ACSR, 45/7 [SDSFIE V2.1 FGDC Utilities Classification]
BLUEBIRD	2156 K circular mils, ACSR,84/19 [SDSFIE V2.1 FGDC Utilities Classification]
BLUEJAY	1113 K circular mils, ACSR,45/7 [SDSFIE V2.1 FGDC Utilities Classification]
BOBOLINK	1431 K circular mils, ACSR,45/7 [SDSFIE V2.1 FGDC Utilities Classification]
CARDINAL	954 K circular mils, ACSR,54/7 [SDSFIE V2.1 FGDC Utilities Classification]
CHICKADEE	397.5 K circular mils, ACSR,18/1 [SDSFIE V2.1 FGDC Utilities Classification]
DOVE	556.5 K circular mils, ACSR,26/7 [SDSFIE V2.1 FGDC Utilities Classification]
DRAKE	795 K circular mils, ACSR,26/7 [SDSFIE V2.1 FGDC Utilities Classification]
FALCON	1590 K circular mils, ACSR,54/19 [SDSFIE V2.1 FGDC Utilities Classification]
FINCH	1113 K circular mils, ACSR,54/19 [SDSFIE V2.1 FGDC Utilities Classification]
FLICKER GROSBEAK	477 K circular mils, ACSR,24/7 [SDSFIE V2.1 FGDC Utilities Classification] 636 K circular mils, ACSR,24/7 [SDSFIE V2.1 FGDC Utilities Classification]
HAWK	477 K circular mils, ACSR,26/7 [SDSFIE V2.1 FGDC Utilities Classification]
HEN	477 K circular mils, ACSR,30/7 [SDSFIE V2.1 FGDC Utilities Classification]
IBIS	397.5 K circular mils, ACSR,26/7 [SDSFIE V2.1 FGDC Utilities Classification]
LAPWING	1590 K circular mils, ACSR,45/7 [SDSFIE V2.1 FGDC Utilities Classification]
LINNET	336.4 K circular mils, ACSR,26/7 [SDSFIE V2.1 FGDC Utilities Classification]
MERLIN	336.4 K circular mils, ACSR,18/1 [SDSFIE V2.1 FGDC Utilities Classification]
N1	#1 [SDSFIE V2.1 FGDC Utilities Classification]
N1_0	#1/0 [SDSFIE V1.4]
N10	#10 [SDSFIE V1.4]
N12	#12 [SDSFIE V1.4]
N14	#14 [SDSFIE V1.4]
N16	#16 [SDSFIE V1.4]
N18	#18 [SDSFIE V1.4] #10 [SDSFIE V1.4]
N19 N2	#19 [SDSFIE V1.4] #2 [SDSFIE V1.4]
112	12 (020) IL 11.7 J

N2_0	#2/0 [SDSFIE V1.4]
N20	#20 [SDSFIE V1.4]
N22	#22 [SDSFIE V1.4]
N24	#24 [SDSFIE V1.4]
N26	#26 [SDSFIE V1.4]
N28	#28 [SDSFIE V1.4]
N3	#3 [SDSFIE V1.4]
N3_0	#3/0 [SDSFIE V1.4]
N30	#30 [SDSFIE V1.4]
N32	#32 [SDSFIE V1.4]
N34	#34 [SDSFIE V1.4]
N36	#36 [SDSFIE V1.4]
N4	#4 [SDSFIE V1.4]
N4_0	#4/0 [SDSFIE V1.4]
N5	#5 [SDSFIE V1.4]
N6	#6 [SDSFIE V1.4]
N8	#8 [SDSFIE V1.4]
ORIOLE	336.4 K circular mils, ACSR,30/7 [SDSFIE V1.7]
ORTOLAN	1033.5 K circular mils,45/7 [SDSFIE V1.7]
OSPREY	556.5 K circular mils, ACSR,18/1 [SDSFIE V1.7]
OSTRICH	300 K circular mils, ACSR,26/7 [SDSFIE V1.7]
OTHER	other [SDSFIE V1.4]
PARAKEET	556.5 K circular mils, ACSR,24/7 [SDSFIE V1.7]
PARTRIDGE	556.5 K circular mils, ACSR,26/7 [SDSFIE V1.7]
PELICAN	266.8 K circular mils, ACSR,18/1 [SDSFIE V1.7]
PHEASANT	477 K circular mils, ACSR,54/19 [SDSFIE V1.7]
PLOVER	1272 K circular mils, ACSR,54/19 [SDSFIE V1.7]
RAIL	1431 K circular mils, ACSR,45/7 [SDSFIE V1.7]
ROOK	954 K circular mils, ACSR,24/7 [SDSFIE V1.7]
TBD	to be determined [SDSFIE V1.4]
TERN	795 K circular mils, ACSR,45/7 [SDSFIE V1.7]
UNKNOWN	unknown [SDSFIE V1.4]
WAXWING	266.8 K circular mils, ACSR,18/1 [SDSFIE V1.7]
	_ *

CodeCableElevation

Used by Attributes: <u>Coaxial Line - Cab Elev;Fiberoptic Line - Cab Elev;Other Cable - Cab Elev;Twisted Pair Line - Cab Elev;Waveguide Line - Cab Elev</u>

Value	Definition (Notes) [Source]
MAIN_BURIED	Underground main communications cables [SDSFIE V1.6]
MAIN_OHEAD	Overhead communications cables, normally suspended from or between poles. [SDSFIE V1.6]
MAIN_SUBMERGE	Submerged communications cables, either on the bottom or buried in the bottom of a water body or water course. [SDSFIE V1.6]
SERV_BURIED	The cable is a secondary service line which has been buried below ground. [SDSFIE V1.6]
SERV_OHEAD	A secondary service line which is suspended overhead, normally between poles. [SDSFIE V1.6]
SERV_SUBMERGE	A secondary service line which lies on the bottom of a watercourse or water body or which has been buried in the bottom. [SDSFIE V1.6]

CodeCableGaDimensions

Used by Attributes: <u>Terminator - Cbldim 3</u>

Value Definition (Notes) [Source]	
100_UM 101 micron core (obsolete). [SDSFIE V2.5 AIR FORCE]	
1000_UM 2 mm (Plastic Optical Fiber). [SDSFIE V2.5 AIR FORCE	3]
125_UM 126 micron cladding. [SDSFIE V2.5 AIR FORCE]	
140_UM 141 micron cladding (obsolete). [SDSFIE V2.5 AIR FOR	CE]
200_UM 201 micron core. [SDSFIE V2.5 AIR FORCE]	
240_UM 241 micron cladding. [SDSFIE V2.5 AIR FORCE]	
50_UM 51 micron core. [SDSFIE V2.5 AIR FORCE]	
62_5_UM 62.5 micron core. [SDSFIE V2.5 AIR FORCE]	
8_3_UM 8.3 micron core. [SDSFIE V2.5 AIR FORCE]	
N14 #14 or 14 Gage. [SDSFIE V2.5 AIR FORCE]	
N16 #16 or 16 Gage. [SDSFIE V2.5 AIR FORCE]	

NI	8	#18 or 18 Gage. [SDSFIE V2.5 AIR FORCE]
NI	19	#19 or 19 Gage. [SDSFIE V2.5 AIR FORCE]
N2	20	#20 or 20 Gage. [SDSFIE V2.5 AIR FORCE]
N2	22	#22 or 22 Gage. [SDSFIE V2.5 AIR FORCE]
N2	24	#24 or 24 Gage. [SDSFIE V2.5 AIR FORCE]
N2	26	#26 or 26 Gage. [SDSFIE V2.5 AIR FORCE]
N2	28	#28 or 28 Gage. [SDSFIE V2.5 AIR FORCE]
N3	30	#30 or 30 Gage. [SDSFIE V2.5 AIR FORCE]
Nã	32	#32 or 33 Gage. [SDSFIE V2.5 AIR FORCE]
N3	34	#34 or 34 Gage. [SDSFIE V2.5 AIR FORCE]
N3	36	#36 or 36 Gage. [SDSFIE V2.5 AIR FORCE]
07	THER	Other. [SDSFIE V2.5 AIR FORCE]
TE	BD	To Be Determined. [SDSFIE V2.5 AIR FORCE]
Uľ	NKNOWN	Unknown. [SDSFIE V2.5 AIR FORCE]

CodeCableInstallationType

Used by Attributes: <u>Path Segment Line - Cabins;Coaxial Line - Install Type;Fiberoptic Line - Install Type;Other Cable - Install Type;Segmented Cable Point - Install Type;Twisted Pair Line - Install Type;Waveguide Line - Install Type</u>

Value ABANDONED ABOVEGROUND AER BORE BURY DB INSIDE JSC OUTSIDE OVERHEAD TR TUNNEL UNDERGROUND	Definition (Notes) [Source] abandoned [SDSFIE V1.6] above ground [SDSFIE V1.6] aerial attachment [SDSFIE V2 Austin and Pitts] jack and bore, pull cable [SDSFIE V2 Austin and Pitts] direct bury cable [SDSFIE V2 Austin and Pitts] directional bore conduit, pull cable [SDSFIE V2 Austin and Pitts] inside [SDSFIE V1.6] jet submarine cable [SDSFIE V2 Austin and Pitts] outside [SDSFIE V1.6] overhead [SDSFIE V1.6] trench and place conduit, pull cable [SDSFIE V2 Austin and Pitts] tunnel [SDSFIE V1.6]
UNDERGROUND	underground [SDSFIE V1.6]
UNDERGROUND	underground [SDSFIE V1.6]

CodeCableType

Used by Attributes: Segmented Cable Point - Cab Type; Waveguide Line - Cab Type; Equipment - Cbl Type; Media Converter - Cbltyp 1;Media Converter - Cbltyp 2

Value	Definition (Notes) [Source]
1_WIRE	1-wire, single conductor [SDSFIE V1.4]
18_7_FC	18x7 FC [SDSFIE V1.4]
19_7	19x7 [SDSFIE V1.4]
3_19_FLUSHER	3x19 slusher [SDSFIE V1.4]
3_7_GRD_RAIL	3x7 guard rail [SDSFIE V1.4]
3_WIRE_PRKWY	3-wire parkway [SDSFIE V1.4]
3_WIRE_ROUND	3-wire, round [SDSFIE V1.4]
3_WIRE_SGMNT	3-wire, segmental [SDSFIE V1.4]
4_WIRE_ROUND	4-wire, quad conductor [SDSFIE V1.4]
5_19_CLAD	5x19 marlin clad FC [SDSFIE V1.4]
6_12_FILLER_FC	6x12 filler wire FC [SDSFIE V1.4]
6_12_GALV_FC	6x12 galvanized running rope FC [SDSFIE V1.4]
6_19_CLAD	6x19 marlin clad [SDSFIE V1.4]
6_19_SEALE_IWRC	6x19 Seale IWRC [SDSFIE V1.4]
6_24_HAWSER	6x24 hawser [SDSFIE V1.4]
6_25_FILL_IWRC	6x25 filler wire IWRC [SDSFIE V1.4]
6_25B_FLAT_FC	6x25B flattened strand FC [SDSFIE V1.4]
6_26_WARR_IWRC	6x26 Warrington Seale IWRC [SDSFIE V1.4]
6_27H_FLAT_FC	6x27H flattened strand FC [SDSFIE V1.4]
6_3_19_SPRING	6x3x19 spring lay [SDSFIE V1.4]
6_30_HAWSER	6x30 hawser [SDSFIE V1.4]
6_30G_FLAG_FC	6x30G flattened strand FC [SDSFIE V1.4]
6_31_FILL_IWRC	6x31 filler wire IWRC [SDSFIE V1.4]
6_31_WARR_IWRC	6x31 Warrington Seale IWRC [SDSFIE V1.4]
6_36_SEALE_IWRC	6x36 Seale filler wire IWRC [SDSFIE V1.4]
6_36_WARR_IWRC	6x36 Warrington Seale IWRC [SDSFIE V1.4]

6_41_SEALE_IWRC 6_41_WARR_IWRC 6_42_TILLER_FC 6_46_SEALE_IWRC 6_49_FILL_FC 6_6_7_TILLER 6_7_FC 8_19_SEALE_FC 8_25_FILLER_IWR 8_9_SEALE_IWRC BARE COAX DUPLEX EHS EIP FC FE FIBER_OPTICS HSS IPS IWRC MPS OTHER PORTAL PRIMARY PS RECEIVE REMOTE SECONDARY SENSOR SOLIDCORE SOLIDCORETB SOLIDCORETS SOLIDIELEC TBD TRANSMIT TRIPLEX TS **TSCORE** TWINAX TWISTED_PAIR UNKNOWN WAVEGUIDE WEATHRPROFCU WSC

6x41 Seale filler wire IWRC [SDSFIE V1.4] 6x41 Warrington Seale IWRC [SDSFIE V1.4] 6x42 tiller rope FC [SDSFIE V1.4] 6x46 Seale filler wire IWRC [SDSFIE V1.4] 6x49 filler wire Seale FC [SDSFIE V1.4] 6x6x7 tiller rope [SDSFIE V1.4] 6x7 FC [SDSFIE V1.4] 8x19 Seale FC [SDSFIE V1.4] 8x25 filler wire IWRC [SDSFIE V1.4] 8x9 Seale IWRC [SDSFIE V1.4] bare [SDSFIE V1.4] coaxial [SDSFIE V1.4] 2-wire, dual conductor [SDSFIE V1.4] Extra High Strength Steel [SDSFIE V1.4] Extra Improved Plow Steel [SDSFIE V1.4] FiberCore [SDSFIE V1.4] Iron [SDSFIE V1.4] Fiber Optics Cable. [SDSFIE V2.3 Tinker Air Force Base] High Strength Steel [SDSFIE V1.4] Improved Plow Steel [SDSFIE V1.4] Independent Wire Rope Core [SDSFIE V1.4] Mild Plow Steel [SDSFIE V1.4] other [SDSFIE V1.4] Portal. [SDSFIE V2.31 Air Force] primary [SDSFIE V1.4] Plow Steel [SDSFIE V1.4] Receive. [SDSFIE V2.31 Air Force] Remote. [SDSFIE V2.31 Air Force] secondary [SDSFIE V1.4] Sensor. [SDSFIE V2.31 Air Force] solid core [SDSFIE V1.4] solid core-twisted bundle around [SDSFIE V1.4] solid core-twisted strand around [SDSFIE V1.4] solid dielectric [SDSFIE V1.4] to be determined [SDSFIE V1.4] Transmit. [SDSFIE V2.31 Air Force] triplex [SDSFIE V1.4] twisted strands [SDSFIE V1.4] twisted strands core [SDSFIE V1.4] Twin Coaxial Cable [SDSFIE V2.31] Twisted Pair Cable. [SDSFIE V2.3 Tinker Air Force Base] Unknown [SDSFIE V2.31 ATT] Waveguide [SDSFIE V2.31 ATT] weatherproofed-Copper [SDSFIE V1.4] Wire-Strand Core [SDSFIE V1.4]

CodeCableUse

Used by Attributes: <u>Coaxial Line - Cab Use; Fiberoptic Line - Cab Use; Other Cable - Cab Use; Segmented Cable Point -</u> <u>Cab Use; Twisted Pair Line - Cab Use; Waveguide Line - Cab Use</u>

Definition (Notes) [Source]

other cable [SDSFIE V2] to be determined [SDSFIE V2] Telegraph [SDSFIE V2.2] telephone cable [SDSFIE V2] television cable [SDSFIE V2] unknown use [SDSFIE V2]

CodeCableWayType

Used by Attributes: Cable Tray Line - Caw Type

Value BRIDGE **Definition (Notes) [Source]** Cable Bridge [SDSFIE V2 Tinker Air Force Base] RACK TRAY Cable Rack [SDSFIE V2] Cable Tray [SDSFIE V2 Tinker Air Force Base]

CodeColor

Used by Attributes: <u>Disposal Tank - Color;Septic Tank - Color;Tank Area - Color;Telephone - Color;Line - Map Color</u>

Value	Definition (Notes) [Source]
AMBER	Amber [U.S. CADD]
BLACK	Black [U.S. CADD]
BLUE	Blue [U.S. CADD]
BROWN	Brown [U.S. CADD]
GREEN	Green [U.S. CADD]
GREEN-GREEN	Bidirectional (Source AC 150/5345-46C)
GREEN-RED	Bidirectional (Source AC 150/5345-46C)
GREEN-YELLOW	Bidirectional (Source AC 150/5345-46C)
GREY	Grey [U.S. CADD]
LIGHTGREY	LightGrey [U.S. CADD]
MAGENTA	Magenta [U.S. CADD]
ORANGE	Orange [U.S. CADD]
OTHER	Other [U.S. CADD]
PINK	Pink [U.S. CADD]
PURPLE	Purple [AIXM]
RED	Red [U.S. CADD]
RED-GREEN	Bidirectional (Source AC 150/5345-46C)
RED-RED	Bidirectional (Source AC 150/5345-46C)
TBD	To be determined
VIOLET	Violet [U.S. CADD]
WHITE	White [U.S. CADD]
WHITE-RED	Bidirectional (Source AC 150/5345-46C)
WHITE-WHITE	Bidirectional (Source AC 150/5345-46C)
WHITE-YELLOW	Bidirectional (Source AC 150/5345-46C)
YELLOW	Yellow [U.S. CADD]
YELLOW-GREEN	Bidirectional (Source AC 150/5345-46C)
YELLOW-RED	Bidirectional (Source AC 150/5345-46C)
YELLOW-YELLOW	Bidirectional (Source AC 150/5345-46C)

CodeCommAntenna

Used by Attributes: Access Point - Ant Type; Antenna Site - Ant Type

Value	Definition (Notes) [Source]
DIPOLE	dipole antenna [SDSFIE V2 Tinker Air Force Base]
FIELD	field antenna [SDSFIE V2 Tinker Air Force Base]
PARABOLIC	parabolic antenna [SDSFIE V2 Tinker Air Force Base]
PATCH	Directional Patch Antenna. [SDSFIE V2.5 AIR FORCE]
YAGI	Directional Yagi Antenna. [SDSFIE V2.5 AIR FORCE]

CodeCommAntennaUsageType

Used by Attributes: Antenna Site - Ant Use; Equipment - Ant Use

Value	Definition (Notes) [Source]
14_DF	14 element dual frequency. [SDSFIE V2.31 Air Force]
14_SF	14 element single frequency. [SDSFIE V2.31 Air Force]
8_DF	8 element dual frequency. [SDSFIE V2.31 Air Force]
8_SF	8 element single frequency. [SDSFIE V2.31 Air Force]
CAPTURE	Capture. [SDSFIE V2.31 Air Force]
NULL	Null. [SDSFIE V2.31 Air Force]
RANTEC	Rantec. [SDSFIE V2.31 Air Force]
ROTATING	Rotating. [SDSFIE V2.31 Air Force]
SIDEBAND	Sideband. [SDSFIE V2.31 Air Force]

CodeCommNodeType

Used by Attributes: <u>Path Node Site - Node Type</u>

Value	Definition (Notes) [Source]
DBGROUP	Virtual Ductbank Group (not drawn). [SDSFIE V2.5 AIR FORCE]
DUCT_OPENING	Duct or Inner duct Opening. [SDSFIE V2.5 AIR FORCE]
DUCT2DIRECT	Duct to/from a Direct-Buried Path. [SDSFIE V2.5 AIR FORCE]
GENERAL	General Transition (i.e. PVC to PE duct). [SDSFIE V2.5 AIR FORCE]
HOLE	Vault Vertical Hole. [SDSFIE V2.5 AIR FORCE]
OTHER	Other. [SDSFIE V2.5 AIR FORCE]
RISER	Vertical pipe or covering. [SDSFIE V2.5 AIR FORCE]

CodeCompAirFitting

Used by Attributes: <u>Fitting - Fittyp</u>

Value CAP CROSS FLANGE TEE

Definition (Notes) [Source]

Pipe Cap [SDSFIE V1.75] Pipe Cross [SDSFIE V1.75] Pipe Flange [SDSFIE V1.75] Pipe Tee [SDSFIE V1.75]

CodeConnectSize

Used by Attributes: <u>Hydrant – Connection Size</u>

Value 1X4.5IN_BC_PLUS_2X2.5IN_NST 2X2.5IN_NST 1X5IN_STORZ_PLUS_2x2.5IN_NST OTHER UNKNOWN

Definition (Notes) [Source]

1 x 4.5" Baltimore City + 2 x 2.5" NST 2 x 2.5" NST 1 x 5" Storz + 2 x 2.5" NST Other Unknown

CodeCoreType

Used by Attributes: <u>Segmented Cable Point - Core Type; Twisted Pair Line - Core Type</u>

Value	Definition (Notes) [Source]
AIR_CORE	Air core [SDSFIE V2 Tinker Air Force Base]
FILLED	Filled Core by unknown substance. [SDSFIE V2.5 AIR FORCE]
INSULATION	Insulation core [SDSFIE V2 Tinker Air Force Base]
PAPER	Paper Core [SDSFIE V2 Tinker Air Force Base]
PRESSURIZED	Pressurized core [SDSFIE V2 Tinker Air Force Base]

CodeCountsInAssembly

Used by Attributes: <u>Load Capacitor - Ldcnum;Load Coil - Ldcnum</u>

Value	Definition (Notes) [Source]
0001	1. [SDSFIE V2.5 AIR FORCE]
0002	2. [SDSFIE V2.5 AIR FORCE]
0003	3. [SDSFIE V2.5 AIR FORCE]
0004	4. [SDSFIE V2.5 AIR FORCE]
0005	5. [SDSFIE V2.5 AIR FORCE]
0006	6. [SDSFIE V2.5 AIR FORCE]
0010	10. [SDSFIE V2.5 AIR FORCE]
0011	11. [SDSFIE V2.5 AIR FORCE]
0012	12. [SDSFIE V2.5 AIR FORCE]
0015	15. [SDSFIE V2.5 AIR FORCE]
0016	16. [SDSFIE V2.5 AIR FORCE]
0018	18. [SDSFIE V2.5 AIR FORCE]
0020	20. [SDSFIE V2.5 AIR FORCE]
0024	24. [SDSFIE V2.5 AIR FORCE]

0025	25. [SDSFIE V2.5 AIR FORCE]
0050	50. [SDSFIE V2.5 AIR FORCE]
0100	100. [SDSFIE V2.5 AIR FORCE]
0200	200. [SDSFIE V2.5 AIR FORCE]
0300	300. [SDSFIE V2.5 AIR FORCE]
0400	400. [SDSFIE V2.5 AIR FORCE]
0600	600. [SDSFIE V2.5 AIR FORCE]
0900	900. [SDSFIE V2.5 AIR FORCE]
1200	1200. [SDSFIE V2.5 AIR FORCE]
1500	1500. [SDSFIE V2.5 AIR FORCE]
1800	1800. [SDSFIE V2.5 AIR FORCE]
OTHER	Other. [SDSFIE V2.5 AIR FORCE]
TBD	To Be Determined. [SDSFIE V2.5 AIR FORCE]
UNKNOWN	Unknown. [SDSFIE V2.5 AIR FORCE]

${\bf Code Cryptography Protocol}$

Used by Attributes: Access Point - Enc Prot

Value	Definition (Notes) [Source]
3DES	Triple DES encryption (will be replaced by AES). [SDSFIE V2.3 Tinker Air Force Base]
A_NEEDH_SCHR_SK	Amended Needham Schroeder Symmetric Key. [SDSFIE V2.5 AIR FORCE]
AES	Advanced Encryption Standard, a Type I capable encryption module. [SDSFIE V2.3 Tinker
	Air Force Base]
AS_RPC	Andrew Secure RPC. [SDSFIE V2.5 AIR FORCE]
BAN_CON_AS_RPC	BAN concrete Andrew Secure RPC. [SDSFIE V2.5 AIR FORCE]
BAN_MOD_AS_RPC	BAN modified Andrew Secure RPC. [SDSFIE V2.5 AIR FORCE]
BAN_MOD_CCITT_3	BAN modified version of CCITT X.509 (3). [SDSFIE V2.5 AIR FORCE]
BAN_YAHALOM	BAN simplified version of Yahalom. [SDSFIE V2.5 AIR FORCE]
CAM	CAM. [SDSFIE V2.5 AIR FORCE]
CCITT_X_509_1	CCITT X.509 (1). [SDSFIE V2.5 AIR FORCE]
CCITT_X_509_1C	CCITT X.509 (1c). [SDSFIE V2.5 AIR FORCE]
CCITT_X_509_3	CCITT X.509 (3). [SDSFIE V2.5 AIR FORCE]
CJ_HC_SPLICE_AS	Clark and Jacob modified Hwang and Chen modified Splice/As. [SDSFIE V2.5 AIR FORCE]
DENNING_SACCO_SK	Denning-Sacco shared key. [SDSFIE V2.5 AIR FORCE]
DES	Digital Encryption Standard [SDSFIE V2.3 Tinker Air Force Base]
DES-OFB	Digital Encryption Standard - Output Feedback [SDSFIE V2.3 Tinker Air Force Base]
DIFFIE_HELMAN	Diffie Helman. [SDSFIE V2.5 AIR FORCE]
DNSSEC	Domain Name Server Security. [SDSFIE V2.5 AIR FORCE]
DSS	DSS. [SDSFIE V2.5 AIR FORCE]
FASCINATOR	Fascinator is a series of Type I capable encryption module. [SDSFIE V2.31 Tinker Air Force
	Base]
GJM	GJM. [SDSFIE V2.5 AIR FORCE]
GNUPG_PGP	GnuPG/PGP. [SDSFIE V2.5 AIR FORCE]
GONG	Gong. [SDSFIE V2.5 AIR FORCE]
GSSAPI	Generic Security Services API. [SDSFIE V2.5 AIR FORCE]
HC_SPLICE_AS	Hwang and Chen modified Splice/As. [SDSFIE V2.5 AIR FORCE]
HWANG_NEUM_STUB	Hwang modified version of Neumann Stubblebine. [SDSFIE V2.5 AIR FORCE]
IDEA	IDEA. [SDSFIE V2.5 AIR FORCE]
IEEE_P1363	IEEE P1364. [SDSFIE V2.5 AIR FORCE]
IPSEC	IP Secure Protocol. [SDSFIE V2.5 AIR FORCE]
KAO_CHOW_AUTH_1	Kao Chow Authentication v.1. [SDSFIE V2.5 AIR FORCE]
KAO_CHOW_AUTH_2	Kao Chow Authentication v.2. [SDSFIE V2.5 AIR FORCE]
KAO_CHOW_AUTH_3	Kao Chow Authentication v.3. [SDSFIE V2.5 AIR FORCE]
KERBEROS_V5	Kerberos V6. [SDSFIE V2.5 AIR FORCE]
KSL	KSL. [SDSFIE V2.5 AIR FORCE]
L_BAN_CON_AS_RPC	Lowe modified BAN concrete Andrew Secure RPC. [SDSFIE V2.5 AIR FORCE]
L_DENNING_SAC_DK	Lowe modified Denning-Sacco shared key. [SDSFIE V2.5 AIR FORCE]
L_NEEDH_SCHR_PK	Lowes fixed version of Needham-Schroder Public Key. [SDSFIE V2.5 AIR FORCE]
LOWE_MOD_KSL	Lowe modified KSL. [SDSFIE V2.5 AIR FORCE]
LOWE_WMF	Lowe modified Wide Mouthed Frog. [SDSFIE V2.5 AIR FORCE]
LOWES_YAHALOM	Lowes modified version of Yahalom. [SDSFIE V2.5 AIR FORCE]
MARS	MARS. [SDSFIE V2.5 AIR FORCE]
NEEDHAM_SCHR_PK	Needham-Schroeder Public Key. [SDSFIE V2.5 AIR FORCE]
NEEDHAM_SCHR_SK	Needham Schroeder Symmetric Key. [SDSFIE V2.5 AIR FORCE]
NEUMANN_STUBBLE	Neumann Stubblebine. [SDSFIE V2.5 AIR FORCE]
OPENPGP	OpenPGP. [SDSFIE V2.5 AIR FORCE]
OTHER	Other. [SDSFIE V2.5 AIR FORCE]

OTWAY REES	Otway Rees. [SDSFIE V2.5 AIR FORCE]
PAULSONS YAHALOM	Paulsons strengthened version of Yahalom. [SDSFIE V2.5 AIR FORCE]
PKCS	Public Key Encryption Standards. [SDSFIE V2.5 AIR FORCE]
RC4	RC5. [SDSFIE V2.5 AIR FORCE]
ROT	ROT. [SDSFIE V2.5 AIR FORCE]
RSA	RSA. [SDSFIE V2.5 AIR FORCE]
SEAL	SEAL. [SDSFIE V2.5 AIR FORCE]
SERPENT	Serpent. [SDSFIE V2.5 AIR FORCE]
SHTTP	Secure Hypertext Transfer Protocol. [SDSFIE V2.5 AIR FORCE]
SK3	SK3. [SDSFIE V2.5 AIR FORCE]
SMARTRIGHT_VO	SmartRight view-only. [SDSFIE V2.5 AIR FORCE]
SOBER	SOBER. [SDSFIE V2.5 AIR FORCE]
SPLIC AS	SPLICE/AS. [SDSFIE V2.5 AIR FORCE]
SSH1	Secure Shell v2. [SDSFIE V2.5 AIR FORCE]
SSH2	Secure Shell v3. [SDSFIE V2.5 AIR FORCE]
SSL	Secure Socket Layer. [SDSFIE V2.5 AIR FORCE]
TBD	To Be Determined. [SDSFIE V2.5 AIR FORCE]
TLS	TLS. [SDSFIE V2.5 AIR FORCE]
TMN	TMN. [SDSFIE V2.5 AIR FORCE]
TWOFISH	Twofish. [SDSFIE V2.5 AIR FORCE]
UNKNOWN	Unknown. [SDSFIE V2.5 AIR FORCE]
WAKE	WAKE. [SDSFIE V2.5 AIR FORCE]
WEP	Wired Equivalent Privacy. [SDSFIE V2.5 AIR FORCE]
WMF	Wide Mouthed Frog. [SDSFIE V2.5 AIR FORCE]
WOO_AND_LAM_P_3	Woo and Lam Pi 3. [SDSFIE V2.5 AIR FORCE]
WOO_AND_LAM_PI	Woo and Lam Pi. [SDSFIE V2.5 AIR FORCE]
WOO_AND_LAM_PI_1	Woo and Lam Pi 1. [SDSFIE V2.5 AIR FORCE]
WOO_AND_LAM_PI_2	Woo and Lam Pi 2. [SDSFIE V2.5 AIR FORCE]
WOO_LAM_MA	Woo and Lam Mutual Authentication. [SDSFIE V2.5 AIR FORCE]
WOO_LAM_PI_F	Woo and Lam Pi f. [SDSFIE V2.5 AIR FORCE]
WPA	Wi-Fi Protected Access. [SDSFIE V2.5 AIR FORCE]
XOR	XOR. [SDSFIE V2.5 AIR FORCE]
YAHALOM	Yahalom. [SDSFIE V2.5 AIR FORCE]

CodeCulvert

Used by Attributes: Culvert Center Line - Gate Type

Value	Definition (Notes) [Source]
GATED	The culvert is equipped with gates to block or divert water flow. [SDSFIE V1.8 REEGIS]
NONGATED	The culvert contains no provision to block or divert water flow. [SDSFIE V1.8 REEGIS]

CodeCulvertScreenType

Used by Attributes: Line - Screen Type;Line - Scrn Type;Storm Trench Drain Line - scrnType

Value
HORZBAR
OTHER
TBD
UNKNOWN
VERTBAR

Definition (Notes) [Source] horizontal bar/pipe [SDSFIE V1.4] other [SDSFIE V1.4] to be determined [SDSFIE V1.4] unknown [SDSFIE V1.4] vertical bar/pipe [SDSFIE V1.4]

CodeDataSource

Used by Attributes: Access Coverage Area - collectionProgress; Access Point - collectionProgress; Air Pipe collectionProgress; Air Pressure Device - collectionProgress; Amplifier - collectionProgress; Anchor - collectionProgress; Anode collectionProgress; Anode - collectionProgress; Anode - collectionProgress; Anode Test Station - collectionProgress; Anode Test Station - collectionProgress; Anode Test Station - collectionProgress; Antenna Line - collectionProgress; Antenna Site collectionProgress; Attenuator - collectionProgress; Bus Line - collectionProgress; Cable - collectionProgress; Cable Bridge Line collectionProgress; Cable Ladder - collectionProgress; Cable Rack Line - collectionProgress; Cable Tray Line collectionProgress; Cable Trough Line - collectionProgress; Capacitor - collectionProgress; Coaxial Line collectionProgress; Device - collectionProgress; Device - collectionProgress; Device - collectionProgress; Discharge Point collectionProgress; Discharge Point - collectionProgress; Ductbank - collectionProgress; Ductbank - collectionProgress; Equipment - collectionProgress; Fiberoptic Line - collectionProgress; Fill Point - collectionProgress; Fitting - collectionProgress; Fitting collectionProgress;Fitting - collectionProgress;Fitting - collectionProgress;Generator - collectionProgress;Grit Chamber collectionProgress:Ground Point - collectionProgress:Ground Point - collectionProgress:Groundplane Area collectionProgress;Groundwave Area - collectionProgress;Head Bolt Outlet - collectionProgress;Headwall collectionProgress;Headwall Line - collectionProgress;Impedance Matching Point - collectionProgress;Inlet collectionProgress;Internet Center - collectionProgress;Junction - collectionProgress;Junction collectionProgress;Junction - collectionProgress;Junction - collectionProgress;Lagoon - collectionProgress;Light collectionProgress;Line - collectionProgress;Load Capacitor - collectionProgress;Load Coil - collectionProgress;Marker - collectionProgress;Marker - collectionProgress;Marker - collectionProgress;Marker collectionProgress;Marker - collectionProgress;Marker - collectionProgress;Media Converter - collectionProgress;Meter collectionProgress;Meter - collectionProgress;Meter - collectionProgress;Meter - collectionProgress;Motor collectionProgress;Multihop Area - collectionProgress;Network Systems Site - collectionProgress;Neutralizer collectionProgress;Oil Water Separator - collectionProgress;Other Cable - collectionProgress;Path Node Site collectionProgress;Path Segment Line - collectionProgress;Pedestal - collectionProgress;Pedestal Site - collectionProgress;Pipe Line - collectionProgress;Pullbox Site - collectionProgress;Pump - collectionProgress;Pump - collectionProgress;Pump collectionProgress;Pump Station - collectionProgress;Pumpstation Ejector - collectionProgress;Radar Site collectionProgress;Radio - collectionProgress;Radio Receiver - collectionProgress;Radio Transmitter - collectionProgress;Rect Point - collectionProgress;Rectifier - collectionProgress;Rectifier - collectionProgress;Reducer - collectionProgress;Refinery Site - collectionProgress;Regulator - collectionProgress;Regulator - collectionProgress;Relay Station - collectionProgress;Repeater collectionProgress;Riser - collectionProgress;Riser - collectionProgress;Satellite - collectionProgress;Segmented Cable collectionProgress;Segmented Cable Point - collectionProgress;Sensor - collectionProgress;Service Loop Point collectionProgress;Source - collectionProgress;Speaker - collectionProgress;Splice - collectionProgress;Splice collectionProgress;Splitter - collectionProgress;Storage Area - collectionProgress;Substation - collectionProgress;Switch collectionProgress;Tank - collectionProgress;Tank Area - collectionProgress;Telephone - collectionProgress;Telephone Booth collectionProgress; Terminal - collectionProgress; Terminator - collectionProgress; Transformer Vault collectionProgress; Transformr Bank - collectionProgress; Transmission Pipeline - collectionProgress; Transmission Pipeline Segment Line - collectionProgress; Treatment Plant - collectionProgress; Twisted Pair Line - collectionProgress; Utility Electric Utility Site - collectionProgress; Utility Pole Guy - collectionProgress; Utility Pole Guy Line - collectionProgress; Utility Pole Tower Site - collectionProgress; Valve - collectionProgress; Valve - collectionProgress; Valve Pit collectionProgress; Vertical Site - collectionProgress; Video Site - collectionProgress; Voice Switch collectionProgress:Waveguide Line - collectionProgress

Value AERIAL CAD CAD ASBUILT CAD_DIGITAL CAD_PAPER CNTRLIMG COGO CONSTRSURVEY CONVSURVEY DIG RTK DIGITAL_OTHER FIELD FIELDMEASURE GIS_DIGITAL GIS_PAPER GPS_COM GPS_MAP GPS_RTK LEGACY LEGAL NA NO ACCESS ORTHOGT6 ORTHOLT6 OTHER PARSONS PLAT RECOLLECTION ROD_LEVEL TOWSON UNCNTRLIMG UNKNOWN

Definition (Notes) [Source]

2005/2007 Aerial Photography Georeferenced CAD File/Scan CAD As-Built CAD Digital CAD Paper Controlled Image COGO Construction Survey Conventional Survey Dig Survey - RTK Digital File (Other) Field Observatin Field Measurement GIS Digital GIS Paper Commercial GPS Mapping GPS Trimble R8/5800 Receiver and TSC2 Data Collector Existed in Legacy Database Legal Description NA Cannot Access Feature Ortho (Greater than 6 Inch GSD) Ortho (Less than 6 Inch GSD) Other Parsons Data Plat Personal Recollection Laser Rangefinder and Survey Rod & Level Towson Data Uncontrolled Image Unknown

WRITTEN

Written Description

CodeDiameterMeasureType

Used by Attributes: Hydrant - Meas Type; Fire Connection Point - Measurement Type

Value
INSIDE
NOMINAL
OTHER
OUTSIDE
TBD
UNKNOWN

Definition (Notes) [Source] inside diameter [SDSFIE V1.4] nominal or average diameter [SDSFIE V1.4] other [SDSFIE V1.4] outside diameter [SDSFIE V1.4] to be determined [SDSFIE V1.4] unknown [SDSFIE V1.4]

CodeDirectionality

Used by Attributes: Air Pipe - Directionality;Antenna Line - Directionality;Bus Line - Directionality;Cable -Directionality;Cable - Directionality;Cable Bridge Line - Directionality;Cable Rack Line - Directionality;Cable Tray Line -Directionality;Cable Trough Line - Directionality;Coaxial Line - Directionality;Culvert Center Line - Directionality;Drainage Divide - Directionality;Drainage Divide Line - Directionality;Ductbank - Directionality;Ductbank - Directionality;Ductbank -Directionality;Fiberoptic Line - Directionality;Headwall Line - Directionality;Headwall Line - Directionality;Intake Line -Directionality;Line - Directionality;Line - Directionality;Line - Directionality;Line - Directionality;Line -Directionality;Line - Directionality;Line - Directionality;Line - Directionality;Copen Drainage Line -Directionality;Other Cable - Directionality;Path Segment Line - Directionality;Pipe Line - Directionality;Segmented Cable -Directionality;Storm Trench Drain Line - Directionality;Utility Pole Guy Line - Directionality;Waveguide Line - Directionality;Waveguide Line - Directionality;Utility Pole Guy Line - Directionality;Waveguide Line - Directionality;Waveguide Line - Directionality;Waveguide Line - Directionality;Waveguide Line - Directionality;Utility Pole Guy Line - Directionality;Waveguide Line - Directional

Value	Definition (Notes) [Source]
BI	Bidirectional
ES	One way from end-to-startpoint
SE	One way from start-to-endpoint

CodeDisplayType

Used by Attributes: <u>Marker - meterType;Device - Readout;Device - Readout</u>

Value	Definition (Notes) [Source]
ANALOG	analog (dial) display [SDSFIE V1.4]
DIGITAL	digital display [SDSFIE V1.4]
OTHER	other [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]

CodeDispositionObject

Used by Attributes: Access Coverage Area - Disposition;Access Point - Disposition;Air Eliminator - Disposition;Air Prepe - Disposition;Air Pressure Device - Disposition;Amplifier - Disposition;Anchor - Disposition;Anode - Disposition;Anode -Disposition;Anode - Disposition;Anode - Disposition;Anode - Disposition;Anode - Disposition;Anode Test Station -Disposition;Anode Test Station - Disposition;Anode Test Station - Disposition;Cable - Disposition;Cable - Disposition;Cable Bridge Line - Disposition;Cable Ladder -Disposition;Cable Rack Line - Disposition;Cable Tray Line - Disposition;Cable Trough Line - Disposition;Capacitor -Disposition;Coaxial Line - Disposition;Culvert Center Line - Disposition;Culvert End - Disposition;Desplice -Disposition;Device - Disposition;Discharge Point - Disposition;Discharge Point - Disposition;Discharge Point - Disposition;Discharge Point - Disposition;Disposal Tank - Disposition;Downspout - Disposition;Downspout -Disposition;Drain Field - Disposition;Drain Separator - Disposition;Drainage Basin - Disposition;Drainage Basin -Disposition;Drainage Divide - Disposition;Drainage Divide Line - Disposition;Drainage Basin - Disposition;Drainage Basin -Disposition;Drainage Divide - Disposition;Drainage Divide Line - Disposition;Drainage Basin - Disposition;Drainage Basin -Disposition;Drainage Divide - Disposition;Drainage Divide Line - Disposition;Drainage Basin -Disposition;Drainage Divide - Disposition;Drainage Divide Line - Disposition;Drainage Basin -Disposition;Drainage Divide - Disposition;Drainage Divide Line - Disposition;Drainage Basin -Disposition;Drainage Divide - Disposition;Drainage Divide Line - Disposition;Drainage Divide - Disposition;Drainage Divide Line -

Disposition;Ductbank - Disposition;Ductbank - Disposition;Equipment - Disposition;Farm Site -Disposition; Fiberoptic Line - Disposition; Fill Point - Disposition; Filter Strainer - Disposition; Filtration Bed - Disposition; Fire Connection Point - Disposition; Fitting - Dis Disposition; Fitting - Disposition; Fitting -Disposition; Flow Control Device - Disposition; Gate - Disposition; Generator - Disposition; Glycol Recovery Pit -Disposition; Grease Trap - Disposition; Grit Chamber - Disposition; Grit Chamber - Disposition; Ground Point -Disposition; Ground Point - Disposition; Groundplane Area - Disposition; Groundwave Area - Disposition; Head Bolt Outlet -Disposition;Headwall - Disposition;Headwall - Disposition;Headwall Line - Disposition;Headwall Line - Disposition;Hydrant -Disposition; Hydrant - Disposition; Impedance Matching Point - Disposition; Inlet - Disposition; Inlet - Disposition; Inlet -Disposition; Inlet - Disposition; Intake - Disposition; Intake Line - Disposition; Internet Center - Disposition; Junction -Disposition; Junction - Disposition; Junction - Disposition; Junction - Disposition; Junction - Disposition; Junction -Disposition; Junction - Disposition; Junction - Disposition; Junction - Disposition; Junction - Disposition; Lagoon -Disposition;Lagoon - Disposition;Lift Station - Disposition;Light - Disposition;Light - Disposition;Line - Disposition;Line -Disposition;Line - Disposition;Line - Disposition;Line - Disposition;Line - Disposition;Line - Disposition;Line -Disposition;Line Clean Out - Disposition;Line Of Sight Line - Disposition;Load Capacitor - Disposition;Load Coil -Disposition;Marker - Disposition;Marker - Dispositi Disposition;Marker - Disposition;Marker - Disposition;Marker - Disposition;Marker - Disposition;Marker - Disposition;Media Converter - Disposition; Meter - Disposition; Meter - Disposition; Meter - Disposition; Meter -Disposition; Meter - Disposition; Meter - Disposition; Motor - Disposition; Multihop Area - Disposition; Network Systems Site -Disposition; Neutralizer - Disposition; Neutralizer - Disposition; Oil Water Separator - Disposition; Oil Water Separator -Disposition; Oil Water Separator - Disposition; Oil Water Separator - Disposition; Oil Water Separator Diversion Vault disposition; Open Drainage Area - Disposition; Open Drainage Line - Disposition; Other Cable - Disposition; Path Node Site -Disposition;Path Segment Line - Disposition;Pedestal - Disposition;Pedestal Site - Disposition;Pig Launch Point -Disposition; Pipe Line - Disposition; Plant Area - Disposition; Pressure Reducing Station - Disposition; Pullbox Site -Disposition;Pump - Disposition;Pump - Disposition;Pump - Disposition;Pump - Disposition;Pump - Disposition;Pump -Disposition;Pump - Disposition;Pump - Disposition;Pump Booster Station - Disposition;Pump Ejector Station -Disposition;Pump Station - Disposition;Pump Station - Disposition;Pump Station - Disposition;Pump Station -Disposition:Pumpstation Ejector - Disposition:Radar Site - Disposition:Radio - Disposition:Radio Receiver - Disposition:Radio Transmitter - Disposition; Rect Point - Disposition; Rectifier - Disposition; Rectifier - Disposition; Rectifier - Disposition;Rectifier - Disposition;Reducer - Disposition;Refinery Site - Disposition;Regulator - Disposition;Regulator -Disposition; Regulator Reducer - Disposition; Regulator Reducer - Disposition; Relay Station - Disposition; Repeater -Disposition; Reservoir - Disposition; Reservoir - Disposition; Reservoir - Disposition; Riser - Disposition; Riser -Disposition;Satellite - Disposition;Segmented Cable - Disposition;Segmented Cable Point - Disposition;Sensor -Disposition;Septic Tank - Disposition;Service Area - Disposition;Service Loop Point - Disposition;Sludge Bed -Disposition; Source - Disposition; Source - Disposition; Source Site - Disposition; Speaker - Disposition; Splice - Disposition; Splice - Disposition; Splitter - Disposition; Stilling Basin - Disposition; Storage Area - Disposition; Storm Ceptor - disposition; Storm Filter - disposition; Storm Trench Drain Line - disposition; Substation - Disposition; Switch - Disposition; Tank Area - disposition; Telephone -Disposition; Telephone Booth - Disposition; Terminal - Disposition; Terminator - Disposition; Transformer Vault -Disposition; Transformr Bank - Disposition; Transmission Pipeline - Disposition; Transmission Pipeline Segment Line -Disposition: Treatment Plant - Disposition: Treatment Plant - Disposition; Treatment Plant - Disposition; Treatment Unit -Disposition; Treatment Unit - Disposition; Twisted Pair Line - Disposition; Utility Electric Utility Site - Disposition; Utility Pole Guy - Disposition; Utility Pole Guy Line - Disposition; Utility Pole Tower Site - Disposition; Valve - Disposition; Valve -Disposition; Valve - Disposition; Valve - Dispositi Disposition; Valve - Disposition; Valve Pit - Disposition; Vault - Disposition; Vault - Disposition; Vault - disposition; Vent -Disposition; Vertical Site - Disposition; Video Site - Disposition; Voice Switch - Disposition; Waveguide Line - Disposition

Value

ABANDONED IN_SERVICE IN_SERVICE_REPAIRS INCOMPLETE OUT_OF_SERVICE OTHER PROPOSED SERV_NOT_USED TBD TEMPORARY UNKNOWN UNSERVICEABLE BURIED NATURAL PERMANENT

Definition (Notes) [Source]

abandoned in place (not in use) [SDSFIE V1.4] In service and being used. [SDSFIE V2.1 DOT - NPMS] In service but requires maintenance incomplete or unfinished [SDSFIE V1.4] Out of service other [SDSFIE V1.4] proposed [SDSFIE V1.4] Servicable Not Used to be determined [SDSFIE V1.4] temporary [SDSFIE V1.4] unknown [SDSFIE V1.4] Unservicable Burried Natural Permanent RETIRED REMOVED Retired Removed

CodeDistallateProductioType

Used by Attributes: <u>Refinery Site - Distillate Type</u>

Value ASPHALT CO2 DISTALLATES H2 HE S

Definition (Notes) [Source] Asphalt Production. [SDSFIE V2.3 HSIP] CO2 Production. [SDSFIE V2.3 HSIP] Distallates Production. [SDSFIE V2.3 HSIP] H2 Production. [SDSFIE V2.3 HSIP] He Production. [SDSFIE V2.3 HSIP] S Production. [SDSFIE V2.3 HSIP]

CodeDrainageDensity

Used by Attributes: Grease Trap - Drainage Texture; Line - Drainage Texture; Line - Drainage Texture; Line - Drainage Texture; Line - Drainage Texture; Septic Tank - Drainage Texture; Storm Trench Drain Line - drainage Texture; Culvert Center Line - Material Texture

Value
COARSE
FINE
MEDIUM
OTHER
TBD
UNKNOWN
FINE MEDIUM OTHER TBD

Definition (Notes) [Source] coarse [SDSFIE V1.4] fine [SDSFIE V1.4] medium [SDSFIE V1.4] other [SDSFIE V1.4] to be determined [SDSFIE V1.4] unknown [SDSFIE V1.4]

CodeDrainagePattern

Used by Attributes: Culvert Center Line - Drainage Pattern; Grease Trap - Drainage Pattern; Line - Drainage Pattern; Line -Drainage Pattern; Line - Drainage Pattern; Line - Drainage Pattern; Septic Tank - Drainage Pattern; Storm Trench Drain Line drainagePattern

Value	Definition (Notes) [Source]
ANGULATE	Angulate. [SDSFIE V1.4]
ANNULAR	Annular. [SDSFIE V1.4]
ARTIFICIAL	Artificial. [SDSFIE V1.4]
BARBED	Barbed. [SDSFIE V1.4]
BRAIDED	Braided. [SDSFIE V1.4]
CENTRIPETAL	Centripetal. [SDSFIE V1.4]
COMPLEX	Complex. [SDSFIE V1.4]
COMPOUND	Compound. [SDSFIE V1.4]
CONTORTED	Contorted. [SDSFIE V1.4]
DENDRITANAST	Dendritic Anastomotic. [SDSFIE V1.4]
DENDRITDISTR	Dendritic Distributary (dichotomic). [SDSFIE V1.4]
DENDRITPINNT	Dendritic Pinnate. [SDSFIE V1.4]
DENDRITSUBDN	Dendritic Subdendritic. [SDSFIE V1.4]
DERANGED	Deranged. [SDSFIE V1.4]
INTERNAL	Internal. [SDSFIE V1.4]
MULTIBSKARST	Multibasinal Karst. [SDSFIE V1.4]
MULTIBSTHERM	Multibasinal Thermokarst. [SDSFIE V1.4]
MULTIELNGBAY	Multibasinal Elongate Bay. [SDSFIE V1.4]
MULTIGLACLDS	Multibasinal Glacially Disturbed. [SDSFIE V1.4]
NODEVLSYSTEM	No developed system. [SDSFIE V1.4]
OTHER	Other. [SDSFIE V1.4]
PALIMPSEST	Palimpsest. [SDSFIE V1.4]
PARLLCOLINER	Parallel Collinear. [SDSFIE V1.4]
PARLLSUBPARL	Parallel Subparallel. [SDSFIE V1.4]

PINNATE RADILCENTRIP RECTANGLARAN TBD TRELISUBTREL TRELSDIRECTN TRELSFAULT TRELSFAULT TRELSRECURVE UNKNOWN Pinnate. [SDSFIE V1.4] Radial Centripetal. [SDSFIE V1.4] Rectangular Angulate. [SDSFIE V1.4] To be determined. [SDSFIE V1.4] Trellis Subtrellis. [SDSFIE V1.4] Trellis Fault. [SDSFIE V1.4] Trellis Fault. [SDSFIE V1.4] Trellis Recurved. [SDSFIE V1.4] Unknown. [SDSFIE V1.4]

CodeDrainageZone

Used by Attributes: <u>Culvert Center Line - Drainage Zone;Line - Drainage Zone;Copen Drainage Line - Drainage Zone;Storm Trench Drain Line - drainageZone;Open Drainage Line - Fld Zon</u>

Value MERLIN OTHER TBD UNKNOWN ZONE_1

Definition (Notes) [Source]

Merlin Drainage District [SDSFIE V1.4] other [SDSFIE V1.4] to be determined [SDSFIE V1.4] unknown [SDSFIE V1.4] zone 1 [SDSFIE V1.4]

CodeDrainType

Used by Attributes: Junction - Drain Type;Junction - Drain Type;Veutralizer - Drain Type;Neutralizer - Drain Type;Veutralizer - Drain Ty

Value FAN NETWORK OTHER SEALED SEEPAGEPIT STORMCONNECT SUBDRAIN SUMPPUMP TBD TILEFIELD

Definition (Notes) [Source]

fan [SDSFIE V1.4] network [SDSFIE V1.4] other [SDSFIE V1.4] sealed [SDSFIE V1.4] seepage pit [SDSFIE V1.4] connected to storm system [SDSFIE V1.4] sub drain (French drain) [SDSFIE V1.4] sump pump [SDSFIE V1.4] to be determined [SDSFIE V1.4] tile field [SDSFIE V1.4]

CodeDrinkingWaterSamLoc

Used by Attributes: Drinking Water Sample Point - Dwslocty

Value	Definition (Notes) [Source]
DISTRIBUTION_SYS	Distribution System [SDSFIE V2 Mississippi Dept. of Health]
PLANT_TREATED	Finished water from a water treatment plant. [SDSFIE V2 Mississippi Dept. of Health]
SOURCE_RAW	Raw water from the water source (i.e., well or surface water) prior to treatment. [SDSFIE V2
	Mississippi Dept. of Health]
WELL	Chlorinated well water. [SDSFIE V2 Mississippi Dept. of Health]

CodeEcmDevice

Used by Attributes: <u>Device - Dev Type</u>

Value
FIELD_INTERFC
MULTIPLEX

Definition (Notes) [Source] field interface [SDSFIE V1.8] multiplexer [SDSFIE V1.8]

CodeElectricBus

Used by Attributes: Bus Line - Bus Mat

Value	
ALUMINUM	
COPPER	
OTHER	
TBD	
UNKNOWN	

Definition (Notes) [Source] aluminum metal [SDSFIE V1.4] copper metal [SDSFIE V1.4] other [SDSFIE V1.4] to be determined [SDSFIE V1.4] unknown [SDSFIE V1.4]

CodeElectricCable

Used by Attributes: Cable - Cable Material; Cable - Cable Type; Cable - Cbl Material; Coaxial Line - Cbl Material; Fiberoptic Line - Cbl Material; Other Cable - Cbl Material; Twisted Pair Line - Cbl Material; Utility Pole Guy - Cbl Material; Waveguide Line - Cbl Material; Sensor - Cbl Type; Cable - Install Type; Antenna Line - Material; Bus Line -Material; Pipe Line - Material; Segmented Cable - Material

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CodeElectricCableUse

Used by Attributes: Bus Line - Cbl Use

Value	Definition (Notes) [Source]
ABANDONED	abandoned/inactive cable [SDSFIE V1.4]
OTHER	other [SDSFIE V1.4]
PRIMARY_OH	primary overhead cable [SDSFIE V1.4]
PRIMARY_UG	primary underground cable [SDSFIE V1.4]
SECONDARY_OH	secondary overhead cable [SDSFIE V1.4]
SECONDARY_UG	secondary underground cable [SDSFIE V1.4]
SERVICE_OH	service, overhead cable [SDSFIE V1.4]
SERVICE_UG	service, underground cable [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]
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CodeElectricConfigType

Used by Attributes: Cable - Config Type

Value	Definition (Notes) [Source]
ARMLESS	The cable group is mounted in a cluster at the top of the pole. [SDSFIE V1.4]
CROSSARM_EQL	The individual line mounts in a cable group are equally spaced on a standard length crossarm. [SDSFIE V1.4]
CROSSARM_UNEQL	The individual line mounts in a cable group are not equally spaced on a standard crossarm. [SDSFIE V1.4]
OTHER	other [SDSFIE V1.4]
SHORTARM	The individual line in a cable group are mounted on a cross arm less than 24-inches long. [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]
VERTICAL	The individual line mounts in a cable group are vertically spaced down the pole. [SDSFIE V1.4]

CodeElectricControlType

Used by Attributes: Capacitor - Cntr Type; Equipment - Cntr Type

Value
OTHER
PRIMARY
REMOTE
TBD
UNKNOWN

Definition (Notes) [Source] other [SDSFIE V1.4] Primary. [SDSFIE V2.31 Air Force] Remote. [SDSFIE V2.31 Air Force] to be determined [SDSFIE V1.4] unknown [SDSFIE V1.4]

CodeElectricDeviceUse

Used by Attributes: <u>Regulator - Reg Use;Meter - Use</u>

Value	Definition (Notes) [Source]
ACPOWERPANEL	ac power panel [SDSFIE V1.4]
ALARMPULLBOX	alarm pullbox [SDSFIE V1.4]
BATTERY	battery [SDSFIE V1.4]
CAPACITOR	capacitor [SDSFIE V1.4]
CIRCUITBREAK	circuit breaker [SDSFIE V1.4]
COMMERCIAL	commercial service [SDSFIE V1.4]
DCPOWERPANEL	dc power panel [SDSFIE V1.4]
DISTRIBFRAME	distribution frame [SDSFIE V1.4]
DISTRIBPANEL	distribution panel [SDSFIE V1.4]
ELEC_METER	electric meter [SDSFIE V1.4]
ELEC_MOTOR	electric motor [SDSFIE V1.4]
FIELDINTERFC	field interface [SDSFIE V1.4]
GENERATOR GROUND INTDISTRFRAM JUNCTIONBOX LIGHT LOAD_POINT MAINDISTFRAM OTHER PEDESTAL RECTIFIER RESIDENTIAL	generator [SDSFIE V1.4] ground [SDSFIE V1.4] intermediate distribution frame [SDSFIE V1.4] junction box [SDSFIE V1.4] light [SDSFIE V1.4] load point [SDSFIE V1.4] main distribution frame [SDSFIE V1.4] other [SDSFIE V1.4] pedestal [SDSFIE V1.4] rectifier [SDSFIE V1.4]
SPLICE	splice [SDSFIE V1.4]
SWITCH	switch [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
TRAFFICSIGNL	traffic signal [SDSFIE V1.4]
TRANSFORMER	transformer [SDSFIE V1.4]
TRFSIGCONBOX	traffic signal control box [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]
VOLTREGULATE	voltage regulator [SDSFIE V1.4]

CodeElectricKvar

Used by Attributes: Capacitor - Cpctr Kv;Transformr Bank - Kva 1;Transformr Bank - Kva 2

Value	Definition (Notes) [Source]
10	10 kvar [SDSFIE V1.4]
100	100 kvar [SDSFIE V1.4]
1000	1000 kvar [SDSFIE V1.4]
10000	10000 kvar [SDSFIE V1.4]
112.5	112.5 kvar [SDSFIE V1.7]
112_5	112.5 kvar [SDSFIE V1.4]
1250	1250 kvar [SDSFIE V1.4]
14K20K	14000 20000 kvar [SDSFIE V1.4]
15	15 kvar [SDSFIE V1.4]
150	150 kvar [SDSFIE V1.4]
1500	1500 kvar [SDSFIE V1.4]
167	167 kvar [SDSFIE V1.4]
16K22K	16000 22000 kvar [SDSFIE V1.4]
225	225 kvar [SDSFIE V1.4]
25	25 kvar [SDSFIE V1.4]
250	250 kvar [SDSFIE V1.4]
300	300 kvar [SDSFIE V1.4]
333	333 kvar [SDSFIE V1.4]
37.5	37.5 kvar [SDSFIE V1.7]
37_5	37.5 kvar [SDSFIE V1.4]
3750	3750 kvar [SDSFIE V1.4]
45	45 kvar [SDSFIE V1.4]
50	50 kvar [SDSFIE V1.4]
500	500 kvar [SDSFIE V1.4]
5000	5000 kvar [SDSFIE V1.4]
55	55 kvar [SDSFIE V1.4]
7.5	7.5 kvar [SDSFIE V1.7]
7_5	7.5 kvar [SDSFIE V1.4]
75	75 kvar [SDSFIE V1.4]
750	750 kvar [SDSFIE V1.4]
775	775 kvar [SDSFIE V1.4]
OTHER	other [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]

CodeElectricMotorEnclType

Used by Attributes: <u>Rect Point - Encl Type;Rectifier - Encl Type;Motor - Enclty</u>

Value	Definition (Notes) [Source]
AIR/AIR	totally enclosed, air-to-air cooled [SDSFIE V1.4]
AIR_OVER	totally enclosed, air-over [SDSFIE V1.4]
DUST_PROOF	totally enclosed, dust-ignition proof [SDSFIE V1.4]
ENCL_FAN	totally enclosed, fan cooled [SDSFIE V1.4]
ENCL_FANG	totally enclosed, fan cooled, guarded [SDSFIE V1.4]
ENCL_NON	totally enclosed, nonventilated [SDSFIE V1.4]
ENCL_WAC	totally enclosed, water/air cooled [SDSFIE V1.4]
ENCL_WATER	totally enclosed, water cooled [SDSFIE V1.4]
EXPL_PROOF	totally enclosed, explosion proof [SDSFIE V1.4]
OPEN	open [SDSFIE V1.4]
OPEN_DGUARD	open, drip-proof guarded [SDSFIE V1.4]
OPEN_DP	open, drip-proof [SDSFIE V1.4]
OPEN_EV	open, externally ventilated [SDSFIE V1.4]
OPEN_GUARD	open, guarded [SDSFIE V1.4]
OPEN_PVENT	open, pipe ventilated [SDSFIE V1.4]
OPEN_SG	open, semiguarded [SDSFIE V1.4]
OPEN_SP	open, splash-proof [SDSFIE V1.4]

OPEN_WEATI	open, weather protected - Type I [SDSFIE V1.4]
OPEN_WEATII	open, weather protected - Type II [SDSFIE V1.4]
OTHER	other [SDSFIE V1.4]
PIPE_VENT	totally enclosed, pipe ventilated [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]
WATER_PROOF	totally enclosed, water-proof [SDSFIE V1.4]
PIPE_VENT	totally enclosed, pipe ventilated [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]

CodeElectricMotorInsulType

Used by Attributes: Motor - Insul Cl

Value	Definition (Notes) [Source]
А	IEEE Std 1, 60- 70 deg C. [SDSFIE V1.4]
В	IEEE Std 1, 80- 90 deg C. [SDSFIE V1.4]
F	IEEE Std 1, 105- 115 deg C. [SDSFIE V1.4]
Н	IEEE Std 1, 125- 135 deg C. [SDSFIE V1.4]
OTHER	other [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]

CodeElectricMotorStartType

Used by Attributes: Motor - Start Type

Value	Definition (Notes) [Source]
AUTOTRN_STRT	autotransformer start [SDSFIE V1.4]
CAPCTR_RUN	capacitor run [SDSFIE V1.4]
CAPCTR_STRT	capacitor start [SDSFIE V1.4]
LINE_STRT	line start [SDSFIE V1.4]
OTHER	other [SDSFIE V1.4]
REACTR_REDUV	reactor type, reduced voltage [SDSFIE V1.4]
RESIST_REDUV	resistor type, reduced voltage [SDSFIE V1.4]
SHADED_POLE	shaded pole [SDSFIE V1.4]
SOLDSTATSTRT	solid state start [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]
Y_STRT_D_RUN	Y start delta run [SDSFIE V1.4]

CodeElectricPhase

Used by Attributes: <u>Transformr Bank - Phase 1; Transformr Bank - Phase 2</u>

Value	Definition (Notes) [Source]
А	1 [SDSFIE V1.9]
В	2 [SDSFIE V1.9]
С	3 [SDSFIE V1.9]

CodeElectricPhaseType

Used by Attributes: <u>Cable - Phase Leter;Capacitor - Phase Leter;Generator - Phase Leter;Meter - Phase Leter;Motor - Phase Leter;Rect Point - Phase Leter;Rectifier - Phase Le</u>

Value	Definition (Notes) [Source]
А	A phase [SDSFIE V1.4]
AB	AB phase [SDSFIE V1.4]
ABC	ABC phase [SDSFIE V1.4]

AC B BC C TBD UNKNOWN AC phase [SDSFIE V1.4] B phase [SDSFIE V1.4] BC phase [SDSFIE V1.4] C phase [SDSFIE V1.4] to be determined [SDSFIE V1.4] unknown [SDSFIE V1.4]

${\bf Code Electric Switch Type}$

Used by Attributes: <u>Regulator - Fuse Type;Switch - Swt Type</u>

Definition (Notes) [Source]

disconnect [SDSFIE V1.4] ISO switch [SDSFIE V1.4] oil switch [SDSFIE V1.4] other [SDSFIE V1.4] RAC 6way oil switch [SDSFIE V1.4] RAM oil switch [SDSFIE V1.4] solid blade disconnect [SDSFIE V1.4] to be determined [SDSFIE V1.4] unknown [SDSFIE V1.4] vacuum [SDSFIE V1.4]

CodeElectricTranbnk

Used by Attributes: Transformr Bank - Mount

Value CEILING_MOUNTED PAD_MOUNTED POLE_MOUNTED WALL_MOUNTED

Definition (Notes) [Source]

Ceiling mounted. [SDSFIE V2.3 Tinker Air Force Base] pad mounted transformer bank [SDSFIE V2.1 FGDC Utilities Classification] pole mounted transformer bank [SDSFIE V2.1 FGDC Utilities Classification] Wall mounted [SDSFIE V2.3 Tinker Air Force Base]

CodeElectricVoltRegulType

Used by Attributes: <u>Regulator - Reg Type</u>

Value	Definition (Notes) [Source]
OTHER	other [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]
VOLTREG_1	1-phase, 7.5-19.9 Kvs, 50-418 amps, 7.6-19.9 Kva, metered or digital parameters, multiple microprocessor controlled step-voltage regulator. [SDSFIE V1.4]
VOLTREG_3	3-phase, 13-34 Kvs, 220-445 amps, 500-2670 Kva, metered or digital parameters, multiple microprocessor controlled step-voltage regulator. [SDSFIE V1.4]

CodeElectronicMarkerPurpose

Used by Attributes: Marker - Elmpur

Value	Definition (Notes) [Source]
BUILDING_ENTER	Conduit Entrance to Building. [SDSFIE V2.5 AIR FORCE]
OTHER	Other. [SDSFIE V2.5 AIR FORCE]
ROAD_CROSSING	Road Crossing. [SDSFIE V2.5 AIR FORCE]
ROUTE	Cable or Duct Route. [SDSFIE V2.5 AIR FORCE]
ROUTE_CHANGE	Change in Direction of Cable or Duct Route. [SDSFIE V2.5 AIR FORCE]
SPLICE	Cable Splice Location. [SDSFIE V2.5 AIR FORCE]

STUBOUT TBD UNKNOWN Manhole Stubout. [SDSFIE V2.5 AIR FORCE] To Be Determined. [SDSFIE V2.5 AIR FORCE] Unknown. [SDSFIE V2.5 AIR FORCE]

CodeEnclosureMaterials

Used by Attributes: <u>Pedestal Site - Costrm;Cable Bridge Line - material;Cable Rack Line - material;Cable Tray Line -</u> Material;Vault - Vlt Material

Value	Definition (Notes) [Source]
AL	Aluminum. [SDSFIE V2.5 AIR FORCE]
CIS	Concrete Cast inSitu/Cast in Place. [SDSFIE V2.5 AIR FORCE]
COMBINATION	Combination of materials. [SDSFIE V2.5 AIR FORCE]
FIBERGLASS	Fiberglass. [SDSFIE V2.5 AIR FORCE]
IRON	Iron (Cast or Forged). [SDSFIE V2.5 AIR FORCE]
MASONRY	Masonry (Brick or Block). [SDSFIE V2.5 AIR FORCE]
OTHER	Other. [SDSFIE V2.5 AIR FORCE]
PLASTIC	Plastic. [SDSFIE V2.5 AIR FORCE]
PRECAST	Pre-Cast Concrete. [SDSFIE V2.5 AIR FORCE]
STEEL	Steel. [SDSFIE V2.5 AIR FORCE]
TBD	To Be Determined. [SDSFIE V2.5 AIR FORCE]
UNKNOWN	Unknown. [SDSFIE V2.5 AIR FORCE]

CodeEncryptionLevelType

Used by Attributes: <u>Relay Station - Enc Max</u>

Value	Definition (Notes) [Source]
Ι	First [SDSFIE V2.3 Tinker Air Force Base]
II	Second [SDSFIE V2.3 Tinker Air Force Base]
III	Third [SDSFIE V2.3 Tinker Air Force Base]
IV	Fourth [SDSFIE V2.3 Tinker Air Force Base]
V	Fifth [SDSFIE V2.3 Tinker Air Force Base]

CodeEquipmentCooling

Used by Attributes: Pump - Cool Method;Pump - Cool Method;Rectifier - Cool Method;Re

Value	Definition (Notes) [Source]
AIR	air [SDSFIE V1.4]
FAN	fan [SDSFIE V1.4]
OIL	oil [SDSFIE V1.4]
OILAIR	oil and air (OA) [SDSFIE V1.4]
DILAIRFAN	oil, air, and fan (FA) [SDSFIE V1.4]
OTHER	other [SDSFIE V1.4]
REFRIGERATE	refrigeration units [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]

CodeEquipmentType

Used by Attributes: <u>Equipment - Equipment Type</u>

Value AN/FPN-62 **Definition (Notes) [Source]** AN/FPN-62. [SDSFIE V2.31 Air Force]

AN/GPN-11	AN/GPN-11. [SDSFIE V2.31 Air Force]
AN/GPN-12	AN/GPN-12. [SDSFIE V2.31 Air Force]
AN/GPN-20	AN/GPN-20. [SDSFIE V2.31 Air Force]
AN/GPN-22	AN/GPN-22. [SDSFIE V2.31 Air Force]
ARSR-4	ARSR-4. [SDSFIE V2.31 Air Force]
ASR-11	ASR-11. [SDSFIE V2.31 Air Force]
ASR-5	ASR-5. [SDSFIE V2.31 Air Force]
ASR-7	ASR-7. [SDSFIE V2.31 Air Force]
ASR-8	ASR-8. [SDSFIE V2.31 Air Force]
ASR-9	ASR-9. [SDSFIE V2.31 Air Force]
MACS	MACS. [SDSFIE V2.31 Air Force]
WSR-88D	WSR-88D. [SDSFIE V2.31 Air Force]

CodeExternalLight

Used by Attributes: <u>Light - litType</u>

Value	Definition (Notes) [Source]
OTHER	Other
SAFETY	Lights used for safety.
SECURITY	Security Light [SDSFIE V1.9 REEGIS]
STREET	Lights specifically designed to illuminate the street below. [SDSFIE V1.6]
UNKNOWN	Unknown
WALKWAY	Normally a low mounted light designed to illuminate a walkway or beside a driveway.
	[SDSFIE V2.1 FGDC Utilities Classification]
WORKSITE	Lights ysed to illuminate a work site.

CodeFireConnection

Used by Attributes: Fire Connection Point - Connection Type

Value	Definition (Notes) [Source]
FIRE_CONNECT	fire department connection [SDSFIE V2.1 FGDC Utilities Classification]
FIRE_HYDRANT	fire hydrant [SDSFIE V2.1 FGDC Utilities Classification]

CodeFireFlow

Used by Attributes: <u>Hydrant – Flow Standard</u>

Value	Definition (Notes) [Source]
С	Less than 500 gal/min, red hydrant cap
В	500-999 gal/min, orange hydrant cap
А	1000-1499 gal/min, green hydrant cap
AA	1500 gal/min or higher, light blue hydrant cap
TBD	To be determined
UNKNOWN	Unknown

CodeFuel

Used by Attributes: <u>Generator - Fuel Type;Line - Fuel Type;Tank - Fuel Type;Fill Point - Gas Type;Light - Gas Type;Line - Gas Type;Source - Type</u>

Value	Definition (Notes) [Source]
100	100/130 octane gasoline, leaded, MIL-L-5572F (GREEN)
100LL	100/130 MIL Spec, low lead, aviation gasoline (BLUE)
115	115/145 octane gasoline, leaded, MIL-L-5572F (PURPLE)
7	JP-7, Jet Propellant type 7 (Glass Tank Fuel)
80	80/87 octane gasoline, leaded, MIL-L-5572F (RED)

А	Jet A, without icing inhibitor
A+	Jet A+, Kerosene fuel, Type A, Jet A or JP-1 With icing inhibitor.
A1	Jet A1, without icing inhibitor
A1+	Jet A1+, Jet A1 with icing inhibitor.
В	Jet B, Wide cut turbine fuel, Without icing inhibitor.
B+	Jet B+, wide cut turbine fuel with icing inhibitor.
С	91/96 octane gasoline, leaded, No MIL Spec.
F	80 octane gasoline, unleaded, No MIL Spec.
G	Aviation Gasoline (AVGAS), octane unknown
Н	108/135 octane gasoline, leaded, No MIL Spec
J	Jet fuel available but type is unknown
J4	JP-4, Wide cut turbine fuel MIL Spec T-5624
J5	JP-5, Kerosene MIL Spec T-5624
J8	JP-8, Semi Kerosene MIL Spec T-83133, without icing inhibitor
K	73 octane gasoline, unleaded, No MIL Spec
Х	Storage tanks available and fuel type unknown or the tanks were used at one time for aviation
	products but may now store other products
LqNaturalGas	Liguified Natural Gas

CodeFuelDeliveryMethodType

Used by Attributes: Generator - Fuel Delivery Method

Value	Definition (Notes) [Source]
CONVEYOR	Conveyor. [SDSFIE V2.31 HSIP]
OTHER	Other. [SDSFIE V2.31 HSIP]
PIPELINE	Pipeline. [SDSFIE V2.31 HSIP]
RAIL	Railroad. [SDSFIE V2.31 HSIP]
SHIP_BARGE	Ship or Fuel Barge. [SDSFIE V2.31 HSIP]
TRUCK	Truck/Vehicle. [SDSFIE V2.31 HSIP]

CodeFuelSource

Used by Attributes: Source - Name

V	alue
5	

5 ART_WELL_7 FEDERALES LAFOUCHE MAGEES_CREEK OTHER TBD TYLERTOWN UNKNOWN

Definition (Notes) [Source]

lagoon #5 [SDSFIE V1.4] Artisan Well #7 [SDSFIE V1.6] Arroyo Federales [SDSFIE V1.6] Bayou LaFouche [SDSFIE V1.6] Magees Creek [SDSFIE V1.6] other [SDSFIE V1.4] to be determined [SDSFIE V1.4] Tylertown Wellfield [SDSFIE V1.6] unknown [SDSFIE V1.4]

CodeGasFixtureUse

Used by Attributes: <u>Light - Fix Use</u>

Value
EX_LIGHT
IN_LIGHT
OTHER
SEC_LIGHT
ST_LIGHT
TBD
UNKNOWN

Definition (Notes) [Source]

exterior light [SDSFIE V1.4] interior light [SDSFIE V1.4] other [SDSFIE V1.4] security light [SDSFIE V1.4] street light [SDSFIE V1.4] to be determined [SDSFIE V1.4] unknown [SDSFIE V1.4]

CodeGeneratorType

Used by Attributes: <u>Generator - Type</u>

Value BACKUP EMERGENCY OTHER PRIMARY TBD UNKNOWN

Definition (Notes) [Source]

Backup generator. [SDSFIE V2 Cherry Point] Emergency generator. [SDSFIE V2 Cherry Point] other [SDSFIE V1.4] Primary generator. [SDSFIE V2 Cherry Point] to be determined [SDSFIE V1.4] unknown [SDSFIE V1.4]

CodeHcsAnchor

Used by Attributes: <u>Anchor - Anch Type</u>

Value GUIDE_ANCHOR RIGID_ANCHOR

Definition (Notes) [Source]

guide anchor [SDSFIE V2.1 FGDC Utilities Classification] rigid anchor [SDSFIE V2.1 FGDC Utilities Classification]

CodeHeating-CoolingType

Used by Attributes: Plant Area - Prod Type

Value	Definition (Notes) [Source]
CHW	chilled water: water less than 45 deg. F. [SDSFIE V1.4]
HTW_CHW	high temp - chilled water [SDSFIE V1.4]
LTW	low temperature water: water less than 250 deg. F. [SDSFIE V1.4]
LTW_CHW	low temp - chilled water [SDSFIE V1.4]
OTHER	other [SDSFIE V1.4]
S	steam [SDSFIE V1.4]
S_CHW	steam - chilled water [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]

CodeHertz

Used by Attributes: Motor - hertz

Value temp **Definition (Notes) [Source]** temp

CodeHydrantClass

Used by Attributes: Fire Connection Point - Hydrant Class

Value GREEN LT_BLUE ORANGE RED

Definition (Notes) [Source]

green - Class A - rated capacity of 1000-1499 gpm (3785-5675 L/min). [SDSFIE V1.8] light blue - Class AA - rated capacity of 1500 gpm or greater (5680 L/min). [SDSFIE V1.8] orange - Class B - rated capacity of 500-999 gpm (1900-3780 L/min). [SDSFIE V1.8] red - Class C - rated capacity less than 500 gpm (1900 L/min). [SDSFIE V1.8]

CodeHydrantOrg

Used by Attributes: <u>Hydrant – Owner; Hydrant – Maintenance Agency</u>

Value AA_COUNTY **Definition (Notes) [Source]** Anne Arundel County BALTIMORE_CITY FAA MAA OTHER PRIVATE SHA UNKNOWN Baltimore City Federal Aviation Administration Maryland Aviation Administration Other Private Maryland State Highway Administration Unknown

CodeHydrantType

Used by Attributes: <u>Fill Point - Hydrant Type; Fire Connection Point - Hydrant Type; Hydrant - Hydrant Type; Hydrant - Hydrant Type</u>

Value AIRPORT	Definition (Notes) [Source] airport hydrant [SDSFIE V1.4]
BUILDING	building hydrant [SDSFIE V1.4]
DRINKFOUNT	drinking fountain [SDSFIE V1.4]
DRYBARREL	dry barrel [SDSFIE V1.4]
FREEZEPROOF	freeze proof [SDSFIE V1.4]
FUEL	fuel hydrant [SDSFIE V1.4]
NATGAS	natural gas hydrant [SDSFIE V1.4]
OTHER	other [SDSFIE V1.4]
STREETWASH	street washer [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]
WASHRACK	wash rack hydrant [SDSFIE V1.4]
WATER	water hydrant [SDSFIE V1.4]
WETBARREL	wet barrel [SDSFIE V1.4]
YARD	yard hydrant [SDSFIE V1.4]
ELEVATED	connection on elevated roadway with valve on lower level
UNDERGROUND	hydrant contained in underground vault
WALL	hydrant is wall-mounted connection inside building

CodeInlets

Used by Attributes: Inlet - Inlet St;Inlet - Inlet St;Inlet - Inlet Step

Definition (Notes) [Source]

air conditioner condensate [SDSFIE V2.3 Cherry Point] backwater valve drain [SDSFIE V2.3 Cherry Point] catch basin [SDSFIE V2.3 Cherry Point] condensate drain [SDSFIE V2.3 Cherry Point] curb opening inlet [SDSFIE V2.1 FGDC Utilities Classification] drain [SDSFIE V2.3 Cherry Point] drop inlet [SDSFIE V2.1 FGDC Utilities Classification] combined grate and curb opening inlet [SDSFIE V1.4] other [SDSFIE V1.4] roof drain [SDSFIE V2.3 Cherry Point] inlet standard type A inlet [SDSFIE V1.4] inlet standard type B inlet [SDSFIE V1.4] inlet standard type C inlet [SDSFIE V1.4] inlet standard type D inlet [SDSFIE V1.4] surface linear [SDSFIE V2.1 FGDC Utilities Classification] to be determined [SDSFIE V1.4] unknown [SDSFIE V1.4] waste drain [SDSFIE V2.3 Cherry Point] weir inlet [SDSFIE V1.4]

CodeJunctionType

Used by Attributes: Access Point - Junction Type; Air Eliminator - Junction Type; Air Pressure Device - Junction Type:Amplifier - Junction Type;Anodor - Junction Type;Anode Test Station - Junction Type;Anode Test Station - Junction Type; Anode Test Station - Junction Type; Anode Test Station - Junction Type; Anode Test Station - Junction Type:Anode Test Station - Junction Type:Antenna Site - Junction Type;Attenuator - Junction Type;Cable Ladder - Junction Type:Capacitor - Junction Type;Culvert End - Junction Type;DbSplice - Junction Type;Device - Junction Type;Device - Junction Type;Discharge Point - Junction Type;Discharge Point - Junction Type;Discharge Point - Junction Type;Discharge Point -Junction Type; Disposal Tank - Junction Type; Downspout - Junction Type; Downspout - Junction Type; Drain Separator - Junction Type;Drinking Water Sample Point - Junction Type;Equipment - Junction Type;Farm Site - Junction Type;Fill Point - Junction Type;Filter Strainer - Junction Type;Fire Connection Point - Junction Type;Fitting - Junction Type;Fitting - Junction Type; Fitting - Junction Type;Fitting - Junction Type;Flow Control Device - Junction Type;Flow Control Device - Junction Type;Gate - Junction Type;Generator - Junction Type;Grease Trap - Junction Type;Grit Chamber - Junction Type;Grit Chamber - Junction Type: Ground Point - Junction Type: Ground Point - Junction Type: Head Bolt Outlet - Junction Type: Headwall - Junction Type;Headwall - Junction Type;Hydrant - Junction Type;Hydrant - Junction Type;Impedance Matching Point - Junction Type;Inlet - Junction Type;Inlet - Junction Type;Inlet - Junction Type;Inlet - Junction Type;Intake - Junction Type;Internet Center - Junction Type; Junction - Junction Type; Junction - Junction Type; Junction - Junction Type;Junction - Junction Type;Light - Junction Type;Load Capacitor - Junction Type;Load Coil - Junction Type:Marker - Junction Type;Marker - Junction Type;Media Converter - Junction Type;Meter - Junction Type;Meter - Junction Type;Meter - Junction Type:Meter - Junction Type;Meter - Junction Type;Meter - Junction Type;Meter - Junction Type;Motor - Junction Type;Network Systems Site - Junction Type; Neutralizer - Junction Type; Neutralizer - Junction Type; Oil Water Separator - Junction Type; Path Node Site -Junction Type; Pedestal - Junction Type; Pedestal Site - Junction Type; Pig Launch Point - Junction Type; Pressure Reducing Station - Junction Type;Pullbox Site - Junction Type;Pump - Junction Type;Pump - Junction Type;Pump -Junction Type;Pump - Junction Type;Pump - Junction Type;Pump - Junction Type;Pump - Junction Type;Pump Booster Station -Junction Type; Pump Ejector Station - Junction Type; Pump Station - Junction Type; Pump Station - Junction Type; Pump Station -Junction Type; Pump Station - Junction Type; Pumpstation Ejector - Junction Type; Radar Site - Junction Type; Radio - Junction Type:Radio Receiver - Junction Type;Radio Transmitter - Junction Type;Rect Point - Junction Type;Rectifier - Junction Type:Rectifier - Junction Type:Rectifier - Junction Type:Rectifier - Junction Type:Rectifier - Junction Type;Refinery Site - Junction Type;Regulator - Junction Type;Regulator - Junction Type;Regulator Reducer - Junction Type;Regulator Reducer - Junction Type;Relay Station - Junction Type;Repeater - Junction Type;Reservoir - Junction Type;Reservoir - Junction Type;Riser - Junction Type;Riser - Junction Type;Satellite - Junction Type;Segmented Cable Point -Junction Type;Sensor - Junction Type;Septic Tank - Junction Type;Service Area - Junction Type;Service Loop Point - Junction Type;Source - Junction Type;Source - Junction Type;Source Site - Junction Type;Speaker - Junction Type;Splice - Junction Type:Splice - Junction Type;Splitter - Junction Type;Stilling Basin - Junction Type;Storm Ceptor - Junction Type;Storm Filter -Junction Type:Substation - Junction Type:Switch - Junction Type:Tank - Junction Type:Tank - Junction Type:Tank - Junction Type: Tank - Junction Type: Tank - Junction Type: Tank Area - Junction Type: Telephone - Junction Type: Telephone Booth -Junction Type; Terminal - Junction Type; Terminator - Junction Type; Transformer Vault - Junction Type; Transformr Bank -Junction Type; Treatment Plant - Junction Type; Treatment Unit - Junction Type; Utility Electric Utility Site - Junction Type:Utility Pole Guy - Junction Type:Utility Pole Tower Site - Junction Type:Valve - Junction Type:Valve - Junction Type; Valve - Junction Junction Type; Valve - Junction Type; Valve Pit - Junction Type; Vault - Junction Type; Vault - Junction Type; Vent - Junction Type; Vertical Site - Junction Type; Video Site - Junction Type; Voice Switch - Junction Type

Value	Definition (Notes) [Source]
NEITHER	A junction feature that neither pushes or pulls flow away or towards itself.
SINK	A junction feature that pulls flow toward itself through the edges of a geometric network [ESRI]
SOURCE	A junction feature that pushes flow away from itself through the edges of a geometric network [ESRI]

CodeJuncType

Used by Attributes: <u>Comm Junction – JuncType</u>; <u>Deicing Junction – JuncType</u>; <u>Electrical Junction - JuncType</u>

Value UNKNOWN **Definition (Notes) [Source]** UNKNOWN

MANHOLE	MANHOLE
HANDHOLE	HANDHOLE
SWITCHBOX	SWITCHBOX

CodeLaboratory

Used by Attributes: Lagoon - Lab Name; Lagoon - Lab Name; Storage Area - Lab Name

Value LAW_ENG LAW_ENV OTHER TBD UNKNOWN WES

Definition (Notes) [Source]

Law Engineering [SDSFIE V1.4] Law Environmental [SDSFIE V1.4] other [SDSFIE V1.4] to be determined [SDSFIE V1.4] unknown [SDSFIE V1.4] Waterways Experiment Station [SDSFIE V1.4]

CodeLaboratoryType

Used by Attributes: Lagoon - Lab Type; Lagoon - Lab Type; Storage Area - Lab Type

Value CHEMICAL ENVIRONMENTAL GEOTECHNICAL OTHER STRUCTURAL TBD UNKNOWN

Definition (Notes) [Source]

chemical testing laboratory [SDSFIE V1.4] environmental testing laboratory [SDSFIE V1.4] geotechnical (soils and rock) testing laboratory [SDSFIE V1.4] other [SDSFIE V1.4] structural testing laboratory [SDSFIE V1.4] to be determined [SDSFIE V1.4] unknown [SDSFIE V1.4]

CodeLightingConfigurationType

Used by Attributes: <u>Disposal Tank - Lighting Type;Septic Tank - Lighting Type;Tank - Lightin</u>

Value	Definition (Notes) [Source]
ALSF-1	High Intensity Approach Lighting System - Configuration 1
ALSF-2	High Intensity Approach Lighting System - Configuration 2
APAP	Alignment of Element Systems
APBN	Airport Rotating Beacon
CLRBAR	Taxiway Clearance Bar Lights
CODEBEACON	Code Beacon
COURSE	Course Lights
F	Fixed
FL	Flashing (Sea Plane Navigation Buoy use only)
FL (2)	Group Flashing (Sea Plane Navigation Buoy use only)
FL (2+1)	Composite Group-Flashing (Sea Plane Navigation Buoy use only)
HLL	Hover Lane Light
HLLL	Hover Lane Limit Light
HPIL	Helipad Perimeter Inset Light
HPPEL	Helipad Perimeter Light (Elevated)
HPPLSF	Helipad Perimeter Light (Semiflush)
ISO	Isophase (Sea Plane Navigation Buoy use only)
L-804	Unidirectional elevated runway guard lights
L-850A	Bi directional or unidirectional runway in pavement light used for runway centerline, Land and Hold Short Operations (LAHSO).
L-850B	Unidirectional runway in pavement light used for runway touchdown zone and medium intensity approach light system applications.
L-850C	Bi directional runway in pavement light used for runway edge lights and displaced threshold applications.
L-850D	Bi directional or unidirectional runway in pavement lights used for runway threshold or runway end light applications.
L-850E	Unidirectional runway in pavement light used for runway threshold light and Medium

	Intensity Approach Light System applications
L-850F	Unidirectional runway in payement lights white flashing lights used for LAHSO
L-852A	Bi directional or unidirectional taxiway centerline in pavement lights used for the straight
E 052H	
	sections of taxiways where operations are permitted when the Runway Visual Range (RVR) is
	greater than or equal to 1200 feet.
L-852B	Bi directional or unidirectional taxiway centerline in pavement lights for curved sections of
	taxiways where operations are permitted when the Runway Visual Range (RVR) is greater
	than or equal to 1200 feet.
L-852C	bi directional or unidirectional taxiway centerline in pavement lights for straight portions of
	taxiways where operations are permitted when the Runway Visual Range (RVR) is less than
	1200 feet.
L-852D	Bi directional or unidirectional taxiway centerline in pavement lights used for curved portions
	of taxiways where operations are permitted when the Runway Visual Range is less than 1200
	feet.
L-852E	Omni directional taxiway intersection in pavement lights where operations are permitted when
	the Runway Visual Range is greater than or equal to 1200 feet.
L-852E/F	Runway Guard Light in-pavement
L-852F	Omni directional taxiway intersection in pavement lights where operations are permitted when
	the Runway Visual Range is less than 1200 feet.
L-852G	Unidirectional Runway Guard in pavement lights
L-852G/S	
	Combination Runway Guard/Stop bar light in-pavement
L-852J	Bi directional taxiway centerline in pavement lights for the curved portions of taxiways where
	operations are permitted when the Runway Visual Range is greater than or equal to 1200 feet.
L-852K	Bi directional taxiway centerline in pavement lights for the curved portions of taxiway where
L-052K	
	operation are permitted when the Runway Visual Ranger is less than 1200 feet.
L-852S	Unidirectional in pavement Stop Bar lights
L-852T	Omni directional in pavement taxiway edge and Apron edge lights
L-853	Reflective Marker
L-854	Radio Controller (Pilot Controlled Lights)
L-860	Omni directional elevated runway edge lights for Visual Flight Rules (VFR) operations.
L-860E	Bi directional or unidirectional elevated runway threshold or runway end lights for Visual
E-000E	
	Flight Rules operations.
L-861	Omni directional or bi directional elevated runway edge or displaced threshold lights for non-
	precision Instrument Flight Rules (IFR) operations.
L-861E	Bi directional or unidirectional elevated runway threshold or runway end lights for non-
E-001E	
	precision Instrument Flight Rule operations.
L-861SE	Bi directional and unidirectional elevated runway threshold, runway end, and displaced
	threshold lights for non-precision Instrument Flight Rule operations
L-861T	Omni directional elevated taxiway and apron edge lights.
L-862	Bi directional elevated runway edge, threshold, and displaced threshold lights for precision
	Instrument Flight Rule operations.
L-862E	Bi directional or unidirectional elevated runway threshold, runway end, and displaced
E 002E	
	threshold lights for precision Instrument Flight Rule operations.
L-862S	Unidirectional elevated stop bar lights
L-880/L881	Precision Approach Path Indicator
LDIN	Lead In Lighting System
MALS	Medium Intensity Approach Lighting System
MALSF	Medium Intensity Approach Lighting System with Sequenced Flashing Lights
MALSR	Medium Intensity Approach Lighting System with Runway Alignment Indicator Lights
	(RAIL)
MO (A)	Morse Code (Sea Plane Navigation Buoy use only)
NONE	No lights
OBSCAT	Catenary Lighting
OBSDUAL	A combination of OBSRED and OBSWHT
OBSRED	Aviation red Obstruction Lights
OBSWHITE	Flashing White Obstruction Lights
OC OD ALC	Occulting (Sea Plane Navigation Buoy use only)
ODALS	Omnidirectional Approach Lighting System
OTHER	Other
PAPI2	Precision Approach Path Indicator with 2 lights
	Precision Approach Path Indicator with 2 lights
PAPI4	
PORTABLE	Portable Lights
PVASI	Pulsating visual Approach Slope Indicator
Q	Quick (Flashing) (Sea Plane Navigation Buoy use only)
RAIL	Runway Alignment Indicator Lights
REIL	Runway End Identifier Lights
RWSL	Runway Status Lights
SALS	Short Approach lighting System
SMGCS	Surface Movement Guidance Control System

SSALF	Short Simplified Approach Light System with Sequenced Flashing Lights
SSALR	Simplified Short Approach Lighting System with Runway Alignment Indicator
TRCV	TriColor VASI
T-VASI	Visual Approach Slope Indicator
TWYON_OFFLGT	Taxiway Lead on/off lights
VASI-12	Visual Approach Slope Indicator with 2 bars and 12 boxes
VASI-16	Visual Approach Slope Indicator with 3 bars and 16 boxes
VASI-2	Visual Approach Slope Indicator with 2 bars
VASI-2-2	Visual Approach Slope Indicator with 2 bars and 2 boxes
VASI-3	Visual Approach Slope Indicator with 3 bars

CodeLightWatts

Used by Attributes: Light - Watts

Value	Definition (Notes) [Source]
100	100w. [SDSFIE V2.4 USMC]
1000	1000w. [SDSFIE V2.4 USMC]
150	150w. [SDSFIE V2.4 USMC]
175	175w. [SDSFIE V2.4 USMC]
200	200w. [SDSFIE V2.4 USMC]
250	250w. [SDSFIE V2.4 USMC]
400	400w. [SDSFIE V2.4 USMC]
7	7w [SDSFIE V1.9]
70	70w [SDSFIE V1.9]

CodeLoadCoilSystem

Used by Attributes: Load Coil - Ldcsym

Value	Definition (Notes) [Source]
B88	B88 - 88 Mh Coil Spaced Every 3,000 Feet. [SDSFIE V2.5 AIR FORCE]
D66	D66 - 66 Mh Coil Spaced Every 4,500 Feet. [SDSFIE V2.5 AIR FORCE]
D66DSL	D66DSL - 66 Mh Coil Spaced Every 4,500 Feet. Permits ADSL Services. [SDSFIE V2.5 AIR
	FORCE]
D88	D88 - 88 Mh Coil Spaced Every 4,500 Feet. [SDSFIE V2.5 AIR FORCE]
H88	H88 - 88 Mh Coil Spaced Every 6,000 Feet. [SDSFIE V2.5 AIR FORCE]
H88DSL	H88DSL - 88 Mh Coil Spaced Every 6,000 Feet. Permits ADSL Services. [SDSFIE V2.5 AIR
	FORCE]
OTHER	Other. [SDSFIE V2.5 AIR FORCE]
TBD	To Be Determined. [SDSFIE V2.5 AIR FORCE]
UNKNOWN	Unknown. [SDSFIE V2.5 AIR FORCE]

CodeLoadsCoilCaseType

Used by Attributes: <u>Load Coil - Ldccas</u>

Value Definition (Notes) [Source]	
124C 124C Case. [SDSFIE V2.5 AIR FORCE]	
235A 235A Case. [SDSFIE V2.5 AIR FORCE]	
236C 236C Case. [SDSFIE V2.5 AIR FORCE]	
723 723 Aerial Load Coil Case. [SDSFIE V2.5 AIR FORCE]	
724 724 Aerial Load Coil Case. [SDSFIE V2.5 AIR FORCE]	
772 772 Aerial Load Coil Case. [SDSFIE V2.5 AIR FORCE]	
NREC Non-reenterable factory sealed case designed to be placed within a	in enclosure. [SDSFIE V2.5
AIR FORCE]	
NREX Non-reenterable factory sealed case designed to be direct buried o	r exposed to weather.
[SDSFIE V2.5 AIR FORCE]	
OTHER Other. [SDSFIE V2.5 AIR FORCE]	
REC Coils are assembled in a case that can be opened for maintenance,	designed to be placed in an
enclosure. [SDSFIE V2.5 AIR FORCE]	

TBD UNKNOWN To Be Determined. [SDSFIE V2.5 AIR FORCE] Unknown. [SDSFIE V2.5 AIR FORCE]

CodeManholeCoverType

Used by Attributes: Junction - Cover Material

Value	Definition (Notes) [Source]
MRND25	Round (25 centimeter diameter). [SDSFIE V2.5 AIR FORCE]
MRND40	Round (40 centimeter diameter). [SDSFIE V2.5 AIR FORCE]
MRND45	Round (45 centimeter diameter). [SDSFIE V2.5 AIR FORCE]
REC	Rectangular (24 inch by 36 inch) [SDSFIE V2 Austin and Pitts]
RND24	Round (24 inch diameter) [SDSFIE V2 Austin and Pitts]
RND27	Round (27 inch diameter) [SDSFIE V2 Austin and Pitts]
RND28	Round (28 inch diameter) [SDSFIE V2 Austin and Pitts]
RND30	Round (30 inch diameter) [SDSFIE V2 Austin and Pitts]
RND36	Round (36 inch diameter) [SDSFIE V2 Austin and Pitts]
RND38	Round (38 inch diameter) [SDSFIE V2 Austin and Pitts]
RND42	Round (42 inch diameter) [SDSFIE V2 Austin and Pitts]
RND48	Round (48 inch diameter) [SDSFIE V2 Austin and Pitts]

CodeManholeLinerType

Used by Attributes: Junction - Liner Type; Junction - Liner Type; Neutralizer - Liner Type; Neutralizer - Liner Type

Value GLASS OTHER PLASTIC TBD UNKNOWN

Definition (Notes) [Source]

glass liner [SDSFIE V1.4] other [SDSFIE V1.4] plastic liner [SDSFIE V1.4] to be determined [SDSFIE V1.4] unknown [SDSFIE V1.4]

CodeManholeMaterial

Used by Attributes: Junction - Apron Trough Material; Junction - Corbel Walls Material

Value temp **Definition (Notes) [Source]** temp

CodeMaritimeMgmtType

Used by Attributes: Media Converter - Mtimzone

Value	Definition (Notes) [Source]
CZ	The Contiguous Zone is a U.S. maritime boundary extending to 24 nautical miles from the baseline. [SDSFIE V2.5 NAVFAC]
EEX	The Exclusive Economic Zone is an area beyond and adjacent to the territorial sea. [SDSFIE V2.5 NAVFAC]
FZ	The Fishing Zone area as defined in the Fisheries Management Act 1991 (FMA). [SDSFIE V2.5 NAVFAC]
HS	High Seas, International Waters, meaning the open seas of the world outside the territorial waters of any nation. [SDSFIE V2.5 NAVFAC]
IW	Internal Waters. [SDSFIE V2.5 NAVFAC]
JDZ	Joint Development Zones. [SDSFIE V2.5 NAVFAC]
MZ	Military Zones. [SDSFIE V2.5 NAVFAC]
SZ	Special Zones. [SDSFIE V2.5 NAVFAC]
TS	The Territorial Sea is U.S. maritime boundary extending to 12 nautical miles as measured from the baseline. [SDSFIE V2.5 NAVFAC]

CodeMarkingFeatureType

Used by Attributes: <u>Disposal Tank - markingFeatureType;Septic Tank - markingFeatureType;Tank - markingFeatureType;Tank - markingFeatureType;Tank - markingFeatureType;Tank Area - markingFeatureType</u>

Value	Definition (Notes) [Source]
AIMING POINT	Runway Aiming Point (Geometry Type: Polygon) [Source: AC 150/5340-1]
ALTBAND	Iternating bands of aviation orange and white [Source AC 70/7640-1]
	Surface painted apron position/entrance sign (Geometry Type: Polygon) [Source: AC
APRON_SIGN	150/5340-1]
ARROW	Arrows identify the displaced threshold area to provide centerline guidance for takeoffs and rollouts (Geometry Type: Line) [Source: AC 150/5340-1]
ARROW_HEAD	Arrow heads are used in conjunction with a threshold bar to further highlight the beginning of
AKKOW_HEAD	a runway (Geometry Type: Line) [Source: AC 150/5340-1]
CHECKERBOARD	Checkerboard obstruction marking pattern [Source AC 70/7640-1]
CHEVRON	A marking used to designate blast pads and other areas that are not suitable for aircraft
DEMARCATION	(Geometry Type: Line) [Source: AC 150/5340-1]
DEMARCATION	Demarcation Bar (Geometry Type: Line) [Source: AC 150/5340-1]
DIR_SIGN	Surface painted taxiway direction signs (Geometry Type: Polygon) [Source: AC 150/5340-1]
GATE_LINE	All painted taxilines covering a parking stand area are regarded as stand guidance lines and
	will be individual objects in the database. There may be several stand guidance taxilines leading to an aircraft stand to accommodate different aircraft types.
GATE_SIGN	Surface painted gate position signs (Geometry Type: Polygon) [Source: AC 150/5340-1]
HOLD_SIGN	Surface painted holding position signs (Geometry Type: AC 150/5340-1]
ILS_HOLD	Holding position markings for Instrument Landing Systems (Geometry Type: Polygon) [Source: AC 150/5340-1]
INTERSECTION_HOLD	Holding position marking for taxiway/taxiway intersections (Geometry Type: Line) [Source: AC 150/5340-1]
LAHSO	Marking associated with a Land And Hold Short Operations (LAHSO)
LOCATION_SIGN	Surface painted taxiway location signs (Geometry Type: Polygon) [Source: AC 150/5340-1]
NON_MOVE_AREA	Non-movement area marking (Geometry Type: Line) [Source: AC 150/5340-1]
NONE	No marking(s)
OTHER	Other markings not listed
OTHER_LINE	Other markings suitable for representation as a line
OTHER_POLYGON	Other markings suitable for representation as a polygon
PERM_CLOSED	Markings for permanently closed runways and taxiways (Geometry Type: Polygon) [Source: AC 150/5340-1]
POS_SIGN	Geographic position markings (Geometry Type: Polygon) [Source: AC 150/5340-1]
RWY_CL	Runway Centerline (Geometry Type: Line) [Source: AC150/5340-1]
RWY_HOLD	Runway holding position markings on Runways (Geometry Type: Polygon) [Source: AC 150/5340-1]
RWY_ID	Runway Designation Marking (Geometry Type: Polygon) [Source: AC 150/5340-1]
RWY_SHD	Runway shoulder markings (Geometry Type: Line) [Source: AC 150/5340-1]
RWY_THRSH	Runway Threshold Marking (Geometry Type: Polygon) [Source: AC 150/5340-1]
SIDE_STRP	Runway Side Stripe Marking (Geometry Type: Line) [Source: AC 150/5340-1]
SOLID	Solid pattern obstruction marking [Source AC 70/7640-1]
TDZ_MARK	Runway Touchdown Zone Marking (Geometry Type: Polygon) [Source: AC 150/5340-1]
TEMP_CLOSED	Markings for temporarily closed runways and taxiways (Geometry Type: Line) [Source: AC 150/5340-1]
THRSH_BAR	Runway Threshold Bar (Geometry Type: Polygon) [Source: AC 150/5340-1]
TIEDOWN	Aircraft tiedown
TWY_CL	Taxiway Centerline (Geometry Type: Line) [Source: AC 150/5340-1]
TWY_EDGE	Taxiway edge marking (Geometry Type: Line) [Source: AC 150/5340-1]
TWY_HOLD	Runway hold position markings on taxiways (Geometry Type: Polygon) [Source: AC 150/5340-1]
TWY_SHD	Taxiway shoulder marking (Geometry Type: Line) [Source: AC 150/5340-1]
VEHICLE	Vehicle roadway markings (Geometry Type: Line) [Source: AC 150/5340-1]

CodeMaxcellType

Used by Attributes: Media Converter - Maxcellt

Value	Definition (Notes) [Source]
MXC_1_25_1	Standard 1.25 Inch 1 Cell (White - Teardrop) - 1.25 Inch Cable OD Max. [SDSFIE V2.5 AIR FORCE]
MXC_2_2	Standard 2 Inch 2 Cell (Purple) - 1 Inch Cable OD Max. [SDSFIE V2.5 AIR FORCE]
MXC_2_3	Standard 2 Inch 3 Cell (Yellow) - 1 Inch Cable OD Max. [SDSFIE V2.5 AIR FORCE]
MXC_3_3	Standard 3 Inch 3 Cell (Black, Red, or Blue) - 1 Inch Cable OD Max. [SDSFIE V2.5 AIR FORCE]
MXC_4_3	Standard 4 Inch 3 Cell (Green) - 1.25 Inch Cable OD Max. [SDSFIE V2.5 AIR FORCE]
MXD_1_25_1	Detachable 1.25 Inch 1 Cell (White - Teardrop) - 1.25 Inch Cable OD Max. [SDSFIE V2.5 AIR FORCE]
MXD_2_2	Detachable 2 Inch 2 Cell (Purple) - 1 Inch Cable OD Max. [SDSFIE V2.5 AIR FORCE]
MXD_2_3	Detachable 2 Inch 3 Cell (Yellow) - 1 Inch Cable OD Max. [SDSFIE V2.5 AIR FORCE]
MXD_3_3	Detachable 3 Inch 3 Cell (Black, Red, or Blue) - 1 Inch Cable OD Max. [SDSFIE V2.5 AIR FORCE]
MXD_4_3	Detachable 4 Inch 3 Cell (Green) - 1.25 Inch Cable OD Max. [SDSFIE V2.5 AIR FORCE]
MXP_1_25_1	Plenum 1.25 Inch 1 Cell (White - Teardrop) - 1.25 Inch Cable OD Max. [SDSFIE V2.5 AIR FORCE]
MXP_2_2	Plenum 2 Inch 2 Cell (Purple) - 1 Inch Cable OD Max. [SDSFIE V2.5 AIR FORCE]
MXP_2_3	Plenum 2 Inch 3 Cell (Yellow) - 1 Inch Cable OD Max. [SDSFIE V2.5 AIR FORCE]
MXP_3_3	Plenum 3 Inch 3 Cell (Black, Red, or Blue) - 1 Inch Cable OD Max. [SDSFIE V2.5 AIR FORCE]
OTHER	Other. [SDSFIE V2.5 AIR FORCE]
TBD	To Be Determined. [SDSFIE V2.5 AIR FORCE]
UNKNOWN	Unknown. [SDSFIE V2.5 AIR FORCE]

CodeMediaConverter

Used by Attributes: Media Converter - Mcnvty

Value	Definition (Notes) [Source]
COAX_TO_MM	Coaxial Cable to Multi Mode Fiber. [SDSFIE V2.5 AIR FORCE]
COAX_TO_SM	Coaxial Cable to Single Mode Fiber. [SDSFIE V2.5 AIR FORCE]
OTHER	Other. [SDSFIE V2.5 AIR FORCE]
SM_TO_MM	Single Mode Fiber to Multi Mode Fiber. [SDSFIE V2.5 AIR FORCE]
STP_TO_MM	Shielded Twisted Pair to Multi Mode Fiber. [SDSFIE V2.5 AIR FORCE]
STP_TO_SM	Shielded Twisted Pair to Single Mode Fiber. [SDSFIE V2.5 AIR FORCE]
TBD	To Be Determined. [SDSFIE V2.5 AIR FORCE]
UNKNOWN	Unknown. [SDSFIE V2.5 AIR FORCE]
UTP_TO_MM	Unshielded Twisted Pair to Multi Mode Fiber. [SDSFIE V2.5 AIR FORCE]
UTP_TO_SM	Unshielded Twisted Pair to Single Mode Fiber. [SDSFIE V2.5 AIR FORCE]

CodeMediaType

Used by Attributes: Equipment - Media Type; Segmented Cable Point - Media Type

Value
COPPER
FIBER_OPTIC
MICROWAVE
MULTI_MODE_FIBER
SINGLE_MODE_FIBE

Definition (Notes) [Source]

Copper. [SDSFIE V2.3 Tinker Air Force Base] Fiber Optics. [SDSFIE V2.31 Air Force] Microwave. [SDSFIE V2.31 Air Force] Multi-Mode Fiber [SDSFIE V2.3 Tinker Air Force Base] Single Mode Fiber. [SDSFIE V2.3 Tinker Air Force Base]

CodeNavigationLineType

Used by Attributes: <u>Cable - Cable Category</u>

Value CLEARING_LINE LD_LN_BEAR_A_TRA TRANSIT_LINE

Definition (Notes) [Source]

Clearing Line [SDSFIE V2.2 S-57] Leading Line Bearing A Recommended Track [SDSFIE V2.2 S-57] Transit Line [SDSFIE V2.2 S-57]

${\bf CodeNetworkAffiliationType}$

Used by Attributes: Network Systems Site - Net Aff; Relay Station - Net Aff

Value	Definition (Notes) [Source]
ABC	ABC Network. [SDSFIE V2.31 HSIP]
CBL	CBL Network. [SDSFIE V2.31 HSIP]
CBS	CBS Network. [SDSFIE V2.31 HSIP]
FOX	FOX Network. [SDSFIE V2.31 HSIP]
NBC	NBC Network. [SDSFIE V2.31 HSIP]
PBS	PBS Network. [SDSFIE V2.31 HSIP]

CodeNetworkBandwidth

Used by Attributes: Media Converter - Netbw; Repeater - Netbw

Value	Definition (Notes) [Source]
0 3	300 bps - 300 Bits Per Second (Bell 103, ITU-T V.21). [SDSFIE V2.5 AIR FORCE]
1 1 2	1200 bps - 1200 Bits Per Second (Bell 212A, ITU-T V.22). [SDSFIE V2.5 AIR FORCE]
1 14 4	14.4K bps - 14.4K Bits Per Second (ITU-T V.32bis, V.33). [SDSFIE V2.5 AIR FORCE]
1 19 2	19.2K bps - 19.2K Bits Per Second (ITU-T V.34, V.32terbo) [SDSFIE V2.5 AIR FORCE]
1_2_4	2400 bps - 2400 Bits Per Second (ITU-T V.22bis). [SDSFIE V2.5 AIR FORCE]
1 28 8	28.8K bps - 28.8K Bits Per Second (ITU-T V.34). [SDSFIE V2.5 AIR FORCE]
1 33 6	33.6K bps - 33.6K Bits Per Second (ITU-T V.34). [SDSFIE V2.5 AIR FORCE]
1_38_4	38.4K bps - 38.4K Bits Per Second. [SDSFIE V2.5 AIR FORCE]
1 4 8	4800 bps - 4800 Bits Per Second (Bell 208 A/B, ITU-T V.29). [SDSFIE V2.5 AIR FORCE]
$1_{48_{0}}^{$	48K bps - 48K Bits Per Second. [SDSFIE V2.5 AIR FORCE]
1_56_0	56K bps - 56K Bits Per Second (ITU-T V.9x). [SDSFIE V2.5 AIR FORCE]
1_57_6	57.6K bps - 57.6K Bits Per Second. [SDSFIE V2.5 AIR FORCE]
1_64_0	64K bps - 64K Bits Per Second. [SDSFIE V2.5 AIR FORCE]
1_7_2	7200 bps - 7200 Bits Per Second (ITU-T V.29). [SDSFIE V2.5 AIR FORCE]
1_9_6	9600 bps - 9600 Bits Per Second (ITU-T V.29, V.32, V.22bis). [SDSFIE V2.5 AIR FORCE]
1115_2	115.2K bps - 115.2K Bits Per Second. [SDSFIE V2.5 AIR FORCE]
2_1_544_T_1	1.544 Mbps (T-1, DS-1). [SDSFIE V2.5 AIR FORCE]
2_10_BT	10 Mbps (10 BaseT Copper). [SDSFIE V2.5 AIR FORCE]
2_2_048_E_1	2.048 Mbps (E-1). [SDSFIE V2.5 AIR FORCE]
2_44_736_T_3	44.736 Mbps (T-3, DS-3). [SDSFIE V2.5 AIR FORCE]
2_51_84_OC1	51.84 Mbps (OC1). [SDSFIE V2.5 AIR FORCE]
2100_BTF	100 Mbps (100 BaseT Copper, 100 BaseF Fiber). [SDSFIE V2.5 AIR FORCE]
2155_52_OC3	155.52 Mbps (OC3c, OC3/STM-1). [SDSFIE V2.5 AIR FORCE]
2622_08_OC12	622.08 Mbps (OC12c, OC12/STM-4). [SDSFIE V2.5 AIR FORCE]
3_1_BTF	1 Gbps (1000 BaseT Copper, 1000 BaseF Fiber). [SDSFIE V2.5 AIR FORCE]
3_10_BF	10 Gbps (10000 BaseF Fiber). [SDSFIE V2.5 AIR FORCE]
3_2_488_OC48	2.488 Gbps (OC48c, OC48/STM-16). [SDSFIE V2.5 AIR FORCE]
3_39_81_OC768	39.81 Gbps (OC-768c, OC-768/STM-256). [SDSFIE V2.5 AIR FORCE]
3_40_OC48WDM	40 Gbps (OC48 WDM). [SDSFIE V2.5 AIR FORCE]
3_9_952_OC192	9.952 Gbps (OC192c, OC192/STM-64). [SDSFIE V2.5 AIR FORCE]
3160_OC3072	160 Gbps (OC-3072). [SDSFIE V2.5 AIR FORCE]
4_6_4_0C768DWDM	6.4 Tbps (OC-768 DWDM). [SDSFIE V2.5 AIR FORCE]
OTHER	Other. [SDSFIE V2.5 AIR FORCE]
TBD	To Be Determined. [SDSFIE V2.5 AIR FORCE]
UNKNOWN	Unknown. [SDSFIE V2.5 AIR FORCE]

CodeNetworkProtocol

Used by Attributes: Media Converter - Netprc

Value	Definition (Notes) [Source]
ADSL	Asymmetric Digital Subscriber Loop. [SDSFIE V2.5 AIR FORCE]
ATM	Asynchronous Transfer Mode. [SDSFIE V2.5 AIR FORCE]

DSL ETHERNET FDDI FIBERCHANNEL FRAMERELAY ISDN OTHER SONET TED	Digital Subscriber Loop. [SDSFIE V2.5 AIR FORCE] Ethernet. [SDSFIE V2.5 AIR FORCE] Fiber Distributed Data Interface. [SDSFIE V2.5 AIR FORCE] Fiber Channel. [SDSFIE V2.5 AIR FORCE] Frame Relay. [SDSFIE V2.5 AIR FORCE] Integrated Services Digital Network. [SDSFIE V2.5 AIR FORCE] Other. [SDSFIE V2.5 AIR FORCE] Synchronous Optical Network. [SDSFIE V2.5 AIR FORCE]

CodeNozzleType

Used by Attributes: <u>Hydrant - Nozzle Type</u>

Value	Definition (Notes) [Source]
OVERWING	Jumbo VASI with a TCH to accommodate long-bodied or jumbo aircraft. [SDSFIE V2.4 Air
	Force]
SINGLE_PT	None. [SDSFIE V2.4 Air Force]
SINGLEPT_OVRWING	Not Applicable. [SDSFIE V2.4 Air Force]
UNKNOWN	PVASI (Pulsating VASI). [SDSFIE V2.4 Air Force]

CodeNumberLoadsCoilType

Used by Attributes: <u>Load Coil - Ldc Type</u>

Value	Definition (Notes) [Source]
632	633 Type 88 Mh Load Coil. [SDSFIE V2.5 AIR FORCE]
656	657 Type 66 Mh Load Coil. [SDSFIE V2.5 AIR FORCE]
662	663 Type 88 Mh Load Coil. [SDSFIE V2.5 AIR FORCE]
666	667 Type 66 Mh Load Coil. [SDSFIE V2.5 AIR FORCE]
OTHER	Other. [SDSFIE V2.5 AIR FORCE]
TBD	To Be Determined. [SDSFIE V2.5 AIR FORCE]
UNKNOWN	Unknown. [SDSFIE V2.5 AIR FORCE]

CodePathCont

Used by Attributes: Path Segment Line - Path Cnt

Value	Definition (Notes) [Source]
3	Fiber and Copper (twisted-pair). [SDSFIE V2.5 AIR FORCE]
4	Coax. [SDSFIE V2.5 AIR FORCE]
5	Coax and Fiber. [SDSFIE V2.5 AIR FORCE]
6	Coax and Copper (twisted-pair). [SDSFIE V2.5 AIR FORCE]
7	Coax, Copper (twisted-pair), Fiber. [SDSFIE V2.5 AIR FORCE]

CodePathType

Used by Attributes: Path Segment Line - Path Type

Value	Definition (Notes) [Source]
AERIAL	Above ground path between, poles, towers or buildings. [SDSFIE V2.5 AIR FORCE]
CABLE_BRIDGE	Bridge only used for cables. [SDSFIE V2.5 AIR FORCE]
CABLE_TROUGH	Pathway on top of ground for cables. [SDSFIE V2.5 AIR FORCE]
DIRECT_BURIED	Below ground path where soil has direct contact with cable. [SDSFIE V2.5 AIR FORCE]
DUCT	Single communications duct. [SDSFIE V2.5 AIR FORCE]
DUCTBANK	A container for multiple ducts. [SDSFIE V2.5 AIR FORCE]

ROAD_CROSSING STUB_OUT A duct for cables, usually under a road. [SDSFIE V2.5 AIR FORCE] Short duct used with manholes and vaults. [SDSFIE V2.5 AIR FORCE]

CodePercentModifier

Used by Attributes: Path Segment Line - percent

Value	Definition (Notes) [Source]
0	Unknown. [SDSFIE V2.5 NAVFAC]
1	Bare. [SDSFIE V2.5 NAVFAC]
2	Sparse. [SDSFIE V2.5 NAVFAC]
3	Patchy. [SDSFIE V2.5 NAVFAC]
4	Continuous. [SDSFIE V2.5 NAVFAC]

CodePhoneType

Used by Attributes: Telephone - Phone Type

Value COURTESY EMERGENCY EXTENSION HOTLINE OTHER PAYPHONE TBD UNKNOWN

Definition (Notes) [Source]

Courtesy [SDSFIE V2 Tinker Air Force Base] Emergency [SDSFIE V2] Extension [SDSFIE V2 Tinker Air Force Base] Hotline [SDSFIE V2 Tinker Air Force Base] Other [SDSFIE V2] Payphone [SDSFIE V2 Tinker Air Force Base] To Be Determined [SDSFIE V2] Unknown [SDSFIE V2]

CodePipeCategory

Used by Attributes: <u>Source Site - Cat Pipe; Transmission Pipeline - Pipe Category</u>

Value BUBBLER_SYSTEM INTAKE_PIPE OUTFALL_PIPE SEWER SUPPLY_PIPE

Definition (Notes) [Source]

Bubbler System [SDSFIE V2.2 S-57] Intake Pipe [SDSFIE V2.2 S-57] Outfall Pipe [SDSFIE V2.2 S-57] Sewer [SDSFIE V2.2 S-57] Supply Pipe [SDSFIE V2.2 S-57]

CodePipeDiameter

Used by Attributes: Junction - effluentPipeDiameter; Junction - influentPipe1Diameter; Junction -

influentPipe2Diameter;Junction - influentPipe3Diameter;Junction - influentPipe4Diameter;Junction influentPipe5Diameter;Culvert Center Line - Openning Diameter;Air Pipe - Size;Downspout - Size;Downspout - Size;Fire Connection Point - Size;Fitting - Size;Cate - Size;Hydrant - Size;Intake Line - Size;Line - Size;Line - Size;Line - Size;Line - Size;Line - Size;Meter - Size;Storm Trench Drain Line - Size;Transmission Pipeline Segment Line - Size;Valve - Size;Valve - Size;Valve - Size;Valve - Valve Diameter;Valve - Valve Size

Value	Definition (Notes) [Source]
0.25	1/4 inch (0.25 inch) [SDSFIE V2]
0.5	1/2 inch (0.5 inch) [SDSFIE V2]
0.75	3/4 inch (0.75 inch) [SDSFIE V2]
1	1inch (1.0 inch) [SDSFIE V2]
1.25	1 1/4 inch (1.25 inches) [SDSFIE V2]

1.5	1 1/2 inch (1.5 inches) [SDSFIE V2]
1.75	1 3/4 inch (1.75 inches) [SDSFIE V2]
10	10 inch (10.0 inches) [SDSFIE V2]
12	12 Inch (12.0 inches) [SDSFIE V2]
14	14 Inch (14.0 inches) [SDSFIE V2 Cherry Point]
15	15 Inch (15.0 inches) [SDSFIE V2 Cherry Point]
16	16 Inch (16.0 inches) [SDSFIE V2 Cherry Point]
18	18 Inch (18.0 inches) [SDSFIE V2 Cherry Point]
2	2 inch (2.0 inches) [SDSFIE V2]
2.5	2 1/2 inch (2.5 inches) [SDSFIE V2]
20	20 Inch (20.0 inches) [SDSFIE V2]
21	21 Inch (21.0 inches) [SDSFIE V2 Cherry Point]
22	22 Inch (22.0 inches) [SDSFIE V2]
24	24 Inch (24.0 inches) [SDSFIE V2 Cherry Point]
28	28 Inch (28.0 inches) [SDSFIE V2]
3	3 inch (3.0 inches) [SDSFIE V2]
30	30 Inch (30.0 inches) [SDSFIE V2 Cherry Point]
32	32 Inch (32.0 inches) [SDSFIE V2]
36	36 Inch (36.0 inches) [SDSFIE V2]
4	4 inch (4.0 inches) [SDSFIE V2]
42	42 Inch (42.0 inches) [SDSFIE V2]
48	48 Inch (48.0 inches) [SDSFIE V2]
5	5 Inch (5.0 inches) [SDSFIE V2 Cherry Point]
6	6 inch (6.0 inches) [SDSFIE V2]
60	60 Inch (60.0 inches) [SDSFIE V2]
64_INCH	64 Inch (64.0 inches). [SDSFIE V2.5 AIR FORCE]
65_INCH	65 Inch (65.0 inches). [SDSFIE V2.5 AIR FORCE]
66_INCH	66 Inch (66.0 inches). [SDSFIE V2.5 AIR FORCE]
67_INCH	67 Inch (67.0 inches). [SDSFIE V2.5 AIR FORCE]
72	72 Inch (72.0 inches) [SDSFIE V2]
8	8 inch (8.0 inches) [SDSFIE V2]
84_INCH	84 Inch (84.0 inches). [SDSFIE V2.5 AIR FORCE]
85_INCH	85 Inch (84.0 inches). [SDSFIE V2.5 AIR FORCE]
OTHER	other [SDSFIE V1.4]
TBD	To Be Determined. [SDSFIE V2.5 AIR FORCE]
UNKNOWN	Unknown. [SDSFIE V2.5 AIR FORCE]

CodePipelineLocationType

Used by Attributes: <u>Line - Location Type;Line - Piplty;Line - Piplty;Line - Piplty</u>

Value
ABOVE_GROUND
ELEVATED
SUBMERGED
TBD
UNDERGROUND
UNKNOWN

Definition (Notes) [Source]

above ground [SDSFIE V1.8 USGS] elevated [SDSFIE V1.8 USGS] submerged [SDSFIE V1.8 USGS] to be determined [SDSFIE V1.8 USGS] underground [SDSFIE V1.8 USGS] unknown [SDSFIE V1.8 USGS]

CodePipelineProduct

Used by Attributes: <u>Transmission Pipeline - Commodity 1;Transmission Pipeline - Commodity 2;Transmission Pipeline - Commodity 3;Pump Booster Station - Prodct;Transmission Pipeline - Product Descriminator</u>

Value	Definition (Notes) [Source]
AA	Anhydrous Ammonia [SDSFIE V2.1 DOT - NPMS]
BAUXITE	BAUXITE [SDSFIE V2.2 S-57]
CEMENT	CEMENT [SDSFIE V2.2 S-57]
CHEMICALS	Chemicals - type unspecified [SDSFIE V2.2 S-57]
CO2	Carbon Dioxide [SDSFIE V2.1 DOT - NPMS]
COAL	COAL [SDSFIE V2.2 S-57]
COKE	COKE [SDSFIE V2.2 S-57]
CRD	Crude or unprocessed oil. [SDSFIE V2.3 DOT - NPMS]
DRINKING_WATER	DRINKING_WATER [SDSFIE V2.2 S-57]

EMP GAS GRAIN HG HVL IRON_INGOTS LIQUIF_PETROGAS LIQUIFIED_NATGAS LPG MILK NG NGL OIL ORE PRD SALT SAND SAWDUST_WOODCHIP SCRAP_METAL STONE TIMBER WATER	empty [SDSFIE V2.1 DOT - NPMS] Gas - type not specified [SDSFIE V2.2 S-57] GRAIN [SDSFIE V2.2 S-57] Hydrogen Gas [SDSFIE V2.1 DOT - NPMS] Highly Volatile Liquid [SDSFIE V2.1 DOT - NPMS] IRON_INGOTS [SDSFIE V2.5 S-57CENTER] LIQUIFIED_PETROLEUM_GAS [SDSFIE V2.2 S-57] Liquefied Petroleum Gas [SDSFIE V2.1 DOT - NPMS] MILK [SDSFIE V2.2 S-57] Natural Gas [SDSFIE V2.1 DOT - NPMS] Natural Gas Liquids [SDSFIE V2.1 DOT - NPMS] OIL [SDSFIE V2.2 S-57] ORE [SDSFIE V2.2 S-57] Product is not known. [SDSFIE V2.1 DOT - NPMS] SALT [SDSFIE V2.2 S-57] SAND [SDSFIE V2.2 S-57] SAND [SDSFIE V2.2 S-57] SAND [SDSFIE V2.2 S-57] STONE [SDSFIE V2.2 S-57] TIMBER [SDSFIE V2.2 S-57] Water - potable or otherwise. [SDSFIE V2.2 S-57]
WATER WINE	Water - potable or otherwise. [SDSFIE V2.2 S-57] WINE [SDSFIE V2.2 S-57]

CodePipeMaterial

Used by Attributes: <u>Ductbank - Duct Material; Ductbank - ductMat; Junction - effluentPipeMaterial; Junction -</u> influentPipe1Material;Junction - influentPipe2Material;Junction - influentPipe3Material;Junction influentPipe4Material; Junction - influentPipe5Material; Air Pipe - Material; Culvert Center Line - Material; Disposal Tank -Material; Downspout - Material; Downspout - Material; Ductbank - Material; Filtration Bed - Material; Fitting - Material; Fitting -Material; Fitting - Material; Gate -Material; Grease Trap - Material; Junction - Material; Junction - Material; Junction - Material; Junction -Material; Junction - Material; Lagoon -Material; Lagoon - Material; Line -Material;Line - Material;Neutralizer - Material;Neutralizer - Material;Septic Tank - Material;Sludge Bed - Material;Storm Trench Drain Line - Material; Tank - Material; Pipe Material; Oil Water Separator Diversion Vault - pipeMaterial

Value	Definition (Notes) [Source]
ABS	acrylonitrile butadiene styrene [SDSFIE V1.4]
ALUMINUM	Aluminum [SDSFIE V1.4]
ARMORED_GLASS	Armored-glass. [SDSFIE V2]
ASBESTCEMENT	asbestos cement [SDSFIE V1.4]
BLACK_FE	black iron [SDSFIE V1.4]
BRICK	brick [SDSFIE V1.4]
BUILTUP	builtup [SDSFIE V1.4]
CANVAS	canvas [SDSFIE V1.4]
CARDBOARD	cardboard [SDSFIE V1.4]
CASTIRON	cast iron [SDSFIE V1.4]
CEMENT	cement [SDSFIE V1.4]
CEMENTBLOCK	cement block [SDSFIE V1.4]
CINDERBLOCK	cinder block [SDSFIE V1.4]
CIS	Concrete Cast inSitu/Cast in Place [SDSFIE V2 Tinker Air Force Base]
COATWRAPSTEL	coated and wrapped steel [SDSFIE V1.4]
COMBINATION	combination of materials [SDSFIE V1.4]
COMPO	Composolite [SDSFIE V2 Tinker Air Force Base]
COMPOSOLITE	Composolite [SDSFIE V2 Tinker Air Force Base]
CONCRETBLOCK	concrete block [SDSFIE V1.4]
CONCRETE	concrete [SDSFIE V1.4]
CONCRETEPILE	concrete pile [SDSFIE V1.4]
CONCRT_AND_STEEL	Concrete and Steel. [SDSFIE V2.31 Air Force]
CONCRT_AND_WOOD	Concrete and Wood. [SDSFIE V2.31 Air Force]
COPPER	Copper [SDSFIE V1.4]
CORR_METAL	corrugated metal [SDSFIE V1.4]
CORR_STEEL	corrugated steel [SDSFIE V1.4]

CORRALBITMEN CORRALPAVINV CORRMETLBITM CORRMETPAVIN CORRSTELBITM CORRSTELPAVI CORRUGATEDAL CRESOTEDWOOD DUCTILEFE EARTHEN FEPT_STEEL FIBER FIBERGLASS FRP FRV GALVANIZEDFE GALVNIZSTEEL GLASS GLASS_LINED GLASS REIN PLAS GLASSBLOCK GRASS HARD_SURFACED HASTELLOY HDPE HELIWOUND HIDES INCONEL INSULATCONCR KYN STEEL LOGS LOOSE_BOULDERS MASNRY_AND_STEEL MASONRY MASONRY_AND_WOOD METAL MONEL MULTIPLECLAY MULTIPLETILE NICKEL OTHER OTHERMASONRY PAINTED PFA PLASTIC POLYETHYLENE POLYSTYRENE PPE_STEEL PRECAST PRESTRESSED PTFE PVC REINFORCONCR REINFPLASMOR RUB_STEEL SARAN_LINED SHEETMETAL SINGLE_CLAY SINGLE_TILE SNOW STAINLESS_STEEL STEEL STEEL_AND_WOOD STEEL_WRAPED STEELPILE STONE STYROFOAM TAN_STEEL TBD

corrugated Aluminum with bituminous coating [SDSFIE V1.4] corrugated Aluminum with paved invert [SDSFIE V1.4] corrugated metal with bituminous coating [SDSFIE V1.4] corrugated metal with paved invert [SDSFIE V1.4] corrugated steel with bituminous coating [SDSFIE V1.4] corrugated steel with paved invert [SDSFIE V1.4] corrugated Aluminum [SDSFIE V1.4] creosoted wood [SDSFIE V1.4] ductile iron [SDSFIE V1.4] earthen, dirt [SDSFIE V1.4] FEP Teflon-lined steel. [SDSFIE V2] fiber [SDSFIE V1.4] fiberglass [SDSFIE V1.4] Fiberglass reinforced polyester. [SDSFIE V2] Fiberglass Reinforced Vinylester. [SDSFIE V2] galvanized iron [SDSFIE V1.4] galvanized steel [SDSFIE V1.4] glass [SDSFIE V1.4] Glass-lined [SDSFIE V2] Glass Reinforced Plastic [SDSFIE V2.2 S-57] glass block [SDSFIE V1.4] grass [SDSFIE V1.4] Hard Surfaced [SDSFIE V2.2 S-57] Hastelloy [SDSFIE V2] High Density Polyethylene (HDPE) [SDSFIE V2] helically wound [SDSFIE V1.4] hides [SDSFIE V1.4] Inconel [SDSFIE V2] insulating concrete [SDSFIE V1.4] Kynar-lined steel. [SDSFIE V2] logs [SDSFIE V1.4] Loose Boulders [SDSFIE V2.2 S-57] Masonry and Steel. [SDSFIE V2.31 Air Force] MASONRY [SDSFIE V2.2 S-57] Masonry and Wood. [SDSFIE V2.31 Air Force] metal conduit [SDSFIE V1.4] Monel [SDSFIE V2] multiple clay [SDSFIE V1.4] multiple tile [SDSFIE V1.4] Nickel [SDSFIE V2] other [SDSFIE V1.4] other [SDSFIE V1.4] Painted [SDSFIE V2.2 S-57] PFA Teflon-lined. [SDSFIE V2] plastic [SDSFIE V1.4] polyethylene [SDSFIE V1.4] polystyrene [SDSFIE V1.4] Polypropylene-lined steel. [SDSFIE V2] precast [SDSFIE V1.4] prestressed [SDSFIE V1.4] PTFE Teflon-lined. [SDSFIE V2] polyvinyl chloride [SDSFIE V1.4] reinforced concrete [SDSFIE V1.4] reinforced plastic mortar [SDSFIE V1.4] Rubber-lined steel. [SDSFIE V2] Saran lined [SDSFIE V2] sheet metal [SDSFIE V1.4] single clay [SDSFIE V1.4] single tile [SDSFIE V1.4] snow [SDSFIE V1.4] Stainless steel [SDSFIE V2] steel [SDSFIE V1.4] Steel and Wood. [SDSFIE V2.31 Air Force] steel wrapped [SDSFIE V1.4] steel pile [SDSFIE V1.4] stone [SDSFIE V1.4] Styrofoam [SDSFIE V1.4] Tantalum-lined steel [SDSFIE V2] to be determined [SDSFIE V1.4]

TERRACOTTA	terra cotta [SDSFIE V1.4]
TILE	tile [SDSFIE V1.4]
TILE_RESIN	tile resin [SDSFIE V1.4]
TITANIUM	Titanium [SDSFIE V2]
UNEARTHEN	Unearthen. [SDSFIE V2.4 USGS]
UNKNOWN	unknown [SDSFIE V1.4]
UNSURFACED	Unsurfaced [SDSFIE V2.2 S-57]
VITRIFIDCLAY	vitrified clay [SDSFIE V1.4]
WOOD	wood [SDSFIE V1.4]
WOODENPILE	wooden pile [SDSFIE V1.4]
WROUGHT_FE	wrought iron [SDSFIE V1.4]
ZIRCONIUM	Zirconium [SDSFIE V2]

CodePlacementOfAirPreType

Used by Attributes: Air Pressure Device - Placement

Value	Definition (Notes) [Source]
EXTENDED	Extended and not in or on cable sheath. [SDSFIE V2.5 AIR FORCE]
ON_BYPASS	On the bypass. [SDSFIE V2.5 AIR FORCE]
ON_CASE	On the case. [SDSFIE V2.5 AIR FORCE]
ON_SHEATH	On or in sheath. [SDSFIE V2.5 AIR FORCE]
ON_SLEEVE	On the lead sleeve. [SDSFIE V2.5 AIR FORCE]
ON_STUB	Located on a stub and not in or on the cable sheath. [SDSFIE V2.5 AIR FORCE]
OTHER	Other. [SDSFIE V2.5 AIR FORCE]
TBD	To Be Determined. [SDSFIE V2.5 AIR FORCE]
UNKNOWN	Unknown. [SDSFIE V2.5 AIR FORCE]

CodePoleClassificationType

Used by Attributes: Utility Pole Tower Site - P Class

Value	Definition (Notes) [Source]
CLASS_1	Class 1, MHBL 4500, Minimum Top Circumference 27 [SDSFIE V1.75]
CLASS_2	Class 2, MHBL 3700, Minimum Top Circumference 25 [SDSFIE V1.75]
CLASS_3	Class 3, MHBL 3000, Minimum Top Circumference 23 [SDSFIE V1.75]
CLASS_4	Class 4, MHBL 2400, Minimum Top Circumference 21 [SDSFIE V1.75]
CLASS_5	Class 5, MHBL 1900, Minimum Top Circumference 19 [SDSFIE V1.75]
CLASS_6	Class 6, MHBL 1500, Minimum Top Circumference 17 [SDSFIE V1.75]
CLASS_7	Class 7, MHBL 1200, Minimum Top Circumference 15 [SDSFIE V1.75]

CodePoleCondition

Used by Attributes: <u>Fire Connection Point - Condition;Gate - Condition;Grease Trap - Condition;Junction -</u> <u>Condition;Pressure Reducing Station - Condition;Pump Booster Station - Condition;Pump Ejector Station - Condition;Pump Station - Conditio</u>

Value	Definition (Notes) [Source]
BOARDEDUP	boarded up [SDSFIE V1.4]
BROKENNOUSE	broken and unusable [SDSFIE V1.4]
BURNTNOUSE	burnt and not useable [SDSFIE V1.4]
BURNTUSEABLE	burnt but useable [SDSFIE V1.4]
CONDEMNED	condemned [SDSFIE V1.4]
CRACKED	cracked but useable [SDSFIE V2.1 FGDC Utilities Classification]
DAMAGED	damaged [SDSFIE V1.4]
DAMAGEHEVUSE	heavily damage, but useable [SDSFIE V1.4]
DAMAGELITUSE	light damage, but useable [SDSFIE V1.4]
DAMAGEMODUSE	moderate damage, but useable [SDSFIE V1.4]

DAMAGHEVNO heavy damage, and unusable [SDSFIE V1.4] DAMAGLITNO light damage, and unusable [SDSFIE V1.4] DAMAGMODNO moderate damage, and unusable [SDSFIE V1.4] DANGEROUS dangerous to use [SDSFIE V1.4] FAIR fair or medium condition [SDSFIE V1.4] FAIRESTIMATED Estimated in fair condition. [SDSFIE V2.31 Air Force] GOOD good condition [SDSFIE V1.4] GOODESTIMATED Estimated in good condition. [SDSFIE V2.31 Air Force] GOODNOTNEW good, but not new [SDSFIE V1.4] HABITABLE habitable [SDSFIE V1.4] HABITABLENO not habitable [SDSFIE V1.4] minor use [SDSFIE V1.4] MINORUSE NEWLYBUILT newly built [SDSFIE V1.4] NEWUNFINISH newly built, but not yet finished [SDSFIE V1.4] NOTRESPASSNG no trespassing [SDSFIE V1.4] other [SDSFIE V1.4] OTHER POOR poor or unsuitable condition [SDSFIE V1.4] POORESTIMATED Estimated in poor condition. [SDSFIE V2.31 Air Force] quarantined [SDSFIE V1.4] QUARANTINED RADIOACTIVE radioactive [SDSFIE V1.4] SERVICEABLE Servicable SPLINTER splintered but useable [SDSFIE V2.1 FGDC Utilities Classification] to be determined [SDSFIE V1.4] UNDERCONSTRUCT Planned or under construction. [SDSFIE V2.31 Air Force] UNKNOWN unknown [SDSFIE V1.4] UNSERVICEABLE Unserviceable or not a weight bearing surface. [SDSFIE V2.31 Air Force] unusable [SDSFIE V2.1 FGDC Utilities Classification] UNUSEABLE useable [SDSFIE V1.4] USEABLE **USEABLENO** not useable [SDSFIE V1.4]

CodePoleTreatmentType

TBD

Used by Attributes: Utility Pole Tower Site - Treat Type

Value	Definition (Notes) [Source]
CREOSOTE	The pole has been treated with creosote. [SDSFIE V1.6]
OTHER	Other, Not otherwise listed [SDSFIE V1.6]
PAINT	The pole has been painted to prevent corrosion. [SDSFIE V1.6]
TBD	To be determined [SDSFIE V1.6]
UNKNOWN	Unknown [SDSFIE V1.6]

CodePosAccuracyQuality

Used by Attributes: Transmission Pipeline Segment Line - Pos Acc

Value EXCELLENT GOOD POOR UNKNOWN VERY_GOOD

Definition (Notes) [Source]

Excellent (0 to 50 feet). [SDSFIE V2.1 DOT - NPMS] Good (301 to 500 feet). [SDSFIE V2.1 DOT - NPMS] Poor (501 to 1000 feet). [SDSFIE V2.1 DOT - NPMS] Unknown [SDSFIE V2.1 DOT - NPMS] Very Good (51 to 300 feet). [SDSFIE V2.1 DOT - NPMS]

CodePowerUseType

Used by Attributes: Relay Station - Power

Value	Definition (Notes) [Source]
AC	Alternating Current [SDSFIE V2.3 Tinker Air Force Base]
DC	Direct Current [SDSFIE V2.3 Tinker Air Force Base]

CodeProgress

Used by Attributes: Access Coverage Area - collectionProgress; Access Point - collectionProgress; Air Pipe collectionProgress;Air Pressure Device - collectionProgress;Amplifier - collectionProgress;Anchor - collectionProgress;Anode collectionProgress;Anode - collectionProgress;Anode - collectionProgress;Anode Test Station - collectionProgress;Anode Test Station - collectionProgress; Anode Test Station - collectionProgress; Antenna Line - collectionProgress; Antenna Site collectionProgress;Attenuator - collectionProgress;Bus Line - collectionProgress;Cable - collectionProgress;Cable Bridge Line collectionProgress;Cable Ladder - collectionProgress;Cable Rack Line - collectionProgress;Cable Tray Line collectionProgress;Cable Trough Line - collectionProgress;Capacitor - collectionProgress;Coaxial Line collectionProgress;DbSplice - collectionProgress;Device - collectionProgress;Device - collectionProgress;Discharge Point collectionProgress;Drain Separator - collectionProgress;Ductbank - collectionProgress;Ductbank - collectionProgress;Equipment - collectionProgress; Fiberoptic Line - collectionProgress; Fill Point - collectionProgress; Fitting - collectionProgress; Fitting collectionProgress;Fitting - collectionProgress;Fitting - collectionProgress;Generator - collectionProgress;Grit Chamber collectionProgress;Ground Point - collectionProgress;Ground Point - collectionProgress;Groundplane Area collectionProgress;Groundwave Area - collectionProgress;Head Bolt Outlet - collectionProgress;Headwall collectionProgress;Headwall Line - collectionProgress;Impedance Matching Point - collectionProgress;Inlet collectionProgress; Internet Center - collectionProgress; Junction - collectionProgress; Junction - collectionProgress; Junction collectionProgress; Junction - collectionProgress; Junction - collectionProgress; Lagoon - collectionProgress; Light collectionProgress;Line - collectionProgress;Load Capacitor - collectionProgress;Load Coil - collectionProgress;Marker - collectionProgress;Marker - collectionProgress;Marker - collectionProgress;Marker collectionProgress;Marker - collectionProgress;Marker - collectionProgress;Media Converter - collectionProgress;Meter collectionProgress;Meter - collectionProgress;Meter - collectionProgress;Meter - collectionProgress;Motor collectionProgress;Multihop Area - collectionProgress;Network Systems Site - collectionProgress;Neutralizer collectionProgress; Oil Water Separator - collectionProgress; Other Cable - collectionProgress; Path Node Site collectionProgress;Path Segment Line - collectionProgress;Pedestal - collectionProgress;Pedestal Site - collectionProgress;Pipe Line - collectionProgress:Pullbox Site - collectionProgress:Pump - collectionProgress:Pump - collectionProgress:Pump collectionProgress;Pump Station - collectionProgress;Pumpstation Ejector - collectionProgress;Radar Site collectionProgress;Radio - collectionProgress;Radio Receiver - collectionProgress;Radio Transmitter - collectionProgress;Rect Point - collectionProgress;Rectifier - collectionProgress;Rectifier - collectionProgress;Reducer - collectionProgress;Refinery Site - collectionProgress;Regulator - collectionProgress;Regulator - collectionProgress;Relay Station - collectionProgress;Repeater collectionProgress;Riser - collectionProgress;Riser - collectionProgress;Satellite - collectionProgress;Segmented Cable collectionProgress;Segmented Cable Point - collectionProgress;Sensor - collectionProgress;Service Loop Point collectionProgress;Source - collectionProgress;Speaker - collectionProgress;Splice - collectionProgress;Splice collectionProgress;Splitter - collectionProgress;Storage Area - collectionProgress;Substation - collectionProgress;Switch collectionProgress:Tank - collectionProgress:Tank Area - collectionProgress:Telephone - collectionProgress:Telephone Booth collectionProgress; Terminal - collectionProgress; Terminator - collectionProgress; Transformer Vault collectionProgress;Transformr Bank - collectionProgress;Transmission Pipeline - collectionProgress;Transmission Pipeline Segment Line - collectionProgress; Treatment Plant - collectionProgress; Twisted Pair Line - collectionProgress; Utility Electric Utility Site - collectionProgress; Utility Pole Guy - collectionProgress; Utility Pole Guy Line - collectionProgress; Utility Pole Tower Site - collectionProgress; Valve - collectionProgress; Valve - collectionProgress; Valve Pit collectionProgress; Vertical Site - collectionProgress; Video Site - collectionProgress; Voice Switch collectionProgress;Waveguide Line - collectionProgress

Value temp **Definition (Notes) [Source]** temp

CodeProjectType

Used by Attributes: Access Coverage Area - Disposition; Access Point - Disposition; Air Eliminator - Disposition; Air Pipe - Disposition; Air Pressure Device - Disposition; Amplifier - Disposition; Anchor - Disposition; Anode - Disposition; Anode -Disposition; Anode - Disposition; Anode - Disposition; Anode - Disposition; Anode - Disposition; Anode Test Station -Disposition; Anode Test Station - Disposition; Antenna Line - Disposition; Antenna Site - Disposition; Cable Ladder -Disposition; Bus Line - Disposition; Cable - Disposition; Cable - Disposition; Cable Bridge Line - Disposition; Cable Ladder -Disposition; Cable Rack Line - Disposition; Cable Tray Line - Disposition; Cable Trough Line - Disposition; Capacitor -Disposition; Device - Disposition; Culvert Center Line - Disposition; Culvert End - Disposition; Discharge Point - Disposition; Device - Disposition; Discharge Point - Disposition; Discharge Point - Disposition; Discharge Point - Disposition; Downspout -Disposition; Discharge Point - Disposition; Disposal Tank - Disposition; Downspout - Disposition; Downspout -Disposition; Drain Field - Disposition; Drain Separator - Disposition; Drainage Basin - Disposition; Drainage Basin -Disposition; Drainage Divide - Disposition; Drainage Divide Line - Disposition; Drinking Water Sample Point -

Disposition;Ductbank - Disposition;Ductbank - Disposition;Equipment - Disposition;Farm Site -Disposition; Fiberoptic Line - Disposition; Fill Point - Disposition; Filter Strainer - Disposition; Filtration Bed - Disposition; Fire Connection Point - Disposition; Fitting - Dis Disposition; Fitting - Disposition; Fitting -Disposition; Flow Control Device - Disposition; Gate - Disposition; Generator - Disposition; Glycol Recovery Pit -Disposition; Grease Trap - Disposition; Grit Chamber - Disposition; Grit Chamber - Disposition; Ground Point -Disposition; Ground Point - Disposition; Groundplane Area - Disposition; Groundwave Area - Disposition; Head Bolt Outlet -Disposition;Headwall - Disposition;Headwall - Disposition;Headwall Line - Disposition;Headwall Line - Disposition;Hydrant -Disposition; Hydrant - Disposition; Impedance Matching Point - Disposition; Inlet - Disposition; Inlet - Disposition; Inlet -Disposition; Inlet - Disposition; Intake - Disposition; Intake Line - Disposition; Internet Center - Disposition; Junction -Disposition; Junction - Disposition; Junction - Disposition; Junction - Disposition; Junction - Disposition; Junction -Disposition; Junction - Disposition; Junction - Disposition; Junction - Disposition; Junction - Disposition; Lagoon -Disposition;Lagoon - Disposition;Lift Station - Disposition;Light - Disposition;Light - Disposition;Line - Disposition;Line -Disposition;Line - Disposition;Line - Disposition;Line - Disposition;Line - Disposition;Line - Disposition;Line -Disposition;Line Clean Out - Disposition;Line Of Sight Line - Disposition;Load Capacitor - Disposition;Load Coil -Disposition;Marker - Disposition;Marker - Dispositi Disposition;Marker - Disposition;Marker - Disposition;Marker - Disposition;Marker - Disposition;Marker - Disposition;Media Converter - Disposition; Meter - Disposition; Meter - Disposition; Meter - Disposition; Meter -Disposition; Meter - Disposition; Meter - Disposition; Motor - Disposition; Multihop Area - Disposition; Network Systems Site -Disposition; Neutralizer - Disposition; Neutralizer - Disposition; Oil Water Separator - Disposition; Oil Water Separator -Disposition; Oil Water Separator - Disposition; Oil Water Separator - Disposition; Oil Water Separator Diversion Vault disposition; Open Drainage Area - Disposition; Open Drainage Line - Disposition; Other Cable - Disposition; Path Node Site -Disposition;Path Segment Line - Disposition;Pedestal - Disposition;Pedestal Site - Disposition;Pig Launch Point -Disposition; Pipe Line - Disposition; Plant Area - Disposition; Pressure Reducing Station - Disposition; Pullbox Site -Disposition;Pump - Disposition;Pump - Disposition;Pump - Disposition;Pump - Disposition;Pump - Disposition;Pump -Disposition;Pump - Disposition;Pump - Disposition;Pump Booster Station - Disposition;Pump Ejector Station -Disposition;Pump Station - Disposition;Pump Station - Disposition;Pump Station - Disposition;Pump Station -Disposition:Pumpstation Ejector - Disposition:Radar Site - Disposition:Radio - Disposition:Radio Receiver - Disposition:Radio Transmitter - Disposition; Rect Point - Disposition; Rectifier - Disposition; Rectifier - Disposition; Rectifier - Disposition;Rectifier - Disposition;Reducer - Disposition;Refinery Site - Disposition;Regulator - Disposition;Regulator -Disposition; Regulator Reducer - Disposition; Regulator Reducer - Disposition; Relay Station - Disposition; Repeater -Disposition; Reservoir - Disposition; Reservoir - Disposition; Reservoir - Disposition; Riser - Disposition; Riser -Disposition;Satellite - Disposition;Segmented Cable - Disposition;Segmented Cable Point - Disposition;Sensor -Disposition;Septic Tank - Disposition;Service Area - Disposition;Service Loop Point - Disposition;Sludge Bed -Disposition; Source - Disposition; Source - Disposition; Source Site - Disposition; Speaker - Disposition; Splice - Disposition; Splice - Disposition; Splitter - Disposition; Stilling Basin - Disposition; Storage Area - Disposition; Storm Ceptor - disposition; Storm Filter - disposition; Storm Trench Drain Line - disposition; Substation - Disposition; Switch - Disposition; Tank Area - disposition; Telephone -Disposition; Telephone Booth - Disposition; Terminal - Disposition; Terminator - Disposition; Transformer Vault -Disposition; Transformr Bank - Disposition; Transmission Pipeline - Disposition; Transmission Pipeline Segment Line -Disposition; Treatment Plant - Disposition; Treatment Plant - Disposition; Treatment Plant - Disposition; Treatment Unit -Disposition; Treatment Unit - Disposition; Twisted Pair Line - Disposition; Utility Electric Utility Site - Disposition; Utility Pole Guy - Disposition; Utility Pole Guy Line - Disposition; Utility Pole Tower Site - Disposition; Valve - Disposition; Valve -Disposition; Valve - Disposition; Valve - Dispositi Disposition; Valve - Disposition; Valve Pit - Disposition; Vault - Disposition; Vault - Disposition; Vault - disposition; Vent -Disposition; Vertical Site - Disposition; Video Site - Disposition; Voice Switch - Disposition; Waveguide Line - Disposition

Value

Definition (Notes) [Source]

CodePumpArea

Used by Attributes: <u>Hydrant – Fire Pump Area</u>

Value WHITE_AREA_MER_2 RED_AREA_A_PIER YELLOW_AREA_B_PIER GREEN_AREA_E_PIER BLUE_AREA_HRLY_GARAGE NA UNKNOWN

Definition (Notes) [Source]

White Area MER 2 Fire Pump Red Area A Pier Fire Pump Yellow Area B Pier Fire Pump Green Area E Pier Fire Pump Blue Area Hourly Garage Pump Not applicable Unknown

CodePumpSta

Used by Attributes: <u>Pump Booster Station - Design;Capacitor - Install Type;Device - Install Type;Flow Control Device - Install Type;Meter - Install Type;Pump Station - Sta Type;Pump Booster Station - Station Type</u>

Value BOOSTER DOUBLE_POLE DOWN_GUY	Definition (Notes) [Source] booster station [SDSFIE V2.1 FGDC Utilities Classification] double pole [SDSFIE V2.1 FGDC Utilities Classification] A wire guy running from the top of a pole to an anchor in the ground. [SDSFIE V2.1 FGDC Utilities Classification]
EJECTOR FAUCET	ejector system [SDSFIE V1.6] faucet [SDSFIE V2.1 FGDC Utilities Classification]
HYDRANT	hydrant [SDSFIE V2.1 FGDC Utilities Classification]
METER	meter [SDSFIE V1.4]
OPEN_DRAINAGE	The channel is part of an unaltered drainage system [SDSFIE V2.1 FGDC Utilities Classification]
PARSHALL_FLUME	parshall flume meter [SDSFIE V1.4]
PAVED_DITCH	The channel has a concrete or other paved surface [SDSFIE V2.1 FGDC Utilities Classification]
POLE	pole [SDSFIE V2.1 FGDC Utilities Classification]
PRESS_REDUCE	pressure reducer station [SDSFIE V2.1 FGDC Utilities Classification]
PUMP	pump station [SDSFIE V2.1 FGDC Utilities Classification]
RISER_POLE	riser pole [SDSFIE V2.1 FGDC Utilities Classification]
SPAN_GUY	A wire guy running from the top of a pole to the top of the adjacent pole [SDSFIE V2.1 FGDC Utilities Classification]
SPRINKLER	sprinkler head [SDSFIE V2.1 FGDC Utilities Classification]
TBD	To Be Determined [SDSFIE V2.1]
TOWER	tower [SDSFIE V2.1 FGDC Utilities Classification]
UNKNOWN	Unknown [SDSFIE V2.1]
UNPAVED_DITCH	The channel has no constructed or prepared surface [SDSFIE V2.1 FGDC Utilities Classification]

CodeRadio

Used by Attributes: <u>Radar Site - Rad Type; Relay Station - Rad Type</u>

Value	Definition (Notes) [Source]
HF	High Frequency. [SDSFIE V2.3 Tinker Air Force Base]
LF	Low Frequency. [SDSFIE V2.3 Tinker Air Force Base]
UHF	Ultra High Frequency. [SDSFIE V2.3 Tinker Air Force Base]
VHF	Very High Frequency. [SDSFIE V2.3 Tinker Air Force Base]

CodeRadioType

Used by Attributes: <u>Relay Station - Radio Type</u>

Value	Definition (Notes) [Source]
BASE_STATION	Base Station Type. [SDSFIE V2.3 Tinker Air Force Base]
MOBILE	Mobile Type. [SDSFIE V2.3 Tinker Air Force Base]
PORTABLE	Portable Type. [SDSFIE V2.3 Tinker Air Force Base]
REPEATOR	Repeator Type. [SDSFIE V2.3 Tinker Air Force Base]

CodeReservoirType

Used by Attributes: <u>Reservoir - Res Type; Reservoir - Res Type</u>

Value	Definition (Notes) [Source]
CONSERVATION	The reservoir is used primarily for water conservation and storage. [SDSFIE V1.6]
FLOOD_CONTROL	The reservoir is used primarily for control of excessive rain fall to temporarily store excessive water. [SDSFIE V1.6]
LAGOON	lagoon [SDSFIE V1.4]
LAKE	lake [SDSFIE V1.4]
OTHER	other [SDSFIE V1.4]
POND	pond [SDSFIE V1.4]
RECREATION	Recreation [SDSFIE V1.9 REEGIS]
TANK	tank [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]

CodeRockStrength

Used by Attributes: Marker - Rock Cnd

Value	Definition (Notes) [Source]
HIGH	high dry strength/toughness [SDSFIE V1.4]
LOW	low dry strength/toughness [SDSFIE V1.4]
MEDIUM	medium dry strength/toughness [SDSFIE V1.4]
NONE	very weak, no strength, probably should class as soil [SDSFIE V1.4]
OTHER	other [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]
VERYHIGH	very high dry strength/toughness [SDSFIE V1.4]

CodeSewageTestType

Used by Attributes: <u>Lagoon - Test Type;Lagoon - Test Type;Storage Area - Test Type</u>

Value	Definition (Notes) [Source]
BOD	biological O2 dissolved [SDSFIE V1.4]
COD	chemical O2 dissolved [SDSFIE V1.4]
DO	dissolved O2 [SDSFIE V1.4]
FC	fecal coliform [SDSFIE V1.4]
OTHER	other [SDSFIE V1.4]
SS	suspended solids [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
TC	total coliform bacteria [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]

CodeSheathInsulateType

Used by Attributes: <u>Cable - Cbl Sht;Fiberoptic Line - Cbl Sht;Other Cable - Cbl Sht;Segmented Cable Point - Cbl</u> Sht;Twisted Pair Line - Cbl Sht;Utility Pole Guy - Cbl Sht;Waveguide Line - Cbl Sht;Coaxial Line - Chl Sht;Anode Test Station - Install Type;Anode Test Station - Install Type;Cable - Insul Material

Value	Definition (Notes) [Source]
ALPETH	Aluminum Polyethylene [SDSFIE V2 Austin and Pitts]
ARP	Aluminum Rodent Protected Polyethylene [SDSFIE V2 Austin and Pitts]
ASBEST_SIL	asbestos-silicone bond [SDSFIE V1.4]
ASBESTOS	asbestos [SDSFIE V1.4]
AT	Aerial Tape Armor [SDSFIE V2 Austin and Pitts]
BT	Buried Tape Armor [SDSFIE V2 Austin and Pitts]
CAMBRIC_PB_COV	varnished cambric, Pb covered [SDSFIE V1.4]
CELLULOSE	cellulose-acetate fiber [SDSFIE V1.4]
COTTON_YARN	cotton yarn [SDSFIE V1.4]

CP CPNM DA DI DOUBLE_TAPE F_FILLED FIBER_PAPER GLASS FIBER GLASS_ORGANIC GLASS_SILICONE GT JP JUTE KP KPSP LA LJ MG MP NEOPRENE NONE OPEN_WIRE OTHER PAP PAPER PAPER_PB_COV PB_ARMOR PB_COVER PLASTIC_CLAD PLASTIC_FOAM PLASTIC_GEL POLY_CROSS POLY_FOAM PPP PVC QUAD_TAPE RPS RUBBER_BUT RUBBER EPT RUBBER_NBR SA SHIELDED SI SUBDA SUBDJ TAPE_ARMOR TBD TFE UM UNKNOWN WEATHERPROOF WIRE_ARMOR

Corrosion Protection [SDSFIE V2 Austin and Pitts] Cross Ply Non Metallic [SDSFIE V2 Austin and Pitts] Double Wire Armor [SDSFIE V2 Austin and Pitts] Jacketed Double Wire Armor [SDSFIE V2 Austin and Pitts] double tape armored [SDSFIE V1.4] Foam Filled. [SDSFIE V2.5 AIR FORCE] polyimide fiber paper [SDSFIE V1.4] glass fiber-organic bond [SDSFIE V1.4] glass/polyesterfib-organic bond [SDSFIE V1.4] glass/polyesterfib-silicone bond [SDSFIE V1.4] Gopher Tape Armor [SDSFIE V2 Austin and Pitts] Jute Protection [SDSFIE V2 Austin and Pitts] jute protected [SDSFIE V1.4] Kevlar Polyethylene [SDSFIE V2 Austin and Pitts] Kevlar Polyethylene Corrugated Steel [SDSFIE V2 Austin and Pitts] Light Armor [SDSFIE V2 Austin and Pitts] Jacketed Light Wire Armor [SDSFIE V2 Austin and Pitts] Modified Gopher Tape Armor [SDSFIE V2 Austin and Pitts] Mechanical Protection [SDSFIE V2 Austin and Pitts] neoprene [SDSFIE V1.4] No outer sheath protection [SDSFIE V2 Austin and Pitts] open wire [SDSFIE V1.4] other [SDSFIE V1.4] Polyethylene Fused Aluminum [SDSFIE V2 Austin and Pitts] paper [SDSFIE V1.4] paper insulated Pb covered [SDSFIE V1.4] Pb armored [SDSFIE V1.4] Pb covered [SDSFIE V1.4] plastic clad [SDSFIE V1.4] Plastic, Foam Filled. [SDSFIE V2.5 AIR FORCE] plastic, gel-filled [SDSFIE V1.4] polyethylene (XLPE), cross-linked [SDSFIE V1.4] polyethylene (PE), foamed [SDSFIE V1.4] polypropylene (PPP) [SDSFIE V1.4] polyvinyl chloride [SDSFIE V1.4] quad tape, armored [SDSFIE V1.4] Rodent Protection Shield Polyethylene [SDSFIE V2 Austin and Pitts] rubber-butyl [SDSFIE V1.4] rubber-EPT [SDSFIE V1.4] rubber-NBR [SDSFIE V1.4] Single Wire Armor [SDSFIE V2 Austin and Pitts] shielded [SDSFIE V1.4] Jacketed Single Wire Armor [SDSFIE V2 Austin and Pitts] Submarine Double Wire Armor [SDSFIE V2 Austin and Pitts] Submarine Jacketed Double Wire Armor [SDSFIE V2 Austin and Pitts] tape armored [SDSFIE V1.4] to be determined [SDSFIE V1.4] polytetrafluroethylene (TFE) [SDSFIE V1.4] Unsoldered Mechanical Protection [SDSFIE V2 Austin and Pitts] Unknown. [SDSFIE V2.5 AIR FORCE] weatherproofed [SDSFIE V1.4] single wire, armored [SDSFIE V1.4]

CodeShoreBufferType

Used by Attributes: Segmented Cable Point - Buffer Type

Value	Definition (Notes) [Source]
CRITICAL_AREA	The area that is 1000 feet landward of the mean high tide coastline and any tidal waterways.
	[SDSFIE V1.75]
NO_BUILD_ZONE	The area that is 100 feet landward of the mean high tide coastline and any tidal waterways.
	[SDSFIE V1.75]

CodeSoilConsistency

Used by Attributes: Lagoon - Soil Cdn;Lagoon - Soil Cdn;Marker - Soil Cnd

Value FIRM HARD MEDIUMFIRM OTHER SOFT TBD UNKNOWN VERYHARD VERYSOFT

Definition (Notes) [Source]

firm [SDSFIE V1.4] hard [SDSFIE V1.4] medium firm [SDSFIE V1.4] other [SDSFIE V1.4] soft [SDSFIE V1.4] to be determined [SDSFIE V1.4] unknown [SDSFIE V1.4] very hard [SDSFIE V1.4] very soft [SDSFIE V1.4]

CodeSoilsErosionK

Used by Attributes: Lagoon - Soil Ero; Lagoon - Soil Ero

Value	Definition (Notes) [Source]
0.02	0.02 [SDSFIE V1.7 FGDC Soils Classification]
0.05	0.05 [SDSFIE V1.7 FGDC Soils Classification]
0.10	0.10 [SDSFIE V1.7 FGDC Soils Classification]
0.17	0.17 [SDSFIE V1.7 FGDC Soils Classification]
0.20	0.20 [SDSFIE V1.7 FGDC Soils Classification]
0.24	0.24 [SDSFIE V1.7 FGDC Soils Classification]
0.28	0.28 [SDSFIE V1.7 FGDC Soils Classification]
0.32	0.32 [SDSFIE V1.7 FGDC Soils Classification]
0.37	0.37 [SDSFIE V1.7 FGDC Soils Classification]
0.43	0.43 [SDSFIE V1.7 FGDC Soils Classification]
0.49	0.49 [SDSFIE V1.7 FGDC Soils Classification]
0.55	0.55 [SDSFIE V1.7 FGDC Soils Classification]
0.64_OR_MORE	0.64 or more [SDSFIE V1.7 FGDC Soils Classification]
0_02	0.02 [SDSFIE V1.4 FGDC Soils Classification]
0_05	0.05 [SDSFIE V1.4 FGDC Soils Classification]
0_10	0.10 [SDSFIE V1.4 FGDC Soils Classification]
0_15	0.15 [SDSFIE V1.8 FGDC Soils Classification]
0_17	0.17 [SDSFIE V1.4 FGDC Soils Classification]
0_20	0.20 [SDSFIE V1.4 FGDC Soils Classification]
0_24	0.24 [SDSFIE V1.4 FGDC Soils Classification]
0_28	0.28 [SDSFIE V1.4 FGDC Soils Classification]
0_32	0.32 [SDSFIE V1.4 FGDC Soils Classification]
0_37	0.37 [SDSFIE V1.4 FGDC Soils Classification]
0_43	0.43 [SDSFIE V1.4 FGDC Soils Classification]
0_49	0.49 [SDSFIE V1.4 FGDC Soils Classification]
0_55	0.55 [SDSFIE V1.4 FGDC Soils Classification]
0_64_OR_MORE	0.64 or more [SDSFIE V1.4 FGDC Soils Classification]
TBD	to be determined [SDSFIE V1.4 FGDC Soils Classification]
UNKNOWN	unknown [SDSFIE V1.4 FGDC Soils Classification]

CodeSoilsFamily

Used by Attributes: Lagoon - Soil Fam; Lagoon - Soil Fam

Value	Definition (Notes) [Source]
ALTAVISTA	fine-loamy, mixed, thermic Aquic Hapludults [SDSFIE V1.4]
AUTRYVILLE	loamy, siliceous, thermic Arenic Paleudults [SDSFIE V1.4]
AYCOCK	fine-silty, siliceous, thermic Typic Paleudults [SDSFIE V1.4]
BLANEY	loamy, siliceous, thermic Arenic Hapludults [SDSFIE V1.4]
BRAGG	fine-loamy, siliceous, acid, thermic Typic Udorthents [SDSFIE V1.4]
BUTTERS	coarse-loamy, siliceous, thermic Typic Paleudults [SDSFIE V1.4]
BYARS	clayey, kaolinitic, thermic Umbric Paleaquults [SDSFIE V1.4]
CANDOR	sandy, siliceous, thermic Arenic Paleudults [SDSFIE V1.4]

CAPEFEAR CHEWACLA COXVILLE CRAVEN CROATAN DELOSS DOGUE DOTHAN DUNBAR DUPLIN DYSTROCHREPT EXUM FACEVILLE FUOUAY GILEAD GOLDSBORO GRANTHAM **JOHNSTON** KALMIA KENANSVILLE KUREB LAKELAND LENOIR LEON LYNCHBURG LYNNHAVEN MCCOLL NAHUNTA NORFOLK OTHER PACTOLUS PANTEGO RAINS ROANOKE STALLINGS TARBORO TBD TORHUNTA UNKNOWN VAUCLUSE WAGRAM WAHEE WICKHAM WOODINGTON

clayey, mixed, thermic Typic Umbraquults [SDSFIE V1.4] fine-loamy, mixed, thermic Fluvaquentic Dystrochrepts [SDSFIE V1.4] clayey, kaolinitic, thermic Typic Paleaquults [SDSFIE V1.4] clayey, mixed, thermic Aquic Hapludults [SDSFIE V1.4] loamy, siliceous, dysic, thermic Terric Medisaprists [SDSFIE V1.4] fine-loamy, mixed, thermic Typic Umbraquults [SDSFIE V1.4] clayey, mixed, thermic Aquic Hapludults [SDSFIE V1.4] fine-loamy, siliceous, thermic Plinthic Paleudults [SDSFIE V1.4] clayey, kaolinitic, thermic Aeric Paleaquults [SDSFIE V1.4] clayey, kaolinitic, thermic Aquic Paleudults [SDSFIE V1.4] loamy, thermic Dystrochrepts [SDSFIE V1.4] fine-silty, siliceous, thermic Aquic Paleudults [SDSFIE V1.4] clayey, kaolinitic, thermic Typic Paleudults [SDSFIE V1.4] loamy, siliceous, thermic Arenic Plinthic Paleudults [SDSFIE V1.4] clayey, kaolinitic, thermic Aquic Hapludults [SDSFIE V1.4] fine-loamy, siliceous, thermic Aquic Paleudults [SDSFIE V1.4] fine-silty, siliceous, thermic Typic Paleaquults [SDSFIE V1.4] coarse-loamy, siliceous, acid, thermic Cumulic Humaquepts [SDSFIE V1.4] fine-loamy over sandy or sandy skeletal, siliceous, thermic Typic Hapludults [SDSFIE V1.4] loamy, siliceous, thermic Arenic Hapludults [SDSFIE V1.4] thermic, uncoated Spodic Quartzipsamments [SDSFIE V1.4] thermic, coated Typic Quartzipsamments [SDSFIE V1.4] clayey, mixed, thermic Aeric Paleaquults [SDSFIE V1.4] sandy, siliceous, thermic Aeric Haplaquods [SDSFIE V1.4] fine-loamy, siliceous, thermic Aeric Paleaquults [SDSFIE V1.4] sandy, siliceous, thermic Typic Haplaquods [SDSFIE V1.4] clayey, kaolinitic, thermic Typic Fragiaquults [SDSFIE V1.4] fine-silty, siliceous, thermic Aeric Paleaquults [SDSFIE V1.4] fine-loamy, siliceous, thermic Typic Paleudults [SDSFIE V1.4] other [SDSFIE V1.4] thermic, coated Aquic Quartzipsamments [SDSFIE V1.4] fine-loamy, siliceous, thermic Umbric Paleaquults [SDSFIE V1.4] fine-loamy, siliceous, thermic Typic Paleaquults [SDSFIE V1.4] clayey, mixed, thermic Typic Ochraquults [SDSFIE V1.4] coarse-loamy, siliceous, thermic Aeric Paleaquults [SDSFIE V1.4] mixed, thermic Typic Udipsamments [SDSFIE V1.4] to be determined [SDSFIE V1.4] coarse-loamy, siliceous, acid, thermic Typic Humaquepts [SDSFIE V1.4] unknown [SDSFIE V1.4] fine-loamy, siliceous, thermic Typic Hapludults [SDSFIE V1.4] loamy, siliceous, thermic Arenic Paleudults [SDSFIE V1.4] clayey, mixed, thermic Aeric Ochraquults [SDSFIE V1.4] fine-loamy, mixed, thermic Typic Hapludults [SDSFIE V1.4] coarse-loamy, siliceous, thermic Typic Paleaqults [SDSFIE V1.4]

CodeSoilsTexture

Used by Attributes: Lagoon - Soil Tex; Lagoon - Soil Tex

Value ASHY	Definition (Notes) [Source] Ashy [SDSFIE V1.8 FGDC Soils Classification]
BOLDGRAVEL	boulder gravel [SDSFIE V1.4]
BY	Bouldery [SDSFIE V1.8 FGDC Soils Classification]
BYV	Very bouldery [SDSFIE V1.8 FGDC Soils Classification]
BYX	Extremely bouldery [SDSFIE V1.8 FGDC Soils Classification]
C/SS	Clay/Sand with Stone. [SDSFIE V2.4 Army]
CB	Cobbly [SDSFIE V1.8 FGDC Soils Classification]
CBV	Very cobbly [SDSFIE V1.8 FGDC Soils Classification]
CBX	Extremely cobbly [SDSFIE V1.8 FGDC Soils Classification]
CLAY	clay [SDSFIE V1.4 FGDC Soils Classification]
CLAYLOAM	clay loam [SDSFIE V1.4 FGDC Soils Classification]
CN	Channery [SDSFIE V1.8 FGDC Soils Classification]
CNV	Very channery [SDSFIE V1.8 FGDC Soils Classification]
CNX	Extremely channery [SDSFIE V1.8 FGDC Soils Classification]
COARSANDYLOM	course sandy loam [SDSFIE V1.4 FGDC Soils Classification]
COARSESAND	coarse sand [SDSFIE V1.4 FGDC Soils Classification]
COARSESILT	coarse silt [SDSFIE V1.4]

COP CORSCOBLGRAV CORSPBLGRAVL CS/CS DIA FINCOBLGRAV FINEPBLGRAVL FINESAND FINESANDYLOM FINESILT FL. FLV FLX G/GS GR GRAVEL GRC GRF GRM GRV GRX GS GYP HB HYDR LOAM LOAMCOARSAND LOAMFINESAND LS LVFS MEDCOBLGRAVL MEDIUMSAND MEDIUMSILT MEDL MEDPEBLGRAVL MK MR MS OTHER PBY PBYV PBYX PCB PCBV PCBX PCN PCNV PCNX PERMAFROST PF PFL PFLV PFLX PGR PGRV PGRX PST PSTV PSTX PT ROCK S S/GS S/SC SANDYCLAY SANDYCLAYLOM SANDYLOAM SI

SILTYCLAY

Coprogenous [SDSFIE V1.8 FGDC Soils Classification] coarse cobble gravel [SDSFIE V1.4] coarse pebble gravel [SDSFIE V1.4] Clay-Sand/Clay-Silt. [SDSFIE V2.4 Army] Diatomaceous [SDSFIE V1.8 FGDC Soils Classification] fine cobble gravel [SDSFIE V1.4] fine pebble gravel [SDSFIE V1.4] fine sand [SDSFIE V1.4 FGDC Soils Classification] fine sandy loam [SDSFIE V1.4 FGDC Soils Classification] fine silt [SDSFIE V1.4] Flaggy [SDSFIE V1.8 FGDC Soils Classification] Very flaggy [SDSFIE V1.8 FGDC Soils Classification] Extremely flaggy [SDSFIE V1.8 FGDC Soils Classification] Gravel/Gravel-Sand. [SDSFIE V2.4 Army] Gravelly [SDSFIE V1.8 FGDC Soils Classification] gravel [SDSFIE V1.4] Coarse gravelly [SDSFIE V1.8 FGDC Soils Classification] Fine gravelly [SDSFIE V1.8 FGDC Soils Classification] Medium gravelly [SDSFIE V1.8 FGDC Soils Classification] Very gravelly [SDSFIE V1.8 FGDC Soils Classification] Extremely gravelly [SDSFIE V1.8 FGDC Soils Classification] Grassy [SDSFIE V1.8 FGDC Soils Classification] Gypsiferous [SDSFIE V1.8 FGDC Soils Classification] Herbaceous [SDSFIE V1.8 FGDC Soils Classification] Hydrous [SDSFIE V1.8 FGDC Soils Classification] loam [SDSFIE V1.4 FGDC Soils Classification] loamy course sand [SDSFIE V1.4 FGDC Soils Classification] loamy fine sand [SDSFIE V1.4 FGDC Soils Classification] loamy sand [SDSFIE V1.8 FGDC Soils Classification] loamy very fine sand [SDSFIE V1.8 FGDC Soils Classification] medium cobble gravel [SDSFIE V1.4] medium sand [SDSFIE V1.4] medium silt [SDSFIE V1.4] Medial [SDSFIE V1.8 FGDC Soils Classification] medium pebble gravel [SDSFIE V1.4] Mucky [SDSFIE V1.8 FGDC Soils Classification] Marly [SDSFIE V1.8 FGDC Soils Classification] Mossy [SDSFIE V1.8 FGDC Soils Classification] other [SDSFIE V1.4] Parabouldery [SDSFIE V1.8 FGDC Soils Classification] Very parabouldery [SDSFIE V1.8 FGDC Soils Classification] Extremely parabouldery [SDSFIE V1.8 FGDC Soils Classification] Paracobbly [SDSFIE V1.8 FGDC Soils Classification] Very paracobbly [SDSFIE V1.8 FGDC Soils Classification] Extremely paracobbly [SDSFIE V1.8 FGDC Soils Classification] Parachannery [SDSFIE V1.8 FGDC Soils Classification] Very parachannery [SDSFIE V1.8 FGDC Soils Classification] Extremely parachannery [SDSFIE V1.8 FGDC Soils Classification] permafrost [SDSFIE V1.4] Permanently frozen [SDSFIE V1.8 FGDC Soils Classification] Paraflaggy [SDSFIE V1.8 FGDC Soils Classification] Very paraflaggy [SDSFIE V1.8 FGDC Soils Classification] Extremely paraflaggy [SDSFIE V1.8 FGDC Soils Classification] Paragravelly [SDSFIE V1.8 FGDC Soils Classification] Very paragravelly [SDSFIE V1.8 FGDC Soils Classification] Extremely paragravelly [SDSFIE V1.8 FGDC Soils Classification] Parastony [SDSFIE V1.8 FGDC Soils Classification] Very parastony [SDSFIE V1.8 FGDC Soils Classification] Extremely parastony [SDSFIE V1.8 FGDC Soils Classification] Peaty [SDSFIE V1.8 FGDC Soils Classification] Rock. [SDSFIE V2.4 Army] sand [SDSFIE V1.8 FGDC Soils Classification] Sand/Gravel Sand. [SDSFIE V2.4 Army] Silt/Silty-Clay. [SDSFIE V2.4 Army] sandy clay [SDSFIE V1.4 FGDC Soils Classification] sandy clay loam [SDSFIE V1.4 FGDC Soils Classification] sandy loam [SDSFIE V1.4 FGDC Soils Classification] silt [SDSFIE V1.8 FGDC Soils Classification] silty clay [SDSFIE V1.4 FGDC Soils Classification]

SLITYCLAYLOMsSRSSRSSS/SCSSTSSTONESsSTVVSTXETBDtdUNKNOWNuVERYFINESANDVVERYFINESILTVVRYFINPBLGRVVVRYFINSANLOMv	silty loam [SDSFIE V1.4 FGDC Soils Classification] silty clay loam [SDSFIE V1.4 FGDC Soils Classification] Stratified [SDSFIE V1.8 FGDC Soils Classification] Sand-Silt/Sand-Clay. [SDSFIE V2.4 Army] Stony [SDSFIE V1.8 FGDC Soils Classification] stones [SDSFIE V1.4] Very stony [SDSFIE V1.8 FGDC Soils Classification] Extremely stony [SDSFIE V1.8 FGDC Soils Classification] o be determined [SDSFIE V1.8 FGDC Soils Classification] o be determined [SDSFIE V1.4] very coarse sand [SDSFIE V1.4] very fine sand [SDSFIE V1.4] very fine sand [SDSFIE V1.4] very fine pebble gravel [SDSFIE V1.4] very fine sandy loam [SDSFIE V1.4] very fine sandy loam [SDSFIE V1.4 FGDC Soils Classification] Very fine sandy loam [SDSFIE V1.4] very fine sandy loam [SDSFIE V1.4 FGDC Soils Classification] Very fine sandy loam [SDSFIE V1.4 FGDC Soils Classification] Very fine Sandy loam [SDSFIE V1.4 FGDC Soils Classification] Very fine Sandy loam [SDSFIE V1.4 FGDC Soils Classification]
WD V	Woody [SDSFIE V1.8 FGDC Soils Classification]

CodeSourceListFuelGas

Used by Attributes: <u>Pump Booster Station - Fuel Source; Fill Point - Source; Line - Source; Meter - Source; Pump Station - Source</u>

Value	Definition (Notes) [Source]
ARROYO	arroyo/draw/wash [SDSFIE V1.4]
ARTISAN_WELL	artisan well [SDSFIE V1.4]
BAYOU	bayou [SDSFIE V1.4]
CREEK	creek [SDSFIE V1.4]
DEEPWELL	deep well [SDSFIE V1.4]
DRY_PLAYA	dry playa [SDSFIE V1.4]
FUMAROLE	fumarole [SDSFIE V1.8 USGS]
GEOTHERMAL	geothermal well [SDSFIE V1.8 USGS]
GEYSER	geyser [SDSFIE V1.4]
GLACIER	glacier [SDSFIE V1.4]
GULF	gulf [SDSFIE V1.4]
HAIL	hail [SDSFIE V1.4]
ICEBERG	iceberg [SDSFIE V1.4]
LAKE	lake [SDSFIE V1.4]
MUD_POT	mud pot [SDSFIE V1.8 USGS]
OCEAN	ocean [SDSFIE V1.4]
OTHER	other [SDSFIE V1.4]
POND	pond [SDSFIE V1.4]
RAINFALL	rainfall [SDSFIE V1.4]
RESERVOIR	reservoir [SDSFIE V1.4]
RIME	hoarfrost, dew, condensed fog [SDSFIE V1.4]
RIVER	river [SDSFIE V1.4]
RUNOFF	runoff [SDSFIE V1.4]
SLEET	sleet [SDSFIE V1.4]
SLOUGH	slough [SDSFIE V1.4]
SNOWFALL	snowfall [SDSFIE V1.4]
SPRING	spring [SDSFIE V1.4]
STREAM	stream [SDSFIE V1.4]
SWAMP	swamp [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]
WET_PLAYA	wet playa [SDSFIE V1.4]

CodeSpeakerImpedance

Used by Attributes: <u>Speaker - Spkimp</u>

Value	Definition (Notes) [Source]
OTHER	Other. [SDSFIE V2.5 AIR FORCE]
TBD	To Be Determined. [SDSFIE V2.5 AIR FORCE]

UNKNOWN VARIABLE Unknown. [SDSFIE V2.5 AIR FORCE] Variable (selectable). [SDSFIE V2.5 AIR FORCE]

CodeSplice

Used by Attributes: <u>Splice - Spl Type</u>

Value	Definition (Notes) [Source]
DROP_INSERT	DROP INSERT SPLICE [SDSFIE V2 Air Force]
HALFTAP_FOLDBACK	Halftap fold back splice. [SDSFIE V2 AIR FORCE]
HALFTAP_INLINE	halftap inline splice [SDSFIE V2]
JUNCTION_FOLDBAC	Junction fold back splice. [SDSFIE V2.5 AIR FORCE]
JUNCTION_INLINE	junction inline splice [SDSFIE V2]
LOAD_FOLDBACK	Load fold back splice. [SDSFIE V2.5 AIR FORCE]
LOAD_INLINE	load inline splice [SDSFIE V2]
MULTIPLE_INLINE	Multiple inline splice. [SDSFIE V2.5 AIR FORCE]
MULTIPLEFOLDBACK	Multiple fold back splice. [SDSFIE V2.5 AIR FORCE]
STRAIGHT_INLINE	straight inline splice [SDSFIE V2]
STRAIGHTFOLDBACK	Straight inline splice. [SDSFIE V2.5 AIR FORCE]

CodeSpliceCaseEncapsulate

Used by Attributes: <u>DbSplice - Ecs Type</u>;<u>Splice - Ecs Type</u>

Value	Definition (Notes) [Source]
OTHER	Other. [SDSFIE V2.5 AIR FORCE]
RE	Reenterable compound. [SDSFIE V2.5 AIR FORCE]
TBD	To Be Determined. [SDSFIE V2.5 AIR FORCE]
UNKNOWN	Unknown. [SDSFIE V2.5 AIR FORCE]

CodeSpliceCaseMat

Used by Attributes: DbSplice - Cas Material;Splice - Cas Material

Value	Definition (Notes) [Source]
AL	Aluminum [SDSFIE V2 Austin and Pitts]
EVA	Ethylene Vinyl Acetate (Heat Shrinkable Tubing). [SDSFIE V2.5 AIR FORCE]
FIBER	Fiberglass [SDSFIE V2 Austin and Pitts]
IRON	Cast Iron [SDSFIE V2 Austin and Pitts]
LEAD	Lead [SDSFIE V2 Austin and Pitts]
OTHER	Other [SDSFIE V2]
PE	Polyethylene. [SDSFIE V2.5 AIR FORCE]
PP	Polypropylene. [SDSFIE V2.5 AIR FORCE]
PVC	Polyvinyl Chloride [SDSFIE V2 Austin and Pitts]
SS	Stainless Steel [SDSFIE V2 Austin and Pitts]
TBD	To Be Determined [SDSFIE V2 Austin and Pitts]
UNKNOWN	Unknown [SDSFIE V2]

CodeSpliceCaseTyp

Used by Attributes: <u>DbSplice - Cas Type</u>;<u>Splice - Cas Type</u>

Definition (Notes) [Source]
12.5 Inch Stainless Steel. [SDSFIE V2.5 AIR FORCE]
3 Type. [SDSFIE V2.5 AIR FORCE]
4 Inch Better Buried. [SDSFIE V2.5 AIR FORCE]
4 Inch ReddiSeal. [SDSFIE V2.5 AIR FORCE]
4 Inch Stainless Steel. [SDSFIE V2.5 AIR FORCE]

4BB 4RS 4SS 6_5BB 6_5RE 6_5SS 9_5BB 9_5RS 9_5SS FOSC_100_B_H HS KBV LEAD OTHER READY_ACCESS TBD UC 6 9	5 Inch Better Buried. [SDSFIE V2.5 AIR FORCE] 5 Inch ReddiSeal. [SDSFIE V2.5 AIR FORCE] 5 Inch Stainless Steel. [SDSFIE V2.5 AIR FORCE] 6.5 Inch Better Buried. [SDSFIE V2.5 AIR FORCE] 6.5 Inch ReddiSeal. [SDSFIE V2.5 AIR FORCE] 9.5 Inch Better Buried. [SDSFIE V2.5 AIR FORCE] 9.5 Inch ReddiSeal. [SDSFIE V2.5 AIR FORCE] 9.5 Inch ReddiSeal. [SDSFIE V2.5 AIR FORCE] 9.5 Inch Stainless Steel. [SDSFIE V2.5 AIR FORCE] 9.5 Inch Stainless Steel. [SDSFIE V2.5 AIR FORCE] 9.5 Inch Stainless Steel. [SDSFIE V2.5 AIR FORCE] 8.5 Inch Stainless Steel. [SDSFIE V2.5 AIR FORCE] 9.5 Inch Stainless Steel. [SDSFIE V2.5 AIR FORCE] 1.5 Inch Stainless Steel. [SDSFIE V2.5 AIR
UC_6_9	Siemens UC 6-9 [SDSFIE V2 Austin and Pitts]
UCN_7_10	Siemens UCN 7-10 [SDSFIE V2 Austin and Pitts]
UNKNOWN	Unknown [SDSFIE V2]

CodeSpliceMethod

Used by Attributes: Splice - Method

Value AMP B ELAST FACTORY FUSION M MECH OTHER ROTARY	Definition (Notes) [Source] Amp [SDSFIE V2 Austin and Pitts] B-connectors [SDSFIE V2 Austin and Pitts] Elastomeric Fiber Splice [SDSFIE V2 Austin and Pitts] Factory Splice [SDSFIE V2 Austin and Pitts] Fusion Fiber Splice [SDSFIE V2 Austin and Pitts] Modular [SDSFIE V2 Austin and Pitts] Other Mechanical [SDSFIE V2 Austin and Pitts] Other [SDSFIE V2 Austin and Pitts] Rotary Fiber Splice [SDSFIE V2 Austin and Pitts]
FACTORY	Factory Splice [SDSFIE V2 Austin and Pitts]
FUSION	Fusion Fiber Splice [SDSFIE V2 Austin and Pitts]
М	Modular [SDSFIE V2 Austin and Pitts]
MECH	Other Mechanical [SDSFIE V2 Austin and Pitts]
OTHER	Other [SDSFIE V2 Austin and Pitts]
ROTARY	Rotary Fiber Splice [SDSFIE V2 Austin and Pitts]
SL	Scotch Locks (Copper) [SDSFIE V2 Austin and Pitts]
TBD	To Be Determined [SDSFIE V2]
TS	Twist and Solder or Sleeve [SDSFIE V2 Austin and Pitts]
UNKNOWN	Unknown [SDSFIE V2]

CodeSplitterType

Used by Attributes: <u>Splitter - Splt Type</u>

Value	Definition (Notes) [Source]
2_WAY	2 Way Splitter [SDSFIE V2 Tinker Air Force Base]
3_WAY	3 Way Splitter [SDSFIE V2 Tinker Air Force Base]
4_WAY	4 Way Splitter [SDSFIE V2 Tinker Air Force Base]
5_WAY	5 Way Splitter [SDSFIE V2 Tinker Air Force Base]
6_WAY	6 Way Splitter [SDSFIE V2 Tinker Air Force Base]

CodeStatus

Value ABANDONED

ACTIVE

AIRSPACED

AS_BUILT

BROKEN

CLOSED

Used by Attributes: Junction - Status; Telephone - Status

Definition (Notes) [Source] Abandoned Active surface A favorable airspace determination has been issued As-Built Broken or rough surface Closed surface

CONDEMNED	Condemned
DEMOLISHED	Demolished
ENV_CLEARED	All required environmental actions and documentation described in FAAO 5050.4 National Environmental Policy Act (NEPA) have been satisfied
FAILED_AID	Failure or irregular operation of visual aides
INACTIVE	Inactive
LIMITED	Limited operations]
LONG_TERM	Indicates the feature is part of a long term $(11 + years)$ plan
MEDIUM_TERM	Indicates the feature is part of a midterm (6 - 10 year) plan
NON_OPERATIONAL	Non-operational
OCCUPIED	Occupied
OPERATIONAL	Operational (fully)
OTHER	Other
PARKED	Parked or disabled aircraft
PERMANENT	Permanent
PORTABLE	Portable
RELEASED	Used to track land released by the airport
S_POWER	Secondary power supply in operation
SEMI_PERMANENT	Semi_Permanent
SHORT_TERM	Indicates the feature is part of a short term (0 - 5 year) plan
TBD	To be determined
TEMPORARY	Temporary
TERMINATED	Terminated no longer used
UNDER_CONSTRUCTION	Planned or under construction
UNKNOWN	Unknown
UNOCCUPIED	Unoccupied
WORK_IN_PROGRESS	Construction or work in progress
PROPOSED	Planned to be installed
REMOVED	Removed from location, though pipes may still be present
BURIED	Partially or completely covered by soil
INCOMPLETE	Partially disassembled

CodeStatusElectricSwitch

Used by Attributes: Switch - Swt Sta

Value
CLOSED
CLOSEDCLOSED
CLOSEDOPEN
OPEN
OPENCLOSED
OPENOPEN
TBD
UNKNOWN

Definition (Notes) [Source]

closed [SDSFIE V1.4] closed - normally closed [SDSFIE V1.4] closed - normally open [SDSFIE V1.4] open [SDSFIE V1.4] open - normally closed [SDSFIE V1.4] open - normally open [SDSFIE V1.4] to be determined [SDSFIE V1.4] unknown [SDSFIE V1.4]

CodeStyleDrainField

Used by Attributes: <u>Septic Tank - Drnfl St;Grease Trap - Field Drain Style</u>

Value	
FAN	
NETWORK	
OTHER	
SEEP_PIT	
TBD	
TILE	
UNKNOWN	

Definition (Notes) [Source]

fan drain field [SDSFIE V1.4] network drain field [SDSFIE V1.4] other [SDSFIE V1.4] seepage pit [SDSFIE V1.4] to be determined [SDSFIE V1.4] tile field [SDSFIE V1.4] unknown [SDSFIE V1.4]

CodeStyleGates

Used by Attributes: Gate - Gate St

Value FLAP LIFT OTHER TBD UNKNOWN

Definition (Notes) [Source]

flap gate [SDSFIE V1.4] lift gate [SDSFIE V1.4] other [SDSFIE V1.4] to be determined [SDSFIE V1.4] unknown [SDSFIE V1.4]

CodeStyleOpenChannel

Used by Attributes: Open Drainage Line - Chan St

Value CANALCMPLSEC CANALTRPZSEC LAKE OPENDRAINAGE OTHER PAVEDDITCH PAVEDDITCH PAVEDINVRTDR POND RIVER STORMWATER SWALE TBD UNKNOWN UNPAVEDITCH

Definition (Notes) [Source]

canal complex section [SDSFIE V1.4] canal trapezoidal section [SDSFIE V1.4] lake [SDSFIE V1.4] open drainage [SDSFIE V1.4] other [SDSFIE V1.4] paved ditch [SDSFIE V1.4] paved invert drain [SDSFIE V1.4] pond [SDSFIE V1.4] river [SDSFIE V1.4] storm water retention reservoir [SDSFIE V1.4] swale [SDSFIE V1.4] to be determined [SDSFIE V1.4] unknown [SDSFIE V1.4] unpaved ditch [SDSFIE V1.4]

CodeStyleTank

Used by Attributes: <u>Septic Tank - Tank St;Tank - T</u>

Value	Definition (Notes) [Source]
ABOVEGROUND	A receptacle or chamber of which 90 percent or more is located above the surface of the ground. [SDSFIE V1.4]
ABVGRND_UNDRGRND	Aboveground and underground. [SDSFIE V2.31 Air Force]
ALODINE_TANK	alodine tank [SDSFIE V2.3 Edwards Air Force Base]
BARRELS	Barrels, drums or cans. [SDSFIE V2.31 Air Force]
DRAINSUMP	drain sump tank [SDSFIE V1.4]
ELEVATED	elevated [SDSFIE V1.4]
HOT_WATER_TANK	hot water rinse tank [SDSFIE V2.3 Edwards Air Force Base]
HYDROPNEU	hydropneumatic [SDSFIE V1.4]
IND_WASTE_TANK	industrial waste tank [SDSFIE V2.3 Edwards Air Force Base]
OTHER	other [SDSFIE V1.4]
RAILROAD_TANKCAR	Railroad Tank Car. [SDSFIE V2.31 Air Force]
SCP	self contained propane gas tank [SDSFIE V1.4]
SEMIBRD_UNDRGRND	Semi-buried and Underground. [SDSFIE V2.31 Air Force]
SEMIBURIED	Semi-buried. [SDSFIE V2.31 Air Force]
STANDPIPE	standpipe [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
TRUCK	Truck. [SDSFIE V2.31 Air Force]
UNCONFNDRESV	unconfined reservoir [SDSFIE V1.4]
UNDERGROUND	A receptacle or chamber of which 10 percent or more is located beneath the surface of the ground. [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]
TEMP	temp

CodeStyleValve

Used by Attributes: <u>Air Pressure Device - Dev St;Fill Point - Valve St;Hydrant - Valve St;Valve - Valve St;Hydrant - Valve Style;Hydrant - Valve Style;Valve - Valve Style;Valve - Valve St;Valve - Valve St;Valv</u>

Value ANGLE BALL BUTTERFLY CHECK DRYPIPE GATE GLOBE NEEDLE OTHER OTHERPOSTIND PLUG PRESSREDUCNG PRESSRELIEF QUAD REGULATING STOP_WASTE SWINGCHECK TBD	Definition (Notes) [Source] angle [SDSFIE V1.4] ball [SDSFIE V1.4] butterfly [SDSFIE V1.4] check [SDSFIE V1.4] dry pipe [SDSFIE V1.4] gate [SDSFIE V1.4] globe [SDSFIE V1.4] needle [SDSFIE V1.4] other [SDSFIE V1.4] other post indicator [SDSFIE V1.4] plug [SDSFIE V1.4] pressure reducing [SDSFIE V1.4] pressure relief [SDSFIE V1.4] guad [SDSFIE V1.4] regulating [SDSFIE V1.4] stop and waste [SDSFIE V1.4] to be determined [SDSFIE V1.4]
SWINGCHECK TBD TRIPLEDUTY	swing check [SDSFIE V1.4] to be determined [SDSFIE V1.4] triple duty [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]

CodeSubstationType

Used by Attributes: <u>Substation - Sst Type</u>

Value	Definition (Notes) [Source]
DISTRIBUTION	Substations located in the middle of a load area. [SDSFIE V1.6]
OTHER	other [SDSFIE V1.4]
SUBTRANSMISSION	Electric substations with equipment used to switch circuits operating at voltages in the range of
	34.5 to 161kV. [SDSFIE V1.6]
TBD	to be determined [SDSFIE V1.4]
TRANSMISSION	A substation which uses alternating current which contains equipment used to sectionalize the
	system when a fault or circuit develops. [SDSFIE V1.6]
UNKNOWN	unknown [SDSFIE V1.4]

CodeSueQualityLevel

Used by Attributes:

Value	Definition (Notes) [Source]
А	Potholing
В	Subsurface Detection
С	Field Survey of Apurtenances
D	Records
UNKNOWN	Unknown

CodeSurfaceComposition

Used by Attributes: <u>Cable Trough Line - Material</u>

Value	
AGS	
ASPH	

Definition (Notes) [Source] Asphalt and turf Asphalt

BE BITUM BRICK CA CG CGS CLAY	Bare earth Bitumen Brick Concrete and asphalt Concrete grooved Concrete and turf Clay
CONC	Concrete Coral
CORAL DS	Corai Desert/Sand
DS GRADE	Graded surface
GRAVEL	Gravel
GS	Turf
ICE	1011
ICE LATERITE	ice
MACADAM	Laterite Macadam
MATS	MATS
MEMBRANE	MEMBRANE
METAL	METAL
OTHER	Other type of surface composition
PSP	PSP
SAND	SAND
SI	Snow/Ice
SNOW	Snow
STONE	Stone
WATER	Water
WOOD	Wood

CodeTankUse

Used by Attributes: <u>Disposal Tank - Tank Use;Tank Area - tankUse</u>

Value	Definition (Notes) [Source]
CHEMICAL	chemical [SDSFIE V1.4]
DISPOSAL	disposal tank [SDSFIE V1.4]
EWS	Reserve water source used by emergency firefighting services. [SDSFIE V2.21 Lakenheath AFB]
FUEL	fuel [SDSFIE V1.4]
NATGAS	natural gas [SDSFIE V1.4]
OIL	oil [SDSFIE V1.75]
OTHER	other [SDSFIE V1.4]
POL	Petroleum, Oil, and Lubricants. [SDSFIE V2.31 Air Force]
POTWATER	potable water [SDSFIE V1.4]
PROPGAS	propane gas [SDSFIE V1.4]
RAWWATER	raw water [SDSFIE V1.4]
SEPTIC_TANK	septic tank [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]

CodeTerminalCaseType

Used by Attributes: <u>Terminal - Case Type</u>

Value	Definition (Notes) [Source]
OTHER	Other [SDSFIE V2]
PED12	12 Inch Pedestal [SDSFIE V2 Austin and Pitts]
PED4	4 Inch Pedestal [SDSFIE V2 Austin and Pitts]
PED6	6 Inch Pedestal [SDSFIE V2 Austin and Pitts]
PED8	8 Inch Pedestal [SDSFIE V2 Austin and Pitts]
TBD	To Be Determined [SDSFIE V2]
TRANS	Transducer [SDSFIE V2 Austin and Pitts]
UNKNOWN	Unknown [SDSFIE V2]

CodeTerminalType

Used by Attributes: <u>Terminal - Term Type</u>

Value	Definition (Notes) [Source]
BNC_F	BNC-F - Bayonet Neill Concelman (BMC), Female. [SDSFIE V2.5 AIR FORCE]
BNC_M	BNC-M - Bayonet Neill Concelman (BMC), Male. [SDSFIE V2.5 AIR FORCE]
ENC	Enclosure [SDSFIE V2 Austin and Pitts]
ENCAP	Encapsulated [SDSFIE V2 Austin and Pitts]
F_TYPE_F	F-F - F TYPE, Female. [SDSFIE V2.5 AIR FORCE]
F_TYPE_M	F-M - F TYPE, Male. [SDSFIE V2.5 AIR FORCE]
FC	Fixed Count [SDSFIE V2 Austin and Pitts]
FC_F	FC-F - MIL-C-39012 category D type, FO connector, Female. [SDSFIE V2.5 AIR FORCE]
FC_M	FC-M - MIL-C-39012 category D type, FO connector, Male. [SDSFIE V2.5 AIR FORCE]
FCCP	Fixed Count Control Point [SDSFIE V2 Austin and Pitts]
FCTP	Fixed Count Taper Point [SDSFIE V2 Austin and Pitts]
FDDI_F	FDDI-F - Fiber Distributed Data Interface, FO connector, Female. [SDSFIE V2.5 AIR
	FORCE]
FIDDI_M	FDDI-M - Fiber Distributed Data Interface, FO connector, Male. [SDSFIE V2.5 AIR FORCE]
LC_F	LC-F - Limited Co-ordination Specification (LC Spec.), Female. [SDSFIE V2.5 AIR FORCE]
LC_M	LC-M - Limited Co-ordination Specification (LC Spec.), Male. [SDSFIE V2.5 AIR FORCE]
N_TYPE_F	N-F - N TYPE, Female. [SDSFIE V2.5 AIR FORCE]
N_TYPE_M	N-M - N TYPE, Male [SDSFIE V2.5 AIR FORCE]
OTHER	Other. [SDSFIE V2.5 AIR FORCE]
RA	Ready Access [SDSFIE V2 Austin and Pitts]
RACP	Ready Access Control Point [SDSFIE V2 Austin and Pitts]
RATP	Ready Access Taper Point [SDSFIE V2 Austin and Pitts]
RE	Reenterable [SDSFIE V2 Austin and Pitts]
SC_F	SC-F - Plug and socket, push-pull latch, FO connector, Female. [SDSFIE V2.5 AIR FORCE]
SC_M	SC-M - Plug and socket, push-pull latch, FO connector, Male. [SDSFIE V2.5 AIR FORCE]
SMA_AF	SMA-AF - Subminiature Version A, Female. [SDSFIE V2.5 AIR FORCE]
SMA_AM	SMA-AM - Subminiature Version A, Male. [SDSFIE V2.5 AIR FORCE]
SMC_CF	SMC-CF - Subminiature Version C, Female. [SDSFIE V2.5 AIR FORCE]
SMC_CM	SMC-CM - Subminiature Version C, Male. [SDSFIE V2.5 AIR FORCE]
ST_F	ST-F - ST, Female. [SDSFIE V2.5 AIR FORCE]
ST_M	ST-M - ST, Male. [SDSFIE V2.5 AIR FORCE]
TBD	To Be Determined. [SDSFIE V2.5 AIR FORCE]
TNC_F	TNC-F - TNC Female. [SDSFIE V2.5 AIR FORCE]
TNC_M	TNC-M - TNC Male. [SDSFIE V2.5 AIR FORCE]
UNKNOWN	Unknown. [SDSFIE V2.5 AIR FORCE]

CodeTransVehicleType

Used by Attributes: Media Converter - Vehtype

Value	Definition (Notes) [Source]
GOV	Areas that contain government owned vehicles only. [SDSFIE V2.5]
POV	Areas that contain privately owned vehicles. [SDSFIE V2.5]

CodeTruckType

Used by Attributes: <u>Hydrant - Truck Type</u>

Value	Definition (Notes) [Source]
FUEL_SVC_UNIT	Trailer-mounted Fuel Servicing Unit [SDSFIE V2.31 Air Force]
HOSE_CART	Hose cart - truck only [SDSFIE V2.31 Air Force]
UNKNOWN	Unknown [SDSFIE V2.31 Air Force]
WATER_SEPARATOR	Filter - Water separator [SDSFIE V2.31 Air Force]

CodeUtilityGuyType

Used by Attributes: <u>Utility Pole Guy - Guy Type</u>

Value	Definition (Notes) [Source]
ANCHOR_GUY	anchor guy [SDSFIE V1.4]
BUILDING_GUY	building guy [SDSFIE V1.4]
COMPRESS_GUY	compressive guy [SDSFIE V1.4]
DOWN_GUY	A wire guy running from the top of a pole to an anchor in the ground. [SDSFIE V1.75]
OTHER	other [SDSFIE V1.4]
SPAN_GUY	A wire guy running from the top of a pole to the top of the adjacent pole [SDSFIE V1.75]
STUB_GUY	stub guy [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]

CodeUtilityOwnershipType

Used by Attributes: Utility Electric Utility Site - Utility Owner Type; Service Area - Utilown

Value	Definition (Notes) [Source]
PRIVATE	Private entity (e.g., individual, corporation, etc.). [SDSFIE V2 AWWA]
PUBLIC	Public entity (e.g., federal, state, or local government). [SDSFIE V2 AWWA]

CodeValveOpen

Used by Attributes:

Value	Definition (Notes) [Source]
CLOCKWISE	CLOCKWISE
COUNTER_CLOCKWISE	COUNTER_CLOCKWISE
UNKNOWN	UNKNOWN

CodeValveType

Used by Attributes: <u>Air Pressure Device - Use; Valve - valveDesc</u>

Value
BACKFLOW
BLOW_OFF
CHECK
GATE
GLOBE
OTH
POSTINDICATOR
PRV
TAP
UNK

Definition (Notes) [Source]

BACKFLOW [FGDC Utilities Classification] BLOW_OFF [FGDC Utilities Classification] CHECK [AWWA] GATE [AWWA] GLOBE [AWWA] Other POSTINDICATOR [AWWA] PRV [FGDC Utilities Classification] TAP [FGDC Utilities Classification] Unknown

CodeValveStatus

Used by Attributes:

Value OPEN CLOSED UNKNOWN **Definition (Notes) [Source]** OPEN CLOSED UNKNOWN

CodeVerticalConnectingBlock

Used by Attributes: Vertical Site - Covtbk

Value	Definition (Notes) [Source]
303	303. [SDSFIE V2.5 AIR FORCE]
305	305. [SDSFIE V2.5 AIR FORCE]
355	355. [SDSFIE V2.5 AIR FORCE]
399	399. [SDSFIE V2.5 AIR FORCE]
700	700. [SDSFIE V2.5 AIR FORCE]
713	713. [SDSFIE V2.5 AIR FORCE]
OTHER	Other. [SDSFIE V2.5 AIR FORCE]
TBD	To Be Determined. [SDSFIE V2.5 AIR FORCE]
UNKNOWN	Unknown. [SDSFIE V2.5 AIR FORCE]

CodeVerticalHeight

Used by Attributes: Vertical Site - Covtht

Value	Definition (Notes) [Source]
11_FT_6_IN	11 Foot 6 Inch. [SDSFIE V2.5 AIR FORCE]
7_FT	7 Foot. [SDSFIE V2.5 AIR FORCE]
8_FT	8 Foot. [SDSFIE V2.5 AIR FORCE]
9_FT	9 Foot. [SDSFIE V2.5 AIR FORCE]
OTHER	Other. [SDSFIE V2.5 AIR FORCE]
TBD	To Be Determined. [SDSFIE V2.5 AIR FORCE]
UNKNOWN	Unknown. [SDSFIE V2.5 AIR FORCE]

CodeVerticalLocation

Used by Attributes: Transmission Pipeline - Vertical Location

Value ELEVATED NEAR UNDERGROUND UNSPECIFIED

Definition (Notes) [Source]

Elevated. [SDSFIE V2.4 USGS] Near. [SDSFIE V2.4 USGS] Underground. [SDSFIE V2.4 USGS] Unspecified. [SDSFIE V2.4 USGS]

CodeVerticalMountBlock

Used by Attributes: <u>Vertical Site - Covtmb</u>

Value 8_IN NONE OTHER TBD UNIVERSAL UNKNOWN

Definition (Notes) [Source] 8 Inch. [SDSFIE V2.5 AIR FORCE]

None. [SDSFIE V2.5 AIR FORCE] Other. [SDSFIE V2.5 AIR FORCE] To be determined. [SDSFIE V2.5 AIR FORCE] Universal. [SDSFIE V2.5 AIR FORCE] Unknown. [SDSFIE V2.5 AIR FORCE]

CodeVerticalMountingArea

Used by Attributes: Vertical Site - Covtma

Value	Definition (Notes) [Source]
126_IN	126 Inch. [SDSFIE V2.5 AIR FORCE]
76_IN	76 Inch. [SDSFIE V2.5 AIR FORCE]
84_IN	84 Inch. [SDSFIE V2.5 AIR FORCE]
92_IN	92 Inch. [SDSFIE V2.5 AIR FORCE]
OTHER	Other. [SDSFIE V2.5 AIR FORCE]

TBD UNKNOWN To Be Determined. [SDSFIE V2.5 AIR FORCE] Unknown. [SDSFIE V2.5 AIR FORCE]

CodeVerticalShelfWidth

Used by Attributes: <u>Vertical Site - Covtsw</u>

Value	Definition (Notes) [Source]
14_IN	14 Inch. [SDSFIE V2.5 AIR FORCE]
20_5_IN	20.5 Inch. [SDSFIE V2.5 AIR FORCE]
26_5_IN	26.5 Inch. [SDSFIE V2.5 AIR FORCE]
32_5_IN	32.5 Inch. [SDSFIE V2.5 AIR FORCE]
5_5_IN	5.5 Inch. [SDSFIE V2.5 AIR FORCE]
8_5_IN	8.5 Inch. [SDSFIE V2.5 AIR FORCE]
9_IN	9 Inch. [SDSFIE V2.5 AIR FORCE]
OTHER	Other. [SDSFIE V2.5 AIR FORCE]
TBD	To Be Determined. [SDSFIE V2.5 AIR FORCE]
UNKNOWN	Unknown. [SDSFIE V2.5 AIR FORCE]

CodeVerticalType

Used by Attributes: Vertical Site - Covtty

Value	Definition (Notes) [Source]
DOUBLE_SIDED	Double sided. [SDSFIE V2.5 AIR FORCE]
OTHER	Other. [SDSFIE V2.5 AIR FORCE]
SINGLE_SIDED	Single sided. [SDSFIE V2.5 AIR FORCE]
TBD	To Be Determined. [SDSFIE V2.5 AIR FORCE]
UNKNOWN	Unknown. [SDSFIE V2.5 AIR FORCE]
WALL_MOUNT	Wall Mount. [SDSFIE V2.5 AIR FORCE]

CodeVesselType

Used by Attributes: Meter - Dredge Vessel Type

Value	Definition (Notes) [Source]
BACKHOE	A dredge with a single bucket on an arm which moves towards the vessel as the bucket
	excavates the soil. [SDSFIE V2.2 COE Dredging]
CLAMSHELL	Type of mechanical cable excavator dredge that uses a single bucket attached to the dredge crane with cables. [SDSFIE V2.2 COE Dredging]
CUTTERHEAD	A hydraulic dredge that uses a cutterhead at the suction entrance to dislodge bottom material.
	[SDSFIE V2.2 COE Dredging]
DIPPER	A power shovel operated from a barge. [SDSFIE V2.2 COE Dredging]
DRAGLINE	An excavating machine with a bucket that is dropped by a boom and then dragged toward the machine by a cable. [SDSFIE V2.2 COE Dredging]
HOPPER	A self-propelled floating plant capable of dredging material, storing it, transporting it to the
	disposal area, and placing the material at a designated site. [SDSFIE V2.2 COE Dredging]
OTHER	Dredges using non-conventional means or a combination of hydraulic and mechanical processes, e.g., pneumatic, agitation, etc. [SDSFIE V2.2 COE Dredging]
PLAIN_SUCTION	Hydraulic dredge with no mechanical device at suction mouth, a cutter for dislodging bottom
	material [SDSFIE V2.2 COE Dredging]
TUGBOAT	Used for agitation dredging [SDSFIE V2.2 COE Dredging]
WATER_INJECTION	A type of dredge that injects water at high velocity and/or volume, into the shoaled material to move it to deeper area. [SDSFIE V2.2 COE Dredging]

CodeVoltage

Used by Attributes: Regulator - Pri Volt; Transformr Bank - Pri Volt; Pump - Pwr Req; Pump - Pwr Req; Regulator - Sec Volt;Transformr Bank - Sec Volt;Rect Point - Volt In;Rectifier - Volt In;Rectifier - Volt In;Rectifier - Volt In;Substation - Volt In;Rect Point - Volt Out;Rectifier - Volt Out;Rectifier - Volt Out;Rectifier - Volt Out;Rectifier - Volt Out;Substation - Volt Out;Bus Line - Voltage;Cable - Voltage;Capacitor - Voltage;Ductbank - Voltage;Ductbank -Voltage: Equipment - Voltage: Generator - Voltage; Head Bolt Outlet - Voltage; Light - Voltage; Meter - Voltage; Motor -Voltage;Switch - Voltage;Rectifier - Voltage Input;Rectifier - Voltage Output

Value	Definition (Notes) [Source]
110V	110 volts [SDSFIE V1.4]
115000V	115,000 volts [SDSFIE V1.4]
115V	115 volts [SDSFIE V1.4]
120_240V	120/240 volts [SDSFIE V1.4]
12000V	12,000 volts [SDSFIE V1.4]
12000Y_6930V	12,000Y/6,930 volts [SDSFIE V1.4]
120V	120 volts [SDSFIE V1.4]
12470V	12,470 volts [SDSFIE V1.4]
12470Y_7200V	12,470Y/7,200 volts [SDSFIE V1.4]
12V	12 volts [SDSFIE V1.4]
13200V	13,200 volts [SDSFIE V1.4]
13200Y_7620V	13,200Y/7,620 volts [SDSFIE V1.4]
138000V	138,000 volts [SDSFIE V1.4]
15000V	15,000 volts [SDSFIE V1.4]
15930V	15,930 volts [SDSFIE V1.4]
19920V	19,920 volts [SDSFIE V1.4]
20780V	20,780 volts [SDSFIE V1.4]
20780Y_12000V	20,780Y/12,000 volts [SDSFIE V1.4]
208V	208 volts [SDSFIE V1.4]
208Y_120V	208Y/120 volts [SDSFIE V1.4]
220V	220 volts [SDSFIE V1.4]
22860V	22,860 volts [SDSFIE V1.4]
22860Y_13200V 230000V	22,860Y/13,200 volts [SDSFIE V1.4]
230000 V 230V	230,000 volts [SDSFIE V1.4] 230 volts [SDSFIE V1.4]
	2,400 volts [SDSFIE V1.4]
2400V 240V	
24940V	240 volts [SDSFIE V1.4] 24.940 volts [SDSFIE V1.4]
	24,940 Volts [SDSFIE V1.4] 24,940Y/14,400 volts [SDSFIE V1.4]
24940Y_14400V 24V	24,9401/14,400 volts [SDSFIE V1.4] 24 volts [SDSFIE V1.4]
24 V 27600V	27,600 volts [SDSFIE V1.4]
27600V 27600Y_15930V	27,600 Volts [SDSFIE V1.4]
277V	277 volts [SDSFIE V1.4]
345000V	345,000 volts [SDSFIE V1.4]
34500V	34,500 volts [SDSFIE V1.4]
34500Y_19920V	34,500Y/19,920 volts [SDSFIE V1.4]
400V	400 volts [SDSFIE V1.4]
4160V	4,160 volts [SDSFIE V1.4]
4160Y_2400V	4,160Y/2400 volts [SDSFIE V1.4]
43800V	43,800 volts [SDSFIE V1.4]
460V	460 volts [SDSFIE V1.4]
4800V	4,800 volts [SDSFIE V1.4]
480V	480 volts [SDSFIE V1.4]
480Y_277V	480Y/277 volts [SDSFIE V1.4]
48V	48 volts [SDSFIE V1.4]
500000V	500,000 volts [SDSFIE V1.4]
5000V	5,000 volts [SDSFIE V1.4]
52V	52 volts [SDSFIE V1.4]
600V	600 volts [SDSFIE V1.4]
69000V	69,000 volts [SDSFIE V1.4]
7200V	7,200 volts [SDSFIE V1.4]
7620V	7,620 volts [SDSFIE V1.4]
765000V	765,000 volts [SDSFIE V1.4]
7970V	7,970 volts [SDSFIE V1.4]
8320V	8,320 volts [SDSFIE V1.4]
OTHER	other [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]

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CodeVoltageRequirements

Used by Attributes: Media Converter - Volt Req; Culvert Center Line - Voltage Requirements

Value AC_+120V DC_+5V DC_+5V_+12V DC_+9V DC_12V DC_12V DC_24V OTHER TBD Definition (Notes) [Source] +120 Volt AC. [SDSFIE V2.5 AIR FORCE] +5 Volt DC. [SDSFIE V2.5 AIR FORCE] +5 and +12 Volt DC. [SDSFIE V2.5 AIR FORCE] +9 Volt DC. [SDSFIE V2.5 AIR FORCE] -12 Volt DC. [SDSFIE V2.5 AIR FORCE] -24 Volt DC. [SDSFIE V2.5 AIR FORCE] Other. [SDSFIE V2.5 AIR FORCE] To Be Determined. [SDSFIE V2.5 AIR FORCE]

CodeWasteFittingLocation

Used by Attributes: Fitting - Fitloc

Value CHILLWATER_TANK CLEANING BOOTH CONDENSATE_TANK COOKER COOLING_TOWER COOLING_WATER CORROSION_REMOVE DESCALER DISHWASHER DRINK_FOUNTAIN EYEWASH_STATION HOT WATER RINSE HUMIDIFIER ICE_DISPENER PAINT_BOOTH PARTS_WASHER PHOTO_TRAY PIT RESPIRATOR_WASH SINK STACK STEAM_CONDEN STRIPPER_VAT TEST_TEE TOILET URINAL VENT_PIPE WASTE_OIL_DISC

Definition (Notes) [Source]

chilled water tank [SDSFIE V2.3 Cherry Point] Cleaning Booth. [SDSFIE V2.3 Cherry Point] condensate tank [SDSFIE V2.3 Cherry Point] cooker [SDSFIE V2.3 Cherry Point] cooling tower [SDSFIE V2.3 Cherry Point] cooling water [SDSFIE V2.3 Cherry Point] corrosion remover [SDSFIE V2.3 Cherry Point] descaler [SDSFIE V2.3 Cherry Point] dishwasher [SDSFIE V2.3 Cherry Point] drinking fountain [SDSFIE V2.3 Cherry Point] eyewash station [SDSFIE V2.3 Cherry Point] hot water rinse [SDSFIE V2.3 Cherry Point] humidifier [SDSFIE V2.3 Cherry Point] ice dispenser [SDSFIE V2.3 Cherry Point] paint booth [SDSFIE V2.3 Cherry Point] parts washer [SDSFIE V2.3 Cherry Point] photo tray [SDSFIE V2.3 Cherry Point] pit [SDSFIE V2.3 Cherry Point] respirator washer [SDSFIE V2.3 Cherry Point] sink [SDSFIE V2.3 Cherry Point] stack [SDSFIE V2.3 Cherry Point] steam condensate [SDSFIE V2.3 Cherry Point] stripper vat [SDSFIE V2.3 Cherry Point] test tee [SDSFIE V2.3 Cherry Point] toilet [SDSFIE V2.3 Cherry Point] urinal [SDSFIE V2.3 Cherry Point] vent pipe [SDSFIE V2.3 Cherry Point] waste oil discharge [SDSFIE V2.3 Cherry Point]

CodeWastewaterLineType

Used by Attributes: <u>Line - Type</u>

Value FORCE MAIN OTHER SERVICE UNKNOWN Definition (Notes) [Source] Force Main Other Service Unknown

CodeWastewaterSystemType

Used by Attributes: Service Area - Wwsystem

Value	Definition (Notes) [Source]
COMMERCIAL	Commercial type wastewater system (i.e., serves residential areas, businesses, industry, etc.
	outside the boundaries of a municipality). [SDSFIE V2 EPA]
MUNICIPAL	Municipal type of wastewater treatment system or utility (i.e., serves residential areas,
	businesses, and industry located within a municipality. [SDSFIE V2 EPA]

CodeWastewaterTankType

Used by Attributes: <u>Disposal Tank - Tank Des;Septic Tank - Use</u>

Value DISPOSAL SEPTIC_TANK **Definition (Notes) [Source]** disposal tank [SDSFIE V1.8] septic tank [SDSFIE V1.8]

CodeWaterTreatmentLevel

Used by Attributes: Treatment Unit - Trt Lev

Value OTHER PRIMARY QUATERNARY SECONDARY TERTIARY Definition (Notes) [Source] Other. [SDSFIE V2.31 HSIP] Primary. [SDSFIE V2.31 HSIP] Quaternary. [SDSFIE V2.31 HSIP] Secondary. [SDSFIE V2.31 HSIP] Tertiary. [SDSFIE V2.31 HSIP]

CodeWindingConnectionType

Used by Attributes: Motor - Wind Type

Value DELTA GROUNDED_Y HIGHLEG_DELTA OPEN_DELTA OTHER TBD UNKNOWN Y

Definition (Notes) [Source]

delta [SDSFIE V1.4] grounded wye [SDSFIE V1.4] high-leg delta [SDSFIE V1.4] open delta [SDSFIE V1.4] other [SDSFIE V1.4] to be determined [SDSFIE V1.4] unknown [SDSFIE V1.4] wye [SDSFIE V1.4]