MEMORANDUM

TO: Distribution

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DATE: December 20, 2019

SUBJECT: Planning and Engineering Guidelines and Standards (PEGS) Supplement Number: PEGS-19-005, Building and Space Naming, Identification, Addressing, and Measurement

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Effective immediately, the following modification shall be made to the MDOT MAA 2019 PEGS Manual:

Volume 1, AIRPortal – Chapter 2, Building and Space Naming, Identification, Addressing, and Measurement (NEW)

- *Insert New Chapter 2, Building and Space Naming, Identification, Addressing, and Measurement*

Consultants listed herein are required to distribute this standard to their respective staff and subconsultants.

If you believe the attached standard conflicts with any other codes or regulations or if you should have any questions regarding this matter, please contact the Manager, GIS & Engineering Technology Section at (410) 859-7768.

Attachment

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Volume 1, AIRPortal: Insert New Chapter 2, Building and Space Naming, Identification, Addressing and Measurement Standards

2.1 Introduction

2.1.1 Purpose

This Building and Space Naming, Identification, Addressing, and Measurement Standard provides guidance for identifying Maryland Aviation Administration (MDOT MAA) owned, occupied, and/or managed properties so they can be uniquely and consistently referenced by personnel and information systems alike. The personnel who will use these identifiers include MDOT MAA staff, consultants, contractors, and emergency responders. This Standard establishes a consistent method for assigning location attributes to MDOT MAA properties, including building number, address, and unique identifiers for interior spaces. In addition, this Standard defines the methods by which interior spaces at MDOT MAA properties shall be measured for the purposes of including these spaces in MDOT MAA databases and computing space square footage. Unless otherwise noted, the implementation and enforcement of these standards is by the MDOT MAA Division of Planning and Engineering GIS and Engineering Technology Section (GETS).

2.1.2 Definitions

This Standard is comprised of five hierarchical levels that define locations within MDOT MAA owned and/or occupied properties. Each level is a more detailed breakdown of its preceding level. The hierarchical levels follow:

A. Campus
B. Building
C. Section
D. Floor
E. Space

The first two levels, Campus and Building, define exterior locations. The Campus identifier is always either BWI or MTN, depending on if the property is located at either BWI Marshall or Martin State Airport, respectively. Buildings are assigned a building number and an address, as per Section 2.2 Addressing and Numbering Standard. Standards for Section, Floor, and Space are all defined within Section 2.3 Interior Space Numbering. The Section level may refer to interior or exterior attributes depending upon the layout of the building. Floor and Space refer to interiors. Spaces include locations that are rooms (spaces with doors) and interior open spaces, such as concourses, holdrooms, or open stairwells.

For each of the five levels, this Standard defines identifiers to be assigned, along with any labeling and database considerations. This Standard covers the numbering and labeling of doors associated with spaces at MDOT MAA properties as well. This Standard also defines the procedures by which unique identifiers are to be assigned to MDOT MAA properties.

2.2 Building Addressing, Numbering, and Naming

Each building on MDOT MAA property will be assigned an address, a unique identifier (building number) and a name whether the building is located on the airside or landside of airport operations. The building numbering conventions and procedures describe the process by which buildings are assigned numbers at BWI Marshall and Martin State Airports. GETS is responsible for assigning building numbers and addresses at BWI Marshall and Martin State Airports in coordination with the MDOT MAA Office of the Fire Marshall (OFM) as well as Anne Arundel and Baltimore counties, respectively.

2.2.1 Building Addressing, Numbering, and Naming Coordination

Designers and consultants working with MDOT MAA will contact GETS to obtain building addresses, numbers, and names during the design and permitting process.

2.2.2 Assigning Building Addresses

2.2.2.1 Assigning Building Addresses at BWI Marshall

Street addresses at BWI Marshall shall be assigned with the closest accessible road that is used to access the building based on determination from GETS in coordination with Anne Arundel County and OFM.

A. BWI Marshall Building Addressing Process
   1. Requests for a building address are made to GETS by an MDOT MAA employee from the Division of Planning and Engineering, Office of the Fire Marshall, another relevant MDOT MAA office, or a consultant firm doing business with MDOT MAA.
   2. When requesting an address, the request must include information about the building including an existing building name and number if available. If building number is not available, GETS will follow the building numbering process as outlined in Section 2.2.3 Assigning Building Numbers.
   3. GETS will review the request, review current addressing data for the building (including nearby named streets and existing addresses), and coordinate with Anne Arundel County and OFM on the appropriate address. A building address consists of a street number and a street name (e.g., 7050 Friendship Rd). Determination of street number is based on nearby addresses and determination of street name is based on the closest accessible street to the building.
   4. GETS will confirm the new address with the requestor and notify relevant MDOT MAA offices.

2.2.2.2 Assigning Building Addresses at Martin State

Building addressing at Martin State is carried out by GETS in coordination with the Martin State Airport Manager, Baltimore County, and OFM following similar procedures as at BWI Marshall.

2.2.3 Assigning Building Numbers

2.2.3.1 Assigning Building Numbers at BWI Marshall

A. Types of Buildings that Receive Building Numbers

   Any permanent building that is intended for occupancy shall receive a building number. For the purposes of these Standards, a building is defined as any structure that is utilized or intended for

supporting or sheltering any occupancy. Structures that are in place for less than 180 days are considered temporary and are not assigned a building number.

B. BWI Marshall Building Numbering Conventions
All buildings are assigned a 3-digit number based on the ownership and operation status of the building. The BWI Marshall Main Terminal is building 100. Buildings constructed, owned and/or operated by the FAA are assigned a number in the 2XX range in coordination with GETS. All other buildings at BWI Marshall are assigned a number in the 1XX range. In cases where a building is a part of a group of buildings, a letter identifier may be added to an existing building number to show that the related buildings are nearby. For example, a new building is being built adjacent to building 160. The next available building number is 191, however for the purposes of planning and dispatch, it is may be appropriate to number the new building 160A so that the adjacent buildings maintain a logical consistency in numbering.

C. BWI Marshall Building Numbering Process
1. Requests for a building number are made to GETS by an MDOT MAA employee from the Division of Planning and Engineering, Office of the Fire Marshall, another relevant MDOT MAA office, or a consultant firm doing business with MDOT MAA.
2. When requesting a building number, the request must include information about the building including an existing building name and address, and information on building owner and tenant(s) if available. If the building address is not known, GETS will follow the building addressing process as outlined in Section 2.2.2 Assigning Building Addresses.
3. GETS will review the request and determine the appropriate number for the building based on the next available number and nearby buildings.
4. GETS will confirm the new number with the requestor and notify relevant MDOT MAA offices.

D. Renumbering Buildings
If a building must be renumbered, all renumbering will be coordinated by GETS since the change will influence several datasets including interior space numbers, airport layout plans, computer aided dispatch GIS datasets, and other GIS layers. GETS will follow the procedures above for assigning a new building number and in doing so update all relevant datasets. Since changing a building number will have impacts on many MDOT MAA offices and datasets, this process should only be carried out under extreme circumstances and after exhausting other options for changing the identification of a building. For example, changing a building name will be easier and is preferred over changing its number.

E. Demolishing Buildings
When a building is removed, GETS will record its number and history in the MAA GIS database and its number will become available again for use for another building.

2.2.3.2 Assigning Building Numbers at Martin State

Building numbering at Martin State follows similar processes as Section 2.2.3.1 Assigning Building Numbers at BWI Marshall under the coordination of GETS staff and the Martin State Airport management.

A. Assigning numbers to T-Hangars
   T-hangars at Martin State are assigned a building number corresponding to a group of hangars installed near each other on the airfield. Individual T-hangars are assigned a unit number corresponding to the lease for that hangar. The unit number is posted on the outside face of the hangar.

2.2.3.3 Building Number Signage

Signs for building numbers shall be 12" x 12" with yellow honeycombed reflective background. Building number characters shall have black background. Character height shall be 4-1/2 inches with 5/8-inch stroke. Mounting location will be determined by OFM. A sign shall be placed on the public side and airfield side of the building as applicable.

2.2.4 Assigning Building Names

Designers of a new building at BWI Marshall and Martin State Airports may suggest a name for the new building. GETS will coordinate with all relevant MDOT MAA stakeholders to approve the name of the new building.

2.3 Interior Space Numbering

2.3.1 Introduction

Interior space numbers are unique codes that are used to identify individual interior spaces at BWI Marshall or Martin State Airports. Each space is represented by a single polygon in the MDOT MAA GIS database. These standards define space numbering conventions (i.e., how space numbers are formatted) and procedures (i.e., how spaces are assigned numbers) for BWI Marshall and Martin State Airports. The GETS office is responsible for maintaining and implementing the numbering standards at BWI Marshall and Martin State.

2.3.2 Interior Space Numbering Coordination

The consultants of Capital and Building Permit projects shall contact GETS to request space number assignments during the design or construction process when one or more spaces are created, removed, or modified. Consultants shall contact GETS at the following times depending on the project type:

A. Capital Projects: Prior to 60% design
B. Building Permits: As early as possible during design, prior to application for building permit.

GETS will assign space numbers for a project based on the following conventions and procedures described in Section 2.3.4 BWI Marshall Space Numbering and will notify consultants via annotated PDF and/or text document of the newly assigned space numbers.

2.3.3 Interior Space Numbering Conventions

Interior space numbers are built from the components defined below. All components are required. Components are joined into a single-space number string separated by underscores. By convention, space number components do not require leading zeros, e.g., 001, however those may be used at the discretion of GETS staff.

A. **Airport Campus**: Either BWI or MTN.
B. **Building Number**: Building numbers are assigned as defined in Section 2.2.3 Assigning Building Numbers.
C. **Section Identifier**: This is a code for part of the BWI Marshall Terminal or a large subdivision of a building. When there are no sections for a building, the Section Identifier is 0. See Section 2.3.4.3 Section Identifier.
D. **Floor Number:** Number or characters that represent the floor where the space is located.
E. **Space Identifier**: All spaces must have a space identifier based on the numbering procedures defined in Section 2.3.4.5 Space Identifier.

2.3.3.1 Space Numbering Examples

Component	Component Name	Examples
1	**Airport Campus**	BWI, MTN
2	**Building Number**	100, 112, 991
3	**Section Identifier**	AT, NTE, A, 1, 0
4	**Floor Number**	1, 1a, 3
5	**Space Identifier**	1, 101, CST1, 203J, A111C

Table 2.3.3.1-1 Space numbering component examples

Space Number	Space number component description
BWI_100_A_1_A111C	BWI, building 100 (Terminal), concourse A, floor 1, space A111C
BWI_991_0_1_203J	BWI, 991 Hock building, no section, floor 1, space 203J
MTN_4-5-6_4_1_402B	MTN, Hangar Building 4-5-6, Section 4 (for hangar 4), floor 1, space 402B

Table 2.3.3.1-2 Space numbering examples

In Figure 2.3.3.1-3 below, several rooms in the BWI Marshall B Terminal are shown with space identifiers for the primary spaces (in green) and identifiers for sub-rooms (in purple). All of these spaces will share many components in the space number, BWI_100_BT_2, but have a unique space number when all components are combined: BWI_100_BT_2_BT254A, BWI_100_BT_2_BT254A1, BWI_100_BT_2_BT254B, BWI_100_BT_2_BT254B1, etc.

The purpose of the full space number (e.g., BWI_100_BT_2_BT254A) is to provide a unique value to represent the space in digital databases that contain features for all spaces at BWI Marshall and Martin State Airports. To represent space numbers on digital or printed plans, use only the "space identifier" component (e.g., BT254A) as highlighted in Figure 2.3.3.1-3.

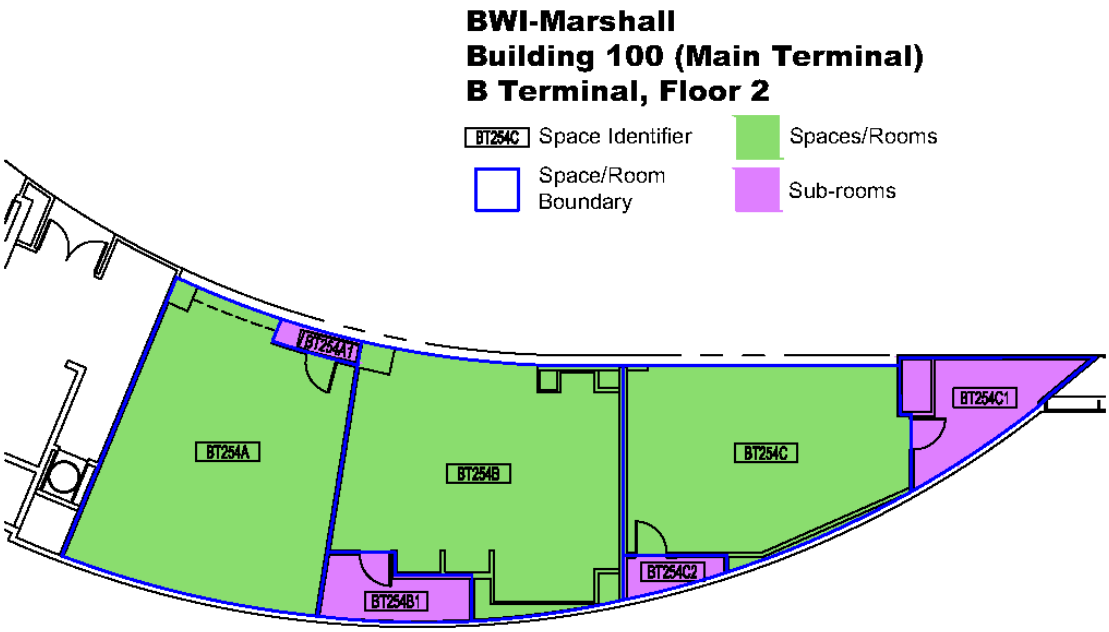


Figure 2.3.3.1-3 Space numbering at BWI showing different space identifiers for rooms and sub-rooms

Space identifiers and door numbers are closely related and are typically assigned at the same time. In general, a door number will match a space identifier. Further description of how door numbers are assigned is found in Section 2.3.5 BWI Marshall Door Numbering.

2.3.4 BWI Marshall Space Numbering

This section describes the space numbering process for all BWI Marshall buildings for designating the campus, building, section, floor, and space identifier components of space numbers.

2.3.4.1 Airport Campus

All interior spaces at BWI Marshall are assigned the campus code BWI.

2.3.4.2 Building Number

All interior spaces are assigned the building number of their building. Building numbers are maintained by GETS in coordination with the Office of Planning, the Office of the Fire Marshal, the Office of Maintenance, and other MDOT MAA offices. Interior spaces at the BWI Marshall Terminal are assigned the building number 100. Refer to Section 2.3.2 Interior Space Numbering Coordination for additional information about building numbering and assigning building numbers.

2.3.4.3 Section Identifier

For buildings with sections (e.g., wings, concourses, zones) interior spaces are assigned the code for the section where they are located. If a building has no sections, the section identifier is 0. The BWI Marshall Terminal is divided into sections based on terminals and concourses (Table 2.3.4.3-1, Figure 2.3.4.3-2). Section identifiers for buildings not outlined above are defined, as needed, by GETS staff.

AT	Terminal A-B, Concourse A side	**A**	Concourse A
BT	Terminal A-B, Concourse B side	**B**	Concourse B
ST	South Terminal	**C**	Concourse C
CT	Center Terminal	**D**	Concourse D
NT	North Terminal	**DX**	Concourse DX
NTE	North Terminal Extended	**DY**	Concourse DY
SKY	Skywalks and associated towers	**E**	Concourse E

Table 2.3.4.3-1 BWI Marshall Terminal Section Codes

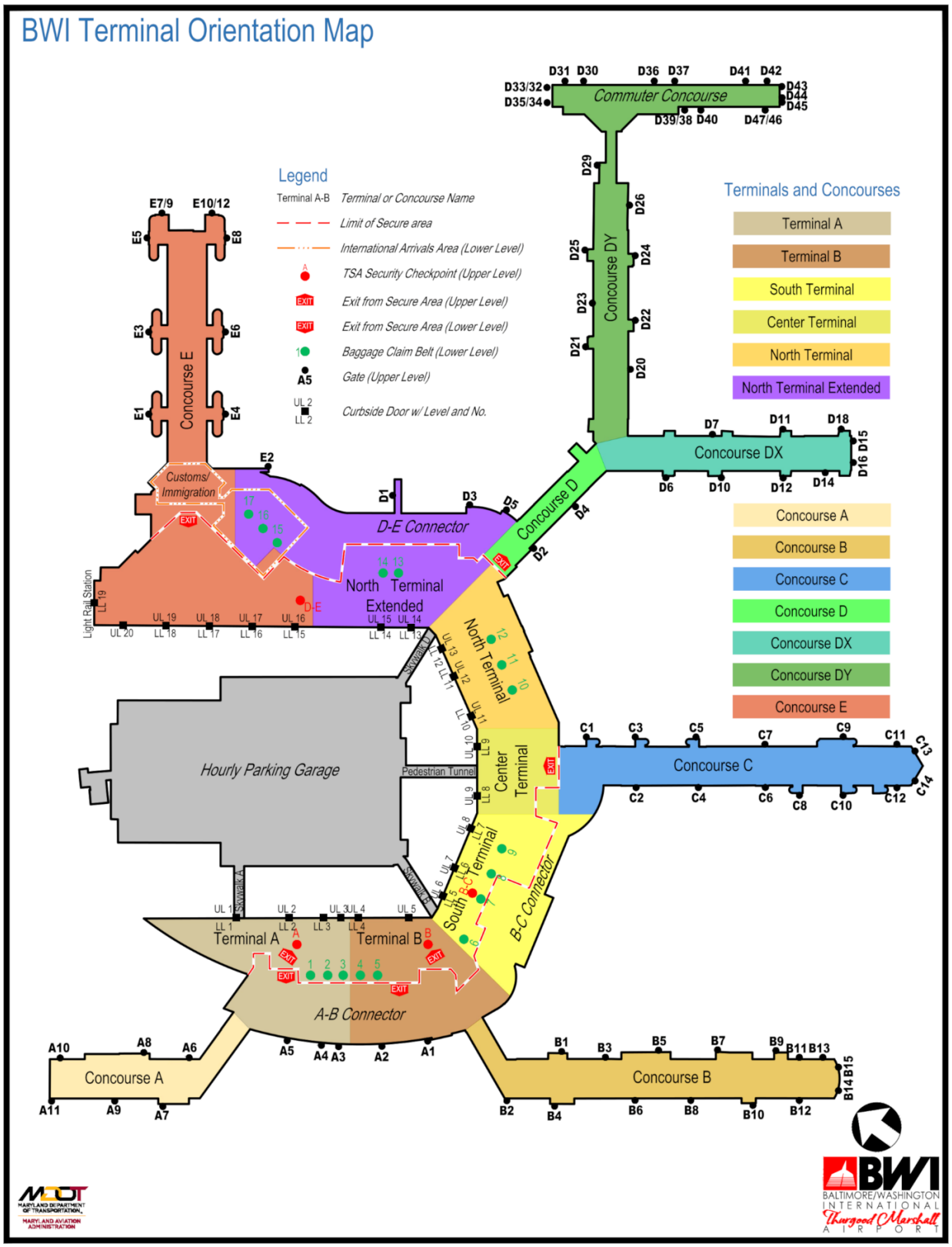


Figure 2.3.4.3-2 BWI Terminal Orientation Map

2.3.4.4 Floor Number

All interior spaces are assigned the floor number for the floor where they are located. This can be a number (e.g., 1, 2, 3) or an alphanumeric value (e.g., 1a, 3o) depending upon the layout of the building.

A. BWI Marshall Terminal Floor Numbers and Names
Floors are divided by program at each level as defined in Table 2.3.4.4-1 below.

Floor Number and Name	**Floor Name**	**Terminal Programs on Floor**
Level 0	Basement	Baggage Tunnels (Under A & B Concourse Ground Level)
		B Concourse Mechanical Space
Floor 1a	A/B Ground Floor	Baggage Make-up Concourse A & B
		Ground Level Concourse A & B
Floor 1	Lower Level	Arrivals/Baggage Claim Level of Domestic Concourses A & B
		Arrivals/Baggage Claim Level of Domestic Concourses C & D
		Arrivals/Baggage Claim Level of International Terminal Concourse E
Floor 2	Upper Level	Domestic and International Ticketing
		Departure Level (including all A & B Gates)
Floor 2i	International Sterile Corridor	International Terminal Pier E, Mezzanine Level, Sterile Corridor between Upper and Lower Levels
Floor 3o	Third Floor Offices	Offices Above the A & B Ticket Counters
		Center Terminal MAA Offices
		Third Floor Offices above Concourse DY
Floor 3s	Skywalk	Skywalks to the Hourly Parking Garage
Floor 3t	Observation Level	Observation Lounge
Floor 4	Fourth Floor Offices	Center Terminal FAA and Operations Offices
		Fourth Floor Offices above Concourse DY
Floor 5	Fifth Floor	Center Terminal FAA Space
Floor 6	Sixth Floor	Center Terminal FAA Space
Floor 7	Seventh Floor	Center Terminal FAA Space
Floor 8	Eighth Floor	Center Terminal FAA Air Traffic Control Tower (ATCT)
Floor 9	Ninth Floor	Center Terminal FAA Air Traffic Control Tower (ATCT)

Table 2.3.4.4-1 BWI Marshall Terminal Floor Levels

2.3.4.5 Space Identifier

Space identifiers are assigned to rooms (spaces with one or more doors) and open spaces (spaces without doors, e.g., concourses, escalators, holdrooms). In general, space identifiers are assigned based on the layout of a building or section, as outlined in the following sections. Space identifiers typically take the form 101, 202, 303, etc., with the first digit assigned the floor or section and the second two digits representing an increasing numerical sequence. For some spaces, an additional use code is included in the space identifier to facilitate the numbering process (e.g., NTEK203 for a kiosk in North Terminal Extended, HRE6 for holdroom at gate E6). Space identifiers are assigned by GETS staff.

A. Linear Buildings/Sections with a Central Corridor
   For buildings or sections whose rooms are arranged in a linear fashion along a central corridor, space identifiers begin at the end or side closest to the main entrance and increment toward the opposite end or side, with spaces to the left of the main corridor receiving sequential odd numbers, and spaces to the right of the main corridor receiving sequential even numbers (e.g., 101, 103, 105 on the left and 102, 104, 106 on the right). If the central corridor runs perpendicular to the face containing the main entrance, numbering shall begin at the end of the corridor to the left of the main entrance. When possible, spaces along secondary corridors are also be numbered sequentially. Determination of the main entrance to a building or section for the purposes of assigning space identifiers is by GETS staff.

B. Non-Linear Buildings/Sections without a Central Corridor
   For non-linear buildings or sections without a central corridor, such as hangars and warehouses, space identifiers begin at the main entrance and increment in a clockwise spiral from the exterior of the building towards the interior. When possible, spaces along corridors are numbered sequentially. Determination of the main entrance to a building or section for the purposes of assigning space identifiers is by GETS staff.

C. Sub-rooms
   Rooms may have one or more sub-rooms and on occasion there can be multiple levels of sub-rooms, for example in a single leased suite. Sub-rooms may also be wholly contained within another room (e.g. a closet). Sub-rooms are assigned space identifiers that consist of the primary space identifier plus an alphabetical suffix, always starting with the letter A, increasing by a letter suffix clockwise from the main entrance of the space. Occasionally, subdivided rooms will also have sub-rooms. In those circumstances, an additional numeric suffix is added: room 201A1 is a sub-room of 201A, which is a sub-room of 201.

D. Public Interior Spaces
   Public interior spaces (public spaces) are typically open spaces (spaces without doors) that are accessible to airport patrons. Public spaces are found at the BWI Marshall Terminal and may be in the secured (concourses) and non-secured (street-side terminal) parts of the airport. Public spaces typically include concourses, walkways and terminal areas that are delineated by GETS

staff based on structural features and practical understanding of the terminal. Space identifiers for public spaces include the Section code (Refer to Section 2.3.4.3 Section Identifier) and the prefix "P" followed by increasing numeric values based on the criteria defined in Sections 2.3.4.5.A Linear Buildings/Sections with a Central Corridor and 2.3.4.5.B Non-Linear Buildings/Sections without a Central Corridor (e.g., DYP200, DYP201, DYP202 for public corridors in the DY concourse).

E. Unleasable, Dead Spaces

Unleasable or "dead spaces" represent interstitial spaces throughout the airport that might be voids, shafts, or "open to below" architectural spaces. As these spaces typically do not have doors it is more straightforward to number them separately from other spaces. Space identifiers for unleasable spaces include the Section code (Refer to Section 2.3.4.3 Section Identifier) and the prefix "U" followed by increasing numeric values based on the criteria defined in Sections 2.3.4.5.A Linear Buildings/Sections with a Central Corridor and 2.3.4.5.B Non-Linear Buildings/Sections without a Central Corridor (e.g., DYU100, DYU101, DYU102 for unleasable spaces in the DY concourse).

F. Kiosks

Kiosks are found throughout the BWI Marshall Terminal and are most common in the ticketing areas. Kiosks represent a leasable area of open space that may include ticketing, queueing, and baggage claim areas. As these spaces typically do not have doors, it is more straightforward to number them separately from other spaces. Space identifiers for kiosks include the Section code (Refer to Section 2.3.4.3 Section Identifier) and the prefix "K" followed by increasing numeric values based on the criteria defined in Sections 2.3.4.5.A Linear Buildings/Sections with a Central Corridor and 2.3.4.5.B Non-Linear Buildings/Sections without a Central Corridor (e.g., NTEK203, NTEK205, NTEK207 for ticketing and queueing kiosks in the NTE terminal).

G. Escalators, Elevators, Open Stairs, Stairwells

Escalators, Elevators, Open Stairs, and Stairwells have special unique identifiers since these are features with spaces that span multiple levels. Elevators and Escalators also have a State of Maryland identifier that begins with the prefix "ST". These State identifiers are shown on placards in the BWI Marshall Terminal and recorded as attributes in the MDOT MAA GIS database, but do not make up part of the space numbering components.

1. Escalators and Open Stairs

Escalators and open stairs are generally found in public spaces in the BWI Marshall Terminal and follow the conventions outlined in Section 2.3.4.5.E Public Interior Spaces. Since escalators and stairs span two floors, they are represented in the MDOT MAA GIS database as two overlapping polygons. Each polygon will have the same geometry and space identifier but will have different space numbers due to the floor number component. For example, an escalator in C terminal with the State identifier ST5527 travels from the lower to the upper level of the terminal. This escalator is represented by two overlapping

polygons with the space numbers: BWI_100_CT_1_P11 and BWI_100_CT_2_P11. The adjacent public stairs would be numbered BWI_100_CT_1_P12 and BWI_100_CT_2_P12.

2. Elevators
   Elevators at the BWI Marshall Terminal are assigned a unique identifier that includes the Section code (Refer to Section 2.3.4.3 Section Identifier) and an alphanumeric identifier assigned by GETS. For example: The elevator labeled NTE2 in the North Terminal Extended section has stops on the Upper and Lower levels. This elevator has two space polygons, one on each floor, with the space numbers: BWI_100_NTE_1_NTE2 and BWI_100_NTE_2_NTE2. The State of Maryland has issued each elevator car a unique identifier, which is displayed on placards inside the car and outside the doors at each floor. This identifier is recorded in the MDOT MAA GIS database but is not part of the space number.

3. Enclosed Stairwells
   Stairwells are enclosed spaces, as opposed to open stairs, and are typically restricted from public use except in case of emergency. Stairwells have a space polygon on each floor through which they pass. Stairwells at BWI Marshall Terminal are each assigned a unique identifier which includes the Section code (Refer to Section 2.3.4.3 Section Identifier), the character "S", and an alphanumeric identifier assigned by GETS. Alphanumeric identifiers in the Concourses will generally correspond to the number of the Gate. For example, the restricted stairwell DYS21 in the DY Concourse is located at Gate D21, and spans from the lower to the upper level of the concourse. The two overlapping polygons for the stairwell have the space numbers: BWI_100_DY_1_DYS21 and BWI_100_DY_2_DYS21.

H. Holdrooms
   Holdrooms are open public spaces at Gates where passengers wait to board their flights. Space identifiers for holdrooms include the prefix "HR" followed by the Gate number of the holdroom. For example, the space number BWI_100_E_2_HRE6 refers to the holdroom at Gate E6. Holdroom delineations are made by GETS staff.

I. Restrooms
   All projects involving renovation or reconstruction of restrooms at BWI Marshall and Martin State Airport shall include numbering of each restroom, as well as, numbering of each stall within the restrooms. The stall numbers should be affixed to the outside and inside door of each stall. The positioning and esthetics of the signs affixed on the stall doors shall be at the discretion of the Director of the MDOT MAA Office of Architecture. The designers shall contact the GETS to request restroom and stall numbers prior to 60% design and anytime during the design or construction process that a door number(s) is added, deleted, or modified.

J. Ad Hoc Space Identifiers
   GETS staff will assign space identifiers that deviate from these procedures in cases where strictly following the procedures results in illogical numbering. For example, if two adjacent spaces would be assigned the identifiers 124 and 146, the second space may be assigned 124A.

2.3.4.6 Construction and Renovation

Consultants shall coordinate with GETS staff for the assignment of space numbers. Spaces may receive a completely new space number or an existing space number if the space layout is being rearranged, depending upon the nature of construction and as outlined below.

A. Additions and New Spaces
When an addition is made to an existing building, GETS staff will assign numbers to the new spaces following these space numbering procedures. New numbers follow the sequence from the existing building, for example when an extension is added to the end of a concourse.

B. Splitting of Spaces
When a space is split, and new spaces are created, GETS staff will review all new spaces to ensure a proper number is assigned in accordance with these space numbering procedures. The first space closest to the main entrance of the area will retain the original space number. For subsequent spaces created from the split, available space numbers will need to be evaluated based on the general rules for space numbering. If the new spaces are not subdivided, then they are be assigned the next available space number in sequence. If the new spaces are subdivisions, then space numbers are assigned with the correct alphabetical suffix, as defined in Section 2.3.4.5.D Sub Rooms.

C. Combining or Merging of Spaces
When multiple spaces are combined or merged into a new single space, for example when several subdivisions in a suite are removed during construction, GETS staff will review current space numbers and reassign numbers so that the renovated space matches the numbering conventions. The space number of the new larger space is based on the primary space number prior to the merge or the lowest sequential space number. For example, an office is made up 3 spaces: the main space from the entrance, AT200, and two subdivision offices, AT200A and AT200B. During a renovation, the subdivisions are removed, creating a single space, the new space has the number AT200 and the numbers AT200A and AT200B are no longer in use.

2.3.4.7 BWI Marshall Terminal Curbside Entry Vestibules

Curbside entry vestibules along the BWI Marshall Terminal roadway are numbered 1-19 (lower level) and 1-20 (upper level), starting on the Terminal A-B side, with a suffix for level (LL or UL). The vestibules are assigned the space identifier based on level and number, UL1, UL2, LL1, LL2. Complete space numbers for curbside vestibules contain the same components as other numbers: BWI_100_AT_1_LL2, BWI_100_AT_2_UL2, etc. Curbside entry vestibules at BWI Marshall Terminal have multiple sets of doors, but these doors are not assigned additional identifiers, all doors associated with a vestibule along with the vestibule space are considered a single entity.

2.3.4.8 Updating Legacy Space Numbers

Many outbuildings and suites throughout the Terminal have legacy space numbers and space identifiers which do not follow these procedures (e.g., hyphens used in numbers for spaces in outbuildings). The

results of this are space numbers that may deviate from the conventions. Non-compliant or un-numbered spaces are numbered according to these procedures when a space is modified. To support legacy numbering, space identifiers may contain a letter code for the building section as well.

2.3.4.9 BWI Marshall Space Names and Additional Identifiers

Along with the above criteria for assigning space identifiers and space numbers, many spaces at BWI Marshall have additional identifying information including State of Maryland identifiers and common space names. For example, the mechanical room MER #1 has a space identifier of NTE100 and the space number BWI_100_NTE_1_NTE100. This space also as the widely known name “Mechanical Room 1” or MER #1 which is displayed prominently on signs outside the room. Both the space number and the space name are recorded in the MDOT MAA GIS database.

2.3.5 BWI Marshall Door Numbering

Numbers are assigned to all doors to facilitate wayfinding and dispatching. As a number is assigned to a space, door(s) associated with that space are numbered at the same time. The door number is derived from the room number into which the door leads. In general, this is based on the space into which a door swings, however GETS staff can override this determination as needed. Since door numbers are assigned along with space numbers, consultants shall follow the procedures as outlined in Section 2.3.2 Interior Space Numbering Coordination for contacting GETS during design and construction. Spaces may have more than one door or different door configurations, and specific door numbering conventions and procedures are outlined below.

2.3.5.1 Spaces with Multiple Doors

If a space has multiple doors opening into it, the primary door will be assigned a number based on the space number and succeeding doors will be assigned the space number with an alphabetical suffix (e.g., primary door into space 100 would be door number 100 and additional doors into space 100 would be 100a, 100b, etc.)

2.3.5.2 Door Numbers for Space Subdivisions

As above, door numbers are assigned based on the space the door leads into, including if the space is a subdivision of a larger space. If a subdivided space has multiple doors opening into it, the primary door will be assigned the space number including its alphabetical suffix and succeeding doors will be numbered with the space number and its alphabetical suffix, plus an additional numerical suffix.

2.3.5.3 Numbering Roll-up Doors

As with other doors, roll-up doors are assigned the space identifier of the room they are associated with along with suffix of “R” plus an increasing letter character, e.g., RA, RB, RC, etc. For example, for space CT100, there may be a standard door, CT100A, and two roll-up doors, CT100RA and CT100RB. For spaces with only one roll-up door, the suffix “RA” is used. Numeric suffixes may be used along with alphabetical suffixes at the discretion of GETS. For example, cargo buildings with multiple roll-up doors on both sides may use numeric on one side, and alphabetical on the other, such as C100R01 thru C100R12, and C100RA thru C100RL. Security grates into retail/food vendors are considered roll-ups for numbering purposes.

2.3.5.4 Doors at BWI Marshall Passenger Terminal Aircraft Boarding Gates

Doors at aircraft boarding gates are numbered corresponding with their Gate number, e.g., “Gate D4”.

2.3.5.5 Assignment and Installation of Door Numbers

For construction that creates new doors, or modifies or replaces existing doors, designers and contractors will coordinate with GETS staff for the assignment of door numbers as defined in Volume 1, Chapter 1, Section 1.3.4.4 Assignment of Door Numbers. For those projects, contractors are responsible for installing door number plates as defined in Volume 2, Chapter 14, Section 14.2 Interior Signage. Door number plates damaged or lost during construction are also required to be replaced by contractors during the construction project per these standards. Outside of construction, and during day-to-day maintenance, the MAA Office of the Fire Marshall (OFM) is responsible for installing missing or wrong door number plates after coordination and instruction from GETS.

2.3.6 Martin State Space Numbering

Space numbering at Martin State follows similar processes as Section 2.3.4 BWI Marshall Space Numbering, with the campus code MTN, and under the coordination of GETS staff and the Martin State Airport management.

2.3.7 Martin State Door Numbering

Doors are not numbered at Martin State Airport and instead only space numbers are assigned. Any signage for spaces may be on or adjacent to door portals at the discretion of the Martin State Airport management.

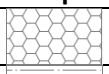
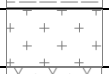
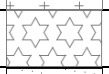
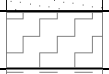
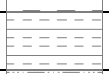
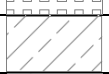
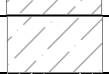
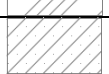
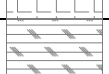
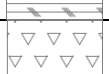
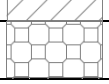
2.3.8 Space Use Codes

Space use codes are assigned to spaces in coordination with the Office of Commercial Management to support interior space management. Spaces are assigned a “general” and a “specific” use and styled as defined in the Tables 2.3.8-1 and 2.3.8-2.

General Use	RGB	Hex	Sample
Airlines Common Use	184, 43, 0	B82B00	
Airlines Leased	255, 127, 127	FF7F7F	
Circulation	255, 255, 127	FFFF7F	
Concession	127, 255, 160	7FFFA0	
Cute Joint Use	184, 161, 91	B8A15B	
Federal Inspection Site	77, 134, 154	4D869A	
Federal SP Leased	222, 0, 165	DE00A5	
MAA Occupied	0, 222, 222	00DEDE	
MAA Support	255, 127, 191	FF7FBF	
MAA Vacant	127, 160, 255	7FA0FF	

Misc. Tenants	221, 221, 221	DDDDDD	
Restrooms	127, 255, 255	7FFFFF	
Unleasable	255, 191, 0	FFBF00	
Utilities	255, 191, 127	FFBF7F	

Table 2.3.8-1 General Use Space Codes

Specific Use	AutoCAD Hatch Pattern	Sample
Airline VIP Lounge	HONEY	
Baggage Claim	ACAD_ISO04W100	
Baggage Makeup	ACAD_ISO02W100	
Concession Food and Beverage	CROSS	
Concession Retail	STARS	
Dead Space	DOS	
Electrical	ZIGZAG	
Holdroom	DASH	
Kiosk	INSUL	
Lounge/Meeting Room	ACAD_ISO14W100	
Mechanical	SQUARE	
Office Public	ANSI33	
Office Restricted	ANSI36	
Office/Shop (Non-A/C)	ANSI34	
Open to Below	SACNCR	
Public Circulation	NONE	
Restricted	ANGLE	
Semi-Improved	CORK	
Telecom	TRIANG	
Ticket Counter	ANSI31	
Ticket Counter Queuing	PATIO1	

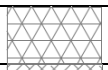
TSA Screening	NET3	
Unfinished/Unimproved	ANSI38	
Warehouse/Hangar (Non-A/C)	ANSI32	

Table 2.3.8-2 Specific Use Space Codes

2.4 Space Measurement Procedures

Interior spaces are delineated by enclosed polygons that are maintained in the MDOT MAA GIS spatial database. These polygons are used for mapping purposes and for critical square footage calculations used for many aspects of design and interior space management. These polygons are defined not only by measurable physical boundaries such as walls and windows, but also by virtual boundaries such as corridor junctions, tenant lease area limits, and the divisions between building sections. The process of delineating such polygons is commonly known as "space measurement". The following procedures shall be used for space measurement at BWI Marshall and Martin State Airports.

2.4.1 General Room Measurement Procedures

2.4.1.1 Room Measurement Procedures

A. Demising walls:
   1. Demising walls separate interior spaces between two tenants or separate a tenant and a common area (i.e. access corridor) or non-lease area (i.e. electrical room, mechanical room).
   2. Room polygons shall be delineated to the centerline of the demising wall separating two tenants or a tenant and a common area (i.e. access corridor) or non-lease area (i.e. electrical room, mechanical room, etc.).
   3. Wall coverings, wainscoting and other attachments to the wall shall not be included in determining the centerline of the demising wall. See Section 2.4.3 Figures, Figures 2.4.3-1 and 2.4.3-2.

B. Exterior walls:
   1. Exterior walls separate a tenant or a common area (i.e. access corridor) or non-lease area (i.e. electrical room, mechanical room) and the outside of the building.
   2. Room polygons shall be delineated to the interior face of the exterior wall. See Section 2.4.3 Figures, Figures 2.4.3-1.
   3. Where there are glass curtain walls or large expanses of glass that are generally not surrounded by other wall construction, room polygons shall be delineated to the interior face of the glass. See Section 2.4.3 Figures, Figures 2.4.3-2 and 2.4.3-3.
   4. Where windows are set within exterior walls and are generally surrounded on all sides by the wall construction, room delineations shall be measured as though the wall plane extends across the window. See Section 2.4.3 Figures, Figures 2.4.3-1 and 2.4.3-2.

C. Demising walls, exterior walls, or glass curtain walls not constructed at 90-degrees to the floor shall be calculated at a point measured 4'-0" above the floor. See Section 2.4.3 Figures, Figures 2.2.

D. Room polygons must be topologically correct:
   1. Polygons must not overlap with adjoining polygons.
   2. Polygons must not have gaps with adjoining polygons.
   3. Polygons must not self-intersect.
   4. Vertices of polygons must match vertices of adjoining polygons.

2.4.1.2 Space Measurement Procedures

Some interior spaces are contained within other spaces and are delineated by features other than walls. Such space polygons must be topologically correct, as defined in Section 2.4.1.1.D. Several other physical and virtual characteristics may be used to delineate a space:

A. Space polygons may be aligned to the program associated with a space: e.g., public walkways in a concourse, holdrooms, queueing areas, food courts, etc.
B. Space polygons may follow existing finishes or structural features such as carpet-tile transitions, or divisions between building sections.
C. Space polygons may be delineated without strict correspondence to physical features, which requires coordination with GETS.

2.4.2 Measurement of Lease Areas

Tenant lease areas are delineated by enclosed polygons in a manner identical to that used for delineating interior rooms/spaces. However, an individual lease area may consist of multiple rooms or spaces, or even partial spaces. The process of delineating such lease area polygons is commonly known as “lease measurement”.

The following procedures shall be used for measuring lease areas at BWI Marshall and Martin State Airports.

2.4.2.1 General Lease Area Procedures

A. Columns and other structural elements within the lease area or projecting into the lease area (e.g., columns or pilasters engaged in a wall) shall be included in lease area calculations and measurements.
B. Areas occupied by raised floors, furniture, appliances and/or equipment for a tenant’s use shall be included in lease areas. See Section 2.4.3 Figures, Figures 2.4.3-1 and 2.4.3-2.

2.4.2.2 Tenant and Public/Common Use Spaces

A. Utility chases serving common use and airport systems that pass through a lease area shall not be included in lease area calculations and measurements.
B. Utility chases for a tenant’s use shall be included in lease area calculations and measurements.
C. Elevators, stairways, fire stairs, emergency exits, hallways, corridors, locker rooms, restrooms, etc. for common and/or public use shall not be included in lease area calculations and measurements. See Section 2.4.3 Figures, Figures 2.4.3-1 and 2.4.3-2.
D. Elevators, stairways, fire stairs, emergency exits, hallways, corridors, locker rooms, restrooms, etc. for tenant’s exclusive use shall be included in lease area calculations and measurements.

2.4.2.3 Accessory Spaces

A. Mezzanine areas approved for use by the MAA Office of the Fire Marshall (OFM) shall be included in lease area calculations and measurements.
   1. Mezzanine areas that are accessible from a tenant lease area but have not been approved for use by the OFM, shall not be permitted to be used by the tenant, may be physically sealed from access by the tenant, and shall not be included in the lease area calculations and measurements.
   2. If, after occupancy, a tenant constructs a mezzanine floor (complying with the Airport's permitting procedures), this additional space shall be included in the lease area calculation and shall be added to lease area.

B. Catwalks, defined as pathways to provide access for the maintenance of mechanical equipment, baggage handling systems or similar building systems, shall not generally be included in lease area calculations and measurements.

2.4.2.4 Calculating Lease Area

Delineation of lease areas follows the procedures for delineating rooms as outlined here:

A. Lease areas are computed by adding the square footage of the spaces that make up the lease.
B. Lease areas are delineated relative to demising walls, exterior walls, and glass curtain walls as described in Section 2.4.1.2 Room Measurement Procedures.
C. Walls separating two or more contiguous lease areas rented by one tenant shall be included in the lease area. See Section 2.4.3 Figures, Figures 2.4.3-1 and 2.4.3-2.

2.4.2.5 Lease Exhibits

A. Lease exhibits shall be prepared following the procedures herein for measuring and calculating tenant lease areas.
B. Lease exhibits shall indicate the total aggregate square footage for the entire lease area. See Section 2.4.3 Figures, Figures 2.4.3-1.
C. Tenant lease areas consisting of more than one room shall indicate the square footage of each room, space or component (such as a tenant's exclusive-use stair, utility chase, etc.) within the lease area. The sum of all such spaces within the lease area shall equal the total aggregate square footage for the entire lease area.

2.4.3 Measurement of Areas for Occupant Capacity

Procedures used for measuring spaces for occupant capacity differ from those used for measuring lease areas. Refer to Volume 3, Chapter 2, Section 2.8.4 Occupant Capacity Calculations for standards on measuring spaces for occupancy.

2.4.3 Figures

The following figures illustrate the appropriate room polygon delineation and lease line placement for various interior space conditions.

Figure 2.4.3-1 illustrates typical interior space conditions in plan view, including interior and exterior walls, windows, and doors.

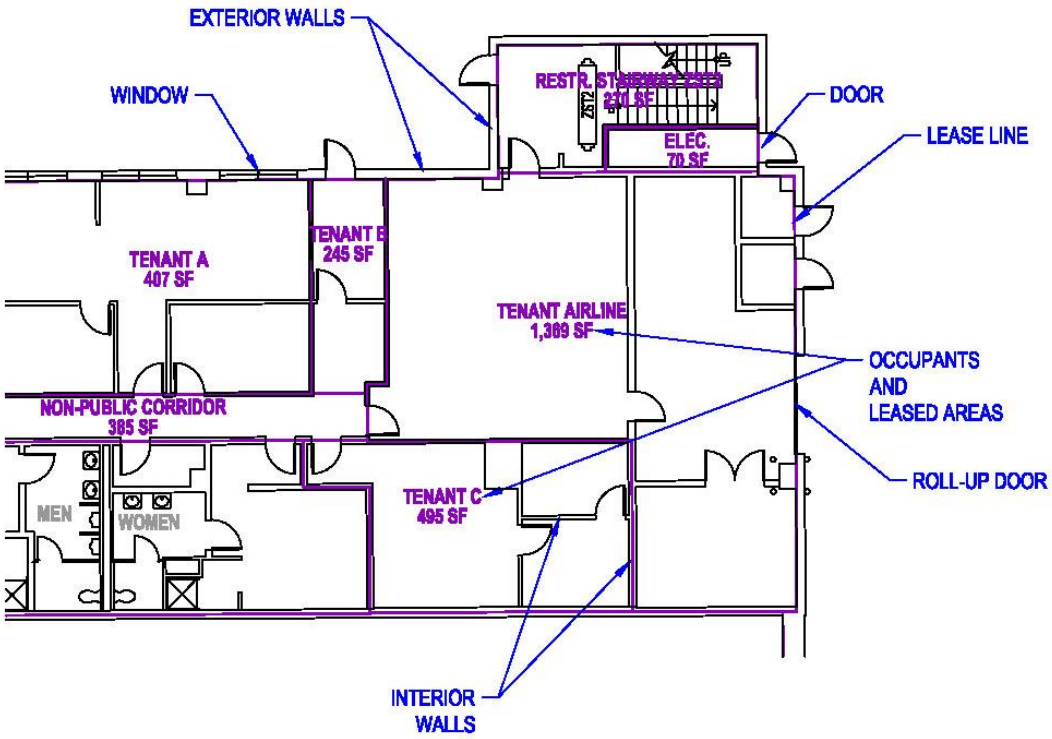


Figure 2.4.3-1: Typical Interior Space Conditions (Plan View)

Figure 2.4.3-2 illustrates typical holdroom conditions in plan view, including interior and exterior walls, exterior curtain walls, and non-wall lease boundaries such as carpet/floor treatment transitions.

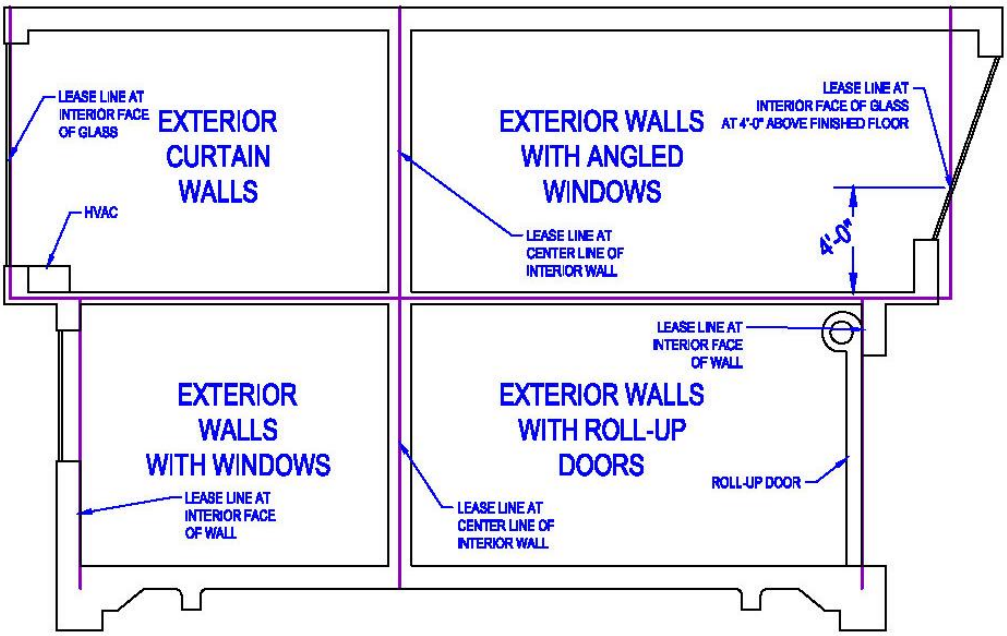


Figure 2.4.3-2: Typical Holdroom Conditions (Plan View)

Figure 2.4.3-3 illustrates typical interior space conditions in cross-section view, including interior and exterior walls, exterior curtain walls, overhead doors, windows, and angled windows.

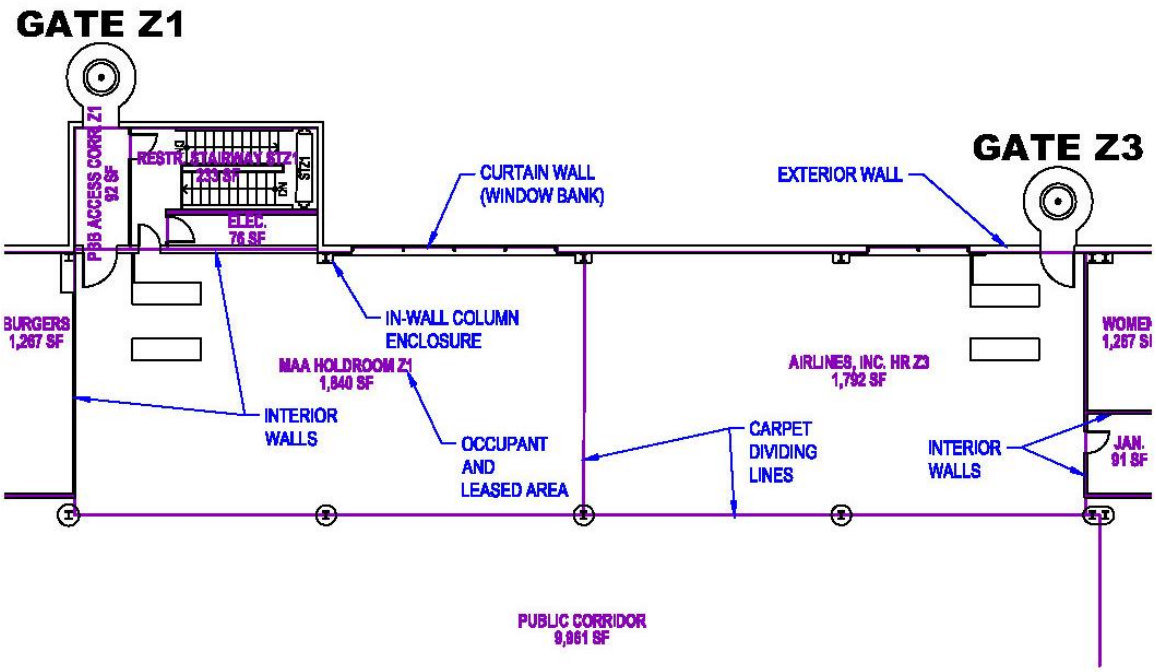


Figure 2.4.3-3: Typical Wall and Window Conditions (Section view)