

(PRE-FINAL) PETERSON SPACE FORCE BASE INSTALLATION FACILITIES STANDARDS (IFS)



Installation Elements



Site Development



Facilities Exteriors



Facilities Interiors

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Signature Field

Peterson Space Force Base

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A. OVERVIEW

Comply with Air Force Corporate Standards for Overview:

<http://afcfs.wbdg.org/index.html>

This Installation Facilities Standards (IFS) document is part of the Air Force Corporate Facilities Standards (AFCFS) program to assist bases in implementing and maintaining facilities standards as appropriate for efficient operations within the respective climate region. IFS fully replaces, consolidates and simplifies existing facilities standards documents, such as the Architectural Compatibility Plan (ACP) or ACGs, FEPs, etc., and organizes information using the same structure, or Table of Contents, as the AFCFS website.

IFS reflects the AFCFS' concepts of "Facility Hierarchy" (categorizing facilities into group numbers) and "Facility Quality" (assigning an appropriate level of quality to each group number) and applies these principles at the base level. Applicable DoD and Air Force criteria such as UFCs, AFIs, Memoranda, and UFGSs (Guide Specs) are referenced and linked within IFS to ensure the document is always current.

Navigating within this IFS is efficient and straightforward. Please use the interactive Table of Contents to locate subject matter, and click on the title of a section to access it. From any page, click on the "Back to Table of Contents" footer to return. Content is organized into 4 major sections: Installation Elements, Site Development, Facilities Exteriors and Facilities Interiors.

This IFS document begins as a fill-in PDF form, which is fully editable, and becomes a "living document" that can be regularly updated by base-level personnel following a format that is consistent across the Air Force. While the format is standardized, IFS content is customized for base operations and the local climate to ensure mission success while emphasizing reduced maintenance and reduced initial costs, life-cycle costs, energy use, and water use.

1. Conformance to Air Force Corporate Facilities Standards (AFCFS) and Installation Facilities Standards (IFS) are required by Air Force Instruction (AFI) 32-1023 and Air Force Memorandum. Please refer to the AFCFS website for links to documentation on current policy.
2. Requests to deviate from any installation facilities standards, that are Unified Facilities Criteria (UFC) requirements, will follow the process outlined in the AFCFS for UFC waivers and exemptions.
3. All Air Force designs including Non-Appropriated Funds (NAF) facilities are required to conform to AFCFS per Air Force Instruction (AFI) 32-1023; AFCFS will be used to formulate Installation Facilities Standards (IFS) per the AFI. The Base Civil Engineer (BCE) maintains and implements the IFS.
4. Please refer to the AFCFS website as a portal to reference materials and requirements documents for design and construction projects (via links). Specific references to current DoD memoranda and Air Force criteria are updated periodically to provide the most current guidance and requirements. Programming, design and contract documents should list "current edition" for all reference and requirements documents. The documents in force at the date of execution of the design and/or construction contract shall be the governing version.
5. *Advanced Modeling Requirements:*
For all Air Force projects requiring advanced modeling, to include 3D visualization, Building Information Modeling (BIM), facility data, quantity take-off, geospatial, etc., follow the Army standards. Refer to USACE Minimum Model Matrix (M3) and Project Execution Plan (PxP) which outline required model uses. Refer to [CAD BIM Technology Center \(Contract Requirements\)](#) for more information on M3 and PxP.
6. Joint Bases shall implement IFS under their Joint-Base designation with volume numbers for individual installations following the IFS Development Tool template. For example, for Joint Base Langley-Eustis, provide: Vol. 1 Langley AFB and Vol. 2 Fort Eustis.
7. References and Supplementary Documents listed in Appendix G are included in these Installation Facilities Standards by reference and are fully part of this document. Please refer to [Appendix G](#) for a listing of documents, which are available via hyperlink for viewing and downloading.
8. Installations outside the United States: Per UFC 1-200-01 DOD BUILDING CODE, 8 Oct 2019, "All construction outside of the United States is also governed by Status of Forces Agreements (SOFA), Host Nation Funded Construction Agreements (HNFA), and in some instances, Bilateral Infrastructure Agreements (BIA). Therefore, the acquisition team must ensure compliance with the most stringent of the UFC, the SOFA, the HNFA, and the BIA, as applicable." Refer to [Appendix G](#) for applicable agreements. "Use UFC 1-202-01 for design of host nation facilities that support military operations."
<https://www.wbdg.org/ffc/dod/unified-facilities-criteria-ufc/ufc-1-202-01>

☐ Applicable ☒ N/A Large graphics do not apply

☐ Applicable ☒ N/A Small graphics do not apply

A01. FACILITY HIERARCHY

Comply with AF Corporate Standards for Facility Hierarchy (and subsections):

<http://afcfs.wbdg.org/facility-hierarchy/index.html>

A02. FACILITY QUALITY

Comply with AF Corporate Standards for Facility Quality (and subsections):

<http://afcfs.wbdg.org/facility-quality/index.html>

A03. FACILITY DISTRICTS

Comply with AF Corporate Standards for Facility Districts (and subsections):

<http://afcfs.wbdg.org/facility-districts/index.html>

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Note: Apply the base-wide standards in this IFS for Installation Elements, Site Development, Facilities Exteriors and Facilities Interiors (products, materials, color, etc.). Following application of the base-wide standards, refer to the Appendix and apply any additional requirements specifically related to the Facility District.

B. INSTALLATION ELEMENTS

Comply with Air Force Corporate Standards for Installation Elements:

<http://afcfs.wbdg.org/installation-elements/index.html>

B01. COMPREHENSIVE PLANNING

Comply with Air Force Corporate Standards for Comprehensive Planning:

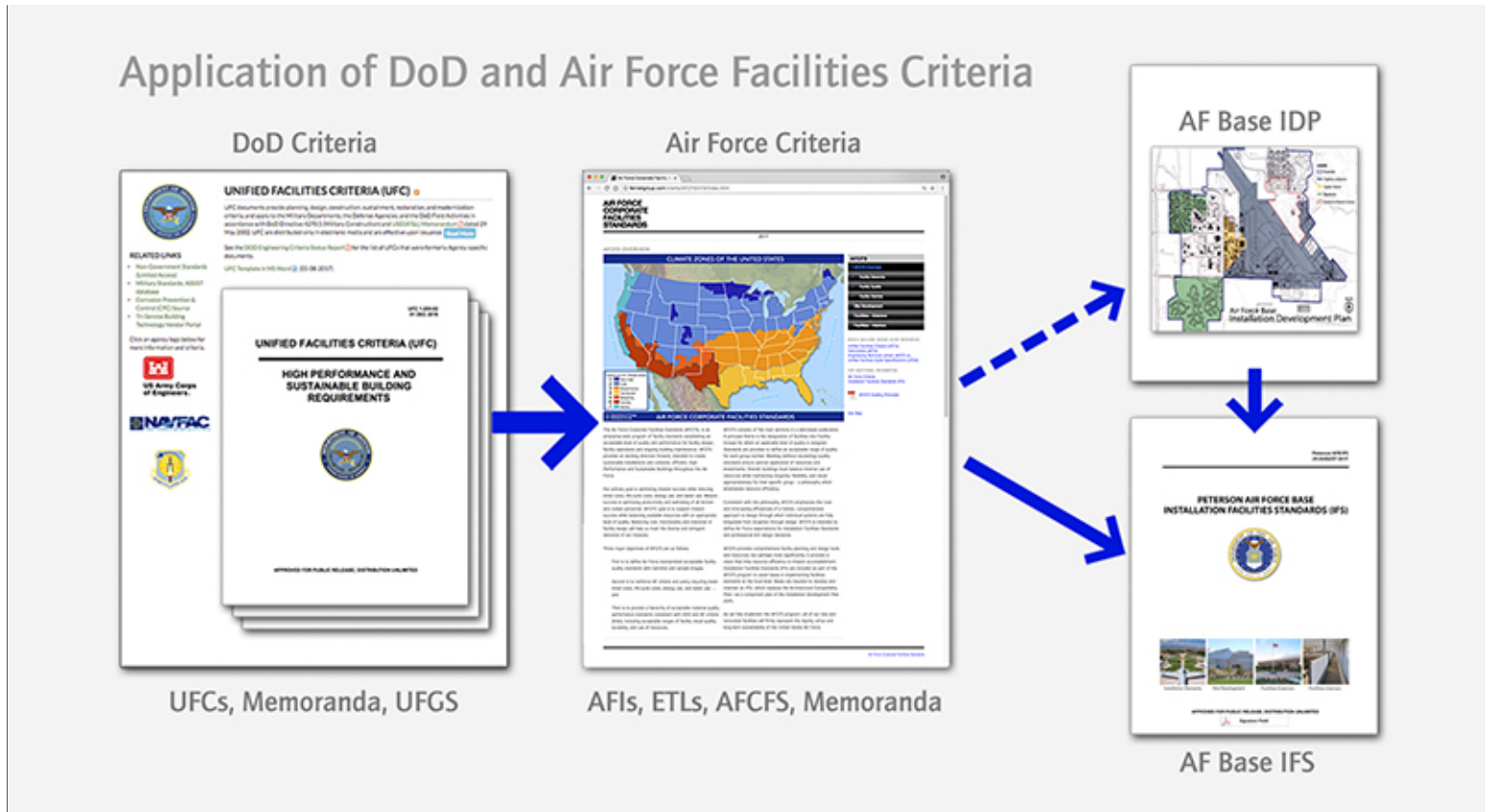
<http://afcfs.wbdg.org/installation-elements/comprehensive-planning/index.html>

B01.1. Installation Development Plan (IDP)

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☐ Applicable ☒ N/A Small graphics do not apply



Department of Defense, Department of the Air Force and Air Force Base Criteria

1. The Base Civil Engineer (BCE) is responsible for developing, maintaining and implementing the Installation Planning documents and to ensure that the Installation Development Plan (IDP) is prepared, maintained, and implemented following AFI 32-1015.
2. Refer to the IDP for information on climate and weather and for demographics and related data.

B01.1.1. IFS Component Plan of IDP

☐ Applicable ☒ N/A Large graphics do not apply

☐ Applicable ☒ N/A Small graphics do not apply

1. Comply with installation planning criteria, architectural compatibility and facilities standards.
2. All Air Force designs will conform to the standards specified in the Air Force Corporate Facilities Standards (AFCFS). AFCFS will also be used to formulate individual Installation Facilities Standards (IFS).
3. Maintain this Installation Facilities Standards (IFS) as required under AFI 32-1023. IFS is maintained and implemented by the Base Civil Engineer (BCE).
4. Address all infrastructure, site and facilities reuse opportunities in the Installation Development Plan (IDP). Reuse designs will follow IFS.
5. Address all infill projects for infrastructure, site and facilities in the (IDP). Infill designs will follow IFS.

B01.1.2. Brief History of Base

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Peterson Field 1940



Peterson Air Field



Original Airport Terminal



HQ Air Force Space Command



Lt. Edward J. Peterson



Pete ang SSgt



P-38 Lightning

Peterson Space Force Base is located in Colorado Springs, Colorado, at an altitude of 6,035 feet and utilizes runways of the Colorado Springs Airport. In 1941 the City of Colorado Springs turned their original municipal airport over to the Army Air Corps establishing an Army Air Force (AAF) flight training center, it being named Colorado Springs Army Air Base (CSAAB). The base was renamed on Dec 13th, 1942 to Peterson Army Air Base (PAAB), also known as Peterson Field in tribute to Lt. Edward J. Peterson, a photoreconnaissance pilot, who died after his P-38/F-4 Lightning crashed at the base in August of that year. It later became the Air Force Support Command Base and was renamed Peterson Air Field.

After World War II, the airport was returned to the jurisdiction of the City of Colorado Springs, and many of the military buildings were demolished. In 1947, after the birth of the U.S. Air Force, the base was reactivated. In 1948 the U.S. Government negotiated with the city to provide flying facilities at the airport in support of the 15th Air Force, then headquartered near downtown Colorado Springs at Ent Air Force Base (now the Olympic Training Center). In 1950 the 15th Air Force relocated to March Air Force Base, California and the Air Force established the Air Defense Command at Peterson Field.

On March 1, 1976, Peterson Field was renamed Peterson Air Force Base (PAFB). In 1979, jurisdiction of the installation was transferred to the Strategic Air Command (SAC).

In September 1982 the Air Force Space Command (AFSPC) was activated at Peterson AFB. The establishment of the 1st Space Wing (SW) on January 1, 1983, followed this action. The base remained under command of the 1st Space Wing until activation of the 3rd Space Support Wing in October 1986. These two wings deactivated May 15, 1992, and command transferred to the newly activated 21st Space Wing.

In May of 2002, The Department of Homeland Defense directed the location of a new headquarters command at Peterson. In August of 2002, the United States Northern Command (USNORTHCOM) was established and disbursed throughout numerous existing facilities at main base Peterson, as well as, Cheyenne Mountain.

On July 22, 2020, the 21st Space Wing was reorganized as part of the Peterson-Schriever Garrison. Peterson AFB was renamed Peterson Space Force Base (PSFB) in July 2021. Peterson SFB maintains an amiable relationship with an expanding Colorado Springs Municipal Airport.

Peterson-Schriever Garrison was reorganized as Space Base Delta 1 to include Cheyenne Mountain Space Force Station (CMSFS) on May 23, 2022. Peterson Space Force Base is headquarters for North American Aerospace Defense Command (NORAD), United

States Northern Command (USNORTHCOM), Space Operations Command (SpOC), US Army Space and Missile Defense Command / Army Forces Strategic Command (SMDC/ARSTRAT), and the Air Force Reserve's 302nd Airlift Wing (AW). It is currently the provisional headquarters for United States Space Command (USSPACECOM) and temporary headquarters for Space Training and Readiness Command (STAR Command or STARCOM). Peterson Space Force Base is home to Space Deltas 2, 3, and 7 and also provides support to 102 other missions.

Several original Municipal Airport buildings remain on the base and have both military and civilian historical significance. These buildings are concentrated along Ent Avenue, east of Peterson Boulevard. This area is now an official Historical District with the National Registry of Historic Places. Including the Base Museum (original Airport Terminal) and numerous historically significant aircraft in a large outdoor display area. Several other World War II era buildings are also located in this vicinity. In addition, the "Spanish House" is located in this area. This house dates back to when this part of the base was the original Colorado Springs Municipal Airport. The house is used for distinguished visitors when they stay in the area. Two of the original airport hangars are still in use as museum auxiliary space. Current flight line activities are now two blocks away to the south.

B01.1.3. Future Development

☐ Applicable ☒ N/A Large graphics do not apply

☐ Applicable ☒ N/A Small graphics do not apply

1. Follow AFI 32-1015 for Air Force Installation Development Plan (IDP), the Comprehensive Planning Process, Comprehensive Planning Requirements, and Geospatial Mapping.
2. Address all future development under the Installation Development Plan (IDP).

B02. STREET ENVELOPE STANDARDS

Comply with Air Force Corporate Standards for Installation Elements:

<http://afcfs.wbdg.org/installation-elements/index.html>

Comply with AF Corporate Standards for Street Envelope Standards:

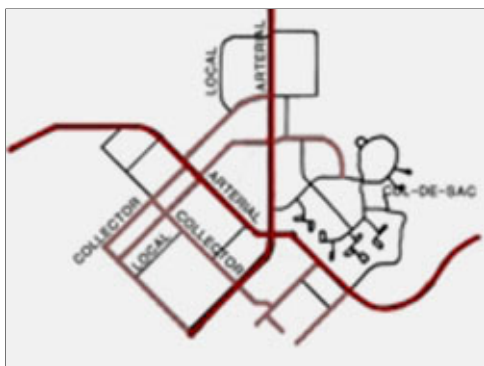
<http://afcfs.wbdg.org/installation-elements/street-envelope-standards/index.html>

B02.1. Hierarchy of Streets

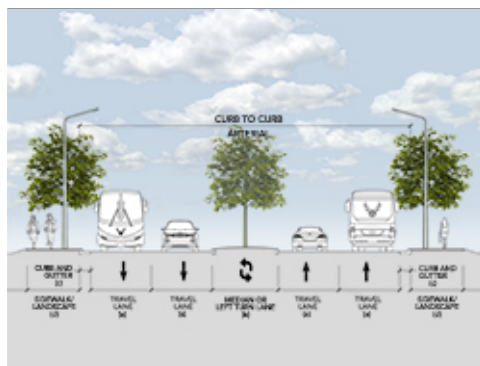
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Hierarchy of Streets



Street Envelope Section



Peterson Boulevard

1. Develop and evolve a hierarchical transportation network of arterial, collector and local streets following UFC 3-201-01 and its industry references.
2. Provide consistent functionality throughout the installation and a level of visual quality relating to the adjacent Facility Group number.
3. Routes along facilities in Group 1 may have materials, finishes and features with a higher visual quality than Groups 2, 3 and 4. Reduce maintenance requirements by installing highly durable materials and finishes in routes along Group 3 industrial facilities.
4. Special routes may have a visual quality comparable to those along facilities in Group 1.
5. Create and maintain arterials with two lanes of traffic in each direction with landscaped or paved medians as applicable to the local climate and adjacent facility group designation / land use.
6. Minimize stops and turns along arterials. Eliminate on-street parking along arterials and provide on collector streets only on lower speed roadways such as residential streets.
7. Connect arterials to local streets with appropriately scaled collector streets.
8. Provide appropriate landscape setbacks and pedestrian buffers along all streets.
9. Minimize and consolidate curb cuts along streets.
10. Ensure access for emergency and service vehicles.
11. Define bicycle traffic routes in the Installation Development Plan or its applicable component plans.
12. Define appropriate force protection features, site furnishings, signs, lighting, utilities, and paving in the IFS.

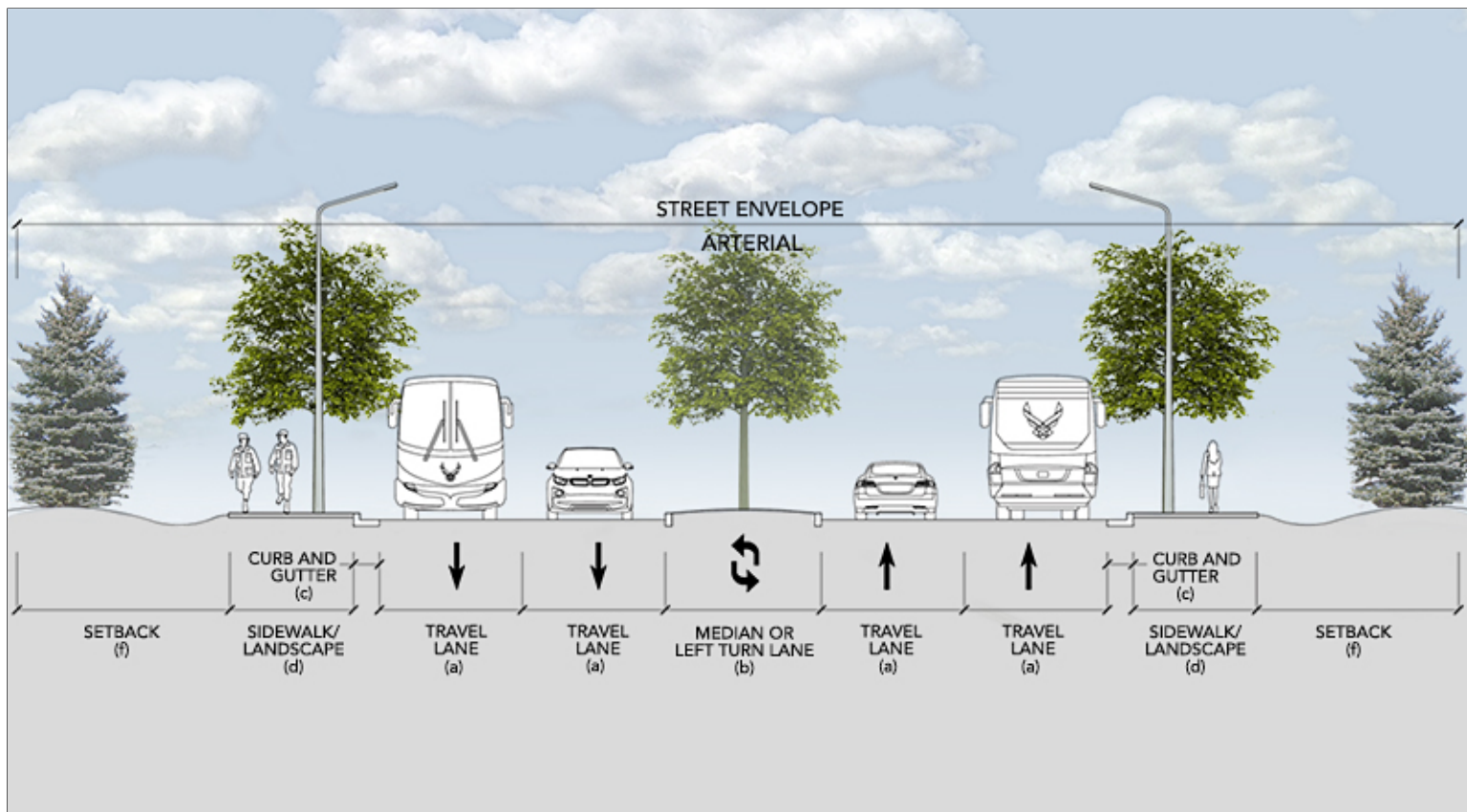
B02.1.1. Arterial Streets

☒ Applicable ☐ N/A Select number of graphics / images (large: 800 px x 440 px) to insert 1

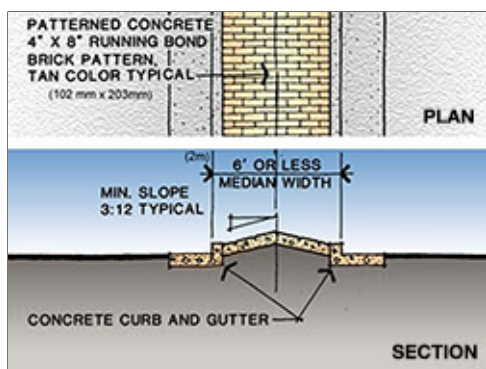
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Travel Lane (a): 12' Median (b): 12' Curb and Gutter (c): 2' Sidewalk / Landscape (d): 12' Setback (f): Min. 35' or per ATRP



Paved Median



Landscaped Median



Landscape/Sidewalk

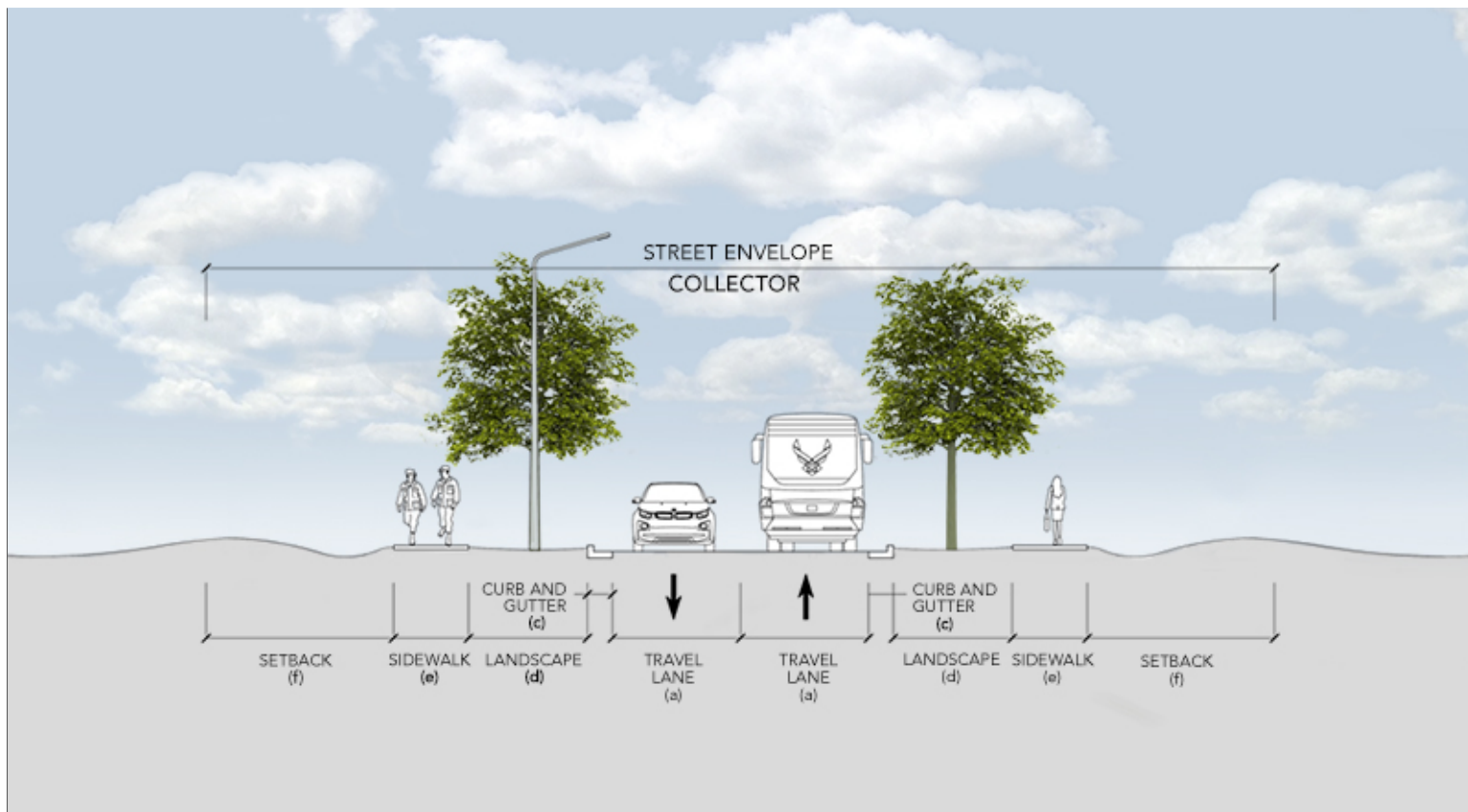
1. Stops and turns should be minimized, and on-street parking will not be allowed at any point along arterial streets.
2. Provide sidewalks on at least one side of arterial streets and both sides of arterial streets in developed areas. Provide a 6' buffer between the road and sidewalk where space allows.
3. Limit curb cuts on arterial streets to entries into major facilities, building groups and major parking areas.
4. Reinforce the importance of arterial streets with appropriate signs, plantings and street lighting.

B02.1.2. Collector Streets

☒ Applicable ☐ N/A Select number of graphics / images (large: 800 px x 440 px) to insert 1

Image Tool 800 x 440

☐ Applicable ☒ N/A Small graphics do not apply



Travel Lane (a): 12' Median (b): N/A Curb and Gutter (c): 2' Landscape (d): 10' Sidewalk (e): 6' Setback (f): Min. 35' or per AT

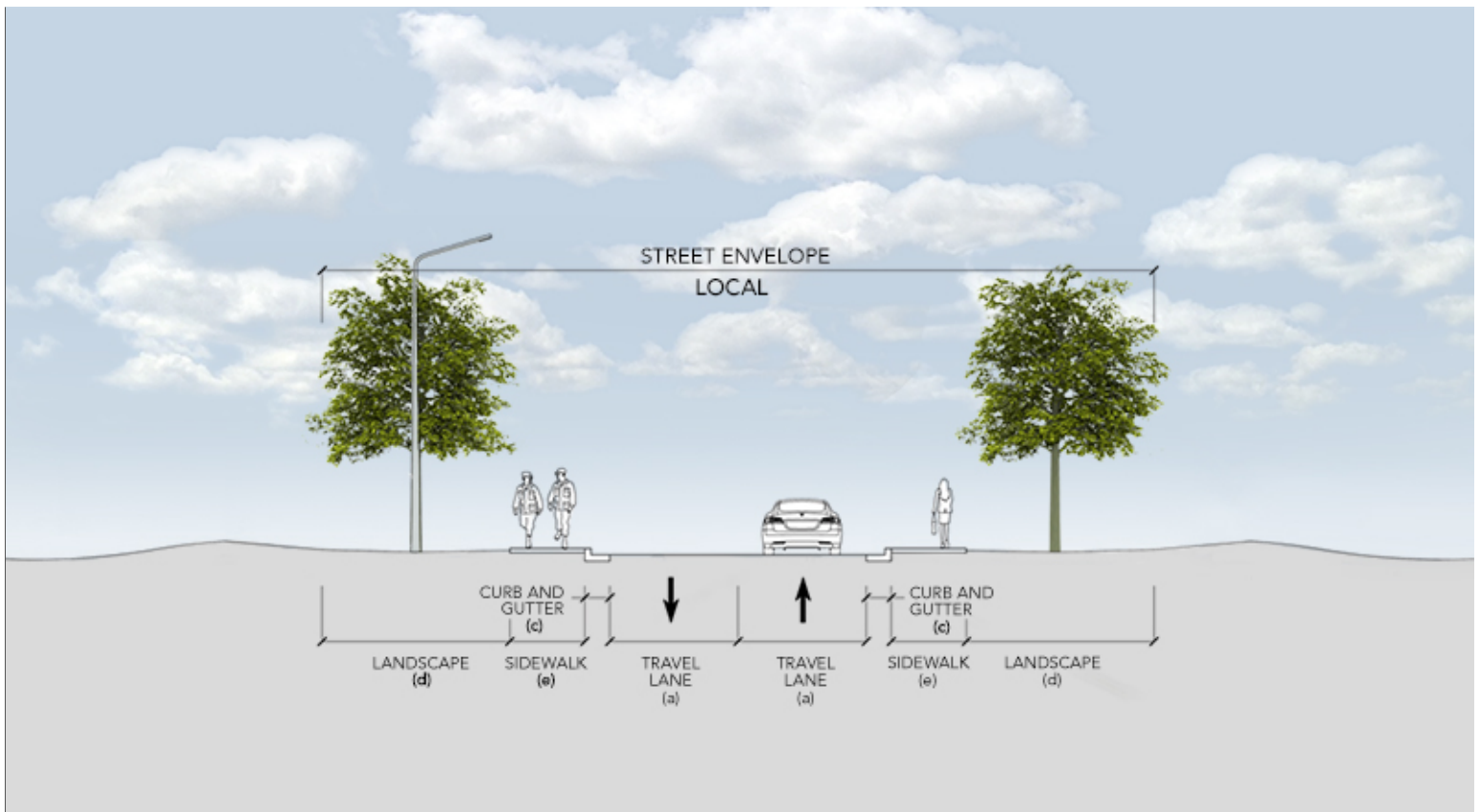
1. Design collector streets less prominent than arterials.
2. Maintain the following as collector streets: Otis Street, Ent Avenue, Hamilton Avenue, Suffolk Street, Mitchell Street, Dover Avenue, Vandenberg Street, Vincent Street, Selfridge Street (between Peterson and Tyndall Street) and Paine Street (between Stewart Avenue and Hamilton Street).
3. Match the level of quality of street elements to the adjacent Facility Group number.

B02.1.3. Local Streets

☒ Applicable ☐ N/A Select number of graphics / images (large: 800 px x 440 px) to insert 1

Image Tool 800 x 440

☐ Applicable ☒ N/A Small graphics do not apply



Travel Lane (a): 11' Median (b): N/A Curb and Gutter (c): 1.5' Landscape (d): 15' Sidewalk (e): 6'

1. Design and maintain local streets in due proportion to the amount of traffic.
2. Generally encourage the development of street frontage of adjacent sites to positively contribute features such as landscaping.
3. Maintain consistent local streetscapes for visual and functional continuity

B02.1.4. Special Routes

☐ Applicable ☒ N/A Large graphics do not apply

☐ Applicable ☒ N/A Small graphics do not apply

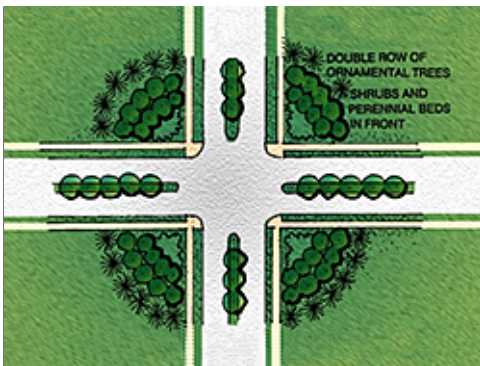
1. Develop all special routes consistently with those adjacent to Group 1 facilities.

B02.2. Hierarchy of Intersections

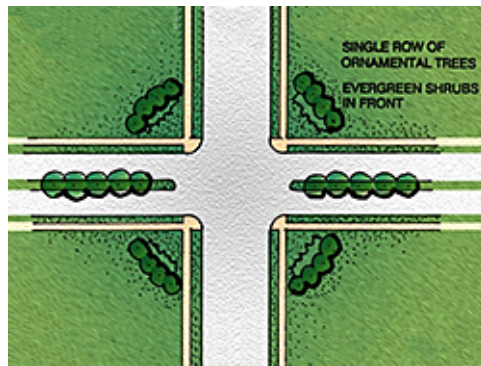
☐ Applicable ☒ N/A Large graphics do not apply

☒ Applicable ☐ N/A Select number of graphics / images (small: 250 px x 188 px) to insert 3

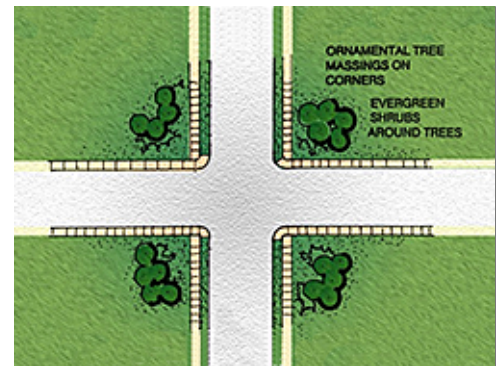
Image Tool 250 x 188



Arterial Intersection



Arterial-Collector Intersection



Collector Intersection

1. Provide a hierarchy of intersections to include arterial, arterial-collector, collector, collector-local and local following UFC 3-201-01, Civil Engineering and its industry references.
2. Passive systems such as traffic circles are preferred to active systems such as signalized intersections. Aggressively pursue passive systems to lower maintenance requirements and reduce energy use.
3. Use the same level of visual quality found in the related streetscape, which corresponds to the adjacent Facility Group number.

B02.2.1. Arterials

☐ Applicable ☒ N/A Large graphics do not apply

☐ Applicable ☒ N/A Small graphics do not apply

1. Provide a circular design that encompasses the four corners of the intersection with a double row of ornamental trees: a backdrop (outer row) of evergreen trees behind ornamental trees. In front of this, provide a large shrub bed made up of deciduous and evergreen shrubs. Provide a perennial flower bed in front of the shrubs.

B02.2.2. Arterial/Collector

☐ Applicable ☒ N/A Large graphics do not apply

☐ Applicable ☒ N/A Small graphics do not apply

1. Provide a circular design including all four corners of the intersection. Use a single row of ornamental trees, with evergreen shrubs providing the foreground, and a perennial flower bed in the foreground.

B02.2.3. Collectors

☐ Applicable ☒ N/A Large graphics do not apply

☐ Applicable ☒ N/A Small graphics do not apply

1. Provide an informal group of small ornamental trees on each of the intersection four corners.

B02.2.4. Special Intersections

☐ Applicable ☒ N/A Large graphics do not apply

☐ Applicable ☒ N/A Small graphics do not apply

1. Develop all special intersections consistently with those adjacent to Facility Group 1 facilities.

B02.2.5. Street Frontage Requirements

☐ Applicable ☒ N/A Large graphics do not apply

☐ Applicable ☒ N/A Small graphics do not apply

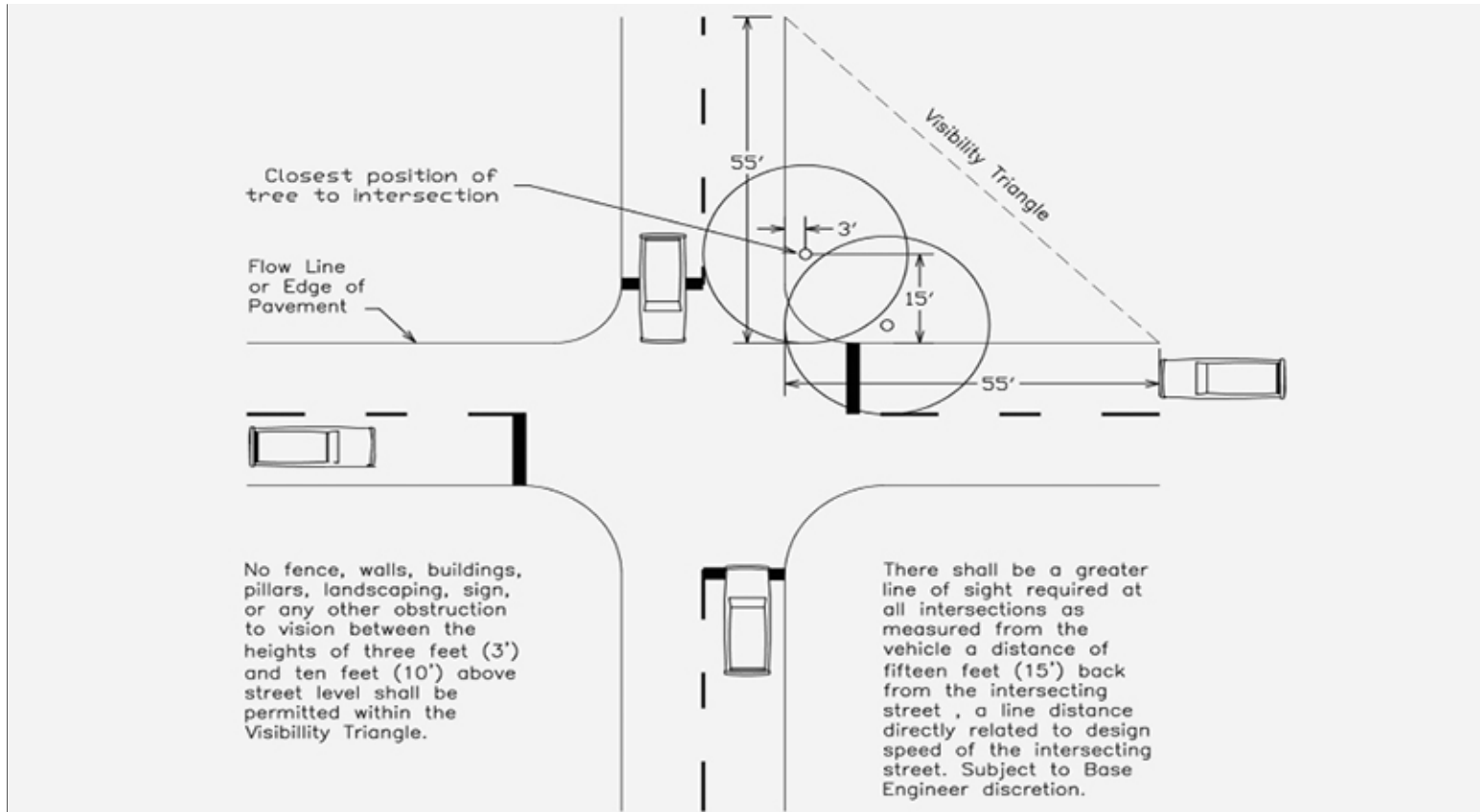
1. Maintain open space buffers following B03.2.3. Preserves.
2. Refer to C06.1.7. Streetscape Landscaping for planting and screen wall requirements along street frontage.
3. Open parking spaces (except in family housing areas) must be screened from view from adjacent streets to a minimum height of 3' by the use of berms, plantings and trees.

B02.2.6. Sight Lines

☒ Applicable ☐ N/A Select number of graphics / images (large: 800 px x 440 px) to insert 1

Image Tool 800 x 440

☐ Applicable ☒ N/A Small graphics do not apply



Sight Lines Diagram

1. Provide adequate sight lines for an effective and safe traffic operation per American Association of State Highway and Transportation Officials (AASHTO) standards.
2. Sight lines will vary based on the speed and classification of the roadway or intersection. Plants and any related signage within the sight triangle should follow these rules:
 - Shrubs within sight triangles may not exceed thirty-six inches (36") growing height above street pavement.
 - Trees may not be located in the sight line triangle unless there is a minimum clear understory of ten feet (10') in height. Evergreen trees will not be allowed in any sight triangles.
 - Trees will be placed a minimum of three feet back from curb and no closer than fifteen feet from intersection flow line.
 - Signs may not be placed in these triangles unless regulatory in nature and approved by the base traffic engineer.

B02.3. Street Elements

☐ Applicable ☒ N/A Large graphics do not apply

☐ Applicable ☒ N/A Small graphics do not apply

1. Emulate the streetscape area's pre-development hydrology using passive and active design features to help sustain the adjacent regionally appropriate landscape. Coordinate with the base Stormwater Management Plan.

2. Employ systems, materials and techniques to maximize streetscape sustainability. Consider pervious paving and high reflectivity of surfaces, which are appropriate for the local climate.
3. Install at-grade curbing and/or raised-profile curb and gutter as applicable to direct stormwater to bioswales and rain gardens as source water for vegetation. Do not paint concrete curbing.
4. Provide all on-site utility service lines and equipment below grade when adjacent to Facility Group 1. In routes along Group 2, 3 and 4, when mounting elements such as utility cabinets, communications equipment and water valves above grade is unavoidable, paint these consistently and provide visual screening following Installation Facilities Standards (IFS).
5. Provide traffic control devices including access control point/entry control facility signs, speed limit signs and street name signs following the current edition of the Manual on Uniform Traffic Control Devices (MUTCD) per UFC 3-120-01.
6. Crosswalk markings will follow the MUTCD for Streets and Highways, current edition. Provide white markings that define the edges of the crosswalk or a tone of lines defining the area of the crosswalk consistent with common practices found in the adjacent municipality.
7. Follow UFC 3-120-01 for directional and wayfinding signs and address both vehicular and pedestrian traffic.
8. Reduce energy consumption and reduce maintenance requirements by providing street lighting only when functionally required to ensure safety and to address antiterrorism following UFC 4-010-01. Ensure the quality and quantities of lighting and fixtures are appropriate for the adjacent Facility Group number.

B02.3.1. Paving

☐ Applicable ☒ N/A Large graphics do not apply

☐ Applicable ☒ N/A Small graphics do not apply

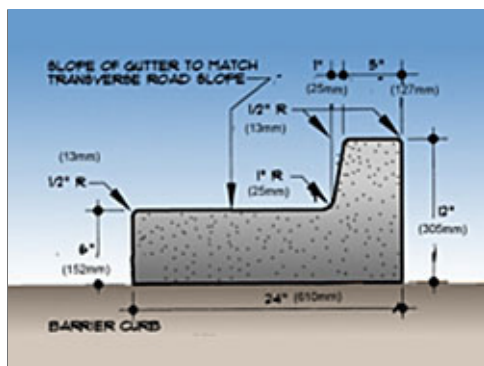
1. Pavement design will comply with UFC 3-250-01. Ensure appropriate analysis and design of subgrade conditions to support low maintenance high performance pavements. Apply best practices from the Construction: Seasonal Frost Conditions section of the UFC.
2. Materials for pavements will be specified in accordance with UFC 3-250-01 and must conform to requirements set forth in the Unified Facility Guide Specifications (UFGS) for concrete and asphaltic concrete.

B02.3.2. Curb and Gutter

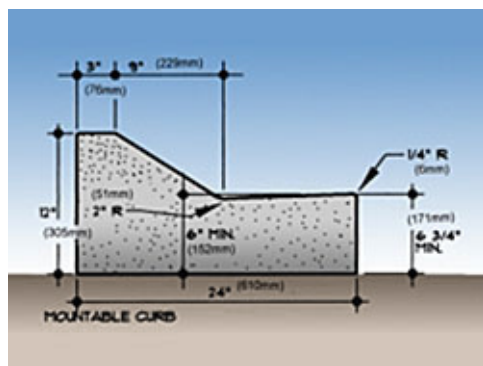
☐ Applicable ☒ N/A Large graphics do not apply

☒ Applicable ☐ N/A Select number of graphics / images (small: 250 px x 188 px) to insert 2

Image Tool 250 x 188



Standard Barrier Curb



Standard Mountable Curb

1. Curb all streets except remote/isolated roads and rock-paved service roads.
2. All streets should have integral concrete curbs and gutters. Painted curbs are prohibited because they are very difficult to maintain.
3. Use concrete for sidewalks and curbs. Do not use asphalt curbs.

B02.3.3. Utility Service Elements

☐ Applicable ☒ N/A Large graphics do not apply

☐ Applicable ☒ N/A Small graphics do not apply

1. Provide all utility service lines below grade when streets are adjacent to Facility Group 1; when mounting elements (such as utility cabinets, communications equipment and water valves) above grade is unavoidable, paint these consistently Dark Bronze to match FSC 30040 (low-luster finish) and provide visual screening following Site Development, Landscaping.
2. Overhead service lines along streets adjacent to Facility Groups 2, 3 and 4 are prohibited.

B02.3.4. Traffic Signs

☐ Applicable ☒ N/A Large graphics do not apply

☐ Applicable ☒ N/A Small graphics do not apply

1. Refer to Exterior Signs, Colors and Types for Traffic Control Devices, which includes signs.

B02.3.5. Street Lighting

☐ Applicable ☒ N/A Large graphics do not apply

☐ Applicable ☒ N/A Small graphics do not apply

1. Refer to the Lighting section for appropriate applications along streets.

B02.3.6. Other

☐ Applicable ☒ N/A Large graphics do not apply

☐ Applicable ☒ N/A Small graphics do not apply

B03. OPEN SPACE / PUBLIC SPACE

Comply with Air Force Corporate Standards for Installation Elements:

<http://afcfs.wbdg.org/installation-elements/index.html>

Comply with AF Corporate Standards for Open Space / Public Space:

<http://afcfs.wbdg.org/installation-elements/open-space-public-space/index.html>

B03.1. Plazas, Monuments and Static Displays

☒ Applicable ☐ N/A Select number of graphics / images (large: 800 px x 440 px) to insert 1

Image Tool 800 x 440

☐ Applicable ☒ N/A Small graphics do not apply



Edward J. Peterson Air & Space Museum Airpark

1. Natural features and culturally or historically significant features or events may be recognized and acknowledged with physical elements such as plazas, monuments and static displays. However, limit these elements on the base to ensure judicious use of resources and to reduce ongoing maintenance requirements.
2. Design highly durable plazas, monuments and static displays with a level of quality comparable to Facility Group 1.
3. Link plazas, monuments and static displays to the pedestrian circulation system. Install landscaping, site furnishings and lighting appropriate for the application and local climate following Installation Facilities Standards (IFS).
4. Select systems, products and materials for paving, walls, and structures following IFS.

B03.1.1. Paved Plazas

☐ Applicable ☒ N/A Large graphics do not apply

☒ Applicable ☐ N/A Select number of graphics / images (small: 250 px x 188 px) to insert 2

Image Tool 250 x 188



Tooled Control Joints



Varied Tile Patterns

1. Mitigate heat island effect by providing high-albedo, shaded plazas. Pervious pavers will be used on all plazas and courtyards in Facility Groups 1 and 2; use pervious concrete in Groups 3 and 4. The designer will incorporate appropriate expansion and construction joints.
2. Pavers will match the color of pavers used on adjacent sidewalks using base standard range of Winter Blend colors (by Pavestone or equivalent) in a Herringbone pattern. Bricks used on plazas will typically be 4" x 8" size.

B03.1.2. Sculptures, Markers and Statuary

☐ Applicable ☒ N/A Large graphics do not apply

☒ Applicable ☐ N/A Select number of graphics / images (small: 250 px x 188 px) to insert 1

Image Tool 250 x 188



Commemorative Plaque

1. Relate new sculpture, markers and statuary to the base's architectural design theme. Generally, limit these elements to frequently used locations adjacent to Facility Group 1 and highly traveled community pedestrian spaces.
2. Consider entry gates as possible sites for new displays.

3. All proposed memorials will follow AFI 36-3108 and be limited to highly deserving individuals or groups as deemed appropriate by the installation leadership. Living memorials (tree plantings / etc.) are discouraged due to added maintenance requirements.
4. When sculpture requires a base, match the materials and / or color palette of adjacent buildings.
5. Use direct or indirect lighting to accentuate features or enhance an intended effect.
6. Ensure that all sculpture, markers and statuary are honorable and inspiring, provide a sense of place, positively contribute to the base's visual quality, and encourage pride for the community and the US Air Force.

B03.1.3. Static Display of Aircraft

☒ Applicable ☐ N/A Select number of graphics / images (large: 800 px x 440 px) to insert 1

Image Tool 800 x 440

☒ Applicable ☐ N/A Select number of graphics / images (small: 250 px x 188 px) to insert 3

Image Tool 250 x 188



Air & Space Museum Airpark



Dynamic Mounting



Street Intersection Display



Interpretive Plaza

1. Follow IFS base-wide standards for all elements of the display area with specific attention to traffic sight lines, pedestrian circulation, site furnishings, signs, and lighting. Address requirements for the Facility District as well.
2. Generally, locate concrete base/foundation structures for static displays below grade.
3. At static displays where pedestrian paths are provided, a minimum of one trash receptacle and one bench will be provided. Receptacle and bench design must conform to IFS requirements.

B03.2. Grounds and Perimeters

☐ Applicable ☒ N/A Large graphics do not apply

☐ Applicable ☒ N/A Small graphics do not apply

1. Provide formal spaces for parade and review functions, recreational areas and parks following the base's Installation Development Plan (IDP) and Installation Facilities Standards (IFS). Refer to the Site Furnishings topic for additional information.
2. Maintain preservation areas following the IDP and IFS.
3. Comply with UFC 4-010-01 DoD Minimum Antiterrorism Standards for Buildings and UFC 4-022-03 Security Fences and Gates for all elements associated with the base's gates and perimeter fence.
4. Identify and describe base-wide utility corridors in the IDP.
5. Base-wide utility infrastructure will be inconspicuous. Bury utility service lines below grade when adjacent to Facility Group 1 and when economically feasible for Facility Groups 2, 3 and 4. When service lines are located above grade, create an ordered, coordinated appearance.
6. Follow the requirements of this IFS regarding all utility structures and service lines located above grade that visually impact the installation.
7. Where screening of utility equipment and structures is provided, allow adequate and proper clearance for safety and maintenance.
8. Reduce visual clutter and visual impact of the following items through a combination of careful placement, screen walls, landscaping and painting:
 - Electrical switch-stations
 - Sewage lift stations
 - Water well pumps, storage tanks and/or related structures
 - Gas piping, meters and similar incidental items
 - Above ground fuel storage tanks

- Any ground-mounted freestanding utility item exposed to view
9. Larger structures such as electrical switch-stations, sewage lift stations, fuel storage tanks and mechanical/electrical equipment will be screened from view, using materials, forms, and colors in the screen walls that match those respective design elements present at adjacent buildings.
 10. Paint aboveground equipment and associated components such as electrical piping or exposed plumbing lines dark bronze.
 11. Maintain existing buried utility service lines as a visual asset.
 12. Bury the following exposed above-grade items in future projects when economically feasible:
 - Electrical power grid and service lines
 - Telephone lines
 - Cable TV lines
 - Communications lines
 - Exterior lighting service lines
 - Any similar system of above-ground lines serving the base
 13. Consolidate and enclose service utility lines in underground utility corridors when feasible. Create routes along the inside edge of parking lot islands.
 14. All development of open space requires prior coordination and approval from the Base Civil Engineer.

B03.2.1. Parade Grounds

☐ Applicable ☒ N/A Large graphics do not apply

☐ Applicable ☒ N/A Small graphics do not apply

1. Follow UFC 3-201-02 Landscape Architecture, Appendix B for the planning and design process and criteria for parade grounds.
2. Establish and maintain parade grounds only where there is a confirmed need and provide landscape materials appropriate for the locale following IFS.
3. Bleachers may be installed only when there is a documented requirement at parade grounds. Nonferrous metals that do not require painting or going maintenance are preferred. The Base Civil Engineer will determine quantities, sizes, and products on a case-by-case basis.

B03.2.2. Parks

☐ Applicable ☒ N/A Large graphics do not apply

☒ Applicable ☐ N/A Select number of graphics / images (small: 250 px x 188 px) to insert 1

Image Tool 250 x 188



Park and Playground

1. Bleachers may be installed only when there is a documented requirement at parks and fields for recreational events. Follow guidance under Parade Grounds.
2. Picnic pavilions may be provided in parks where there is a documented need.
3. Prohibited picnic pavilion materials include wood, concrete masonry units (CMU) or metal pre-manufactured storage sheds.
4. When picnic pavilions are permitted near facilities, generally match the architecture of the adjacent facility and provide a level of quality of the adjacent facility group number.

B03.2.3. Preserves

☐ Applicable ☒ N/A Large graphics do not apply

☒ Applicable ☐ N/A Select number of graphics / images (small: 250 px x 188 px) to insert 3

Image Tool 250 x 188



Open Space Preserve



Integrated Force Protection



Natural Open Space

1. Preserve areas adjacent to runways, taxiways, aprons, golf course roughs, storage areas, antenna facilities, and ammunition storage areas as open space.

2. Provide minimal maintenance with mowing as needed for controlling bird behavior for airfield safety or eliminating fire hazards.

B03.2.4. Perimeter Fence

☐ Applicable ☒ N/A Large graphics do not apply

☒ Applicable ☐ N/A Select number of graphics / images (small: 250 px x 188 px) to insert 3

Image Tool 250 x 188



Entrance Control Facility



Perimeter Over Watch



Facility at Perimeter Fence

1. Design, install and maintain the base's perimeter fence following UFC 4-022-03 Security Fences and Gates.
2. Stringently comply with AT requirements following UFC 04-010-01 for all spaces adjacent to the base's perimeter fence and all gates.
3. Fencing, gates and other elements that are associated with the main gates will be a level of quality equivalent to Facility Group 1.
4. Maintain a positive visual quality along the traffic corridor on both sides of the main gates. Specifically address pedestrian access, circulation and common areas.

C. SITE DEVELOPMENT

Comply with Air Force Corporate Standards for Site Development:
<http://afcfs.wbdg.org/site-development/index.html>

C01. SITE DESIGN

Comply with Air Force Corporate Standards for Site Development:
<http://afcfs.wbdg.org/site-development/index.html>

Comply with AF Corporate Standards for Site Design / NEPA:
<http://afcfs.wbdg.org/site-development/site-design-nepa/index.html>

C01.1. Site Design Considerations

☐ Applicable ☒ N/A Large graphics do not apply

☒ Applicable ☐ N/A Select number of graphics / images (small: 250 px x 188 px) to insert 12

Image Tool 250 x 188



Group 1 Plaza



Plaza Alignment with Entrance



Pedestrian Access



Integrated Force Protection Measures



Rainwater Harvesting



Open Space Buffer



Buried Utility Infrastructure



Adjacent Parking



Functional Paved Areas



Detached Sidewalk at Street



Shared Open Space



Internal Pedestrian Path

1. Comply with Criteria and apply Best Practices in UFC 3-201-02 for Site Design:
<https://www.wbdg.org/ffc/dod/unified-facilities-criteria-ufc/ufc-3-201-02>
2. Collect documentation to validate approvals and completion of the NEPA process.
3. Ensure site design compliance with the Installation Development Plan (IDP) and its component plans and Installation Facilities Standards (IFS).
4. Promote integrated design with on-site solutions such as engineered small-scale hydrologic controls versus base-wide infrastructure; consider open space, natural features, bioswales, building roofs, streets, and paved surfaces, and snow storage areas.
5. Integrate snow storage areas with adjacent streets and parking areas, coordinate snow storage with the base stormwater plan.
6. Limit the impact of development on land and water resources. All site elements and infrastructure will reinforce an image of sustainability, with reduced energy demand, renewable-energy usage, and water conservation.
7. Consider energy conservation during site design for the following categories: building and site lighting, auxiliary systems and equipment (refrigerators, elevators, etc.), building envelope, electric power and distribution, HVAC systems and equipment, service hot water, and energy management metering (EMCS).
8. Coordinate on-site renewable-energy systems and components to minimize area requirements and maximize efficiencies. Appropriately buffer and screen these and other mechanical systems and equipment.
9. New building projects should preserve open space and protect natural habitat.
10. Conform to existing topography to the greatest extent possible and use slopes to increase site and building efficiencies. Design sites to minimize irrigation and impacts to stormwater runoff.

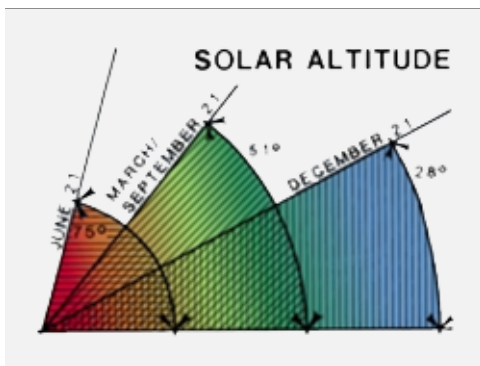
11. Carefully study new project sites to identify the character of adjacent buildings, streets, landscaping, and site design elements. Reinforce the existing character in new site design.
12. Consider relationships to adjacent facilities and district / centralized heating and cooling infrastructure and cost effectively connect building systems to harvest heat, grey water or other beneficial byproducts.
13. Minimize existing and planned obstructions from landscaping, structures, topography, and adjacent developments to preserve solar access and natural ventilation.
14. Purposefully integrate service access, receiving and storage areas to eliminate the need for visual screening.
15. Appropriately connect to the base network of streets, sidewalks and trails using drive aisles, parking areas, walkways, paths, and bicycle routes addressing both vehicles and pedestrians.
16. Applicably coordinate heat island mitigation in paving and roof designs when implementing an integrated approach to stormwater management.
17. Consider the location of "Designated Tobacco Areas."

C01.2. Building Orientation

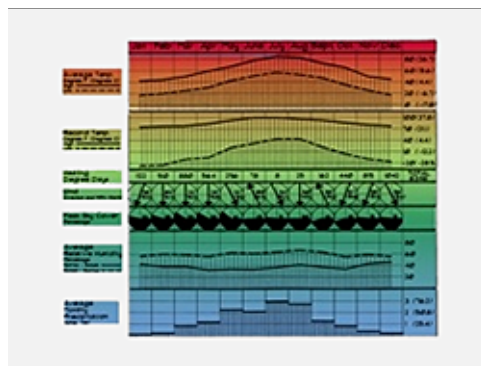
☐ Applicable ☒ N/A Large graphics do not apply

☒ Applicable ☐ N/A Select number of graphics / images (small: 250 px x 188 px) to insert 6

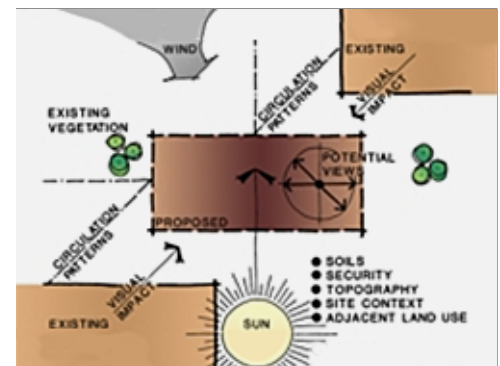
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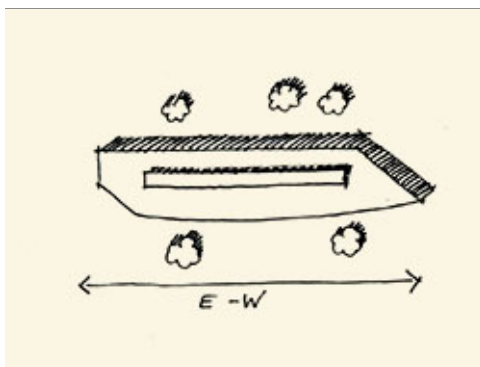
Local Solar Data



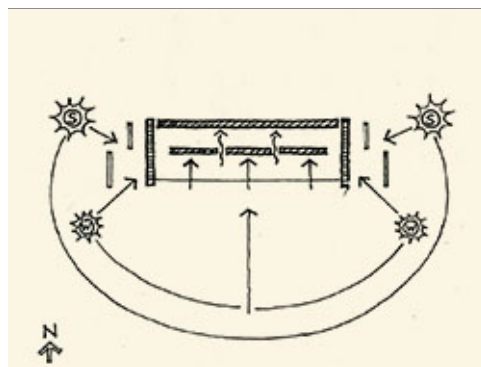
Local Climate Data



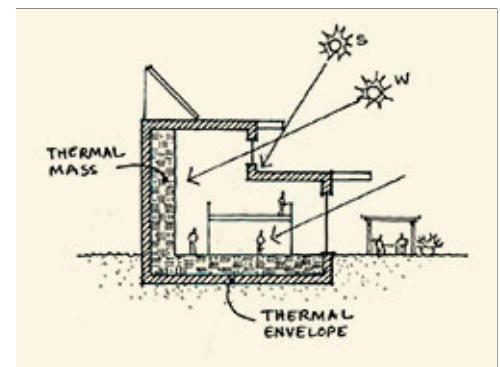
Site Data



East-West Axis



Optimum Solar Control



Maximized Southern Exposure

1. Ensure the site will accommodate optimum requirements for building orientation, which is with the long axis parallel to the east/west direction for rectilinear CONUS buildings.

2. Meet Installation Facilities Standards (IFS) requirements for locating the building's passive and renewable-energy systems—including geothermal and solar systems—and exterior shading systems.
3. Locate buildings and permitted ancillary structures to promote solar gain (winter), solar shading (summer), daylighting, natural ventilation, rainwater harvesting, wind buffering and other beneficial passive systems. Consider natural ventilation during the design of HVAC systems.
4. Limit the use of courtyards and restrict their use to Group 1 and 2 facilities. When provided, conform to the geometry of rectilinear narrow buildings developed along an east-west axis. Define space with a building's exterior wall and with supplementary screen walls matching facility materials and detailing. Locate these near the main entrance, align with view corridors, and provide appropriate landscaping, site furnishings and lighting.
5. At a minimum, a courtyard must have one trash receptacle, one bench, moveable or built-in planters, and one (1) picnic table with seating. Generally use concrete or brick paving at all courtyards following standards for plazas.
6. Consider relationships to adjacent sites and their facilities and infrastructure, and cost effectively integrate building systems to harvest heat, grey water or other beneficial byproducts.
7. Consider the "public side" of the building, its views and the location of the main entrance.

C02. UTILITIES

Comply with AF Corporate Standards for Site Development:

<http://afcs.wbdg.org/site-development/index.html>

Comply with AF Corporate Standards for Utilities:

<http://afcs.wbdg.org/site-development/utilities/index.html>

C02.1. Utility Components

☐ Applicable ☒ N/A Large graphics do not apply

☒ Applicable ☐ N/A Select number of graphics / images (small: 250 px x 188 px) to insert 6

Image Tool 250 x 188



Buried Utility Services



Screened Utility Component



Finishes to Compliment Wall



Painted Utility Components



Buried Utility Lines



Components Painted to Match Wall

1. Provide all on-site utility service lines below grade for Facility Group 1; when mounting elements (such as utility cabinets, communications equipment and water valves) above grade is unavoidable, paint these consistently and provide visual screening following Installation Facilities Standards (IFS).
2. Provide installation of utility infrastructure to support near term and future electric vehicle charging stations.
3. Define all service entry points into the building and route distribution below grade into an interior space within the facility; exposed conduits, cables and wires on exterior walls are not permitted for Facility Group 1.
4. Include consideration of appropriate placement of meters in support of Automated Revenue Management Services (ARMS).
5. Limit exterior mechanical distribution systems such as exterior steam, chilled water, and hot water distribution to Group 3 facilities; when required for Group 1 and 2 facilities integrate with the architecture and provide visual screens following IFS.
6. Direct roof drainage to bioswales or underground collection when feasible or provide splash blocks / paved channels to intercept roof drainage at grade.

C03. PARKING AREAS

Comply with AF Corporate Standards for Site Development:

<http://afcfs.wbdg.org/site-development/index.html>

Comply with AF Corporate Standards for Parking Areas:

<http://afcfs.wbdg.org/site-development/parking-areas/index.html>

C03.1. Configurations and Design

☐ Applicable ☒ N/A Large graphics do not apply

☒ Applicable ☐ N/A Select number of graphics / images (small: 250 px x 188 px) to insert 9

Image Tool 250 x 188



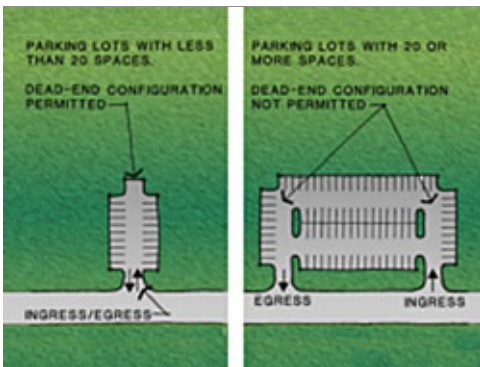
Appropriate Size and Configuration



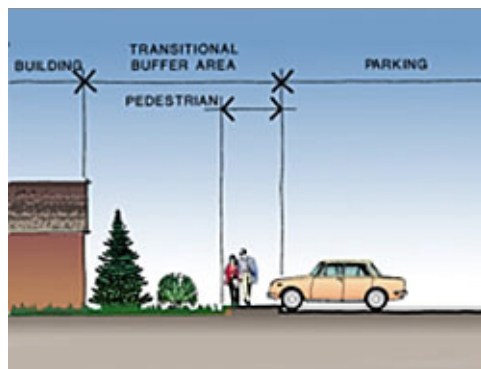
Adjacent Parking Area



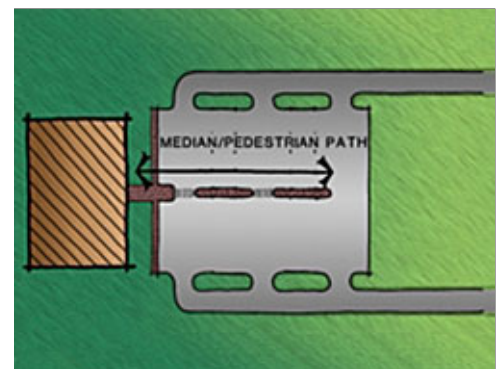
Residential Guest Parking



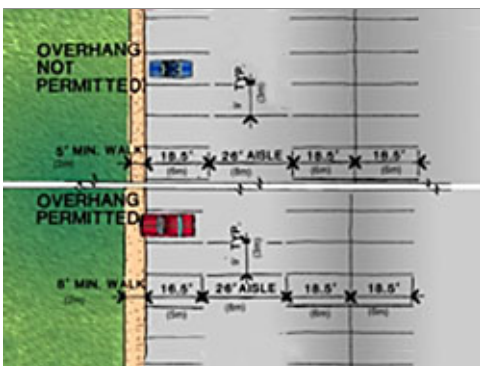
Internal Layout



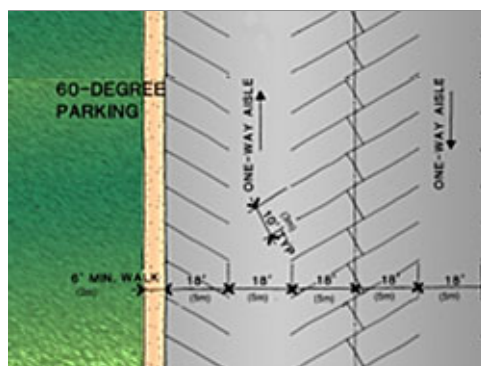
Appropriate Buffers



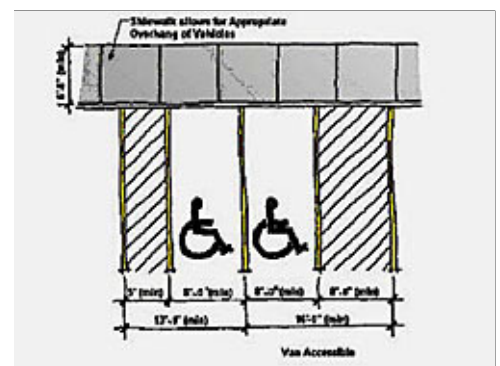
Defined Pedestrian Path



Preferred Geometry



Alternative Geometry



ADAG / ABA Parking

1. Evaluate adjacent sites and cost-effectively consolidate parking areas to maximize efficient use; ensure that all areas meet accessibility guidelines.
2. Parking lots should not be located within the setback portions of the streetscapes identified in B02. Street Envelope Standards. In the event that there are existing parking areas that did not comply with this requirement, or that it is infeasible for new designs to maintain this setback, additional requirements itemized in section C06.1.10 Parking Lot Landscaping will be in effect.

3. Generally, envision on-site parking as a series of small connected singular areas selectively placed around the facility served, rather than a single large area; buffer parking areas from the facility main entrance with a transition space and provide drop-offs to decrease close-in parking. Comply with IFS standards while meeting requirements.
4. Integrate at-grade and raised-profile curbing, permeable paved areas, and parking islands with the stormwater system and direct stormwater to bioswales and rain gardens as source water for regionally appropriate native vegetation. Configure curbing to facilitate snow removal. Ensure snow storage areas are coordinated with the stormwater plan.
5. Define pedestrian access with approved hardscape and provide shading along the primary path from the parking area to the building's main entrance of the building.
6. Coordinate suitable landscape or barriers integrated with walls and fences to ensure adequate force protection.
7. Accessible parking spaces will be marked according to UFC 3-120-01 and its references in the Architectural Barriers Act Accessibility Standard (ABAAS) and the Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD).
8. Consider locations and requirements of near term and future electric vehicle charging stations.
9. Designate preferred parking spaces for electric vehicles and carpools near the main entrance.
10. Consider cost-effectively integrating solar photovoltaic arrays into covered parking structures.
11. Reserved parking is discouraged except for Facility Group 1. Refer to AFMAN 31-116_21SWSUP 3 July 2018, Air Force Motor Vehicle Traffic Supervision for guidance.
12. On-street parking is discouraged except in multi-use areas. When used, provide approved on-street parking configurations following UFC 3-201-01, Civil Engineering.
13. Access and service drives should accommodate the largest vehicle serving the facility.

C03.1.1. Paving and Striping

☐ Applicable ☒ N/A Large graphics do not apply

☐ Applicable ☒ N/A Small graphics do not apply

Facility Group 1 paving materials shall be as follows.

Primary: Permeable Pavers
 Secondary: Permeable Asphalt
 Accent: Concrete Edging

Facility Group 2 paving materials shall be as follows.

Primary: Asphalt
 Secondary: Permeable Pavers
 Accent: Concrete Edging

Facility Group 3 paving materials shall be as follows.

Primary: Asphalt
 Secondary: Concrete where Operationally Required
 Accent: N/A

Facility Group 4 paving materials shall be as follows.

Primary: Asphalt
 Secondary: N/A
 Accent: N/A

1. All new parking lot stalls in Groups 1 and 2 will be constructed of permeable brick interlocking pavers. The brick pavers will be sized as nominal 5" x 10" pavers, installed in a Herringbone pattern. Color will be a grey tone pallet, with the darker

(Charcoal) as the field and the lighter (Antique Pewter) as the integral striping. Parking stalls and asphalt drive isles separated by a 6" wide by 12" deep concrete edge restraint. Refer to UFC 3-201-01 for permeable pavement criteria.

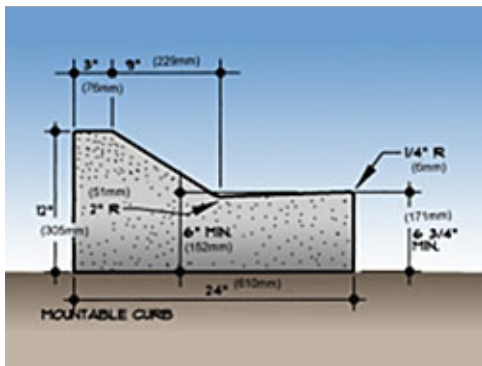
2. Porous paving may be considered on a case-by-case basis.
3. Cost-effectively provide light-colored concrete to reduce heat island effect; otherwise install bituminous pavement. Dirt, gravel, and grass lots are not allowed.
4. Use consistent striping, angles and stall sizes in all parking areas.
5. All parking will be marked with white stripes of paint or applied vinyl coatings on concrete or asphalt surfaces and white or light-colored paver between permeable paving parking stalls. Red or yellow markings will only be used for safety purposes and must be kept to a minimum. All lines will be four inches (4") wide.

C03.1.2. Curbing

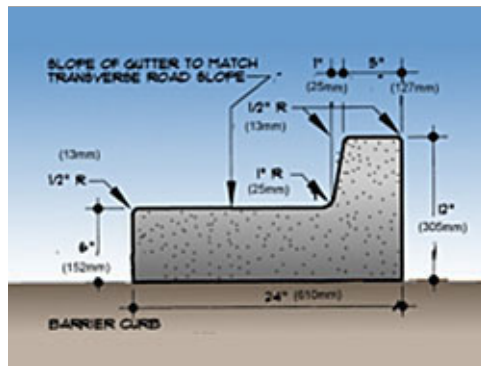
☐ Applicable ☒ N/A Large graphics do not apply

☒ Applicable ☐ N/A Select number of graphics / images (small: 250 px x 188 px) to insert 3

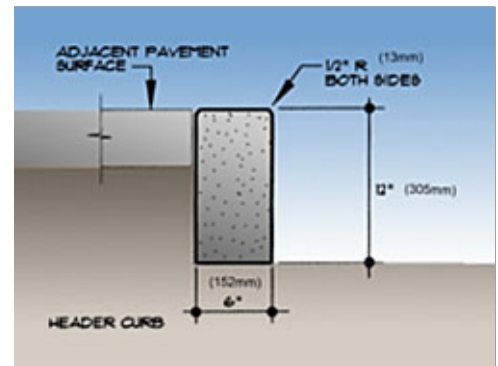
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Mountable



Barrier



Header

Facility Group 1 curbing / edging materials shall be as follows.

Primary: Concrete

Secondary: N/A

Accent: N/A

Facility Group 2 curbing / edging materials shall be as follows.

Primary: Concrete

Secondary: N/A

Accent: N/A

Facility Group 3 curbing / edging materials shall be as follows.

Primary: Concrete

Secondary: N/A

Accent: N/A

Facility Group 4 curbing / edging materials shall be as follows.

Primary: Concrete

Secondary: N/A

Accent: N/A

1. Define all parking lots with either raised-profile or at-grade curbing to promote drainage and protect paving edges. All raised curbs will be the rolled (mountable) type.

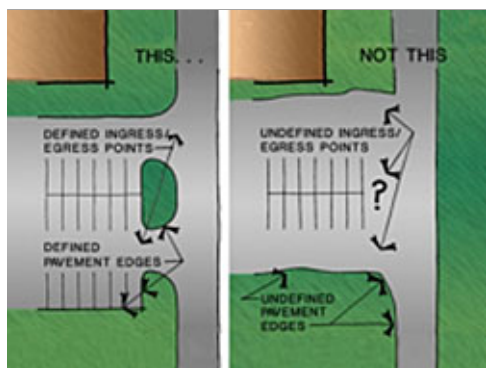
2. Integrate curbing to direct stormwater to bioswales and rain gardens as source water for regionally appropriate native vegetation.
3. Wheel stops are not permitted except at locations where car bumpers could contact adjacent items such as poles, signs or pedestrians.

C03.1.3. Internal Islands and Medians

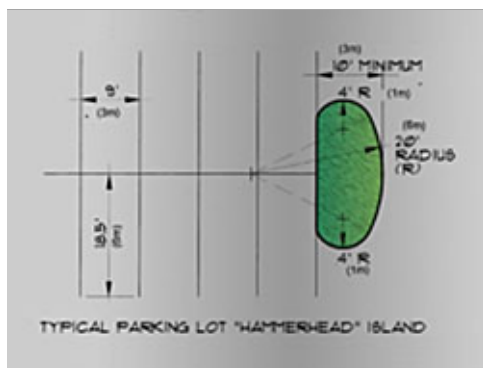
☐ Applicable ☒ N/A Large graphics do not apply

☒ Applicable ☐ N/A Select number of graphics / images (small: 250 px x 188 px) to insert 3

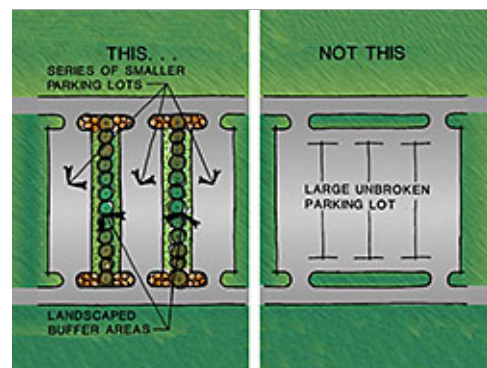
Image Tool 250 x 188



Defined Entrance



Internal Island



Internal Median

1. Install landscape islands and medians as visual breaks, to reduce heat island effects and to accommodate bioswales and rain gardens with consideration for snow storage and removal. Coordinate suitable landscape or barriers integrated with walls and fences to ensure adequate force protection.
2. Interior landscaped areas will be disbursed to define drive aisles and limit unbroken rows of parking to a maximum of 100 feet.
3. When lighting is necessary, contain fixture bases within medians or internal landscape islands.

C03.2. Parking Structures

☐ Applicable ☒ N/A Large graphics do not apply

☐ Applicable ☒ N/A Small graphics do not apply

1. Parking structures are encouraged in land-constrained locations when economically feasible.
2. Consider near- term and future electric vehicle charging stations and renewable energy generation development during the analysis and design.
3. Consider opportunities for integrating parking structures into multi-use developments with pedestrian-oriented uses located on the ground floor and parking on upper levels; ensure AT guidelines are fully addressed.
4. Structures may be constructed below grade with roofs serving as vegetated areas or plazas.

C03.3. Connectivity

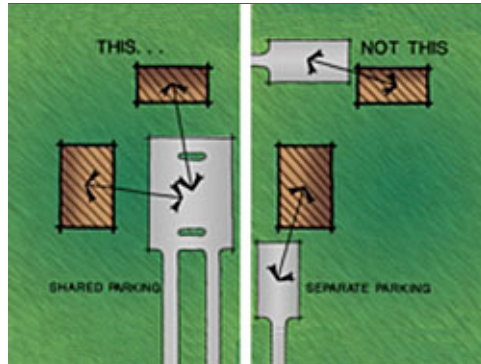
☐ Applicable ☒ N/A Large graphics do not apply

☒ Applicable ☐ N/A Select number of graphics / images (small: 250 px x 188 px) to insert 3

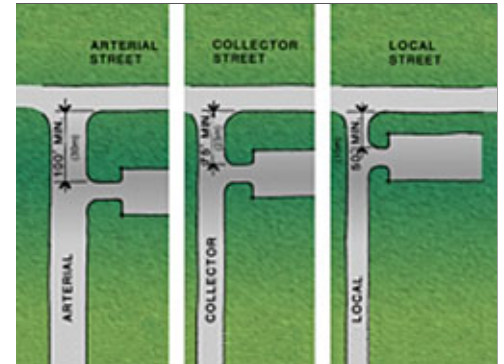
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Central Pedestrian Connection



Coordinated Arrangement



Appropriate Street Connectivity

1. Refer to the Installation Development Plan (IDP) for locations of transit stops and pedestrian and cycling networks; provide appropriately sized sidewalks and bike paths to connect facilities and users to these networks.
2. Provide amenities such as rain and shade shelters, trees, and benches to encourage and facilitate use of public transportation.
3. Evaluate the IDP for the current and planned network of roads and optimally develop vehicular access to and from the site.

C04. STORMWATER MANAGEMENT

Comply with AF Corporate Standards for Site Development:

<http://afcs.wbdg.org/site-development/index.html>

Comply with AF Corporate Standards for Stormwater Management:

<http://afcs.wbdg.org/site-development/stormwater-management/index.html>

C04.1. Stormwater Requirements

☐ Applicable ☒ N/A Large graphics do not apply

☒ Applicable ☐ N/A Select number of graphics / images (small: 250 px x 188 px) to insert 6

Image Tool 250 x 188



Integrated Landscape



Roadway Landscaping



Roof Rainwater Surface Collection



Roof Rainwater Subsurface Collection



Trench Drain



Surface Swale with Rock Mulch

1. Design all stormwater systems including retention ponds, detention areas, channels, etc. as on-site amenities that are consistent with natural systems and drainage patterns, that help sustain the base landscape with beneficial functionality and that provide aesthetic appeal, coordinate with the base Stormwater Management Plan.
2. Incorporate bioswales into the design of all roadways, parking and facility roof systems to enhance water quality and support the overall stormwater system.
3. Permeable paving may be used in areas that are not subjected to severe freeze-thaw cycles.
4. Provide rainwater harvesting and storage that is attached to the building's roof drain systems to support grey water irrigation; consider freeze protection for winter months.
5. When underground drainage systems are required establish a maintenance program to include removal of sediments and debris; inspect joints seasonally for alignment to prevent leakage and the development of voids and surface failures.
6. Cost-effectively integrate stormwater systems with AT measures.

C05. SIDEWALKS, BIKEWAYS AND TRAILS

Comply with AF Corporate Standards for Site Development:

<http://afcs.wbdg.org/site-development/index.html>

C05.1. Circulation and Paving

☐ Applicable ☒ N/A Large graphics do not apply

☒ Applicable ☐ N/A Select number of graphics / images (small: 250 px x 188 px) to insert 6

Image Tool 250 x 188



Efficient Geometry



Axial Approach to Facility



Trail Surface



Alignment of Architectural Feature



Detached Sidewalk at Street



Functionally Required Width

Facility Group 1 sidewalks, plazas, and courtyards paving materials shall be as follows.

Primary: Concrete Paving and Edging

Secondary: Permeable Pavers

Accent: Colored Concrete (Optional)

Facility Group 2 sidewalks, plazas, and courtyards paving materials shall be as follows.

Primary: Concrete Paving and Edging

Secondary: Permeable Pavers

Accent: Colored Concrete (Optional)

Facility Group 3 sidewalks, plazas, and courtyards paving materials shall be as follows.

Primary: Concrete Paving

Secondary: N/A

Accent: N/A

Facility Group 4 sidewalks, plazas, and courtyards paving materials shall be as follows.

Primary: Concrete Paving

Secondary: N/A

Accent: N/A

1. Maintain efficient geometry and accessibility to connect building entrances to adjacent parking areas and activity areas and to the base transportation system following AT. Efficiently use materials to optimize life-cycle costs and to minimize maintenance.
2. Generally, conform horizontal layouts of sidewalks to the geometric configuration of adjacent buildings, streets, parking lots, and other adjacent related site amenities. Occasional meanders and/or jogs may be included to capture views, to coordinate with landscaping or accommodate site constraints.
3. Walks in parking areas will provide a direct path using "safe islands" and "peninsulas" to encourage safety. Walks parallel to streets will follow streetscape guidelines. Clearly mark pedestrian crossings at vehicular routes.
4. Mitigate heat island effect by providing high-albedo, shaded sidewalks. Pervious pavers will be used on all sidewalks, plazas and courtyards in Facility Groups 1 and 2; use pervious concrete in Groups 3 and 4. The designer will incorporate appropriate expansion and construction joints.
5. Only experienced contractors will install pervious pavements.
6. Consider an integrated approach that could include stormwater management (permeable surfaces) and complement the design of the storm drainage system when appropriate.
7. Pedestrian paths should be at least 5' in width to allow for comfortable side-by-side walking.
8. Sidewalks leading to a building main entrance and at the interior of parking lots will be a minimum width of 6'. Walks greater than 10' wide may be used at high-density pedestrian areas where volumes of traffic justify added material.
9. Where vehicles park adjacent and head-in to the sidewalk and wheel stops are not used, such perimeter walks will be increased to a minimum width of 8' to accommodate overhangs of the parked vehicles.
10. All sidewalks will have positive drainage to prevent ponding of water with slopes ranging from 2.1% to 4.2%. Walks with a slope greater than 4.2% will be designed as ramps following accessibility guidelines. All walks will have a minimum cross slope of 2.1%.
11. Pavers will conform to the following range of color: beiges, tans, browns, or terra cotta. Pavers used on walks will typically be 4"x 8" in size.
12. Connect to the bicycle circulation system and provide bicycle parking with a suitable means for securing bicycles following IFS. Consider changing/shower facilities for use by cyclists.
13. Refer to the Installation Development Plan (IDP) for future trails, bicycle paths, and sidewalks.

C05.1.1. Ramps and Stairs

☐ Applicable ☒ N/A Large graphics do not apply

☐ Applicable ☒ N/A Small graphics do not apply

1. Use ramps instead of stairs for sidewalks, bikeways and trails and at all buildings where possible. Where steps are unavoidable, follow UFC 1-200-01 and its references to the International Building Code.

C05.1.2. Lighting

☐ Applicable ☒ N/A Large graphics do not apply

☐ Applicable ☒ N/A Small graphics do not apply

1. Provide lighting for all stairs and landings where traffic warrants.
2. Refer to the Lighting section for path lighting along sidewalks, bikeways and trails.

C06. LANDSCAPE

Comply with AF Corporate Standards for Site Development:
<http://afcfs.wbdg.org/site-development/index.html>

Comply with AF Corporate Standards for Landscape:
<http://afcfs.wbdg.org/site-development/landscape/index.html>

C06.1. Climate-based Materials

☐ Applicable ☒ N/A

Large graphics do not apply

☒ Applicable ☐ N/A

Select number of graphics / images (small: 250 px x 188 px) to insert 3

Image Tool 250 x 188



Group 1 Facility Arrangement



Adaptable Plant Species



Rock Mulch and Planting

1. Use native or regionally adaptable, non-invasive, drought tolerant plant species (including grasses) appropriate for the locale to promote energy efficiency and water conservation, preserve drainage patterns, inhibit erosion, improve air quality, lower maintenance, and add beauty.

C06.1.1. Landscape Design Concept

☐ Applicable ☒ N/A

Large graphics do not apply

☒ Applicable ☐ N/A

Select number of graphics / images (small: 250 px x 188 px) to insert 3

Image Tool 250 x 188



Integral Force Protection Measures



Preserved Native Grasses



Internal Facility Landscaping

1. Develop, maintain and implement a climate-based plant list with landscape features using a regionally appropriate palette of materials to promote energy efficiency, preserve drainage patterns, inhibit erosion, improve air quality, lower

maintenance and add beauty. Comply with criteria under "Appendix A Best Practices, A.7 Planting Design" in UFC 3-201-02.

2. Comply with Tree Care Industry Association, Inc. American National Standard for Tree Care Operations, ANSI A300 (Parts 1-10) for planting, transplanting, and maintenance standard specification and detail development. Maintenance contractors and personnel must demonstrate understanding of these requirements and compliance.
3. Landscaping is required for all newly developed sites and facilities; preserve existing native landscape where possible and avoid overplanting.
4. Provide facility landscaping acceptable for the facility group number.
 - a. Group 1: Concentrate landscaping along major thoroughfares and integrate these landscaped areas into the base's stormwater management plan. Refer to the Streetscape Envelope Standards in this IFS (B02.).
 - b. Group 1: For all buildings, provide a minimum of four (4) trees and eight (8) shrubs for every five thousand (5,000) square feet, and fractions thereof, of gross building area contained in the building. A minimum of one-half (1/2) of the shrubs must be evergreen. These trees and shrubs should be located within seventy-five feet (75') of the exterior walls of the building in question.
 - c. Group 1 and 4: Sites will be landscaped at their entire perimeter; limit formal planting arrangements to formal spaces typically associated with Group 1. Landscape public spaces near the main entrances of Group 1 facilities.
 - d. Group 2 and 3: Sites may have a native undisturbed landscape except at the main entrances of Group 2, which should be newly landscaped.
 - e. Group 2: For all buildings, provide a minimum of two (2) trees and four (4) shrubs for every five thousand (5,000) square feet, and fractions thereof, of gross building area contained in the building. A minimum of one-half (1/2) of the required shrubs must be evergreen. These trees and shrubs should be located within seventy-five feet (75') of the exterior walls of the building in question.
 - f. Group 3: For all buildings, provide a minimum of one (1) tree and two (2) shrubs for every five thousand (5,000) square feet, and fractions thereof, of gross building area contained in the building. A minimum of one-half (1/2) of the required shrubs must be evergreen. These trees and shrubs should be located within seventy-five feet (75') of the exterior wall containing the main entrance of the building in question.
5. Facility plantings will follow the Installation Facilities Standards (IFS) plant list, which is based on the specific microclimates created by the adjacent building: shadow areas, protected areas, zones adjacent to thermal mass, and availability of rainwater and/or grey water.
6. Provide open spaces as transitions between developed and native areas that promote quality of life and provide visual relief and allow walkable connections to the transportation system.
7. Return suitable areas to a natural state to minimize and, whenever possible, eliminate ground maintenance requirements; expand prairie areas where appropriate with native plants to eliminate mowing and maintenance requirements.
8. In tree clusters replace grass with naturalized shrub beds and leaf litter mulch to eliminate mowing requirements.
9. Use plantings in open spaces to reinforce the space as a visual asset.
10. Consider landscape windbreaks when suitable for the local climate.
11. Integrate security requirements into the landscape design. Coordinate the heights of trees and shrubs and note restrictions for plantings following UFC 4-010-01.
12. Berms may be used as an integral part of the overall landscape strategy for screening, security and/or visual interest.

C06.1.2. Xeriscape Design Principles

☐ Applicable ☒ N/A Large graphics do not apply

☒ Applicable ☐ N/A Select number of graphics / images (small: 250 px x 188 px) to insert 3

Image Tool 250 x 188



Streetscape Adjacent to Facility Group 1



Sustainable Planting Principles



Native Species

1. Apply sustainable principles following UFC 3-201-02, Appendix B, and Air Force Corporate Facilities Standards.
2. Facility plantings are encouraged to use native plant species and to consider specific microclimates created by the adjacent building: shadow areas, protected areas, zones adjacent to thermal mass, and availability of rainwater and/or grey water.
3. Analyze soils and provide organic amendments as needed to improve plant growth and conserve water.
4. Note that in the Peterson prairie environment that plant establishment takes two to three years for a 2.5" caliper deciduous tree.

C06.1.3. Minimizing Water Requirements

☐ Applicable ☒ N/A Large graphics do not apply

☒ Applicable ☐ N/A Select number of graphics / images (small: 250 px x 188 px) to insert 3

Image Tool 250 x 188



Reduced Water Demand



Native Materials



Use of Drought Tolerant Native Grasses

1. Reasonably reduce demand on potable water while seeking opportunities to increase alternative water sources for irrigation. Reduce or eliminate the use of potable/domestic water for purposes of landscape architecture maintenance, consistent with existing legal or contractual obligations, and prohibit potable-water irrigation in new construction beyond establishment following current DoD and Air Force policy.

C06.1.4. Plant Material Selection

☐ Applicable ☒ N/A Large graphics do not apply

☐ Applicable ☒ N/A Small graphics do not apply

1. Base plant quality on details and specifications of the American Standard for Nursery Stock (ANSI Z60.1), current edition.
2. Use only native or regionally adapted plant materials including grasses or turf suited for the local climatic conditions in the landscape design; potable-water irrigation systems are discouraged beyond the establishment period.
3. New facilities are encouraged to use native or regionally adapted plant species as indicated on the plant lists available from the Base Civil Engineer.
4. Trees should be the focus of landscape plantings and, where possible, should be a mix of deciduous and evergreen species for variety; provide tree grates when appropriate and use tree guards on smaller trees.
5. Ground covers are only recommended when minimal maintenance is required.
6. Turf areas should be limited to those that can be sustained by natural rainfall or grey water (non-potable) irrigation systems; turf may be defined by at-grade concrete mow strips to lessen maintenance.
7. All plant material will have one-year warranty and is subject to approval by the Base Landscape Architect.

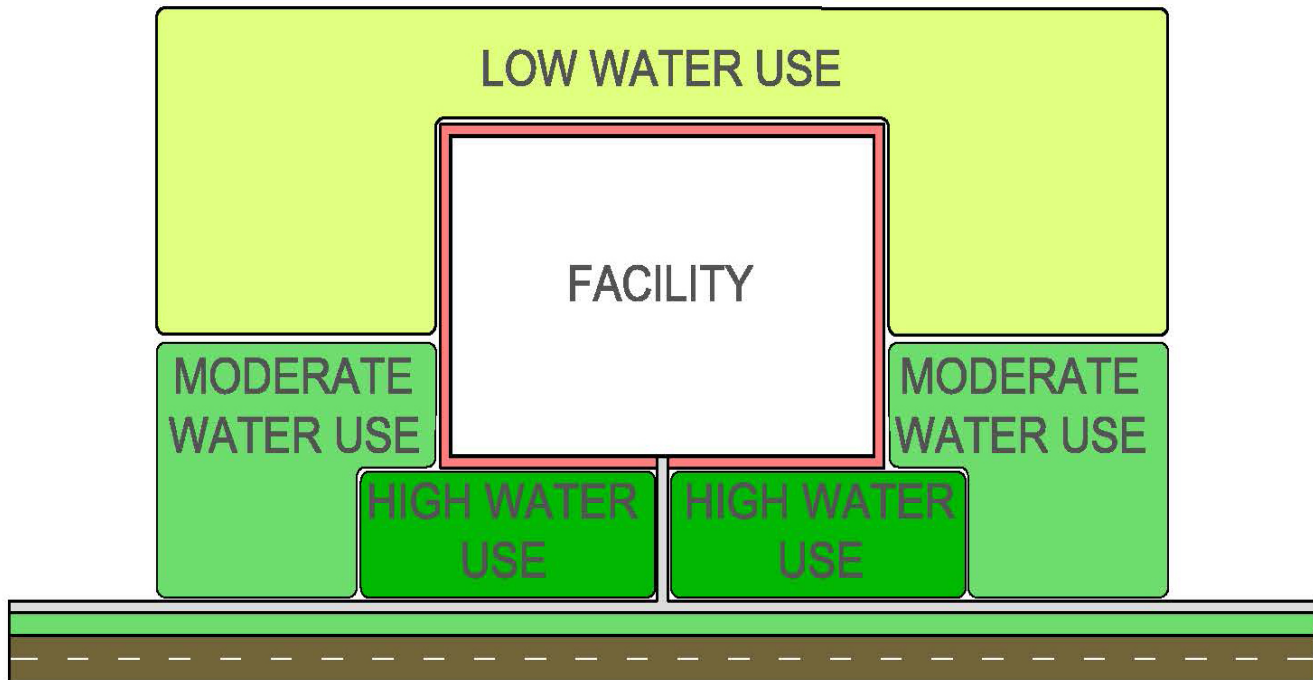
C06.1.5. Water Budgeting (Hydrozones)

☒ Applicable ☐ N/A Select number of graphics / images (large: 800 px x 440 px) to insert 1

Image Tool 800 x 440

☒ Applicable ☐ N/A Select number of graphics / images (small: 250 px x 188 px) to insert 3

Image Tool 250 x 188



Basic Hydrozones Concept Example



Hydrozones along Peterson Boulevard



Drip Irrigation



Coordinated Colors for Valve Boxes

1. Comply with DoD and Air Force policy on potable-water irrigation systems.
2. Provide irrigation systems in new construction to establish plant materials following "Water for Landscaping" in UFC 1-200-02. Note the climate zone and annual rainfall for the locale.
3. New buildings will cost-effectively integrate a grey-water reclamation system following UFC 1-200-02, which provides source water for an automatic drip irrigation system; connect adaptive plantings adjacent to facilities to a grey-water irrigation system when available and discontinue the use of potable water for irrigation after the establishment period.

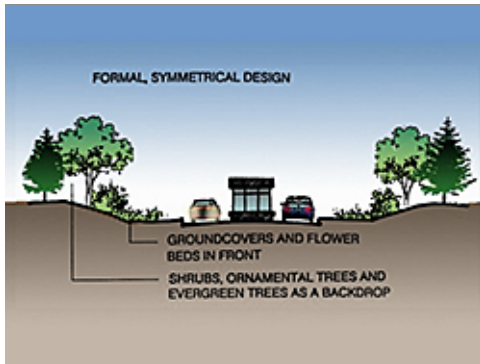
4. Provide irrigation design following UFC 3-201-02. Install drip irrigation products and components following UFGS Section 32 84 24 Irrigation Sprinkler Systems. Automatic drain valves are not permitted. Match the color of valve box lids to the adjacent ground treatment (i.e., green at turf & native seed areas, brown at wood mulch & rock areas).
5. Use life cycle cost-effective irrigation system equipment to sense soil moisture, rainfall and wind to minimize unnecessary watering; incorporate drip irrigation systems as the primary source.

C06.1.6. Base Entrance Landscaping

☐ Applicable ☒ N/A Large graphics do not apply

☒ Applicable ☐ N/A Select number of graphics / images (small: 250 px x 188 px) to insert 1

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Main Gate Planting

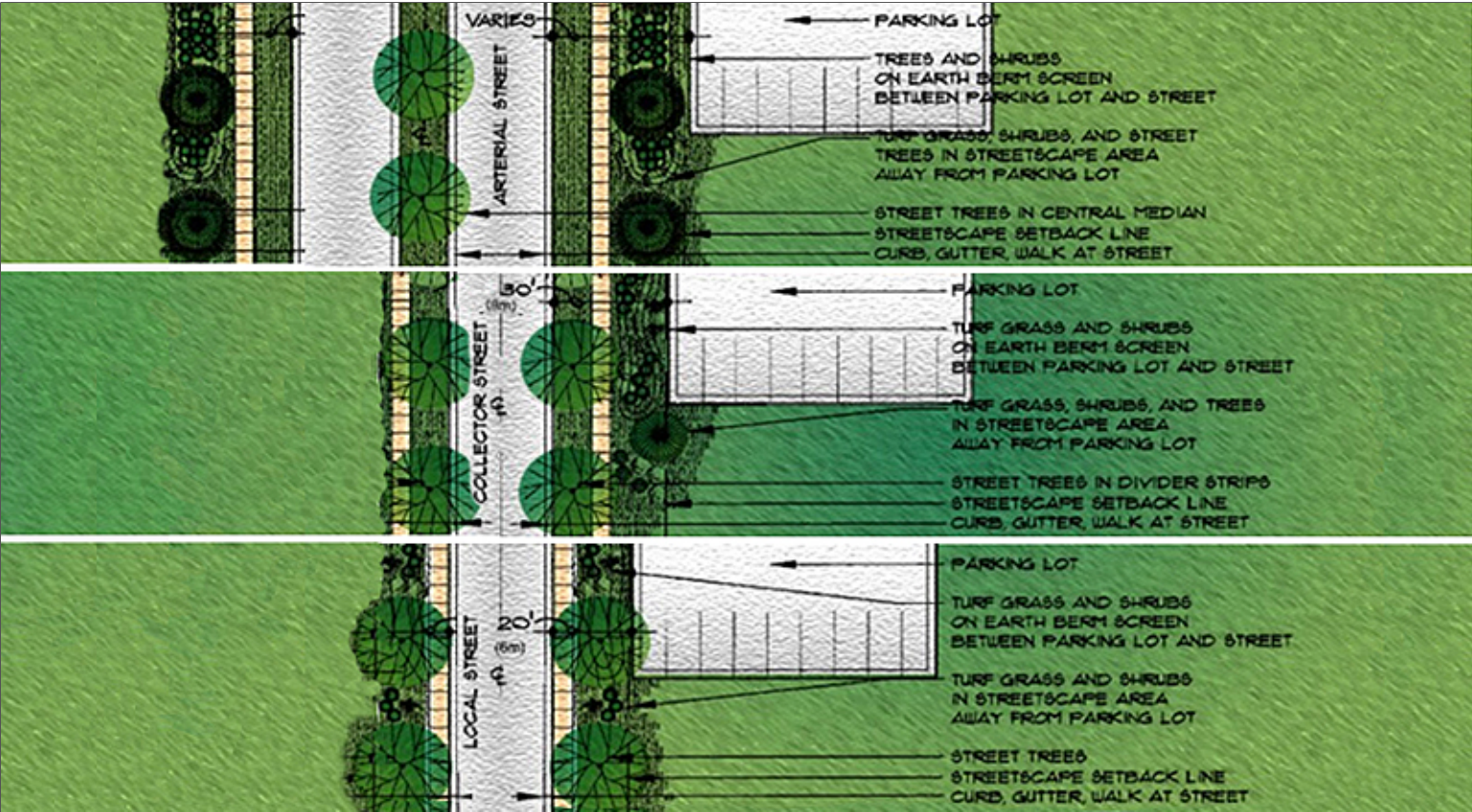
1. At the main gate, reinforce a sense of arrival through a well-designed concentration of landscape elements consistent in visual quality with Facility Group 1.
2. Ensure landscaping has seasonal features with spring and fall color and a combination of evergreen and deciduous trees and shrubs for winter interest.
3. Integrate base signs and street and pedestrian lighting whenever feasible.

C06.1.7. Streetscape Landscaping

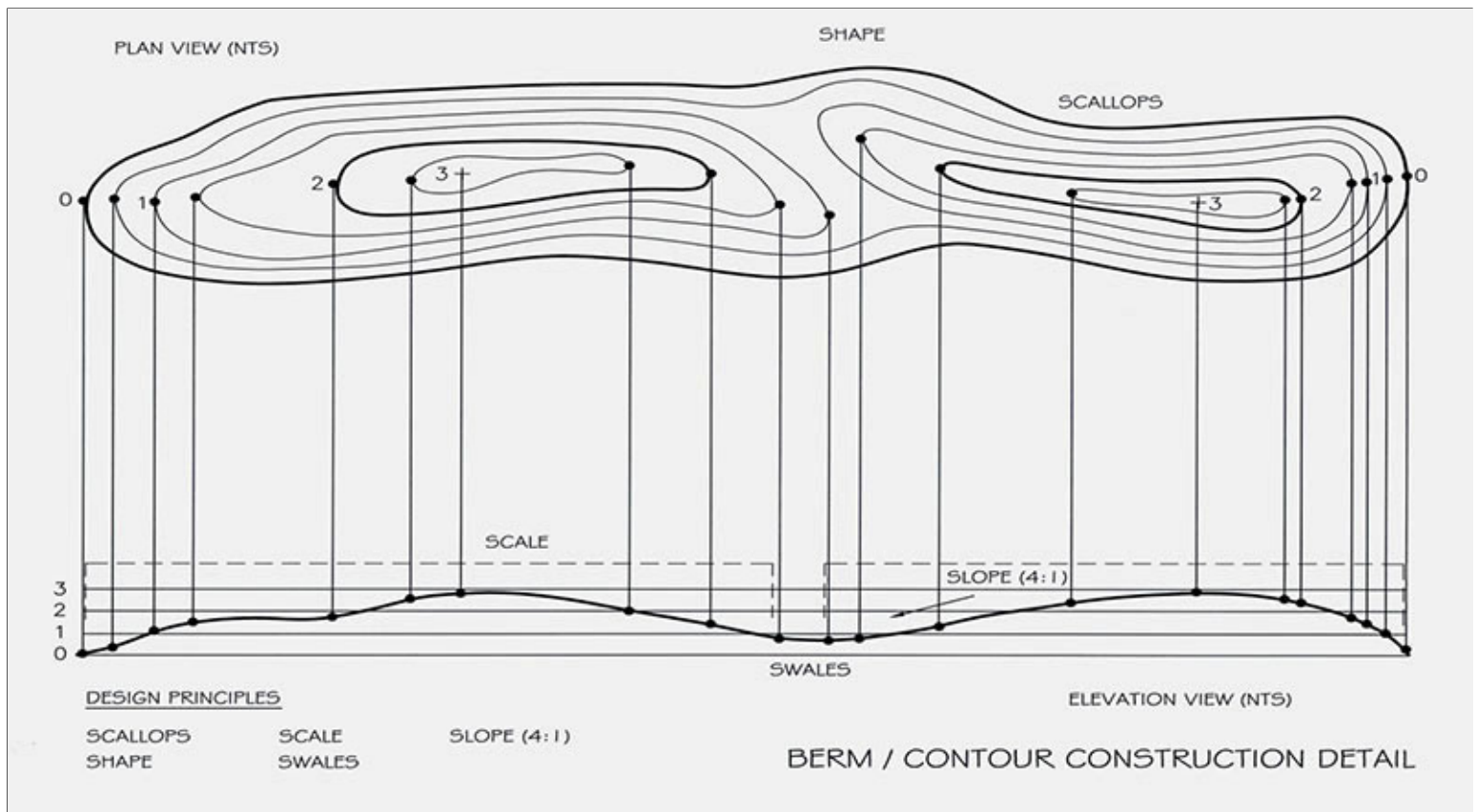
☒ Applicable ☐ N/A Select number of graphics / images (large: 800 px x 440 px) to insert 3

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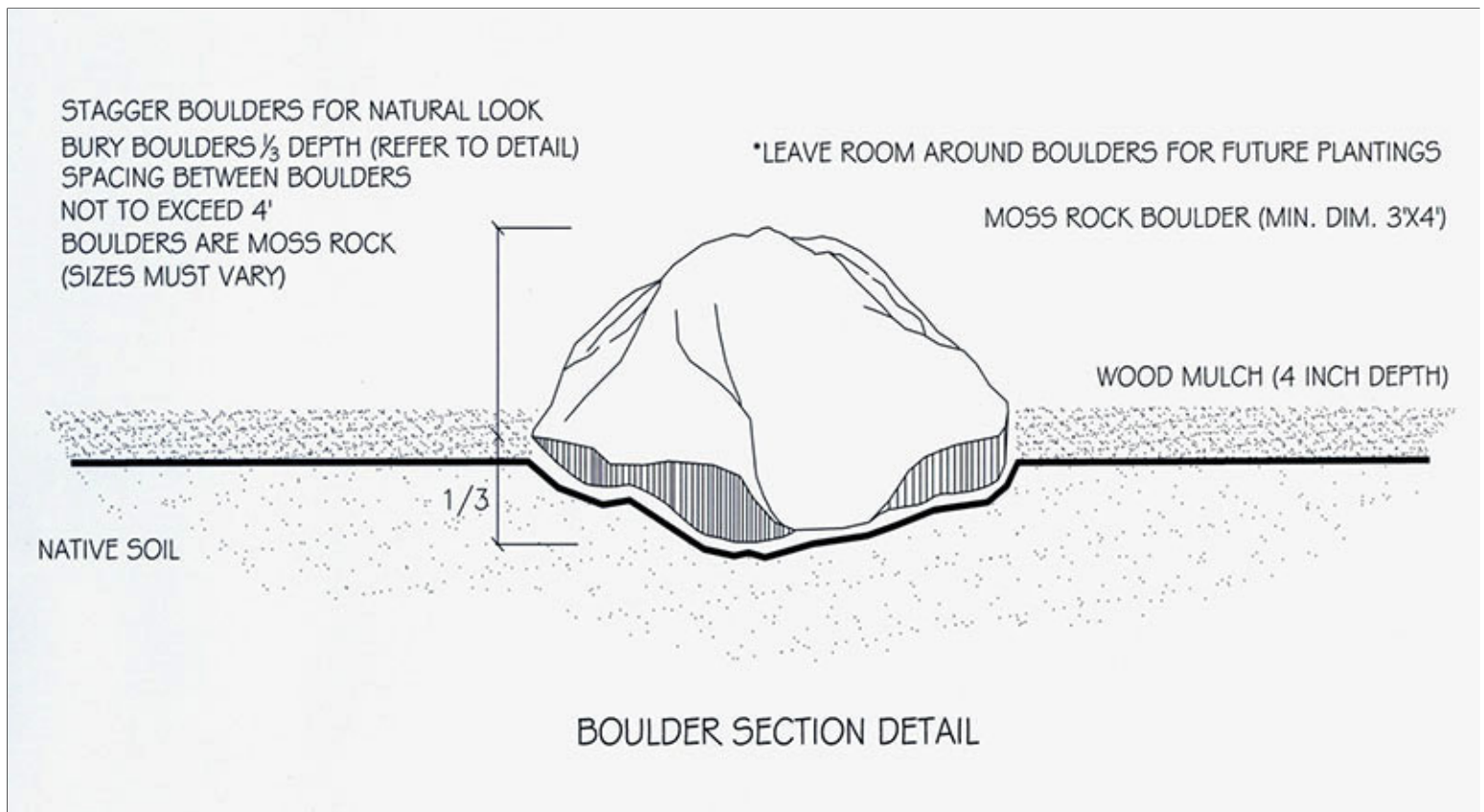
☐ Applicable ☒ N/A Small graphics do not apply



Landscaping Application Based on Facility Group Number for Each Type of Street



Appropriately Designed Landscape Berm



Appropriately Placed Accent Boulder

1. Provide landscape designs with plant materials appropriately representing the level of quality of the adjacent Facility Group number. Refer to the Installation Elements section.

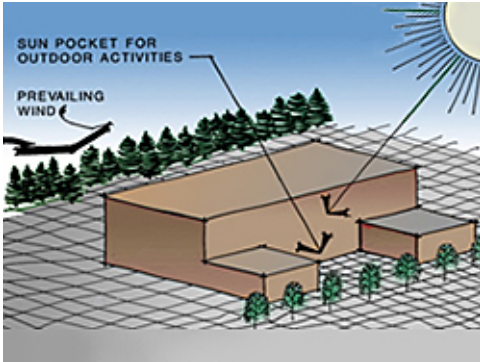
2. Select a variety of regionally appropriate streetscape plantings and grading to create a visual interest.
3. Arterial streetscapes will incorporate a central median, pedestrian walks, and landscaped areas (Refer to B02.1.1. Arterial Streets).
 - a. The arterial streetscape setback will be 35' from back of curb or as defined by the Peterson Blvd Open Space Preserve.
 - b. For arterial streets, in the areas on each side of the street, between the sidewalks and the preserve/ setback lines, the following plants will be provided: a minimum of two (2) evergreen trees, two (2) deciduous trees, four (4) evergreen shrubs, and four (4) deciduous shrubs, for every one hundred feet (100'), and fraction thereof. These plants will be placed in informal groups and in berms which are placed close to the preserve/setback lines and away from the street-side trees. This requirement can also be used to help meet any parking lot buffer requirements.
4. Collector streetscapes will incorporate the street, pedestrian paths, and landscaped areas as shown in B02.1.2. Collector Streets.
 - a. The collector streetscape setback is 30' from the back of curb.
 - b. Along both sides of the collector street, provide a single row of deciduous shade/street trees, spaced thirty-five feet (35') on center. Streets near and adjacent to the flight line and runways will use varieties that adhere to installation's BASH Guidelines. These trees should provide regularity to the streetscape in a loosely rhythmic, informal pattern. These trees will be located in the divider strips or on the backside of the sidewalks if divider strip is too small or non-existent.
 - c. In the setback areas on each side of the collector street, between the sidewalks and the setback lines, the following plants will be provided: a minimum of one (1) evergreen tree, one (1) ornamental tree, two (2) evergreen shrubs, and two (2) deciduous shrubs, for every two hundred feet (200'), and fraction thereof, of streetscape length measured parallel to the collector street. These plants will be placed in informal groups and berms which are placed close to the streetscape setback lines and away from the street-side trees and walks. This requirement can also be used to help meet any parking lot buffer requirements.
5. Local streetscapes will incorporate a local street, pedestrian paths, and landscaped areas as shown B02.1.3. Local Streets.
 - a. The local streetscape setback is 20' from the back of curb.
 - b. Along both sides of the local street, provide a single row of deciduous shade/street trees, spaced fifty feet (50') on center. The trees should produce an informal visual effect along the street. These trees will be located between the sidewalk and the streetscape setback line as shown in the street envelope graphic.

C06.1.8. Pedestrian Circulation Landscaping

☐ Applicable ☒ N/A Large graphics do not apply

☒ Applicable ☐ N/A Select number of graphics / images (small: 250 px x 188 px) to insert 3

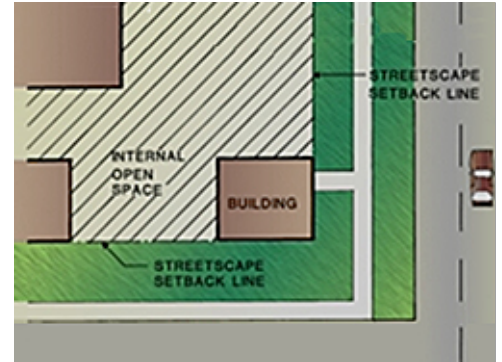
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Wind Buffers and Shading



Reinforcing Human Scale



Appropriate Landscape Setbacks

1. Define walkways with landscaping where appropriate. Refer to Pedestrian and Bicycle Circulation Study (2002).
2. Provide rest areas along the pedestrian circulation network with human-scaled deciduous shade trees. Supplement tree plantings with finely textured shrubs when appropriate for the climate.
3. Provide wind breaks where required.

C06.1.9. Parking Lot Landscaping

☐ Applicable ☒ N/A Large graphics do not apply

☒ Applicable ☐ N/A Select number of graphics / images (small: 250 px x 188 px) to insert 3

Image Tool 250 x 188



Coordinated Tree Plantings



Rain Gardens/Island



Step outs

1. Integrate appropriate landscaping elements into parking areas to visually soften the appearance at a minimum rate of five percent of the total area for medium sized lots (greater than 5,200 square feet but less than 20,000 square feet, and a minimum of eight percent of total area for large lots (exceeding 20,000 square feet).
2. Parking lots that are less than 5,250 square feet (15 cars at 350 square feet per car) will not be required to provide any landscaped areas within the lot itself.

3. Avoid trees that drop sap, fruit, or seeds, and use long-lived species; keep trees trimmed, removing dead and dying trees or branches.
4. Provide planting in islands within parking lots for shade and appeal following IFS and the base stormwater management plan.
5. Rain garden islands will be landscaped to receive snowmelt and rainwater runoff from adjacent impervious parking areas to be absorbed into the ground/planting bed. Native plants and groundcovers are recommended within the rain garden areas, which can survive inundation and without supplemental irrigation once established.
6. Parking lot screening requirements vary depending on the classification of the adjacent street and any encroachment within the setback portion of the streetscape.
7. The entire affected street frontage adjacent to arterial streets must have the required screening. At least 50% of that screening must be made up of plant materials and no more than 50% may be accomplished by the use of berming.
8. A minimum of two-thirds (2/3) of the affected collector street frontage must have the required screening. At least 75% of the screening must be accomplished with plant materials and no more than 25% may be accomplished by the use of berming.
9. A minimum of one-half (50%) of the affected local street frontage must have the required screening. Screening should be provided by using plant materials rather than berms.
10. If there is an encroachment within the setback area, screening along the street frontage will be made up of a solid screen/retaining wall, berming, and shrubbery.
11. Solid screen walls along street frontages must be at least four feet (4') high and will be constructed using the predominant building materials of the character area.
12. Berming should cover at least three feet (3') of the street frontage solid screen wall and is intended to be gradual with slopes not exceeding 3:1.
13. Shrubby located along the edge of the street frontage solid screen wall should be provided for additional softening and screening. Provide 1 shrub per 5 lineal feet of frontage. Shrubby should be laid out in groupings or masses at the perimeter of the lot area. Shrubby should not necessarily be evenly spaced or distributed along this edge. At least 60% of these plant materials must be evergreen.
14. Open parking spaces (except in family housing areas) must be screened from view from adjacent buildings and site areas to an eventual minimum height of 3' (three feet) by the use of berms and/or plantings.
15. A minimum of 50% of the affected parking lot perimeter must have the required screen. At least 35% of the screening plant materials must be evergreen.
16. When a parking lot perimeter abuts a family housing or dormitory area the entire affected perimeter must have the required screening. In addition to the required screening, one canopy tree per 40 lineal feet of perimeter will be provided to help screen parked cars from first and second story windows as well as from exterior yard areas.
17. Integrate appropriate landscaping elements into parking areas to visually soften the appearance at a minimum rate of five percent of the total area for medium sized lots (greater than 5,200 square feet but less than 20,000 square feet, and a minimum of eight percent of total area for large lots (exceeding 20,000 square feet).
18. Parking lots that are less than 5,250 square feet (15 cars at 350 square feet per car) will not be required to provide any landscaped areas within the lot itself.
19. One tree of a type suitable for parking lots will be provided for every ten (10) open vehicular parking stalls in parking lots with fifteen (15) or more stalls. The required trees may be clustered but should be located to divide and break up expanses of paving and long rows of parking stalls and to create a canopy effect in the parking lot.

20. In order to be considered within the parking lot, the trees must be located in planters that are bounded on at least two (2) sides by parking lot paving.

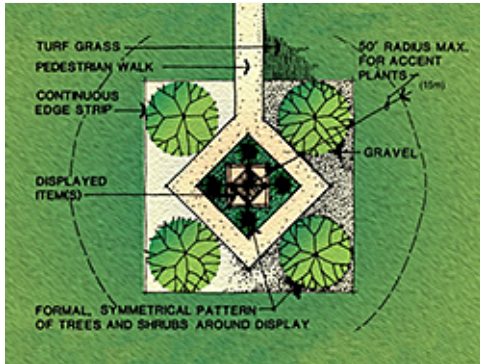
21. Interior landscaped areas should be disbursed to define drive aisles and limit unbroken rows of parking to a maximum of 100 feet.

C06.1.10. Screen/Accent Landscaping

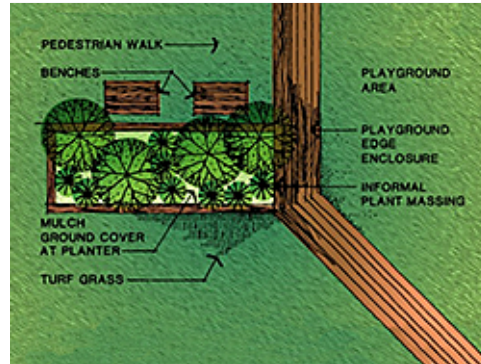
☐ Applicable ☒ N/A Large graphics do not apply

☒ Applicable ☐ N/A Select number of graphics / images (small: 250 px x 188 px) to insert 3

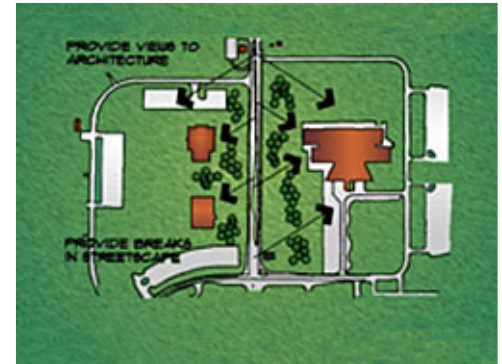
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Formal Arrangement



Informal Planting



Preserved and Defined Views

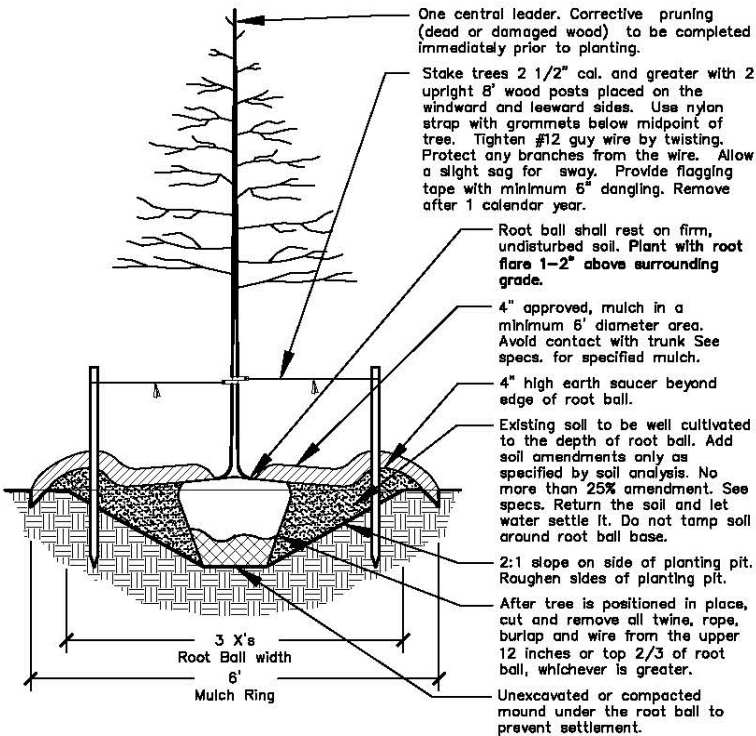
1. Provide complimentary accent landscaping at monuments and static displays.
2. At Facility Group 1, provide landscaping adjacent to all freestanding signs without distracting from the written communication.
3. Provide landscape screening of utility elements adjacent to Facility Group 1.
4. Providing landscaping as visual screening is preferred to the construction of walls and fences; berms and mounding may supplement landscape screening.

C06.1.11. Other

☒ Applicable ☐ N/A Select number of graphics / images (large: 800 px x 440 px) to insert 5

Image Tool 800 x 440

☐ Applicable ☒ N/A Small graphics do not apply



NOTES:

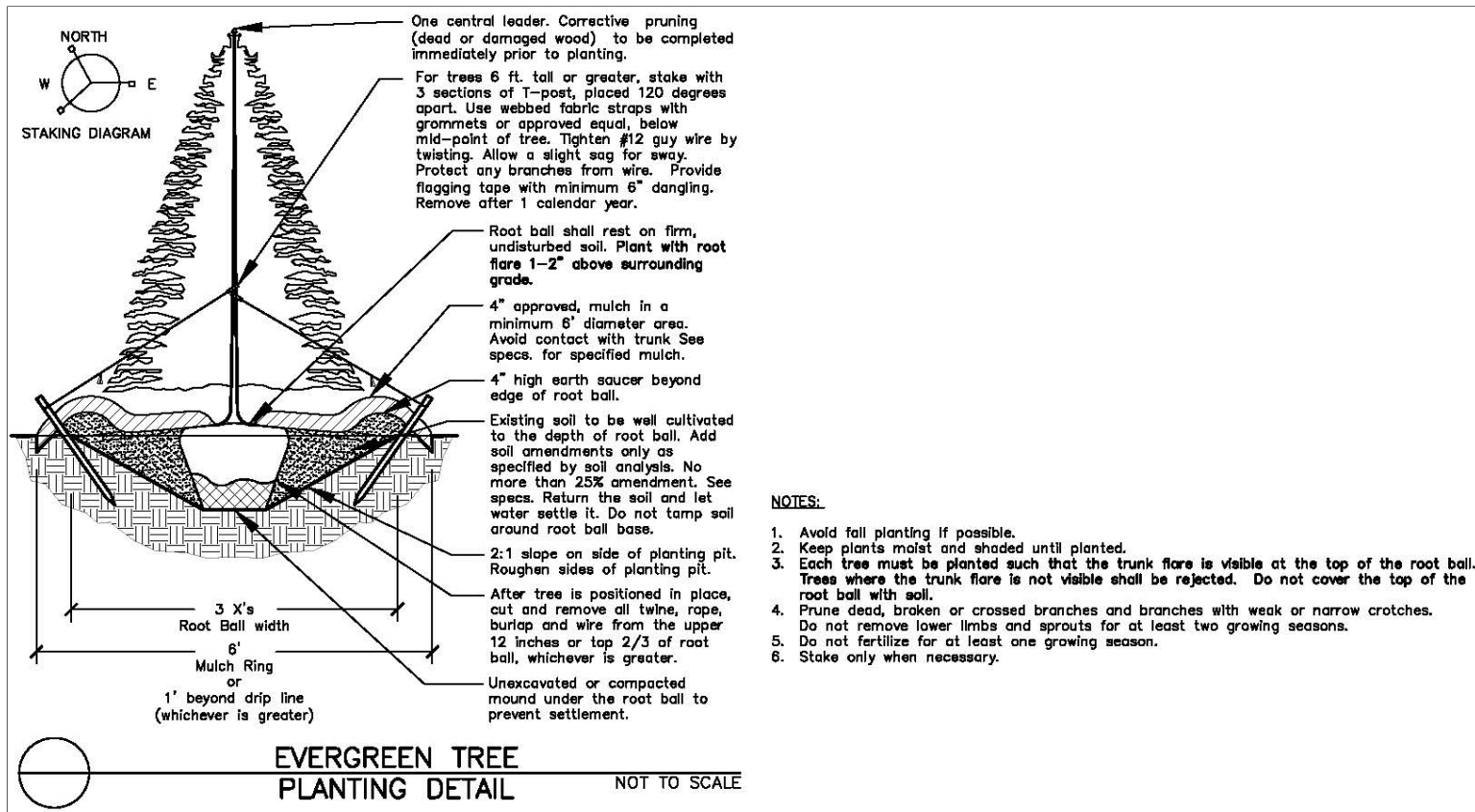
1. Mark the north side of the tree in the nursery, and rotate tree to face north at the site possible. The inside curve of any graft crotch faces north.
2. Each tree must be planted such that the trunk flare is visible at the top of the root ball. Trees where the trunk flare is not visible shall be rejected. Do not cover the top of the root ball with soil.
3. Prune dead, broken or crossed branches and branches with weak or narrow crotches. Do not remove lower limbs and sprouts for at least two growing seasons.
4. Stake only when necessary. Stake trees 2" cal. and smaller with wood post on prevailing wind side.
5. Do not wrap trunk unless required on exposed sites for species with thin bark. Use electrical tape, not duct tape. Do not use twine. Wrap in November and remove in April.
6. Do not fertilize for at least one growing season.
7. Keep plants moist and shaded until planted.



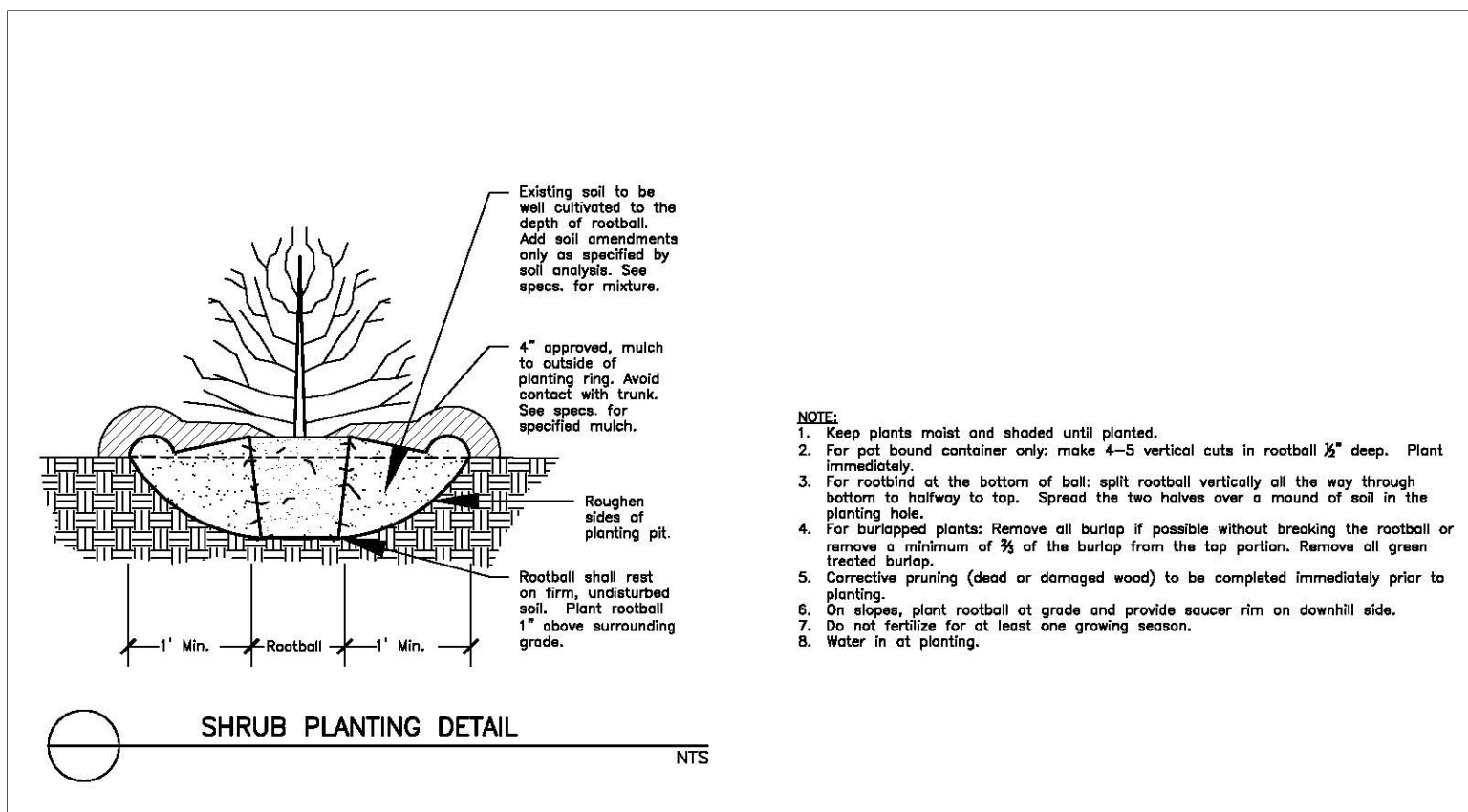
DECIDUOUS TREE
PLANTING DETAIL

NOT TO SCALE

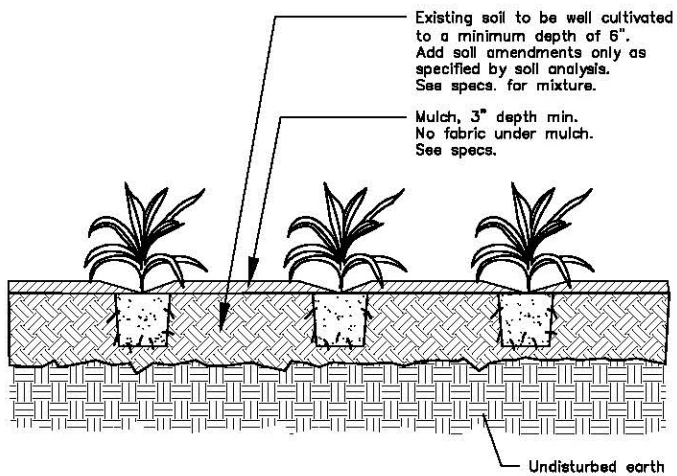
Deciduous Tree Planting Detail



Evergreen Tree Planting Detail



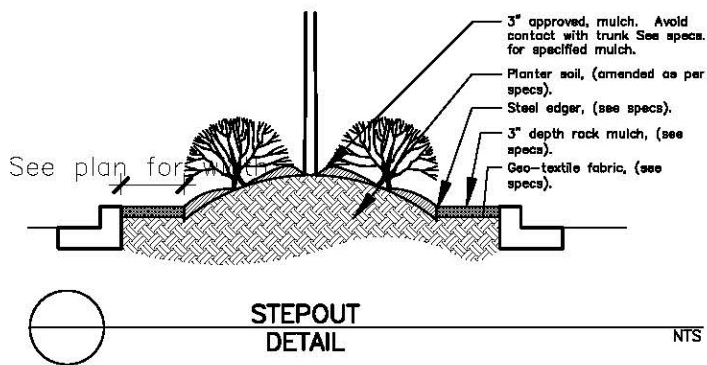
Shrub Planting Detail



NOTES:

1. Keep plants moist and shaded until planting.
2. Plant ground covers and perennials level and at grade.
3. Refer to soil analysis report and specifications for soils amendment.
4. Soil preparation depth varies with material being planted. Six inches (6") is a minimum depth requirement. Other plants may require eight to twelve inches (8-12") depth of preparation. Plan and estimate accordingly.


PERENNIAL / GROUND COVER
PLANTING DETAIL
NTS



Stepout Detail

C07. SITE FURNISHINGS

Comply with AF Corporate Standards for Site Development:

<http://afcs.wbdg.org/site-development/index.html>

Comply with AF Corporate Standards for Site Furnishings:

<http://afcs.wbdg.org/site-development/site-furnishings/index.html>

C07.1. Furnishings and Elements

☐ Applicable ☒ N/A Large graphics do not apply

☒ Applicable ☐ N/A Select number of graphics / images (small: 250 px x 188 px) to insert 6

Image Tool 250 x 188



Coordinated Furnishings



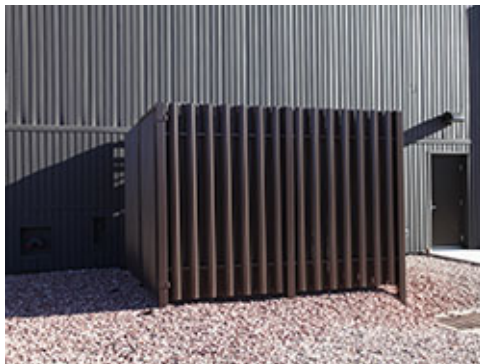
Compatibility with Architecture



Low Maintenance Materials



Lighted Bollards



Screen Wall



Compatible Playground Structures

1. Provide a coordinated consistent inventory of site furnishings to positively contribute to the visual environment, image, and identity of the base; ensure durability, low maintenance, reduced visual clutter, and compatibility with the adjacent architecture.
2. Remove poorly located or redundant litter / ash receptacles, newspaper and bicycle racks, telephone booths, vending machines, walls and fences to reduce visual clutter and to lessen the requirements for maintenance.
3. Facility Groups 1 and 2 site furnishings will be determined by the designer and approved by CE. Facility Groups 3 and 4 site furnishings will be vinyl-coated steel utilizing an open-weave mesh or perforated metal design. Generally, match the site furniture of adjacent facilities and the facility district.
4. Install needed outdoor seating (benches and low walls) in public gathering spaces near main and secondary building entrances. Low walls will match facility architecture.
5. Benches in Facility Groups 1, 2 and 3 areas will be determined by the designer and approved by CE. Provide vinyl-coated metal benches in Facility Group 4 and parks.

6. Integrate functional bicycle racks with the design of the building's main entrance grounds in Facility Groups 1 and 2 while meeting AT requirements. Racks should be inverted U (staple, or loop) style, not ribbon rack or wave style. Grid style or schoolyard styles may be permitted pending review.
7. Limit the use of bollards, but when necessary for force protection use precast concrete non-illuminated bollards in Facility Groups 1 and 2 areas; steel pipe bollards in Facility Group 3 areas; and decorative aluminum bollards in Facility Group 4 areas, and parks and trails. Use of illuminated bollards should be avoided but may be used as approved on a case-by-case basis.
8. Locate architecturally coordinated containers for recycling, litter, ash, vending, etc., to minimize visual clutter and not be visible from the building's main entrance. Minimize the use of freestanding planters.
9. Generally, limit picnic tables, barbeque grills and drinking fountains to lodging, dormitories, housing areas, parks and recreation areas following IFS.
10. The Installation Flagpole location will comply with the guidance for the display of flags in AFI 34-1201, Protocol. Each Air Force installation is authorized to fly one United States Flag, normally in front of the installation headquarters. Waivers for non-authorized locations must be submitted in accordance with AFI 33-360, Publications and Forms Management and approved waivers (AF Form 679) must be maintained by the installation protocol office.
11. Flagpoles using approved materials may be installed at locations designated by IFS, and in accordance with AFI 34-1201, Protocol.
12. Refer to the Overview Section, A01. "Facility Hierarchy" topic of this AFCFS for guidelines regarding ancillary structures such as pavilions and shade shelters.
13. Bus shelters will be provided only where there is a documented need and when approved on a case-by-case basis. Generally, emulate the designs of adjacent shelters using factory finished dark bronze metal structure, wall panels and standing seam roofing; glazing will be dark solar gray/bronze polycarbonate. Perforated metal sheets may be used in-lieu of polycarbonate where blowout from high winds or vandalism is a concern.
14. Monuments and Static Displays will be limited. New elements are generally discouraged unless these are fully vetted through the base's approval process and designed following IFS.
15. When visual screening is necessary, consider landscaping as the first option; screen walls are permitted only in Facility Group 1 areas finished with brick veneer as called out in D05.4.2 and detailed to match the adjacent facilities. Do not use concrete masonry units (CMU) as an exposed finish for walls.
16. For fencing, apply the standards for "Products, Materials and Color" in the following section. Limit those with the highest visual quality to Facility Group 1 areas where there is sustained maintenance. Define all levels of security and visual quality.
17. Do not use chain-link fencing at Facility Group 1, 2 or 4 facilities; Limit the use of barbed-wire outriggers on chain-link fencing at industrial sites, unless required for additional security or protection of assets.
18. Wood fencing may be used in Facility Group 4 areas and in recreation areas following IFS for material and finish when there is sustained periodic maintenance.
19. Provide trash dumpster enclosures for Facility Group 1 facilities with cast-in-place concrete or brick veneer walls to match adjacent facilities and for Facility Groups 2 and 3 facilities with metal walls; all gates will be metal factory finished dark bronze.
20. Specify screen wall materials and finishes that do not require painting or maintenance beyond periodic cleaning.
21. Facility Group 1, 2 and 3 picnic tables and seating will be precast concrete similar to benches. Facility Group 4 and recreational areas will have vinyl-coated steel picnic tables and seating in an open mesh design. Generally, limit picnic tables, barbeque grills and drinking fountains to lodging, dormitories, housing areas, parks and recreation areas.
22. Limit the use of freestanding planters to areas with ongoing maintenance.

23. Provide kiosks only where there is a documented need for visual communication of posted messages. When used, match adjacent facilities in materials and detailing and consolidate kiosks with other site furnishings within 30 feet of major pedestrian paths. Limit kiosks to Facility Groups 1 and 2 and parks.
24. Manufacturers listed below are only provided to establish a baseline of equivalency among all applicable manufacturers.

C07.2. Site Furnishings Products, Materials and Color

Note: Apply the below base-wide standards for Site Furnishings (products, materials and color). Then refer to the Appendix and apply any additional requirements specifically related to the Facility District in which the project is located.

C07.2.1. Barbeque Grills

☒ Applicable
 ☐ N/A
 Number of base standards 2

Image Tool 250 x 188



Type: **Charcoal**

Applies to:
 ☒ Group 1
 ☒ Group 2
 ☒ Group 3
 ☒ Group 4
 ☐ Other

Mfr: Iron Mountain Forge

Color: Black

Finish: Powder Coated

Model #: 200-X

Other: In-ground pedestal, coordinate with Base Architect

UFGS:



Type: **Natural Gas**

Applies to: ☒ Group 1 ☒ Group 2 ☒ Group 3 ☒ Group 4 ☐ Other

Mfr: BBQ Coach

Color: Natural stainless steel

Finish: Mill

Model #: 32" 4-Burner

Other: Built-in Concrete or masonry, coordinate with Base Architect

UFGS:

C07.2.2. Benches

☒ Applicable ☐ N/A Number of base standards 2 **Image Tool 250 x 188**



Type: **Pre-cast concrete**

Applies to: ☒ Group 1 ☒ Group 2 ☒ Group 3 ☐ Group 4 ☐ Other

Mfr: Materials, Inc.

Color: Weatherstone Gray

Finish: Standard Finish (Smooth)

Model #: Mesa, Rectangular design

Other: N/A

UFGS: Section 12 93 00 Site Furnishings



Type: **Factory finished metal**

Applies to: ☐ Group 1 ☐ Group 2 ☐ Group 3 ☒ Group 4 ☐ Other

Mfr: Wabash Valley

Color: Dark Bronze

Finish: Vinyl coated

Model #: Signature Series 6' Bench with Back, Perforated

Other: Coordinate with Base Architect

UFGS: Section 12 93 00 Site Furnishings

C07.2.3. Bike Racks

☒ Applicable ☐ N/A Number of base standards 2

Image Tool 250 x 188



Type: **Single Bike**

Applies to: ☒ Group 1 ☒ Group 2 ☒ Group 3 ☒ Group 4 ☐ Other

Mfr: Victor Stanley

Color: Steel

Finish: Powder coated over galvanized

Model #: BRWS-101, Single Loop Bike Rack

Other: In-ground mount

UFGS: Section 12 93 00 Site Furnishings



Type: **Multiple Bikes**

Applies to: ☒ Group 1 ☒ Group 2 ☒ Group 3 ☒ Group 4 ☐ Other

Mfr: Brandir International Inc.

Color: Galvanized

Finish: Factory

Model #: The Ribbon Bike Rack, RB-07

Other: N/A

UFGS: Section 12 93 00 Site Furnishings

C07.2.4. Bike Lockers

☒ Applicable ☐ N/A

Number of base standards 1

Image Tool 250 x 188



Type: **Factory Finished Composite**

Applies to: ☒ Group 1 ☒ Group 2 ☒ Group 3 ☐ Group 4 ☐ Other

Mfr: CycleSafe

Color: Sandstone

Finish: Factory

Model #: Two Door, ProPark View-ThruSeries

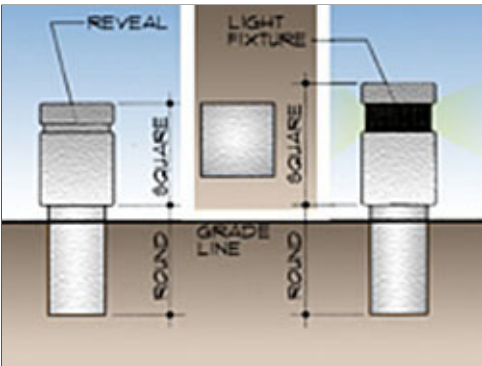
Other: ADA Slam Latch

UFGS: Section 12 93 00 Site Furnishings

C07.2.5. Bollards

☒ Applicable ☐ N/A

Number of base standards 3



Type: **Style 1: Force Protection, Precast Concrete**

Applies to: ☒ Group 1 ☒ Group 2 ☒ Group 3 ☐ Group 4 ☐ Other

Mfr: Materials, Inc.

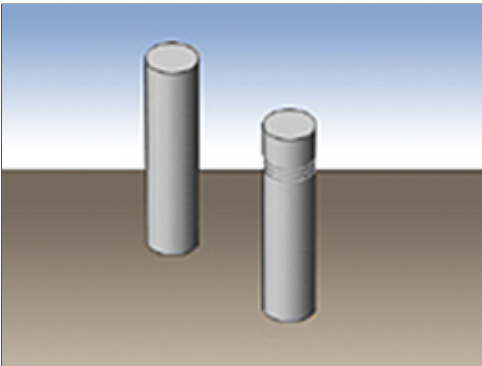
Color: Weatherstone Gray

Finish: Standard Finish (Smooth)

Model #: 1852, Square design, rounded outside corners

Other: Dark bronze light shields for lighted option, refer to C09.2.3. Lighted Bollards, (see Appendix for Facility Districts requirements)

UFGS: Section 12 93 00 Site Furnishings, Section 03 45 00 Precast Arch. Conc.



Type: **Force Protection, Metal**

Applies to: ☒ Group 1 ☒ Group 2 ☒ Group 3 ☐ Group 4 ☐ Other

Mfr: Lithonia

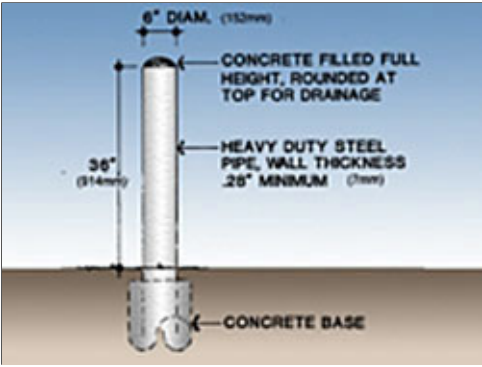
Color: Natural Aluminum

Finish: DNATXD (Textured natural aluminum)

Model #: KBR8, Extruded aluminum, round with flat top

Other: Solid bollard without light kit, refer to C09.2.3. Lighted Bollards

UFGS: Section 12 93 00 Site Furnishings



Type: **Building Protection, Steel**

Applies to: ☒ Group 1 ☒ Group 2 ☒ Group 3 ☐ Group 4 ☐ Other

Mfr: Custom, 6" steel well casing

Color: FSC 10091, Brown

Finish: Factory

Model #: 6" Steel pipe, concrete filled

Other: A 1" (25.4 mm) rigid conduit and box with shroud may be provided at top of bollard with a receiver/key switch application; cover Mfr: Bollards and Sleeves, LLC, 1/4 inch Heavy Duty Bollard Covers

UFGS: Section 12 93 00 Site Furnishings

C07.2.6. Bus Shelters

☒ Applicable ☐ N/A Number of base standards 2

Image Tool 250 x 188



Type: **1**

Applies to: ☒ Group 1 ☒ Group 2 ☐ Group 3 ☐ Group 4 ☐ Other

Mfr: Custom

Color: Silver

Finish: Powder coated

Model #: Gabled roof

Other: Provide concrete slab and 2 pre-manufactured aluminum benches

UFGS: Section 12 93 00 Site Furnishings



Type: **2**

Applies to: ☐ Group 1 ☐ Group 2 ☐ Group 3 ☒ Group 4 ☐ Other

Mfr: Custom

Color: FSC 30040, Dark Bronze

Finish: Powder coated

Model #: Gabled roof

Other: Provide concrete slab and 2 pre-manufactured aluminum benches

UFGS: Section 12 93 00 Site Furnishings

C07.2.7. Drinking Fountains

☒ Applicable ☐ N/A Number of base standards 1 [Image Tool 250 x 188](#)



Type: **Pedestal**

Applies to: ☒ Group 1 ☒ Group 2 ☒ Group 3 ☒ Group 4 ☐ Other

Mfr: Most Dependable Fountains, Inc.

Color: Natural

Finish: Stainless Steel

Model #: MDF 440 SMSS

Other: Accessible

UFGS: UFGS 12 93 00, Site Furnishings, UFGS 22 00 00, Plumbing, General

C07.2.8. Dumpster Enclosures / Gates

☒ Applicable ☐ N/A

Number of base standards 2

Image Tool 250 x 188



Type: **1, Concrete and steel**

Applies to: ☒ Group 1 ☐ Group 2 ☐ Group 3 ☐ Group 4 ☐ Other

Mfr: Transit Mix, Colorado Springs

Color: Exposed Aggregate (Pikes Peak Granite)

Finish: Medium Texture (or media blasted)

Model #: Sheet-formed with exposed-tie reveals or board-formed concrete

Other: (Match adjacent building)
Gates, galvanized or powder-coated silver

UFGS: Section 03 33 00 Cast-In-Place Architectural Concrete

Type: **2, Brick and steel**

Applies to: ☐ Group 1 ☒ Group 2 ☒ Group 3 ☐ Group 4 ☐ Other

Mfr: General Shale, Custom

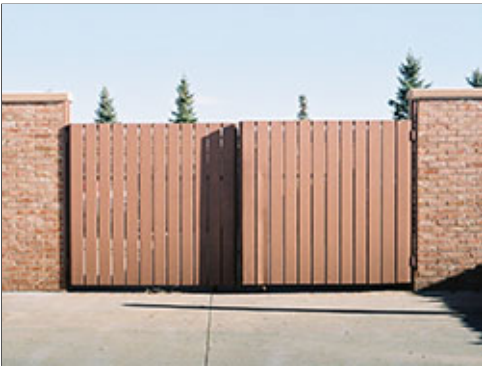
Color: Heritage 411 brick and Brown (FSC 10091) steel gates

Finish: Running Bond

Model #: Match adjacent building

Other: Dumpsters will be painted brown

UFGS: Section 04 20 00 Unit Masonry



C07.2.9. Fencing

☒ Applicable ☐ N/A

Number of base standards 7

Image Tool 250 x 188



Type: **Style A Barrier: High Security, Low Visibility**

Applies to: ☐ Group 1 ☐ Group 2 ☒ Group 3 ☐ Group 4 ☐ Other

Mfr: General Wire Co.

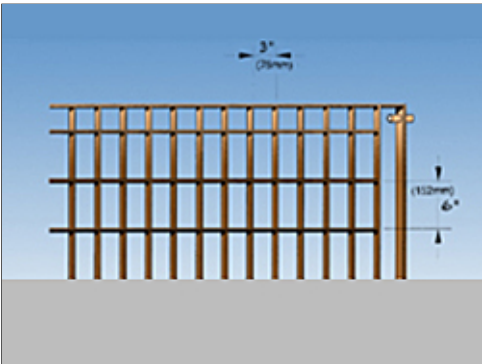
Color: Brown (FSC 10091); or Retrofit: Dark Bronze (FSC 30040)

Finish: PVC coating over galvanized steel

Model #: Chain link, steel posts and rails, gates and accessories

Other: See also Section 32 31 13.53 High Security Chain Link Fences and Gates

UGFS: Section 32 31 13 Chain Link Fences and Gates



Type: **Style B Barrier: High Security, Medium Visibility**

Applies to: ☒ Group 1 ☒ Group 2 ☐ Group 3 ☐ Group 4 ☐ Other

Mfr: Custom

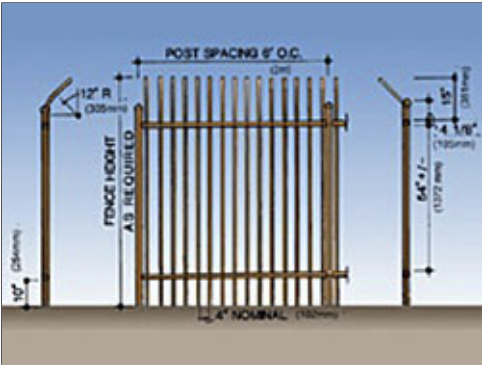
Color: Dark brown

Finish: Powder coated

Model #: Steel grid: flat bar stock verticals, round rod horizontals

Other: Steel posts, horizontal bars, braces, and accessories, in heights, lengths, and gauges as required; Close all ends of tubing

UGFS: Section 05 50 13 Miscellaneous Metal Fabrications



Type: **Style C Barrier: Medium Security, Medium Visibility**

Applies to: ☐ Group 1 ☒ Group 2 ☐ Group 3 ☐ Group 4 ☐ Other

Mfr: Custom

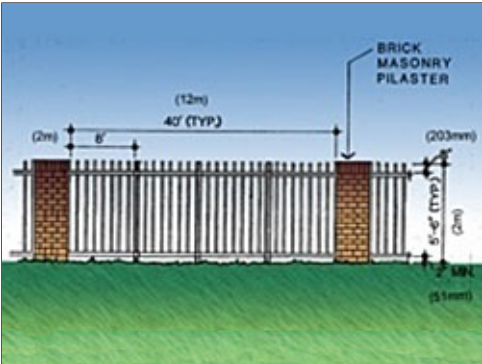
Color: FSC X0040, Dark Bronze

Finish: Powder coated

Model #: Steel posts, rails and pickets (vertical, angular bent inward at top)

Other: Posts, rails, and pickets in heights, lengths and gauges as required, (see Appendix for Facility Districts requirements)

UFGS: Section 05 50 13 Miscellaneous Metal Fabrications



Type: **Style D Barrier: Low Security, High Visibility**

Applies to: ☒ Group 1 ☒ Group 2 ☐ Group 3 ☐ Group 4 ☐ Other

Mfr: General Shale, Denver

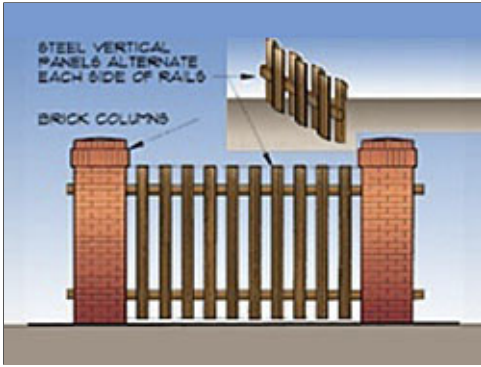
Color: Heritage 441 brick, FSC X0040, Dark Bronze

Finish: Face brick, powder coated metal

Model #: Brick Piers with steel posts, rails and pickets

Other: Brick: 2'x2' (Height as required, equally spaced 12' to 40'), Steel posts: 4"x4" (equally spaced), Rails: 2"x2", Pickets: 1"x1" (6"o.c.); close all ends of tubing

UFGS: Section 04 20 00 Unit Masonry, Section 05 50 13 Misc. Metal



Type: **Style E Barrier: Low Security, High Visibility**

Applies to: ☒ Group 1 ☒ Group 2 ☐ Group 3 ☐ Group 4 ☐ Other

Mfr: CusGeneral Shale, Denver

Color: Heritage 441 brick, FSC X0040, Dark Bronze

Finish: Powder coated metal

Model #: Brick Piers / steel posts, rails and alternating panels (Alt.: no brick piers)

Other: Brick: 2'x2' (Height as required, equally spaced 8' to 40'), Steel posts: 4"x4" (equally spaced), Rails: 1-1/4"x1-1/2", vertical steel panels spaced alternately on each side of the rails; matching gates; close all ends

UGFS: Section 04 20 00 Unit Masonry, Section 05 50 13 Misc. Metal



Type: **Style F Barrier: Very Low Security, High Visibility**

Applies to: ☐ Group 1 ☐ Group 2 ☐ Group 3 ☒ Group 4 ☒ Other

Mfr: Custom (Alt. James Hardie post and rail with vertical boards)

Color: Integral Mixed Davis Color# 5130 "Cocoa"

Finish: Factory

Model #: Post and rail

Other: Concrete 3-rail, wood-grain textured (4,000 psi at 28 days); Posts: 39" height, 8' spacing, set 30" deep below grade with footing, typical; may be used in recreational areas

UGFS: Section 03 33 00 Cast-In-Place Architectural Concrete



Type: **Style G Barrier (Alternate): Very Low Security, High Visibility**

Applies to: ☐ Group 1 ☐ Group 2 ☐ Group 3 ☒ Group 4 ☐ Other

Mfr: James Hardie Building Products, Inc.

Color: Earth Tones

Finish: Factory

Model #: Post and rail with vertical boards

Other: Posts: Height as required, 8' max. spacing; apply boards to outside face

UFGS: Section 07466 Fiber Cement Siding

C07.2.10. Flagpoles

☒ Applicable ☐ N/A Number of base standards 1 [Image Tool 250 x 188](#)



Type: **1**

Applies to: ☒ Group 1 ☐ Group 2 ☐ Group 3 ☐ Group 4 ☐ Other

Mfr: Eder Flag

Color: Natural aluminum

Finish: Satin Lustre

Model #: ECL30 IH, Internal Halyard

Other: 5" Butt Dia. 33' H (30' Exposed)

UFGS: N/A

C07.2.11. Lighting – Landscape / Accent

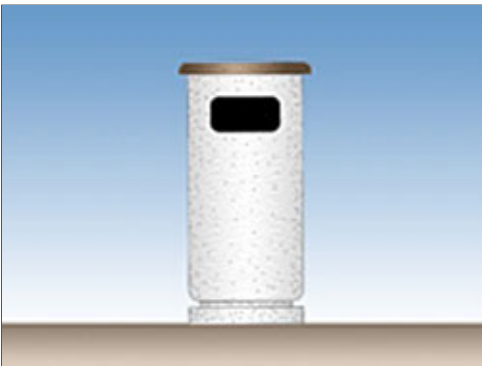
Please refer to the Lighting section.

C07.2.12. Litter and Ash Receptacles

☒ Applicable ☐ N/A

Number of base standards 2

Image Tool 250 x 188



Type: **Style 1: Precast Concrete**

Applies to: ☒ Group 1 ☒ Group 2 ☒ Group 3 ☐ Group 4 ☐ Other

Mfr: Materials, Inc.

Color: Weatherstone Gray

Finish: Smooth

Model #: TR-3225 Sante Fe Square

Other: Rigid plastic internal liner,
http://materialsinc.com/wp-content/uploads/2014/10/TR-3225_SANTA_FE.pdf

UFGS: UFGS 12 93 00 Site Furnishings



Type: **Style 2: Metal**

Applies to: ☐ Group 1 ☐ Group 2 ☐ Group 3 ☒ Group 4 ☐ Other

Mfr: Wabash Valley

Color: Black or as approved

Finish: Perforated Pattern

Model #: Urbanscape "E" with liner, 32 Gallon

Other: With dome top, without side door

UFGS: UFGS 12 93 00 Site Furnishings

C07.2.13. Picnic Tables

☒ Applicable ☐ N/A

Number of base standards 2

Image Tool 250 x 188



Type: **Precast Concrete**

Applies to: ☒ Group 1 ☒ Group 2 ☒ Group 3 ☐ Group 4 ☐ Other

Mfr: Materials, Inc.

Color: Weatherstone Gray

Finish: Standard Finish (Smooth)

Model #: TS-3490 New Mexican

Other: (303) 458-9595

UFGS: UFGS 12 93 00 Site Furnishings



Type: **Metal, Vinyl Coated**

Applies to: ☐ Group 1 ☐ Group 2 ☐ Group 3 ☒ Group 4 ☐ Other

Mfr: Wabash Valley

Color: Brown or as approved

Finish: Factory vinyl coated

Model #: Signature Series, 46" Square Pedestal Tables with 4 Seats

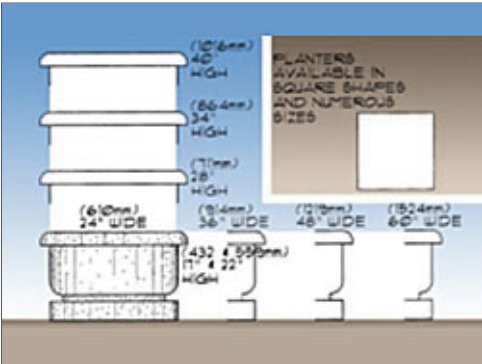
Other: Perforated pattern, in-ground mount

UFGS: UFGS 12 93 00 Site Furnishings

C07.2.14. Planters

☒ Applicable ☐ N/A

Number of base standards 1



Type: **Precast Concrete**

Applies to: ☒ Group 1 ☒ Group 2 ☒ Group 3 ☒ Group 4 ☐ Other

Mfr: Materials, Inc.

Color: Weatherstone Gray

Finish: Smooth

Model #: Santa Fe

Other: N/A

UFGS: UFGS 12 93 00 Site Furnishings

C07.2.15. Play Equipment

☒ Applicable ☐ N/A

Number of base standards 1



Type: **Steel**

Applies to: ☐ Group 1 ☐ Group 2 ☐ Group 3 ☒ Group 4 ☒ Other

Mfr: Little Tikes Commercial

Color: Varies

Finish: Powdercoated Steel

Model #: N-R-G Freestyle

Other: Coordinate with Base Architect

UFGS: Section 11 68 13 Playground Equipment, 12 93 00 Site Furnishings

C07.2.16. Screen Walls

☒ Applicable ☐ N/A

Number of base standards 5

Image Tool 250 x 188



Type: **Cast-in-place Concrete**

Applies to: ☒ Group 1 ☐ Group 2 ☐ Group 3 ☐ Group 4 ☐ Other

Mfr: Transit Mix, Colorado Springs

Color: Exposed aggregate (Pikes Peak Granite)

Finish: Medium texture (or media blasted)

Model #: Sheet-formed with exposed-tie reveals or board-formed

Other: Match adjacent building

UGFS: SECTION 03 33 00 Cast-In-Place Architectural Concrete



Type: **Brick**

Applies to: ☒ Group 1 ☒ Group 2 ☐ Group 3 ☐ Group 4 ☐ Other

Mfr: General Shale, Denver

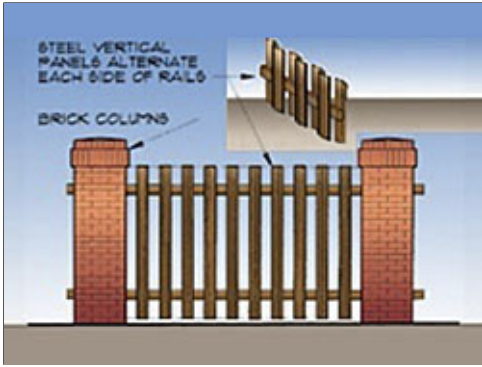
Color: Heritage 441 brick

Finish: Factory

Model #: N/A

Other: Running bond pattern

UGFS: Section 04 20 00 Unit Masonry



Type: **Brick / Steel**

Applies to: ☐ Group 1 ☒ Group 2 ☐ Group 3 ☐ Group 4 ☐ Other

Mfr: General Shale, Denver

Color: Heritage 441 brick,, dark bronze

Finish: Factory, powder coated metal

Model #: Brick piers only at Group 1 / steel posts, rails and pickets

Other: Brick: 2'x2', Steel posts: 4"x4", Rails: 2"x2", Pickets: 1"x1" (4"o.c.)
Close all ends of tubing

UFGS: Section 04 20 00 Unit Masonry, Section 05 50 13 Misc. Metal



Type: **Steel**

Applies to: ☐ Group 1 ☐ Group 2 ☒ Group 3 ☐ Group 4 ☐ Other

Mfr: Custom

Color: Dark bronze

Finish: Factory, powder coated metal

Model #: Vertical ribs over framing

Other: Match adjacent building

UFGS: Section 05 50 13 Miscellaneous Metal Fabrications



Type: **Cementitious Board**

Applies to: ☐ Group 1 ☐ Group 2 ☐ Group 3 ☒ Group 4 ☐ Other

Mfr: James Hardie Building Products, Inc.

Color: Earth Tones

Finish: Wood textured

Model #: Hardie Plank, vertical boards

Other: Match adjacent building

UFGS: (Not Available) Section 074646 Fiber Cement Siding

C07.2.17. Tree Grates

☒ Applicable ☐ N/A

Number of base standards 1

Image Tool 250 x 188



Type: **Cast Iron**

Applies to: ☒ Group 1 ☒ Group 2 ☐ Group 3 ☐ Group 4 ☐ Other

Mfr: Neenah Enterprises, Inc.

Color: Natural cast iron

Finish: Cast

Model #: 2-Piece, round or square

Other: N/A

UFGS: UFGS 12 93 00 Site Furnishings

C07.2.18. Other

☐ Applicable ☒ N/A

C08. EXTERIOR SIGNS

Comply with AF Corporate Standards for Site Development:

<http://afcfs.wbdg.org/site-development/index.html>

C08.1. Colors and Types

☐ Applicable ☒ N/A Large graphics do not apply

☐ Applicable ☒ N/A Small graphics do not apply

1. Provide concise functional signs as a visually unifying element with consistent colors and types for all Installation and Gate Identification Signs; Building Identification Signs; Traffic Control Devices; Directional and Wayfinding Signs; and Informational and Motivational Signs.
2. Provide signs with the lowest overall life- cycle costs considering initial cost, ongoing maintenance and lifespan while meeting quality standards. Follow IFS for specifications appropriate for the local climate to withstand weathering.
3. Reduce the number of signs, reduce visual clutter and provide only essential signs required for identification, directions, instructions, and customer service following UFC 3-120-01, Design: Sign Standards. Remove non-conforming signs during renovation projects.
4. Use clear concise terms for content consistent with UFC 3-120-01.
5. Display of emblems on building exterior walls or other permanent structures is prohibited by UFC.
6. Raised "standout" letters and numbers may be used for Group 1 and Group 2, Group 3 with approval on a case-by-case basis from CES/CENB. Font; Helvetica Neue - 85 Heavy. Individual letters; Clear anodized aluminum with a smooth surface or PSFB standard Dark Bronze. 12" height for one- and two-story facilities, 18" high for three story or greater facilities. 1" thick with concealed anchors.
7. Group 2 and 3 facilities will have wall mounted facility signs with sizes and layouts following UFC 3-120-01. Signs are not permitted for Group 4 facilities.
8. Only one building identification sign is permitted at each building entrance. Include a building number following UFC 3-120-01.
9. A street address is not required on the building identification sign. Building numbers and building address can be confusing when combined. For clarity the font for the building number should be larger than the address font. The building address must conform to the US Postal Service standards including the street name.
10. Traffic Control Devices, which regulate vehicular traffic on the installation, will conform to the standards in the Manual of Uniform Traffic Control Devices (MUTCD) published by the Federal Highway Administration. Coordinate street signs with this IFS.
11. Provide Directional and Wayfinding Signs and address both pedestrian and vehicular traffic following UFC 3-120-01 for size, layout and content.
12. Reserved parking signs should be kept to a minimum. When approved, provide post-mounted sign faces in base standard materials and colors. Consider "bracketing" a designated area with a single sign at each end.
13. Parking lot identification signs may be used to identify areas or rows within large lots.
14. Follow the guidelines and requirements in ABAAS and the MUTCD for accessible parking signs.
15. Follow UFC 3-120-01 for Informational and Motivational Signs for size, layout and content.
16. Symbols or pictographs (graphic expressions of actual objects) may be used to indicate service, mandatory / prohibitory, sports, and recreation when rapid communication is necessary.

17. Force Protection signage may be applied to glass doors using white vinyl lettering.
18. Refer to UFC 3-120-01 for prohibited signs, which include those with animated, blinking, chasing, flashing, or moving effects.
19. Manufacturers listed below are only provided to establish a baseline of equivalency among all applicable manufacturers.

C08.1.1. Materials and Color Specifications

☐ Applicable ☒ N/A Large graphics do not apply

☐ Applicable ☒ N/A Small graphics do not apply

1. Fabricate sign panels from aluminum sheet, minimum 12 gauge. Sign posts will be powder-coated steel with capped ends in a concrete base.
2. Fence mounted sign panels may be attached with exposed fasteners.
3. Directional, Guide, Regulatory, Prohibitory, and Warning Road signage will follow Federal Highway Administration (FHWA) Manual on Uniform Traffic Control Devices (MUTCD) using standard colors. Refer to MUTCD color specifications, which provide cross-referenced Pantone Matching System (PMS) numbers.
4. All other signage must be provided using the following AMS-STD-595 Colors (formerly Federal Standard Colors (FSC)):
 - a. Red: 11086
 - b. White: x7925
 - c. Blue: x5180
 - d. Black: x7038 (non-reflective)
 - e. Brown: 10091
 - f. Dark Bronze: 30040

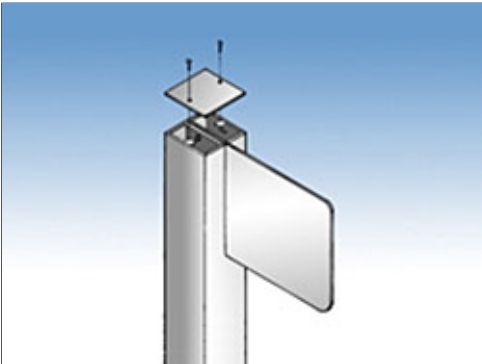
The first figure (x) can be 1, 2 or 3 and indicates the level of sheen:

- 1 = gloss
- 2 = semi-gloss
- 3 = matt

Materials and Color Specifications

☒ Applicable ☐ N/A Number of base standards 3

Image Tool 250 x 188



Type: **Typical Sign Post**

Applies to: ☒ Group 1 ☒ Group 2 ☒ Group 3 ☐ Group 4 ☐ Other

Mfr: Custom

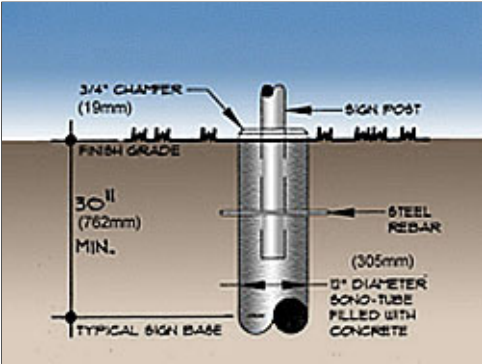
Color: Black

Finish: Powder coated

Model #:EOCPS1

Other: Square posts and squared ends

UFGS: Section 05 50 13 Miscellaneous Metal Fabrications



Type: **Typical Sign Base, Alternative 1**

Applies to: ☒ Group 1 ☒ Group 2 ☐ Group 3 ☐ Group 4 ☐ Other

Mfr: 21 CES/CEOHS

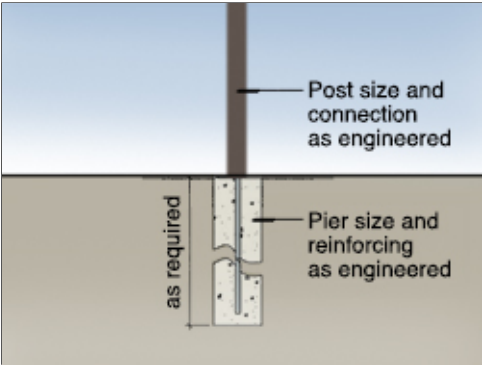
Color: Natural Gray

Finish: Sonotube-formed

Model #: 30" height x 12" diameter

Other: At grade with 3/4" chamfer

UFGS: Section 05 50 13 Miscellaneous Metal Fabrications



Type: **Typical Sign Base, Alternative 2**

Applies to: ☐ Group 1 ☐ Group 2 ☐ Group 3 ☐ Group 4 ☐ Other

Mfr: 21 CES/CEOHS

Color: Galvanized steel

Finish: Hot-dipped galvanized steel

Model #: 12 ga. 2"x2"x36" galvanized perforated steel

Other: Holes will be 7/16± 1/64 inches in diameter on one (1) inch centers on all four sides down the entire length of the post. On square tubing, holes will be on centerline of each side in true alignment

UFGS: Section 05 50 13 Miscellaneous Metal Fabrications

C08.1.2. Installation and Gate Identification Signs

☒ Applicable ☐ N/A Number of base standards 1

Image Tool 250 x 188



Type: **Level A**

Applies to: ☒ Group 1 ☐ Group 2 ☐ Group 3 ☐ Group 4 ☐ Other

Mfr: 21 CES/CEOHS

Color: Davis Colors Palomino, Terra Cotta, and Canyon

Finish: Pre-cast panels (no fiber reinforcing)

Model #: Custom

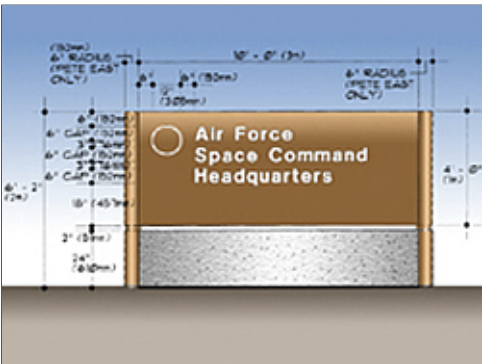
Other: See East Gate Sign A-1 original record drawings (TDKA 08-2568)

UFGS: Section 03 33 00 Cast-In-Place Architectural Concrete

C08.1.3. Building Identification Signs

☒ Applicable ☐ N/A Number of base standards 5

Image Tool 250 x 188



Type: **Level A**

Applies to: ☒ Group 1 ☐ Group 2 ☐ Group 3 ☐ Group 4 ☐ Other

Mfr: 21 CES/CEOHS

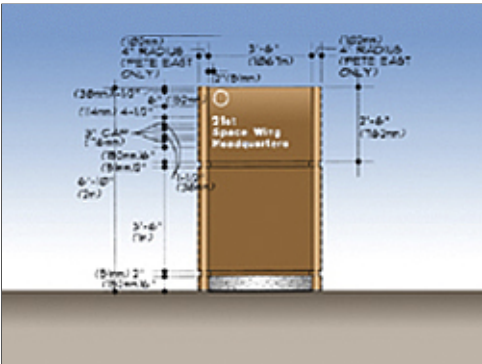
Color: Face - Black, FSC 17038; concrete, gray

Finish: Powder coat or vinyl sign face

Model #: Metal pylon, concrete base

Other: White vinyl lettering; UFGS Section 10 14 00.10, Exterior Signage

UFGS: Section 03 33 00 Cast-In-Place Architectural Concrete



Type: **Level B**

Applies to: ☒ Group 1 ☒ Group 2 ☐ Group 3 ☐ Group 4 ☐ Other

Mfr: 21 CES/CEOHS

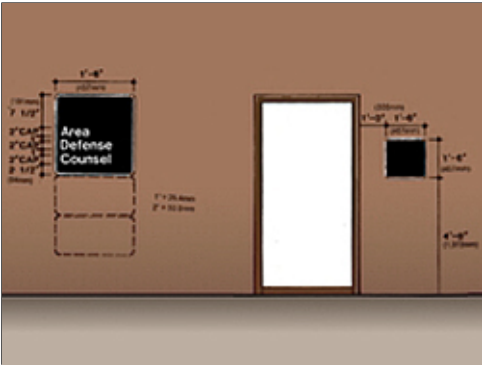
Color: Black, FSC 17083, white lettering

Finish: Powder coat or vinyl sign face

Model #: Aluminum sheet metal, aluminum post mounted

Other: N/A

UFGS: Section 05 50 13 Miscellaneous Metal Fabrications



Type: **Level C**

Applies to: ☐ Group 1 ☐ Group 2 ☒ Group 3 ☐ Group 4 ☐ Other

Mfr: 21 CES/CEOHS

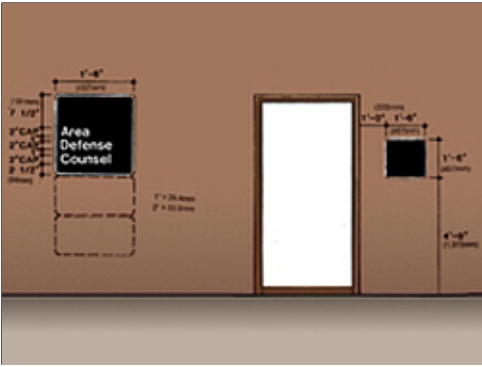
Color: Black, FSC 17083, white lettering

Finish: Powder coat or vinyl sign face

Model #: Aluminum sheet metal, wall mounted

Other: N/A

UFGS: Section 05 50 13 Miscellaneous Metal Fabrications



Type: **Level D**

Applies to: ☐ Group 1 ☐ Group 2 ☒ Group 3 ☐ Group 4 ☐ Other

Mfr: 21 CES/CEOHS

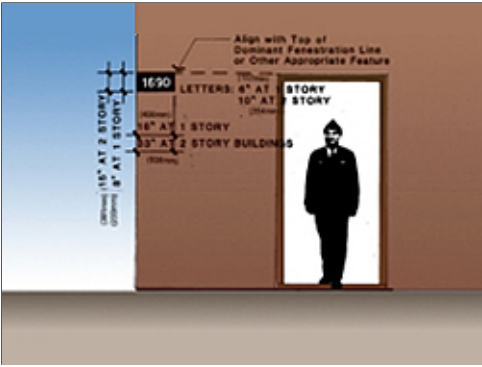
Color: Black, FSC 17083, white lettering

Finish: Powder coat or vinyl sign face

Model #: Aluminum sheet metal, wall mounted

Other: N/A

UFGS: Section 05 50 13 Miscellaneous Metal Fabrications



Type: **Building Numbers**

Applies to: ☐ Group 1 ☒ Group 2 ☒ Group 3 ☐ Group 4 ☐ Other

Mfr: 21 CES/CEOHS

Color: Black, FSC17083, white lettering

Finish: Powder coat or vinyl sign face

Model #: Aluminum sheet metal, wall mounted

Other: UFGS Section 10 14 00.10 Exterior Signage; see section C08.1.10. for "House Numbers"

UFGS: Section 05 50 13 Miscellaneous Metal Fabrications

C08.1.4. Traffic Control Devices (Street Signs)

☒ Applicable ☐ N/A Number of base standards 1

Image Tool 250 x 188



Type: **Street Signs**

Applies to: ☒ Group 1 ☒ Group 2 ☒ Group 3 ☒ Group 4 ☐ Other

Mfr: 21 CES/CEOHS

Color: Black background; white reflective lettering

Finish: Powder coat or vinyl sign face

Model #: Aluminum sign face, control arm or pole mounted

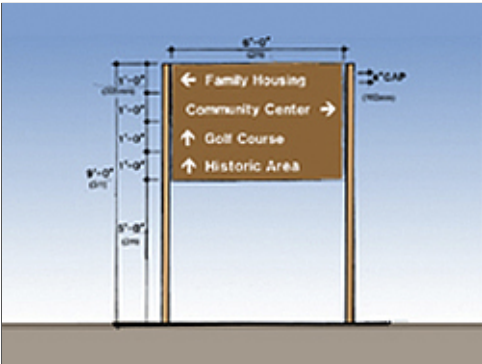
Other: Mount 7' above grade minimum, pictographs and logos are prohibited on street name signs per UFC

UFGS: Section 05 50 13 Miscellaneous Metal Fabrications

1. Maintain streets signs as the most important directional signage on the base with consistent color and layout conforming to UFC-3-120-01.
2. Provide White reflective lettering on a Black background for street signs. Note that pictographs and logos are prohibited on street name signs per UFC.
3. Determine the length of the sign by the number of letters in the street name. Always use a single line of text. Use capital and lower-case lettering. Capital letters will be seven inches high. Provide a one-half inch, white rule line around the sign edge (inset one inch from the edge of metal). Do not abbreviate street names, but it is acceptable to shorten street types such as Boulevard (Blvd.), Street (St.), and Avenue (Ave.).
4. Street signs must be mounted at each intersection on the horizontal member of the streetlight, or on poles 15 feet from the curb line. The tops of signs mounted on poles must be 7 feet off the ground. They should be located away from trees or other obstructions.

C08.1.5. Directional and Wayfinding Signs

☒ Applicable ☐ N/A Number of base standards 2



Type: **Vehicular**

Applies to: ☒ Group 1 ☒ Group 2 ☒ Group 3 ☒ Group 4 ☒ Other

Mfr: 21 CES/CEOHS

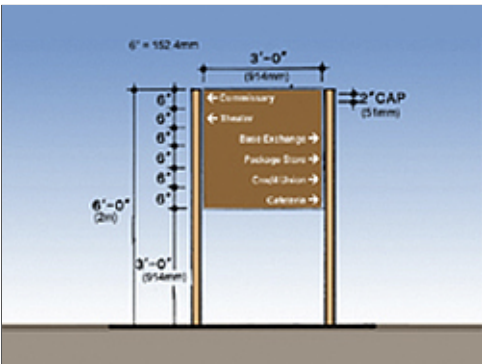
Color: White letters and symbols (reflectivity mandatory) Black background

Finish: Powder coat or vinyl sign face

Model #: Aluminum sign face, aluminum posts

Other: Use on all roadways, provide base area names

UGFS: Section 10 14 53 Traffic Signage



Type: **Pedestrian**

Applies to: ☒ Group 1 ☒ Group 2 ☒ Group 3 ☒ Group 4 ☒ Other

Mfr: 21 CES/CEOHS

Color: White letters and symbols (reflectivity mandatory) Black background

Finish: Powder coat or vinyl sign face

Model #: Aluminum sign face, aluminum posts

Other: Use on all roadways, provide building names

UGFS: Section 10 14 53 Traffic Signage

C08.1.6. Informational Signs

☐ Applicable ☒ N/A Large graphics do not apply

☐ Applicable ☒ N/A Small graphics do not apply

- 1. Minimize informational signs such as static display signs, hours of operation, and project signs to reduce visual clutter.
- 2. Static display signs will have standard blue background.
- 3. Hours of operation signs will have a level of quality equivalent to the Facility Group number.

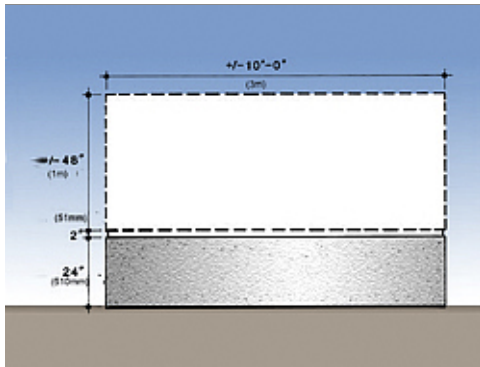
4. Temporary / Project Signage will be judiciously placed to avoid visual clutter. Schedule and arrange for the removal of these signs prior to installation.

C08.1.7. Motivational Signage

☐ Applicable ☒ N/A Large graphics do not apply

☒ Applicable ☐ N/A Select number of graphics / images (small: 250 px x 188 px) to insert 1

Image Tool 250 x 188

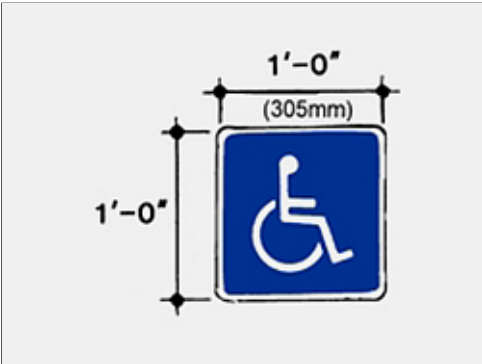


Professionally Produced Sign

1. Provide professionally produced motivational signs as important elements of campaigns to boost morale, improve safety, aid in recruiting, and accomplish other motivational objectives. Consolidate this signage to reduce visual clutter.
2. Motivational signs will be limited to an electronic "marquee" type changeable sign near each gate. Temporary signs are not permitted. Motivational information may also be posted in a small, printed format on kiosks in specified, high pedestrian use areas. Refer to kiosks under Site Furnishings.
3. Follow UFC 3-120-01 for color and layout. Note that animated, blinking, chasing, flashing, or moving effects are prohibited by the UFC.
4. Mount marquee signs on reinforced concrete bases faced with brick to match the Main Gate marquee signs.

C08.1.8. Parking Lot Signs

☒ Applicable ☐ N/A Number of base standards 4



Type: **Accessible Parking Signs**

Applies to: ☒ Group 1 ☒ Group 2 ☒ Group 3 ☒ Group 4 ☐ Other

Mfr: 21 CES/CEOHS

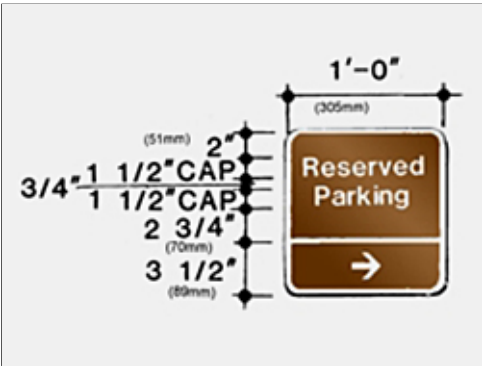
Color: White lettering on standard Blue background

Finish: Vinyl background and letters, powder coated post

Model #: Aluminum sheet sign face, galvanized steel posts

Other: 1'x1' sign face; UFGS Section 10 14 53 Traffic Signage

UFGS: Section 05 50 13 Miscellaneous Metal Fabrications



Type: **Reserved Parking Signs**

Applies to: ☒ Group 1 ☐ Group 2 ☐ Group 3 ☐ Group 4 ☐ Other

Mfr: 21 CES/CEOHS

Color: White lettering on standard Black background

Finish: Vinyl background and letters, powder coated post

Model #: Aluminum sheet sign face, galvanized steel posts

Other: 1'x1' sign face; UFGS Section 10 14 53 Traffic Signage

UFGS: Section 05 50 13 Miscellaneous Metal Fabrications



Type: **Parking Prohibited Signs**

Applies to: ☒ Group 1 ☒ Group 2 ☒ Group 3 ☒ Group 4 ☐ Other

Mfr: 21 CES/CEOHS

Color: White lettering on standard Black background

Finish: Vinyl background and letters, powder coated post

Model #: Aluminum sheet sign face, galvanized steel posts

Other: 1'x1' sign face

UGFS: Section 05 50 13 Miscellaneous Metal Fabrications



Type: **Parking Lot Identification Signs**

Applies to: ☒ Group 1 ☒ Group 2 ☐ Group 3 ☐ Group 4 ☐ Other

Mfr: 21 CES/CEOHS

Color: White lettering on standard Black background

Finish: Vinyl background and letters, powder coated post

Model #: Aluminum sheet sign face, mounted to parking lot light fixture posts

Other: 1'x1' sign face; UFGS Section 10 14 53 Traffic Signage

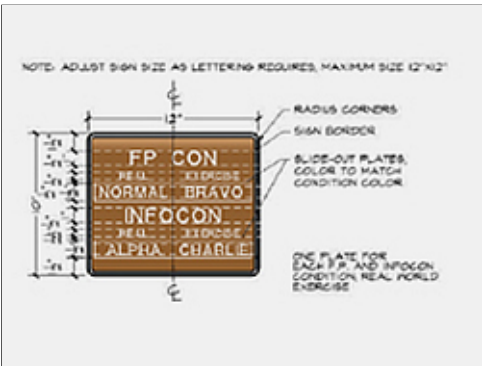
UGFS: Section 05 50 13 Miscellaneous Metal Fabrications

1. Whenever possible, limit the number of parking signs by "bracketing" multiple reserved parking spaces. Use the "bracketing" approach for three or more contiguous spaces. For one or two spaces, use individual signs at each space. The signs will only indicate Disabled, an assigned number, or General Reserved.
2. Individual reserved parking space information, i.e., "CO" or "NCO OF THE MONTH" will be post mounted.
3. Follow the guidelines and requirements in The Architectural Barriers Act Accessibility Standard (ABAAS) and the MUTCD for accessible parking signs.
4. Use parking lot identification signs to identify areas or rows within large parking lots over 100 spaces or two double rows of parking.
5. Follow UFC 3-120-01 and AFCFS.

C08.1.9. Regulatory Signs

☒ Applicable ☐ N/A Number of base standards 4

Image Tool 250 x 188



Type: **Force Protection Signage**

Applies to: ☒ Group 1 ☒ Group 2 ☒ Group 3 ☐ Group 4 ☐ Other

Mfr: 21 CES/CEOHS

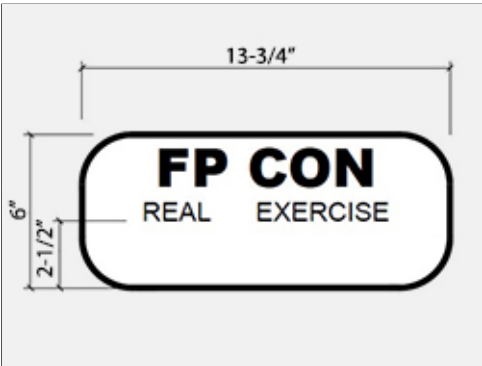
Color: White lettering on Black background

Finish: Vinyl background and letters, powder coated post

Model #: Aluminum sheet sign face, wall mounted

Other: 10"x12" sign face; Emblems are not authorized.

UFGS: Section 05 50 13 Miscellaneous Metal Fabrications



Type: **Force Protection Signage (Alternate)**

Applies to: ☒ Group 1 ☒ Group 2 ☐ Group 3 ☐ Group 4 ☐ Other

Mfr: 21 CES/CEOHS

Color: White lettering

Finish: Vinyl

Model #: Direct application to glass entrance doors

Other: Refer to drawing

UFGS: N/A



Type: **Designated Tobacco Use**

Applies to: ☒ Group 1 ☒ Group 2 ☒ Group 3 ☒ Group 4 ☐ Other

Mfr: 21 CES/CEOHS

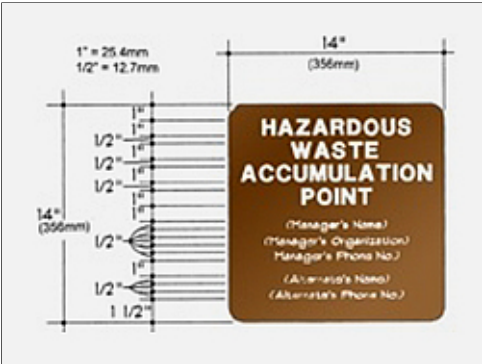
Color: White lettering on Black background

Finish: Vinyl background and letters, powder coated post

Model #: Aluminum sheet sign face, galvanized steel posts

Other: 1'x1' sign face

UFGS: Section 05 50 13 Miscellaneous Metal Fabrications



Type: **Hazardous Waste**

Applies to: ☒ Group 1 ☒ Group 2 ☒ Group 3 ☐ Group 4 ☐ Other

Mfr: 21 CES/CEOHS

Color: White lettering on Black background

Finish: Vinyl background and letters, powder coated post

Model #: Aluminum sheet sign face, galvanized steel posts

Other: 14"x14" sign face; Emblems are not authorized.

UFGS: Section 05 50 13 Miscellaneous Metal Fabrications

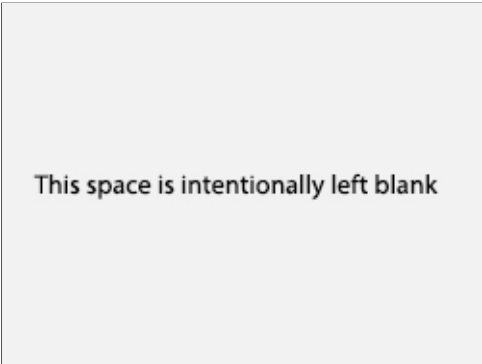
1. Regulatory signage, which restricts, warns and advises, will be limited to those mandated under Highway/Traffic, Government Warning, and/or Parking Regulation. Follow UFC 3-120-01 and its industry references for color and layout.
2. Provide a comprehensive, systematic approach to regulatory signage to avoid clutter and confusion from "over signage."
3. Maintain base warning signs for safety and security at the base perimeter and at specific secure areas. Use these to notify visitors of restrictions governing conduct on the base, as well as other security procedures.

C08.1.10. Other

☒ Applicable ☐ N/A

Number of base standards 1

Image Tool 250 x 188



Type: **House Numbers**

Applies to: ☐ Group 1 ☐ Group 2 ☐ Group 3 ☒ Group 4 ☐ Other

Mfr: 21 CES/CEOHS

Color: Black, FSC 17083

Finish: Powder coat or vinyl sign face

Model #: Aluminum numbers, wall mounted, powder coated

Other: N/A

UFGS: UFGS 05 50 13 Miscellaneous Metal Fabrications

C09. LIGHTING

Comply with AF Corporate Standards for Site Development:
<http://afcfs.wbdg.org/site-development/index.html>

Comply with AF Corporate Standards for Lighting:
<http://afcfs.wbdg.org/site-development/lighting/index.html>

C09.1. Fixtures and Lamping

☐ Applicable ☒ N/A Large graphics do not apply

☐ Applicable ☒ N/A Small graphics do not apply

1. Provide, coordinate and efficiently install street, parking lot, sidewalk and facility lighting with appropriate luminaires, lamping, and placement and spacing following UFC 3-530-01 and Installation Facilities Standards (IFS); ensure the level of quality is consistent with the adjacent facility group number. Pole-mounted, wall-mounted and bollard fixtures are permitted.
2. Integrate controls to automatically reduce lighting power during periods of non-activity; automatically turn off power when sufficient daylight is available.
3. Ensure continuity and consistency of lighting elements. In new construction generally match post types, fixture types, styles, heights, sizes, materials, colors, and lamp types of adjacent facilities and the facility district.
4. Economically provide renewable-energy power sources such as solar photovoltaic when feasible.
5. Use appropriately designed or shielded luminaires to direct light downward to minimize light pollution and intrusion onto adjacent sites and to facilitate night training.

6. Calculate illuminant levels for all lighting applications following UFC 3-530-01 and ensure compliance with pre-curfew maximum brightness level requirements.
7. Sufficiently address environmental factors to prevent corrosion and weathering of fixtures, plinths and other components.
8. Wall mounted fixtures should respond to the architectural character of the facility.
9. Efficient accent lighting of architectural and landscape features may be provided for Group 1, lodging and historical applications. Accent lights in ground-mounted locations may be provided for static displays and signs when these do not conflict or cause hazards with overhead aircraft.
10. Comply with UFC 3-530-01 for light source technology and lamp types. High efficiency lamping such as LED is preferred for most applications.
11. Provide round tapered, square non-tapered, or round non-tapered aluminum poles and aluminum fixtures with square, rectangular or circular housings in colors and shapes to match adjacent facilities and the facility district.
12. Install lighted bollards only at Group 1 and high-traffic Group 2 facilities with approval on a case-by-case basis by CES/CENB. Generally, match materials, colors and shapes of adjacent facilities and the facility district.
13. Install natural warm gray color, smooth finished concrete bases for all poles in heights appropriate for the facility group and application. Generally, Groups 1, 2 and 4 will have at-grade bases. Group 3 will have taller bases for added durability.
14. When parking lot lighting is necessary, provide an illuminated path to the building's main entrance. Pole bases should be contained within an internal landscape median or island.
15. Consistently install lighting for sidewalks, bikeways and trails to match adjacent facilities.
16. Landscape accent lighting may be used in public gathering spaces and in Group 1 facilities. Coordinate the design, luminaire selection, and placement with the location of trees, shrubs, and site furnishings.
17. Manufacturers listed below are only provided to establish a baseline of equivalency among all applicable manufacturers.

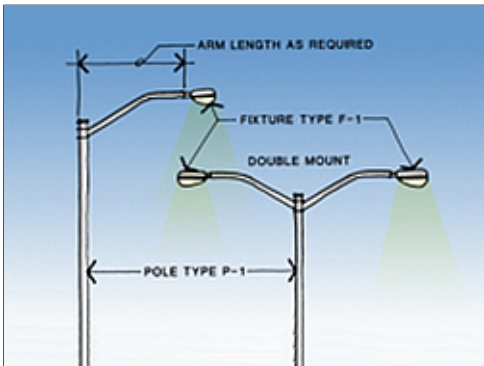
C09.2. Light Fixture Types

Note: *Apply the below base-wide standards for Light Fixtures (products, materials and color). Then refer to the Appendix and apply any additional requirements specifically related to the Facility District in which the project is located.*

C09.2.1. Street Lighting

☒ Applicable ☐ N/A Number of base standards 3

Image Tool 250 x 188



Type: **Style 1**

Applies to: ☒ Group 1 ☐ Group 2 ☐ Group 3 ☐ Group 4 ☐ Other

Mfr: Hubbell, Kim Lighting

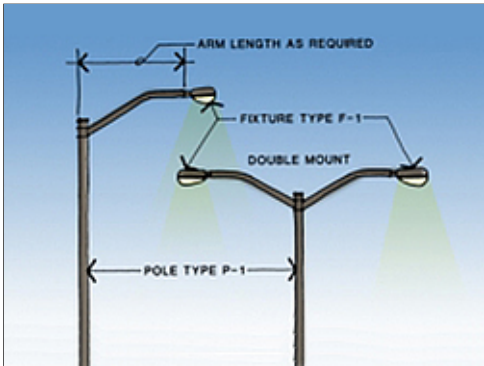
Color: Clear Anodized

Finish: Factory

Model #: Curvilinear Cutoff, Round Pole, Single Arm or Dual Arm Mount

Other: Lamp: LED

UFGS: Section 26 56 19.00 40 Roadway Lighting



Type: **Style 2**

Applies to: ☐ Group 1 ☒ Group 2 ☒ Group 3 ☒ Group 4 ☐ Other

Mfr: Hubbell, Kim Lighting

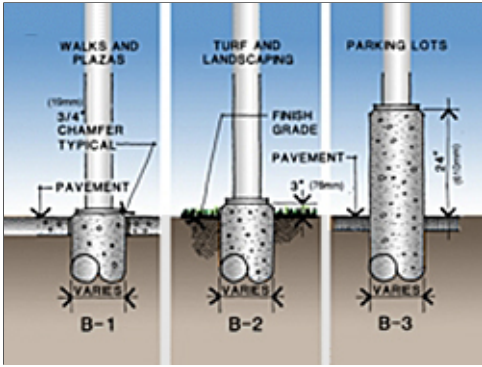
Color: Dark Bronze Anodized

Finish: Factory

Model #: Curvilinear Cutoff, Round Pole , Single Arm or Dual Arm Mount

Other: Lamp: LED

UFGS: Section 26 56 19.00 40 Roadway Lighting



Type: **Street Lighting Bases (B-1)**

Applies to: ☒ Group 1 ☒ Group 2 ☒ Group 3 ☒ Group 4 ☐ Other

Mfr: Formed on site

Color: Natural gray

Finish: Smooth

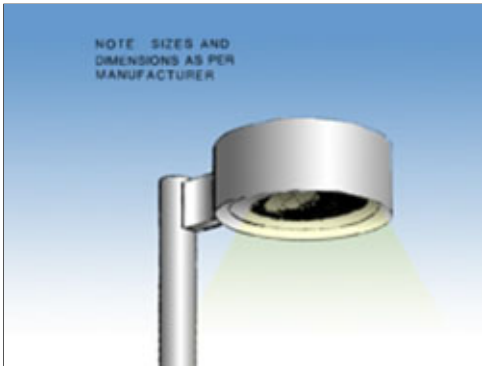
Model #: Round, cast in place

Other: Heights will be relative to adjacent finish surfaces as indicated in the drawing; walks and plazas, turf and landscape, and parking lots; UFGS Section 33 71 02 Underground Electrical Distribution

UFGS: Section 03 33 00 Cast-In-Place Architectural Concrete

C09.2.2. Parking Lot Lighting

☒ Applicable ☐ N/A Number of base standards 4



Type: **Style 1**

Applies to: ☒ Group 1 ☒ Group 2 ☐ Group 3 ☐ Group 4 ☐ Other

Mfr: Hubbell, Kim Lighting

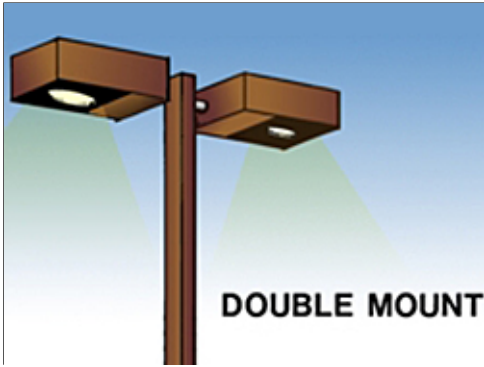
Color: Clear Anodized

Finish: Factory

Model #: Curvilinear Cutoff, Round Pole, Single Arm or Dual Arm Mount

Other: Lamp: LED, Sidewalk fixture similar

UFGS: Section 26 56 00 Exterior Lighting



Type: **Style 2**

Applies to: ☐ Group 1 ☒ Group 2 ☒ Group 3 ☒ Group 4 ☐ Other

Mfr: Hubbell, Kim Lighting

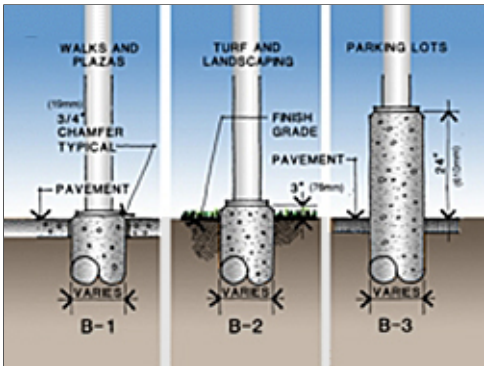
Color: Dark Bronze Anodized

Finish: Factory

Model #: Rectilinear Cutoff, Single Arm or Dual Arm Mount

Other: Lamp: LED, Sidewalk fixture similar

UFGS: Section 26 56 00 Exterior Lighting



Type: **Parking Lot Fixture Bases: Facility Group 1 and 2 (B-1, B-2, B-3)**

Applies to: ☒ Group 1 ☒ Group 2 ☒ Group 3 ☐ Group 4 ☐ Other

Mfr: Formed on site

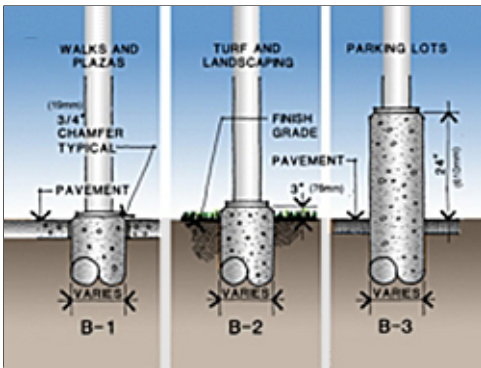
Color: Natural gray

Finish: Smooth

Model #: Round, cast in place

Other: Heights will be relative to adjacent finish surfaces as indicated in the drawing; walks and plazas, turf and landscape, and parking lots; UFGS Section 33 71 02 Underground Electrical Distribution

UFGS: Section 03 33 00 Cast-In-Place Architectural Concrete



Type: **Parking Lot Fixture Bases: Facility Group 3 (B-3)**

Applies to: ☐ Group 1 ☐ Group 2 ☒ Group 3 ☐ Group 4 ☐ Other

Mfr: Formed on site

Color: Natural gray

Finish: Smooth

Model #: Round, cast-in-place

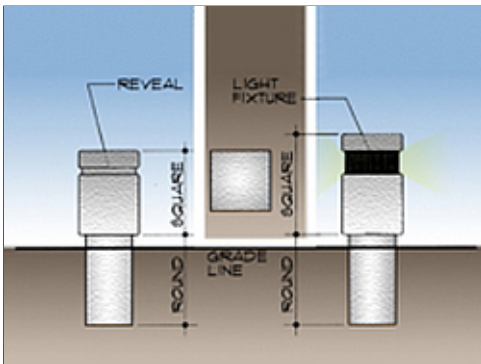
Other: Heights 3' to 5' based on vehicle size; UFGS Section 33 71 02
Underground Electrical Distribution

UFGS: Section 03 33 00 Cast-In-Place Architectural Concrete

C09.2.3. Lighted Bollards

☒ Applicable ☐ N/A Number of base standards 1

Image Tool 250 x 188



Type: **Precast Concrete**

Applies to: ☒ Group 1 ☒ Group 2 ☐ Group 3 ☐ Group 4 ☐ Other

Mfr: HE Williams

Color: Natural warm gray

Finish: Smooth

Model #: Precast Concrete OSC12S (Square) or OSC12R (Round)

Other: Illuminated bollards are not permitted on PSFB. For Group 1, may be used only as approved on a case-by-case basis; Lamp: LED

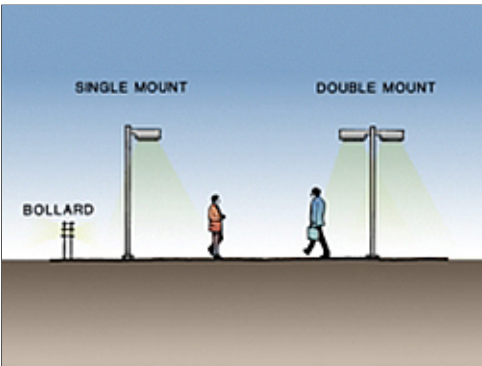
UFGS: N/A

C09.2.4. Sidewalk Lighting

☒ Applicable ☐ N/A

Number of base standards 2

Image Tool 250 x 188



Type: **Style 1**

Applies to: ☒ Group 1 ☒ Group 2 ☐ Group 3 ☐ Group 4 ☐ Other

Mfr: Hubbell, Kim Lighting

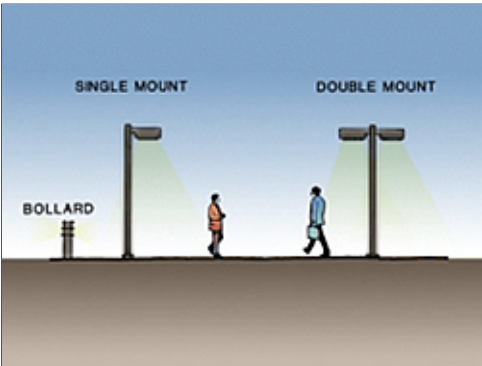
Color: Clear Anodized

Finish: Factory

Model #: Curvilinear Cutoff, Single arm

Other: Lamp: LED, 8' height

UFGS: Section 26 56 00 Exterior Lighting



Type: **Style 2**

Applies to: ☐ Group 1 ☒ Group 2 ☒ Group 3 ☒ Group 4 ☐ Other

Mfr: Hubbell, Kim Lighting

Color: Dark Bronze Anodized

Finish: Factory

Model #: Rectilinear Cutoff, Single arm

Other: Lamp: LED, 8' height

UFGS: Section 26 56 00 Exterior Lighting

C09.2.5. Walls / Stairs Lighting

☒ Applicable ☐ N/A

Number of base standards 1

Image Tool 250 x 188



Type: **Style 1**

Applies to: ☒ Group 1 ☒ Group 2 ☐ Group 3 ☐ Group 4 ☐ Other

Mfr: Vista Lighting

Color: Dark bronze anodized

Finish: Smooth

Model #: Aluminum Step and Brick Lights, 5230 round louvered

Other: Lamp: LED

UFGS: Section 26 56 00 Exterior Lighting

C09.2.6. Other

☐ Applicable ☒ N/A

D. FACILITIES EXTERIORS

Comply with Air Force Corporate Standards for Facilities Exteriors:
<http://afcfs.wbdg.org/facilities-exteriors/index.html>

☐ Applicable ☒ N/A Large graphics do not apply

☐ Applicable ☒ N/A Small graphics do not apply

D01. SUPPORTING THE MISSION

Comply with AF Corporate Standards for Supporting the Mission:
<http://afcfs.wbdg.org/facilities-exteriors/supporting-the-mission/index.html>

D02. SUSTAINABILITY

Comply with Air Force Corporate Standards for Sustainability:
<http://afcfs.wbdg.org/facilities-exteriors/supporting-the-mission/index.html>

D03. ARCHITECTURAL FEATURES

Comply with AF Corporate Standards for Facilities Exteriors:
<http://afcfs.wbdg.org/facilities-exteriors/index.html>

Comply with AF Corporate Standards for Architectural Features:
<http://afcfs.wbdg.org/facilities-exteriors/architectural-features/index.html>

Insert 3 photos for each facility group.

Image Tool 250 x 188

Group 1



Group 2



Group 3



Group 4



D03.1. Orientation, Massing and Scale

1. Orient new buildings to maximize energy efficiency, passive solar and daylighting potential of the building; narrow buildings oriented along an east-west axis are preferred to minimize heat gain in the summer months and maximize heat gain in the winter months resulting in less overall energy usage.
2. Provide orthogonal geometry for principal building form; angular geometry may be used sparingly for Group 1 and used only for emphasis at specific areas such as building entrances and stairwells.
3. Maintain a human scale and reduce the visual scale of large buildings with sub-massing related to interior functional operations; create consistent form and scale in adjacent buildings with compatible profiles or silhouettes.
4. Building heights will not be limited; however, building heights over 2 stories will be considered on a case-by-case basis.
5. Combine functions where practical to avoid a proliferation of small, independent structures.
6. Use and coordinate shading devices with orientation and for function.

☐ Applicable ☒ N/A Large graphics do not apply

☐ Applicable ☒ N/A ~~Small graphics do not apply~~ Small graphics do not apply images (small: 250 px x 188 px) to insert

D03.2. Architectural Character

1. Develop architectural features, materials and detailing appropriate for the Facility Group designation. Refer to Building Entrances, Wall Systems and Roof Systems.
2. Respond to the local climate, Climate Zone 5, and regional influences with environmentally functional architectural features.
3. For new facilities design generally maintain consistency and visual unity in the character of the adjacent buildings through compatible architectural features: repeated use of similar forms such as roofs, and through recurring elements such as doors, windows, materials and colors.
4. Reinforce the aerospace-related architectural theme expressive of innovation and technology that represents the Space Force Command and its mission.
5. All facilities will express sustainability through their orientation, massing, shape, form, materials, and detailing. Provide roof overhangs, louvers, fins and other shading devices to control heat gain and glare and to and improve energy efficiency.
6. Strive for economical construction without compromising a high-quality, professional appearance.

☐ Applicable ☒ N/A Large graphics do not apply

☐ Applicable ☒ N/A Small graphics do not apply

D03.3. Details and Color

1. Provide elements of the aerospace-related theme in Group 1 and Group 2 to include natural colors of stainless steel and aluminum blended with a palette of earth-tone colors related to the native landscape in brick, block, and powder-coated metals. Refer to D05. Wall Systems for detailed material listings.
2. Relate the level of architectural detailing to the Facility Group number.
3. Use only integrally colored materials as the predominant exterior building material; do not use materials that require field painting and ongoing maintenance.
4. Provide consistent and compatible colors for every exterior building feature, including walls, roofs, doors, windows, gutters, downspouts, utility and mechanical elements, and other visible elements.
5. Noncorrosive metals with factory applied color finishes are required.
6. Combine details and color with orientation, massing, scale and architectural character to maintain base compatibility.
7. Manufacturers listed below are only provided to establish a baseline of equivalency among all applicable manufacturers.

☐ Applicable ☒ N/A Large graphics do not apply

☐ Applicable ☒ N/A Small graphics do not apply

D03.3.1. Climate-based Data and Life-Cycle Cost-Effective Passive and Natural Design Strategies:

- ☐ Climate dominated by mechanical cooling
- ☒ Climate dominated by mechanical heating
- ☐ Climate with similar mechanical cooling / heating needs
- ☐ Climate with minimal mechanical cooling / heating needs
- ☐ Climate with high humidity
- ☐ Climate with moderate humidity
- ☒ Climate with low humidity
- ☒ High Solar Insolation
- ☐ Moderate Solar Insolation
- ☐ Low Solar Insolation
- ☐ Soils with High Thermal Conductivity
- ☒ Soils with Average Thermal Conductivity

☐ Soils with Low Thermal Conductivity

Other: N/A

Other: N/A

Facility: Narrow buildings along E-W axis

Wall: Integral shading features and devices / interior masonry thermal mass walls (for cooling)

Doors: Recessed

Windows: Limit north-facing windows, limit non-shaded windows and maximize windows on south facades with shading

Roof: High to medium albedo, minimal to moderate slope

Structure: (exposed) Non-ferrous metals or concrete

MEP: Ground-source and solar photovoltaic following LCCA

Other: Shading must be provided for west-, east-, and south-facing windows

Other: Internal thermal mass walls may be used following LCCA

Note: Apply the below base-wide standards for Architectural Features (products, materials and color). Then refer to the Appendix and apply any additional requirements specifically related to the Facility District in which the project is located.

D03.3.2. Natural Ventilation System

☒ Applicable ☐ N/A

Number of base standards 3

Image Tool 250 x 188



Type: **Style 1 Aluminum Windows**

Applies to: ☒ Group 1 ☒ Group 2 ☐ Group 3 ☐ Group 4 ☐ Other

Mfr: Kawneer (or equivalent)

Color: Group 1: Silver, Group 2: Dark Bronze

Finish: Anodized

Model #: 2x4, Awning type

Other: Provide thermally broken frames

UFGS: Section 08 41 13 Aluminum-Framed Entrances and Storefronts



Type: **Style 2 Steel Windows**

Applies to: ☐ Group 1 ☐ Group 2 ☒ Group 3 ☐ Group 4 ☐ Other

Mfr: Steelcraft (or equivalent)

Color: Dark Bronze

Finish: Powder coated

Model #: 2x4 frame, Awning type

Other: Provide thermally broken frames

UFGS: Section 08 11 13 Steel Doors and Frames

Type: **Style 3 Aluminum-clad Wood Windows**

Applies to: ☐ Group 1 ☐ Group 2 ☐ Group 3 ☒ Group 4 ☐ Other

Mfr: Marvin (or equivalent)

Color: Earth Tones

Finish: Factory

Model #: 4" Depth, Double-hung type

Other: N/A

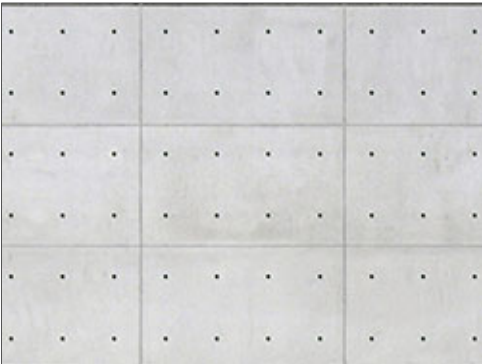
UFGS: Section 08 52 00 Wood Windows



D03.3.3. Thermal Mass

☒ Applicable ☐ N/A

Number of base standards 2



Type: **Style 1 Wall Material - Cast-in Pace Concrete**

Applies to: ☒ Group 1 ☐ Group 2 ☐ Group 3 ☐ Group 4 ☐ Other

Mfr: Transit Mix, Colorado Springs

Color: Natural gray; exposed aggregate, granite

Finish: Light or medium texture

Model #: Sheet-formed

Other: May be media blasted

UFGS: Section 03 33 00 Cast-In-Place Architectural Concrete



Type: **Style 2 Wall Material - Brick**

Applies to: ☒ Group 1 ☒ Group 2 ☐ Group 3 ☐ Group 4 ☐ Other

Mfr: General Shale, Denver

Color: Heritage 441

Finish: Light texture

Model #: Modular Face Brick

Other: N/A

UFGS: Section 04 20 00 Unit Masonry

D03.3.4. Thermal Shading

☒ Applicable ☐ N/A

Number of base standards 2

Image Tool 250 x 188



Type: **Style 1 Wall Devices**

Applies to: ☒ Group 1 ☒ Group 2 ☐ Group 3 ☐ Group 4 ☐ Other

Mfr: Kawneer (or equivalent)

Color: Group 1: silver, Group 2: medium bronze

Finish: Factory, to match frames

Model #: Louver

Other: Shading devices may be attached to frames or structure

UGS: Section 08 41 13 Aluminum-Framed Entrances and Storefronts



Type: **Style 2 Wall Devices**

Applies to: ☐ Group 1 ☐ Group 2 ☒ Group 3 ☐ Group 4 ☐ Other

Mfr: Steelcraft (or equivalent)

Color: Medium bronze

Finish: Factory, to match frames

Model #: Louver, powder coated

Other: Shading devices may be attached to frames or structure
UGS: Section 08 11 13 Steel Doors and Frames

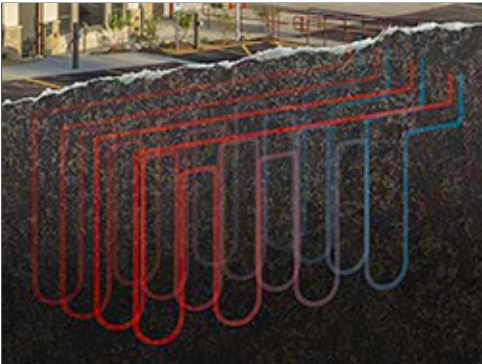
UGS: Section 08 11 13 Steel Doors and Frames

D03.3.5. Renewable Heating/Cooling

☒ Applicable ☐ N/A

Number of base standards 1

Image Tool 250 x 188



Type: **Style 1 Geothermal (Ground Source)**

Applies to: ☒ Group 1 ☒ Group 2 ☒ Group 3 ☒ Group 4 ☐ Other

Mfr: Climate Master

Color: N/A

Finish: N/A

Model #: TBD

Other: Vertical ground loop well field

UGFS: Section 23 81 47 Water-Loop and Ground-Loop Heat Pump Systems

D03.3.6. Solar Photovoltaic System

☒ Applicable ☐ N/A

Number of base standards 1

Image Tool 250 x 188



Type: **Style 1**

Applies to: ☒ Group 1 ☒ Group 2 ☒ Group 3 ☒ Group 4 ☐ Other

Mfr: Varies

Color: Factory

Finish: Factory

Model #: Flat panel

Other: Ground mount or roof mount

UGFS: Section 26 31 00 Solar Photovoltaic (PV) Components

D03.3.7. Solar Thermal System

☒ Applicable ☐ N/A

Number of base standards 1



Type: **Style 1**

Applies to: ☒ Group 1 ☒ Group 2 ☒ Group 3 ☒ Group 4 ☐ Other

Mfr: Varies

Color: Factory

Finish: Factory

Model #: Flat panel

Other: Wall mount or roof mount

UFGS: Section 48 14 13.00 20 Solar Liquid Flat Plate and Evacuated Tube

D04. BUILDING ENTRANCES

Comply with AF Corporate Standards for Facilities Exteriors:
<http://afcf.wbdg.org/facilities-exteriors/index.html>

Comply with AF Corporate Standards for Building Entrances:
<http://afcf.wbdg.org/facilities-exteriors/building-entrances/index.html>

Insert 3 photos for each facility group.

Image Tool 250 x 188

Group 1



Group 2



Group 3



Group 4



D04.1. Primary Entrances

1. Emphasize the primary entrance in the overall building design with a projecting or recessed covering for weather protection following Installation Facilities Standards (IFS) for Facility Group designations.
2. Provide vestibules at entries in Groups 1, 2 and 3 unless used infrequently or serving unconditioned space following ASHRAE 90.1.
3. Fully integrate all elements including the design of handicap ramps in the overall design of the primary entrance in an organized, uncluttered appearance.
4. Install paved transitional spaces sized for the building function and occupancy.
5. Install appropriate lighting and site furniture following AT and IFS.
6. Protect entrances from direct sun and weather.
7. Provide Porte cocheres or covered drop-offs when justified for lodging and medical facilities. Do not use for prestige or architectural accents.

D04.2. Secondary Entrances

1. Provide vestibules at entries in Groups 1, 2 and 3 unless used infrequently or serving unconditioned space following ASHRAE 90.1; use of stair towers as vestibules for multi-story buildings is encouraged when building and / or energy codes are satisfied.
2. Reflect the character of the primary entrance to a lesser extent with a smaller scale.
3. Include a recess or projection for weather protection and shading.
4. Integrate service and egress doors and loading areas with the building design by matching the materials and detailing and reflect the overall quality of the facility.
5. Incorporate egress structures such as stair towers into the facility design.
6. Canopies may be used for service and loading areas. Weather protection beyond weather stripping is not required at doors used only for life safety egress.
7. Develop building massing and orientation to minimize the appearance of service and loading areas; physically and visually separate these from primary entrances.
8. Loading areas must be organized, orderly and have an uncluttered appearance.

D05. WALL SYSTEMS

Comply with AF Corporate Standards for Facilities Exteriors:
<http://afcfs.wbdg.org/facilities-exteriors/index.html>
Comply with AF Corporate Standards for Wall Systems:
<http://afcfs.wbdg.org/facilities-exteriors/wall-systems/index.html>
Comply with AFCFS Recommended Materials:
<http://afcfs.wbdg.org/facilities-exteriors/wall-systems/materials/index.html>

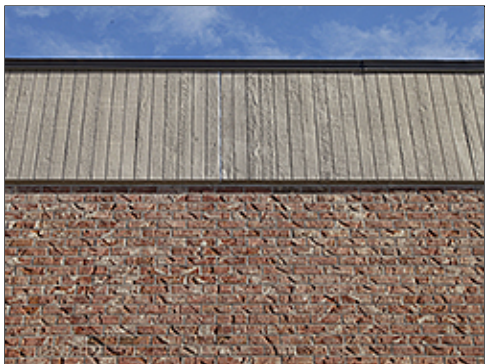
Insert 3 photos for each facility group.

Image Tool 250 x 188

Group 1



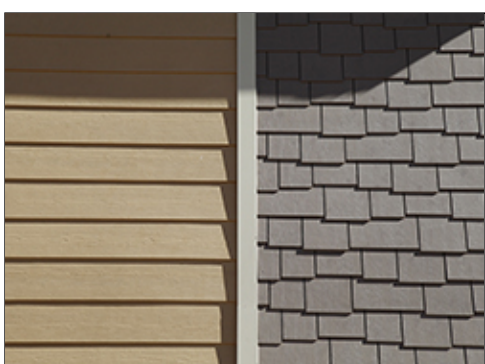
Group 2



Group 3



Group 4



D05.1. Hierarchy of Materials

1. Group 1 facilities may have more refined detailing than Group 2 and Group 2 may have more definition than Group 3.
2. Group 1 facilities will be predominantly brick and metal panels. Cast-in place concrete or architectural precast accents may be used also. Refer to Appendix F for special requirements of site-specific Facility Districts.
3. Group 2 facilities will be predominantly brick with architectural precast accents. Cast-in-place concrete and metal panel accents may be used also.
4. Group 3 facilities will be insulated metal panels or metal sheeting. Ribbed metal sheeting in an alternate color or brick as an accent material may be used also.
5. Group 4 will be fiber cement siding. Trim boards and fiber cement siding in an alternate color, concrete or brick as an accent may be used also
6. Multi-story Group 1 facilities may include a transition in material, color or detailing to create a visual base. Generally, limit the primary material to a single color on Group 2 and 3 facilities.
7. Use high-performance building envelopes following UFC 1-200-02 (High Performance and Sustainable Building Requirements).
8. Use detailing not subject to excessive weathering. Provide wall accents consistently throughout the base.
9. Use integrally colored materials and factory-finished metals.
10. Translucent wall panels may be used in Facility Group 1 and recreational uses in Group 2 when protected from direct solar gain. Provide insulating panels and shading appropriate for the orientation and exposure.
11. Manufacturers listed below are only provided to establish a baseline of equivalency among all applicable manufacturers.

D05.2. Layout, Organization and Durability

1. Organize wall components including doors, windows, accents, shading devices, control joints, etc., to provide an ordered, professional appearance.
2. Integrate shading devices into the overall composition of the wall.
3. Integrate fixed shading devices at all exterior glazing exposed to summer UV heat gain as a passive design measure to reduce energy use. Ensure adequate shading at west entrances. Deciduous trees may be used for shading.
4. Shading systems may be included as part of a manufacturer's window system or may be custom systems integrated into the wall.
5. Provide appropriate transitions between dissimilar materials to mitigate effects of thermal expansion and galvanic action per UFGS 07 60 00, Flashing and Sheet Metal.
6. All joint sealants will be slightly darker than adjacent surfaces.
7. Materials requiring regular maintenance are not permitted; do not use exposed structural steel or other materials that require painting.
8. Refer to C07.2.16. Screen Walls for materials and colors of freestanding walls.
9. Refer to D07. Roofs for downspouts.

D05.3. Equipment, Vents and Devices

- 1. Arrange all mechanical, electrical, fire alarm, lightning protection and other system components to create an orderly appearance that integrates with the wall system.
- 2. Do not expose conduits, cables, piping, lightning protection components, etc. on exterior walls; if unavoidable in renovations, finish these elements to match the adjacent wall surface.
- 3. Avoid visual clutter and where surface-mounted elements are required they will match the wall color.

D05.4 Wall Systems Materials

Facility Group 1 wall materials shall be as follows.

- Primary: Metal Panels or Brick
- Secondary: Cast-in-place Concrete, or Precast with brick
- Accent: Optional: Metal Panels, with Brick

Facility Group 2 wall materials shall be as follows.

- Primary: Brick
- Secondary: Architectural Precast
- Accent: Optional: Cast-in-Place Concrete

Facility Group 3 wall materials shall be as follows.

- Primary: Ribbed Metal Sheeting
- Secondary: Ribbed Metal Sheeting in Alternate Color or Brick
- Accent: Optional: Brick

Facility Group 4 wall materials shall be as follows.

- Primary: Fiber Cement Siding
- Secondary: Fiber Cement Siding, Trim Boards
- Accent: Concrete or Brick Foundation Cladding

Note: Apply the below base-wide standards for Wall Systems (products, materials and color). Then refer to the Appendix and apply any additional requirements specifically related to the Facility District in which the project is located.

D05.4.1. Flat Metal Panels

☒ Applicable ☐ N/A

Number of base standards 1

Image Tool 250 x 188



Type: **Style 1**

Applies to: ☒ Group 1 ☐ Group 2 ☐ Group 3 ☐ Group 4 ☐ Other

Mfr: Alucobond

Model #: Classic Collection

Color: Anodic Clear Mica

Finish: Matte, PVDF 2

Other:

UFGS: Section 07 42 13 Metal Wall Panels:
<http://www.wbdg.org/FFC/DOD/UFGS/UFGS 07 42 13.pdf>
Section 07 42 63 Fabricated Wall Panel Assemblies:
<http://www.wbdg.org/FFC/DOD/UFGS/UFGS 07 42 63.pdf>

D05.4.2. Brick Veneer

☒ Applicable ☐ N/A

Number of base standards 1

Image Tool 250 x 188



Type: **Style 1**

Applies to: ☒ Group 1 ☒ Group 2 ☒ Group 3 ☒ Group 4 ☐ Other

Mfr: General Shale, Denver

Model #: Full Modular Brick: 3-5/8"W x 2-1/4"H x 7-5/8"L

Color: Heritage 441

Finish: Light texture

Other: Thin brick, brick tile or Z-Brick is not allowed.

UFGS: Section 04 20 00 Unit Masonry:
<http://www.wbdg.org/FFC/DOD/UFGS/UFGS 04 20 00.pdf>

D05.4.3. Architectural Precast

☒ Applicable ☐ N/A

Number of base standards 1

Image Tool 250 x 188



Type: **Style 1**

Applies to: ☒ Group 1 ☒ Group 2 ☐ Group 3 ☐ Group 4 ☐ Other

Mfr: Stresscon, Colorado Springs

Model #: Smooth Casting

Color: Light Beige

Finish: Very Light texture

Other: N/A

UFGS: Section 03 45 00 Precast Architectural Concrete:
<http://www.wbdg.org/FFC/DOD/UFGS/UFGS 03 45 00.pdf>

D05.4.4. Stucco Over Sheathing

☐ Applicable ☒ N/A

D05.4.5. Curtain Wall

☐ Applicable ☒ N/A

D05.4.6. Cast-In-Place Concrete

☒ Applicable ☐ N/A

Number of base standards 1

Image Tool 250 x 188



Type: **Style 1**

Applies to: ☒ Group 1 ☐ Group 2 ☐ Group 3 ☐ Group 4 ☐ Other

Mfr: Transit Mix, Colorado Springs

Model #: Sheet-formed

Color: Exposed Aggregate; Granite

Finish: Medium Texture (or media blasted)

Other: N/A

UFGS: Section 03 33 00 Cast-In-Place Architectural Concrete:
<http://www.wbdg.org/FFC/DOD/UFGS/UFGS 03 33 00.pdf>

D05.4.7. Tilt-Up Concrete

☐ Applicable ☒ N/A

D05.4.8. Ribbed Metal Sheetting

☒ Applicable ☐ N/A Number of base standards 2

Image Tool 250 x 188



Type: **Style 1**

Applies to: ☐ Group 1 ☐ Group 2 ☒ Group 3 ☐ Group 4 ☐ Other

Mfr: Berridge

Model #: Metal Wall Panel

Color: Dark Bronze; FSC X0045 (Brown)

Finish: Embossed Texture

Other: 24 Gauge Steel

UFGS: Section 07 42 13 Metal Wall Panels:
<http://www.wbdg.org/FFC/DOD/UFGS/UFGS 07 42 13.pdf>

Type: **Style 2**

Applies to: ☐ Group 1 ☐ Group 2 ☒ Group 3 ☐ Group 4 ☐ Other

Mfr: Berridge

Model #: Metal Wall Panel

Color: Beige; FSC X3690 (Sand)

Finish: Embossed Texture

Other: 24 Gauge Steel

UFGS: Section 07 42 13 Metal Wall Panels:
<http://www.wbdg.org/FFC/DOD/UFGS/UFGS 07 42 13.pdf>

D05.4.9. EIFS

☐ Applicable ☒ N/A

D05.4.10. GFRC

☐ Applicable ☒ N/A



D05.4.11. Concrete Block

☐ Applicable ☒ N/A

D05.4.12. Fiber Cement Siding

☒ Applicable ☐ N/A Number of base standards 1

Image Tool 250 x 188



Type: **Style 1**

Applies to: ☐ Group 1 ☐ Group 2 ☐ Group 3 ☒ Group 4 ☐ Other

Mfr: James Hardie Building Products, Inc.

Model #: Horizontal Lap Siding, Shingle Siding

Color: Earth Tones

Finish: Wood Texture

Other: Hardie Plank, Hardie Shingle

UFGS: SECTION 074646 Fiber Cement Siding:
(Not Available on UFGS)

D05.4.13. Other

☐ Applicable ☒ N/A

D06. DOORS AND WINDOWS

Comply with AF Corporate Standards for Facilities Exteriors:
<http://afcfs.wbdg.org/facilities-exterior/index.html>
Comply with AF Corporate Standards for Doors and Windows:
<http://afcfs.wbdg.org/facilities-exterior/doors-and-windows/index.html>
Comply with AFCFS Recommended Materials:
<http://afcfs.wbdg.org/facilities-exterior/doors-and-windows/materials/index.html>

Insert 3 photos for each facility group.

Image Tool 250 x 188

Group 1



Group 2



Group 3



Group 4



D06.1. Types

1. Clear anodized aluminum doors, windows and frames with thermal breaks are preferred for Facility Groups 1-3 because they show less wear and weathering than dark anodized finishes; match the color of the door and frame. For renovation projects the color of new windows, doors and frames may match existing.
2. Aluminum clad wood windows are preferred for Facility Group 4.
3. Standard-sized hinged doors are preferred. Use sliding, folding, overhead, and sectional and other door configurations only to support mission operations.
4. Automatic doors are allowed only where functionally necessary.
5. Limit hollow metal doors and frames to security doors, utility rooms and mechanical rooms in Groups 1 and 2 and to any application in Group 3 facilities.
6. Utility and emergency egress doors will match or be harmonious with the wall color.
7. Passive thermal comfort methods of ventilation are encouraged where life cycle cost justified.
8. Windows must meet force protection requirements.
9. Adjacent joint sealants should be slightly darker than the frame color.
10. Make efforts to contain noise at its source with the proper door gasket per UFC 3-450-01 Noise and Vibration Control.
11. Manufacturers listed below are only provided to establish a baseline of equivalency among all applicable manufacturers.

D06.2. Layout and Geometry

1. Visually and functionally compose openings in walls for the climate-specific exposure.
2. Consistently use opening type, size, placement, mullion pattern, and color to reinforce the overall architectural design.
3. Openings will augment interior lighting and space conditioning needs.
4. Protect against vandalism and intrusion.

D06.3. Glazing and Shading

1. Factory tinted, energy-efficient, low-e, double-pane glazing is required. Provide triple-pane glazing in extreme environments. Provide the U-factor value, Solar Heat Gain Coefficient (SHGC), and Visible Light Transmittance (VLT), conforming to requirements of Climate Zone 5.
2. Glazing color, medium gray, will follow Installation Facilities Standards (IFS).
3. Translucent wall panels may be integrated into wall systems.
4. Do not use mirrored glazing.
5. Fully integrate applicable shading designs for overhangs, louvers, light shelves and grilles.
6. Install window screens on operable windows.

D06.4. Hardware

- 1. Provide hardware appropriate for the Facility Group while considering activity and frequency of use and local climate, Climate Zone 5. Hardware may be of higher visual quality for Facility Group 1.
- 2. Ensure hardware will perform throughout the facility's lifespan without showing extreme wear.
- 3. Select finishes that will not degrade by intensity of operation or exposure to the elements.
- 4. Use consistent finishes and color on window and door systems throughout a facility. For renovation projects the color of new hardware may match the existing hardware.
- 5. Design building systems to eliminate the need for security screens whenever possible.

D06.5. Doors and Windows Materials

Note: Apply the below base-wide standards for Doors and Windows (products, materials and color). Then refer to the Appendix and apply any additional requirements specifically related to the Facility District in which the project is located.

D06.5.1. Anodized Aluminum

☒ Applicable ☐ N/A Number of base standards 1



Type: **Anodized Aluminum Doors, Windows and Frames**

Applies to: ☒ Group 1 ☒ Group 2 ☐ Group 3 ☐ Group 4 ☐ Other

Mfr: Kawneer (or equivalent)

Color: Group 1: Silver Powder Coated, Group 2 Dark Bronze Powder Coated

Finish: Matte

Model #: 2x4

Other: Provide thermally broken frames

UFGS: Section 08 41 13 Aluminum-Framed Entrances and Storefronts:
<http://www.wbdg.org/FFC/DOD/UFGS/UFGS 08 41 13.pdf>

D06.5.2. Hollow Metal

☒ Applicable ☐ N/A

Number of base standards 1

Image Tool 250 x 188



Type: **Hollow Metal Doors, Windows and Frames**

Applies to: ☒ Group 1 ☒ Group 2 ☒ Group 3 ☐ Group 4 ☐ Other

Mfr: Steelcraft (or equivalent)

Color: Group 1: Silver, Group 2 and 3 Dark Bronze

Finish: Satin

Model #: 2x4 frame

Other: Provide thermally broken frames

UGFS: Section 08 11 13 Steel Doors and Frames:
<http://www.wbdg.org/FFC/DOD/UGFS/UGFS 08 11 13.pdf>

D06.5.3. Aluminum-clad Wood

☒ Applicable ☐ N/A

Number of base standards 1

Image Tool 250 x 188



Type: **Aluminum-clad Wood Doors, Windows and Frames**

Applies to: ☐ Group 1 ☐ Group 2 ☐ Group 3 ☒ Group 4 ☐ Other

Mfr: Marvin (or equivalent)

Color: Earth Tones

Finish: Satin

Model #: Double hung

Other: N/A

UGFS: Section 08 14 00 Wood Doors
<http://www.wbdg.org/FFC/DOD/UGFS/UGFS 08 14 00.pdf>

D06.5.4. Other

☐ Applicable ☒ N/A

D07. ROOF SYSTEMS

Comply with AF Corporate Standards for Facilities Exteriors:

<http://afcfs.wbdg.org/facilities-exterior/index.html>

Comply with AF Corporate Standards for Roof Systems:

<http://afcfs.wbdg.org/facilities-exterior/roof-systems/index.html>

Comply with AFCFS Recommended Materials:

<http://afcfs.wbdg.org/facilities-exterior/roof-systems/materials/index.html>

Insert 3 photos for each facility group.

Image Tool 250 x 188

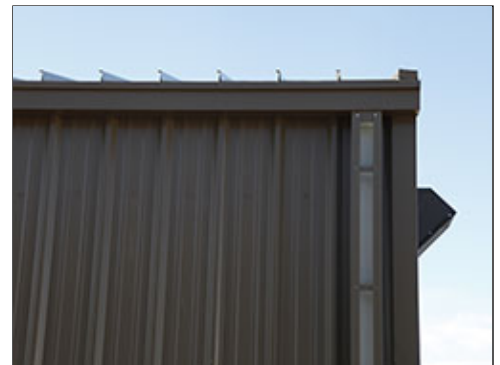
Group 1



Group 2



Group 3



Group 4



D07.1. Roof Type and Form

1. Use proven, cost-effective roof systems with high durability, weather resistance, and low maintenance that are compatible with Installation Facilities Standards (IFS) and requirements for the designated Facility Group.
2. Generally, match the roof type and form of existing adjacent facilities in new construction.
3. Group 1 and 2 buildings will use "flat" membrane roofs with parapets as the predominant design element.
4. Provide screens for roof-mounted appendages and equipment of the same materials, which are used predominantly in the building's roof systems.
5. Roof translucent panels are permitted only for Group 1 and will match the white panels used previously at B1. (See Appendix F, Command District)
6. Group 2 and 3 facilities under 5,000 sf and narrow in plan geometry, may use low-sloped shed, gabled or hipped standing seam metal roofs. Larger facilities may use sloped-roof features in conjunction with predominantly minimal-sloped "flat" membrane roofs.
7. Group 4 facilities will have gabled or hipped composite shingle roofs.
8. Roof eaves will extend beyond the exterior wall for roof drainage and shading. Provide overhangs for shading in response to local climatic conditions, Climate Zone 5. These should be sized and proportioned to the height of the facility and to the window openings being shaded.
9. South-facing eaves will coordinate with adjacent wall-mounted shading devices.
10. The color, shape and slope of the eave and soffit will be compatible with adjacent facilities.
11. Keep roofs uncluttered and minimize penetrations.
12. Diminish massive roofs into coordinated smaller components consistent with adjacent facilities; avoid random, arbitrary changes.
13. Increase the insulation value of existing roofing systems during renovations if supported by life-cycle cost and structural analysis.
14. Roofs will be maintained for the life of the system and replaced in accordance with UFC 3-110-03 (Roofing, w/ Change 5) and AFI 32-1051 (Roof Systems Management). A warranty is required on all new roofs.
15. Manufacturers listed below are only provided to establish a baseline of equivalency among all applicable manufacturers.

D07.2. Roof Slope

1. Group 1 and 2 buildings will use sloped roofs, min. 3:12.
2. Low-sloped roofs are allowed for larger structures or to match existing conditions on renovation projects. Minimal-sloped roofs may also be used for Group 3 facilities in high-visibility areas.
3. Group 4 facilities will use 4:12 to 6:12 roof slopes.
4. Ensure adequate drainage and connect to the subsurface rain collection system where available.
5. Provide roof slopes to accommodate solar photovoltaic, solar thermal, passive systems and daylighting when applicable following UFC 1-200-02 (High Performance and Sustainable Building Requirements).
6. Provide underlayment's as required for the roofing type as directed by UFC 3-110-03 (Roofing, with Change 5).

D07.3. Parapets and Copings

1. Extend wall materials vertically above the roofline and provide metal copings to match the wall. Ensure copings are properly flashed and detailed to avoid roof leaks.

D07.4. Color and Reflectivity

1. Sloped roofs in Groups 1 and 2 and smaller facilities in Group 3 will be off-white to match adjacent facilities and follow requirements of IFS.
2. All minimal-slope membrane roofs will use only use high-albedo, high-reflectivity color to help decrease the temperature around the buildings and minimize damage to human and wildlife habitat.
3. Sloped roofs in Group 4 will be earth tones.
4. Comply with UFC 3-110-03 (Roofing, with Change 5) and ASHRAE 90.1-2019 (Energy Standard for Buildings except Low-Rise Residential Buildings) for Solar Reflectance Index (SRI) and thermal requirements.
5. All roof flashing will match the color of the predominant background material.

D07.5. Gutters, Downspouts, Scuppers, Drains

1. All sloped roofs will use gutters and downspouts. Locate gutters outside the fascia.
2. Internal roof drainage systems are not permitted in new construction. Minimal-sloped roofs will be sloped to drain to the building perimeter through scuppers into downspouts.
3. All gutters and fascias will match the roof color.
4. Size the roof drainage system per IBC and SMACNA for the region.
5. Use scuppers as required in parapet walls. Arrange scuppers in an orderly manner consistent with other elements of the wall system.
6. When open scuppers are connected to downspouts, provide transitions consistent with adjacent facilities.
7. Integrate downspouts with the architectural details of the wall system and arrange in an orderly, non-prominent appearance. Generally, blend downspouts with the color of the wall.
8. Fabricate downspouts from non-corrosive materials such as aluminum or zinc-coated steel. Provide powder-coated finishes in medium bronze.
9. All downspouts will be solid.
10. Provide angled transitional pieces for downspouts to fit closely against the wall for their entire length.
11. Coordinate locations of downspouts to conceal control joints in masonry walls when possible.
12. Place downspouts away from building entries. Water discharged is not permitted to run across sidewalks.

D07.6. Roof Vents and Elements

1. Minimize and consolidate roof penetrations into a single, inconspicuous point whenever possible.

2. On sloped roofs clad pipe penetrations to match the roofing material.
3. Avoid the use of rooftop mechanical equipment; however, for renovations and unavoidable configurations, ensure units are screened.
4. Provide access points and service routes to equipment that protect the roof.
5. Screen all large vents.
6. Ensure attic spaces are properly vented at ridges and soffits.
7. Match roof color for all exposed equipment and vents.
8. Avoid roof-mounted antenna systems.
9. Arrange Lightning Protection Systems (LPS) components in an ordered, uncluttered and inconspicuous appearance; integrate components into the organization of the roof and wall systems. Follow UFC 3-575-01 (Lightning and Static Electricity Protection Systems). Include a Fall Protection Plan.
10. Ensure that LPS roof mounting systems are approved by the roofing manufacturer.
11. Additions to a roof will not interfere with LPS or other rooftop systems that may be required.
12. Include permanent fall protection with any addition to a roof with a slope above 3:12 per UFC 3-110-03 (Roofing, with Change 5).

D07.7. Clerestories and Skylights

1. Clerestories are permitted in Group 1 facilities. These are allowed in Group 3 facilities only when serving passive systems and are justifiable by life-cycle analysis.
2. Clerestories are preferred to skylights to avoid roof penetrations. Skylights are not permitted.
3. Design clerestories using the same principles for seasonal shading that are required for walls and roof overhangs.
4. Translucent panel systems are preferred in clerestory applications due to lack of window cleaning.
5. Clerestories must comply with UFC 4-10-01 (DoD Minimum Antiterrorism Standard for Facilities w/ Change 1).

D07.8. Vegetated Roof

1. Not applicable.

D07.9. Roof Systems Materials

Note: Apply the below base-wide standards for Roof Systems (products, materials and color). Then refer to the Appendix and apply any additional requirements specifically related to the Facility District in which the project is located.

D07.9.1. Standing Seam Metal

☒ Applicable ☐ N/A Number of base standards 1



Type: **Style 1**

Applies to: ☐ Group 1 ☒ Group 2 ☒ Group 3 ☐ Group 4 ☐ Other

Mfr: Berridge

Color: Dark Bronze

Finish: Matte

Model #: Tee-Panel

Other: Shed, gabled or hipped standing seam metal

UFGS: Section 07 61 14 Steel Standing Seam Roofing
<http://www.wbdg.org/FFC/DOD/UFGS/UFGS 07 61 14.00 20.pdf>

D07.9.2. Membrane Single-ply

☒ Applicable ☐ N/A Number of base standards 1



Type: **Style 1**

Applies to: ☒ Group 1 ☒ Group 2 ☒ Group 3 ☐ Group 4 ☐ Other

Mfr: Carlisle Syntec Systems

Color: Off-white

Finish: Smooth

Model #: Single-ply, "flat" minimal slope

Other: Gabled or shed translucent panel clerestories

UFGS: Section 07 53 23 Ethylene-Propylene-Diene-Monomer Roofing
<http://www.wbdg.org/FFC/DOD/UFGS/UFGS 07 53 23.pdf>
Section 07 54 50 TPO Thermoplastic Single-Ply Roofing
(Not Available on UFGS)

D07.9.3. Built-up Multi-ply

☐ Applicable ☒ N/A

D07.9.4. Concrete Tile

☐ Applicable ☒ N/A

D07.9.5. Clay Tile

☐ Applicable ☒ N/A

D07.9.6. Slate Shingles

☐ Applicable ☒ N/A

D07.9.7. Vegetated System

☐ Applicable ☒ N/A

D07.9.8. Ribbed Metal Sheet

☐ Applicable ☒ N/A

D07.9.9. Composite Shingles

☒ Applicable ☐ N/A Number of base standards 1



Type: **Style 1**

Applies to: ☐ Group 1 ☐ Group 2 ☐ Group 3 ☒ Group 4 ☐ Other

Mfr: **Tamko**

Color: **Earth Tones**

Finish: **Factory**

Model #: **Heritage**

Other: **Gabled or hipped with transverse gabled or hipped features**

UGFS: **Section 07 31 13 Glass-fiber-reinforced Asphalt Shingles**
<http://www.wbdg.org/FFC/DOD/UGFS/UGFS 07 31 13.pdf>

D07.9.10. Other

☐ Applicable ☒ N/A

D08. STRUCTURAL SYSTEMS

Comply with AF Corporate Standards for Facilities Exteriors:

<http://afcfs.wbdg.org/facilities-exteriors/index.html>

Comply with AF Corporate Standards for Structural Systems:

<http://afcfs.wbdg.org/facilities-exteriors/structural-systems/index.html>

Comply with AFCFS Recommended Materials:

<http://afcfs.wbdg.org/facilities-exteriors/structural-systems/materials/index.html>

Insert 3 photos for each facility group.

Image Tool 250 x 188

Group 1



Group 2



Group 3



Group 4



D08.1. Systems and Layouts

- 1. Pre-engineered structural steel framing may be used for Groups 1, 2 and 3 facilities; Installation-appropriate thermal envelopes, materials and detailing are required.
- 2. Select economical structural systems that integrate roof and wall systems.
- 3. Narrow buildings 60' or less in width with column-free interiors are preferred for office, administrative and personnel spaces, when interior columns are required optimize the structural grid layout for open-plan arrangements.
- 4. Fully coordinate structural grids with exterior window systems to align columns with window frames or wall systems.
- 5. When structure is exposed provide an organized appearance and coordinate with mechanical, electrical, plumbing, fire protection, information technology, and communications systems.
- 6. Limit the use of specialty systems (such as space frames, vaults or domes) and of structure as a visual feature.
- 7. Cost-effectively design interior bearing walls as thermal mass.
- 8. Manufacturers listed below are only provided to establish a baseline of equivalency among all applicable manufacturers.

D08.2. Structural Systems Materials

Note: Apply the below base-wide standards for Structural Systems (products, materials and color). Then refer to the Appendix and apply any additional requirements specifically related to the Facility District in which the project is located.

D08.2.1. Concrete

☒ Applicable ☐ N/A

Number of base standards 1

Image Tool 250 x 188



Type: **Style 1**

Applies to: ☒ Group 1 ☐ Group 2 ☐ Group 3 ☐ Group 4 ☐ Other

Mfr: Stresscon. Inc.

Color: Natural Gray

Finish: Light texture

Model #: Post and beam, waffle slab

Other: N/A

UFGS: Section 03 30 53 Miscellaneous Cast-In-Place Concrete
<http://www.wbdg.org/FFC/DOD/UFGS/UFGS 03 30 53.pdf>
Section 03 33 00 Cast-In-Place Architectural Concrete
<http://www.wbdg.org/FFC/DOD/UFGS/UFGS 03 33 00.pdf>
Section 03 47 13 Tilt-Up Concrete
<http://www.wbdg.org/FFC/DOD/UFGS/UFGS 03 47 13.pdf>

D08.2.2. Insulated Concrete Forming (ICF)

☐ Applicable ☒ N/A

D08.2.3. Steel

☒ Applicable ☐ N/A

Number of base standards 1

Image Tool 250 x 188



Type: **Rigid Framing**

Applies to: ☒ Group 1 ☒ Group 2 ☐ Group 3 ☐ Group 4 ☐ Other

Mfr: US Steel

Color: Shop primed

Finish: Matte

Model #: Structural steel shapes

Other: N/A

UFGS: Section 05 12 00 Structural Steel
<http://www.wbdg.org/FFC/DOD/UFGS/UFGS 05 12 00.pdf>

D08.2.4. Pre-Engineered Steel

☒ Applicable ☐ N/A

Number of base standards 1

Image Tool 250 x 188



Type: **Moment Frame**

Applies to: ☒ Group 1 ☒ Group 2 ☒ Group 3 ☐ Group 4 ☐ Other

Mfr: Behlen Building Systems

Color: Factory primed

Finish: Matte

Model #: Moment Frame

Other: Draped insulation may be used behind wall system;
Behlen standing seam roof system may be used for Group 3

UFGS: Section 13 12 00 Steel Building Systems
(Not Available on UFGS)
Section 13 34 19 Metal Building Systems
<http://www.wbdg.org/FFC/DOD/UFGS/UFGS 13 34 19.pdf>

D08.2.5. Masonry

☐ Applicable ☒ N/A

D08.2.6. Heavy Timber

☐ Applicable ☒ N/A

D08.2.7. Light-gauge Steel

☒ Applicable ☐ N/A Number of base standards 1



Type: **Style 1**

Applies to: ☐ Group 1 ☐ Group 2 ☐ Group 3 ☒ Group 4 ☐ Other

Mfr: Steelrite

Color: Factory

Finish: Galvanized

Model #: Structural framing shapes

Other: N/A

UFGS: Section 05 45 00 Light Gauge Steel Framing System
(Not Available on UFGS)

D08.2.8. Lumber Framing

☒ Applicable ☐ N/A

Number of base standards 1

Image Tool 250 x 188



Type: **Style 1**

Applies to: ☐ Group 1 ☐ Group 2 ☐ Group 3 ☒ Group 4 ☐ Other

Mfr: Boise Cascade Wood Products

Color: N/A

Finish: S4S

Model #: Structural dimensional lumber

Other: N/A

UFGS: Section 06 10 00 Rough Carpentry
[http://www.wbdg.org/FFC/DOD/UFGS/UFGS 06 10 00.pdf](http://www.wbdg.org/FFC/DOD/UFGS/UFGS%2006%2010%2000.pdf)
Section 06 11 00 Wood Framing and Sheathing
(Not Available on UFGS)

D08.2.9. Other

☐ Applicable ☒ N/A

D09. MECHANICAL, ELECTRICAL AND PLUMBING

Comply with AF Corporate Standards for Facilities Exteriors:
<http://afcf.wbdg.org/facilities-exteriors/index.html>

Comply with AF Corporate Standards for Mechanical, Electrical and Plumbing:
<http://afcf.wbdg.org/facilities-exteriors/mechanical-electrical-and-plumbing/index.html>

Insert 3 photos for each facility group.

Image Tool 250 x 188

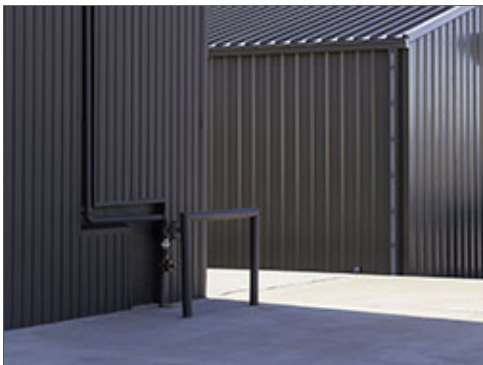
Group 1



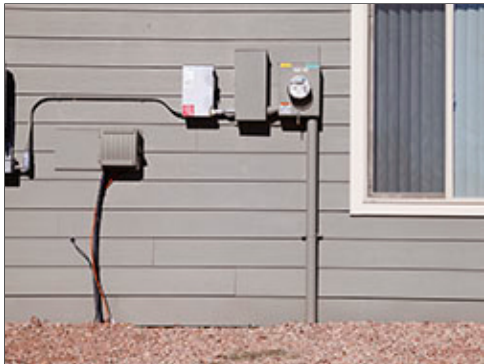
Group 2



Group 3



Group 4



D09.1. Passive and Active Systems

1. Fully integrate passive heating and cooling systems into facility designs whenever practical for the local climate prior to the design of active mechanical systems.
2. Provide optimized passive and active systems; design active mechanical systems to supplement thermal mass walls and floors.
3. Develop renewable-energy systems including geo-exchange (ground source heat pumps) when life cycle cost effective.
4. Performance display screens, which report energy performance and utility savings, are encouraged, when provided locate these in building lobbies or common areas.
5. Solar domestic hot water systems are required when life-cycle cost effective for the climate.
6. Integrate shading into building exteriors to reduce solar heat gain during hot seasons.

D09.2. Functionality and Efficiency

1. Fully coordinate mechanical, electrical, plumbing (MEP) and fire protection systems with each other and with the building structure, enclosure, thermal envelope and interior design.
2. Ensure direct exterior access is provided, for CE, to main mechanical and electrical rooms.
3. Screen exterior equipment from primary views (landscape, building masses, screen walls) and comply with AT requirements.
4. Keep equipment away from main building entrances; locate service area/yard on least visible side of a building.
5. Coordinate the location of all exterior meters, equipment and devices to provide convenient access and an overall coordinated and orderly appearance.
6. Design emergency generator systems integrally with all other building systems and avoid incompatible building additions; locate generators near service areas and ensure they are not visible from primary entrances.
7. When structure is exposed as a finished ceiling, fully integrate MEP and fire protection systems to provide an organized, uncluttered appearance.
8. Conceal ducts, piping, conduits, devices, etc., when permanent walls, suspended ceilings or raised floors are provided; locate sprinkler heads in orderly configuration.
9. Limit interior wall-mounted equipment in occupied personnel spaces; avoid surface-mounted conduit and pipes.
10. Provide efficient utility rooms with layouts to facilitate system performance and maintenance; provide convenient access to controls, clearly label systems and include operating and maintenance instructions.
11. Separate mechanical and electrical and communications rooms.
12. Integrate recessed and wall-mounted fixtures such as fire standpipe cabinets and drinking fountains within permanent walls.

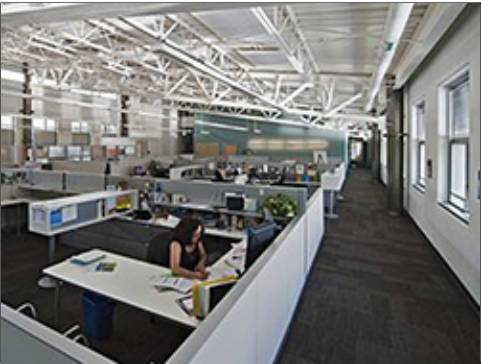
E. FACILITIES INTERIORS

Comply with Air Force Corporate Standards for Facilities Interiors:
<http://afcfb.wbdg.org/facilities-interiors/index.html>

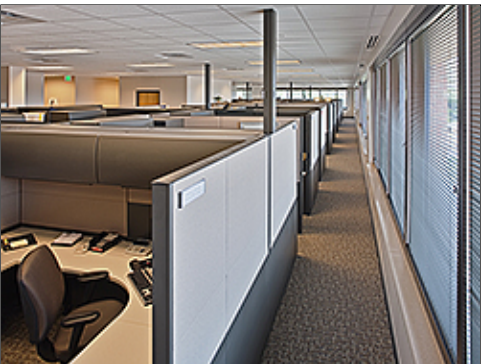
Insert 3 photos for each facility group.

Image Tool 250 x 188

Group 1



Group 2



Group 3



Group 4



E01. Building Configurations

Comply with Air Force Corporate Standards for Building Configurations:

<http://afcfs.wbdg.org/facilities-interiors/buildings-configurations/index.html>

1. Provide open-plan configurations for office, administrative, operational and related activities and spaces for maximum flexibility. Use a "core and shell" approach in which all building systems, infrastructure and permanent interior partitions anticipate two or more uses (operations) during a facility's life span.
2. Create flexible interior configurations using Furniture, Fixtures & Equipment (FF&E) and limit private offices and private rooms. Refer to AFMAN 32-1084 (Facility Requirements Standards) for space requirements. To the greatest extent, limit permanent partitions to core areas such as toilet rooms, stairs, mechanical and utility rooms.
3. Use more durable long-lasting finishes in core areas for walls, ceilings, floor coverings and built-in casework. Coordinate interior FF&E layouts with structural grids during space planning.
4. Provide high-performance building configurations following UFC 1-200-02 (High Performance and Sustainable Building Requirements). Ensure passive design strategies are cost effectively incorporated before active mechanical systems are designed.
5. Comply with UFC 1-200-01 (DoD Building Code, w/ Change 1), general building requirements. UFC 1-200-01 provides applicability of model building codes and government unique criteria for typical design disciplines and building systems, as well as for accessibility, antiterrorism, security, high performance and sustainability requirements, and safety.
6. Meet security and force protection requirements in UFC 4-010-01: DoD Minimum Antiterrorism Standards for Buildings.
7. Comply with AFCFS for supporting mission requirements, addressing human comfort and well being, and creating highly flexible interiors while satisfying metrics for high performance and sustainable buildings.
8. Provide a level of quality for interior features, materials and finishes that is appropriate for the Facility Group number. Group 1 may receive higher quality than Groups 2 thru 4. Refer to Facility Hierarchy.
9. Through open-plan configurations, preserve all passive and natural design strategies and fully integrate facility interiors with overall building systems.
10. Professional interior designers, or architects with significant interior design experience, must accomplish the design and review of applicable new construction, renovations and maintenance projects.
11. Consult with the State Historic Preservation Officer (SHPO) and base-level Historic Preservation offices regarding proposed changes to properties listed on or eligible for listing on the National Register of Historic Places. Follow requirements of The National Historic Preservation Act and Secretary of the Interior Standards for the Treatment of Historic Properties.
12. Maintain architectural compatibility following AFCFS and this Installation Facilities Standards (IFS) document to create continuity while avoiding monotony.

E01.1. Layout and Common Areas

Comply with Air Force Corporate Standards for Layout and Common Areas:

<http://afcfs.wbdg.org/facilities-interiors/buildings-configurations/layout-and-common-areas/index.html>

1. Create open-plan interior environments to accommodate changes.
2. Limit interior partitions, private offices and rooms; use furniture or modular systems to provide privacy and acoustic control.
3. When partitions are functionally justified such as for conference rooms, use systems furniture and moveable (demountable) floor-to-ceiling wall systems for acoustical or visual privacy.

4. Proportion lobbies and common spaces based on type of function, activity and facility group.
5. Allow no direct sight lines into restrooms.
6. Situate utility and core areas to minimize impact on daylighting and to maximize use as thermal buffers.
7. Ensure electrical, lighting and communications system can be adaptable to configuration changes.
8. Avoid power poles to the maximum extent; when poles are necessary minimize the number and coordinate locations with furniture placement and other elements.
9. Avoid sloping floors to maintain flexibility and eliminate future structural changes.
10. Special consideration may apply to Sensitive Compartmented Information Facilities (SCIFs).

E01.1.1. Interior Design Process

1. Comply with UFC 3-120-10 (Interior Design, w/ Change 2) for the Comprehensive Interior Design (CID,) which includes both Structural Interior Design (SID) and Furniture, Fixtures & Equipment (FF&E) design services.
2. Use a collaborative, integrated planning and design team, composed of user, government support staff, and appropriate professionals. Integrate architectural features using simple detailing to create a professional appearance; avoid extravagant or excessive detailing.
3. Ensure interior designs satisfy the functional requirements within the context of flexibility, sustainability and the building's energy performance.
4. Base space planning on square foot allocations from AFM 32-1084. Identify special requirements if any, such as privacy separation, VIP areas, gathering spaces and storage. Note: The occupant's rank and position will influence the square footage and selection of materials.
5. Provide clear circulation and pathway finding for both horizontal and vertical directions that accommodate the number of personnel in the facility.
6. Maximize efficiencies in the space plan for functional relationships and adjacencies for all facility users. Efficiently create and situate rooms and support rooms such as conference / meeting rooms and break rooms.
7. Provide interior design building-related illustrations, drawings, schedules, materials selections, specifications and cost estimates as listed in UFC 3-120-10. Refer to Furnishings in this IFS also.
8. SID Format will follow UFC 3-120-10 (Interior Design, w/ Change 2).
9. Base the FF&E package on the furniture footprint developed in the SID. Identify all new or existing equipment needed and its users within each facility or each area of the facility. Provide specific information on: equipment sizes, electrical requirements, ventilation requirements, weight (if heavy), quantity, and security level if required. Presume all administrative spaces have computers and supporting equipment.

E01.1.2. Codes and Regulations

1. Refer to UFC 1-200-01 (DoD Building Code, w/ Change 1) for modifications to the International Building Code (IBC) to determine applicable sections of the IBC. Both the IBC Chapter 3 and UFC 3-600-01 (Fire Protection Engineering for Facilities, w/ Change 6). govern "Use and Occupancy Classification" for example.
2. Fire code requirements are as defined in the International Building Code (IBC) and must be used where dictated by UFC 1-200-01 DoD Building Code (General Building Requirements) except where noted in UFC 3-600-01 (Fire Protection Engineering for Facilities).

3. National Fire Protection Association (NFPA) 101 must be utilized to determine the occupancy classification as it relates to fire/smoke resistance rating of interior non-load bearing partitions (other than occupancy separation), means of egress, interior finish, features of fire protection (including vertical openings) and associated requirements.

E01.2. Quality and Comfort

Comply with Air Force Corporate Standards for Quality and Comfort:

<http://afcfb.wbdg.org/facilities-interiors/buildings-configurations/quality-and-comfort/index.html>

1. Include durability in the life-cycle cost analysis for best-value material selections with long life expectancies that do not show excessive wearing.
2. Select long-lasting materials and finishes for permanent core areas such as lobbies, restrooms and stairs.
3. Select low-maintenance materials and products that reduce ongoing servicing and repair and that are easy to clean.
4. Relate the visual quality of finishes to the Facility Group number.
5. Building and interior configurations should address both operations and climatic responses.
6. Convey a professional image; avoid trendy patterns and textures.
7. Use materials and finishes that provide a healthy indoor environment.
8. Orient interior spaces toward views while maintaining cost-effective building performance and efficiency.
9. Promote air movement and daylighting for human health and wellbeing.

E02. Floors

Comply with Air Force Corporate Standards for Floors:

<http://afcfb.wbdg.org/facilities-interiors/floors/index.html>

E02.1. Floor Materials

Facility Group 1 floor materials shall be as follows.

Primary: Prepared Slabs (Ground, Polished)
Secondary: Porcelain Tile
Tertiary: Carpet, Rubber Stair Treads

Facility Group 2 floor materials shall be as follows.

Primary: Prepared Slabs (Ground, Polished)
Secondary: Ceramic Tile
Tertiary: Carpet, Rubber Stair Treads

Facility Group 3 floor materials shall be as follows.

Primary: Prepared Slabs (Ground)
Secondary: Prepared Slabs (Sealer)
Tertiary: N/A

Facility Group 4 floor materials shall be as follows.

Primary: Carpet
Secondary: Ceramic Tile
Tertiary: N/A

1. Natural stone and terrazzo flooring may be used in high traffic areas of Group 1 as approved on a case-by-case basis.

2. Resilient and rapidly renewable flooring may be used in low traffic areas in Group 1, 2 and 4.
3. Manufacturers listed below are only provided to establish a baseline of equivalency among all applicable manufacturers.

Note: Apply the below base-wide standards for Floors (products, materials and color). Then refer to the Appendix and apply any additional requirements specifically related to the Facility District in which the project is located.

E02.1.1. Prepared Slabs

☒ Applicable ☐ N/A Number of base standards 1

Image Tool 250 x 188



Type: **Style 1**

Applies to: ☒ Group 1 ☒ Group 2 ☐ Group 3 ☐ Group 4 ☐ Other

Mfr: Transit Mix Colorado Springs

Color: Natural gray cement, neutral to red aggregates

Finish: Semi-gloss

Model #: Medium to small aggregate

Other: Fine polished texture

UFGS: Section 03 35 45 Polished Concrete Finishing
(Not Available on UFGS)

E02.1.2. Natural Stone and Terrazzo

☐ Applicable ☒ N/A

E02.1.3. Quarry Tile

☒ Applicable ☐ N/A

Number of base standards 1

Image Tool 250 x 188



Type: **Style 1**

Applies to: ☒ Group 1 ☐ Group 2 ☐ Group 3 ☐ Group 4 ☐ Other

Mfr: Daltile

Color: Earth tones

Finish: Matte, slip resistant

Model #: N/A

Other: Use in commercial kitchen flooring.

UFGS: Section 09 30 10 Ceramic, Quarry, and Glass Tiling
<http://www.wbdg.org/FFC/DOD/UFGS/UFGS 09 30 10.pdf>

E02.1.4. Ceramic Tile

☒ Applicable ☐ N/A

Number of base standards 2

Image Tool 250 x 188



Type: **Style 1**

Applies to: ☐ Group 1 ☒ Group 2 ☒ Group 3 ☒ Group 4 ☐ Other

Mfr: Daltile

Color: Earth tones

Finish: Matte, slip resistant

Model #: Porcelain tile

Other: Use in high traffic areas. Epoxy grout is recommended.

UFGS: Section 09 30 10 Ceramic, Quarry, and Glass Tiling
<http://www.wbdg.org/FFC/DOD/UFGS/UFGS 09 30 10.pdf>



Type: **Style 2**

Applies to: ☐ Group 1 ☒ Group 2 ☒ Group 3 ☒ Group 4 ☐ Other

Mfr: Daltile

Color: Earth tones

Finish: Matte, slip resistant

Model #: Ceramic tile

Other: Use in low traffic areas.

UFGS: Section 09 30 10 Ceramic, Quarry, and Glass Tiling
<http://www.wbdg.org/FFC/DOD/UFGS/UFGS 09 30 10.pdf>

E02.1.5. Resilient Floor

☒ Applicable ☐ N/A Number of base standards 1 **Image Tool 250 x 188**



Type: **Style 1**

Applies to: ☒ Group 1 ☒ Group 2 ☐ Group 3 ☐ Group 4 ☐ Other

Mfr: Roppe

Color: Neutral tones

Finish: Factory

Model #: Raised design rubber tread

Other: Stair Treads Material

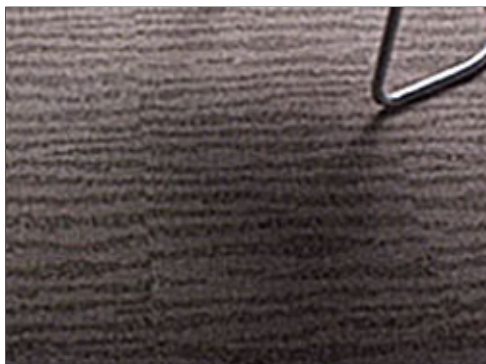
UFGS: Section 09 65 00 Resilient Flooring
<http://www.wbdg.org/FFC/DOD/UFGS/UFGS 09 65 00.pdf>

E02.1.6. Carpet

☒ Applicable ☐ N/A

Number of base standards 2

Image Tool 250 x 188



Type: **Style 1**

Applies to: ☒ Group 1 ☒ Group 2 ☐ Group 3 ☐ Group 4 ☐ Other

Mfr: Mohawk Group

Color: Neutral multi-colored tones/patterned/solid

Finish: Yarn: Nylon 6 or 6.6/cut pile or loop pile

Model #: Broadloom, 6' wide rolled, carpet tiles, entry walk-off carpet

Other: N/A

UFGS: UFGS 09 68 00 Carpeting

<http://www.wbdg.org/FFC/DOD/UFGS/UFGS 09 68 00.pdf>

Type: **Style 2**

Applies to: ☐ Group 1 ☐ Group 2 ☐ Group 3 ☒ Group 4 ☐ Other

Mfr: Mohawk Group

Color: Earth tones

Finish: Factory

Model #: Broadloom, residential loop, "Smartstrand"

Other: N/A

UFGS: UFGS 09 68 00 Carpeting

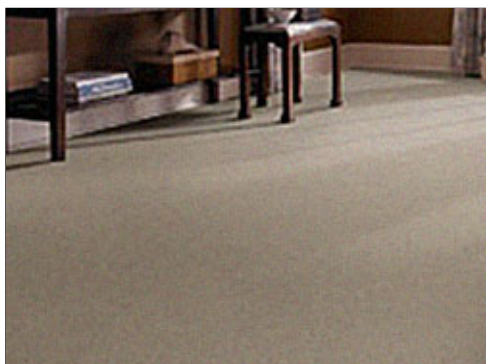
<http://www.wbdg.org/FFC/DOD/UFGS/UFGS 09 68 00.pdf>

E02.1.7. Rapidly-Renewable Products

☐ Applicable ☒ N/A

E02.1.8. Other

☐ Applicable ☒ N/A



E03. Walls

Comply with Air Force Corporate Standards for Walls:
<http://afcfs.wbdg.org/facilities-interiors/walls/index.html>

E03.1. Wall Materials

Facility Group 1 wall materials shall be as follows.

Primary: Brick (or Other as Approved by the BCE)
Secondary: Gypsum Board (Painted)
Tertiary: Ceramic Tile (Restrooms)

Facility Group 2 wall materials shall be as follows.

Primary: Brick
Secondary: Gypsum Board (Painted)
Tertiary: Ceramic Tile (Restrooms)

Facility Group 3 wall materials shall be as follows.

Primary: Ground Face CMU, Sealed (Do Not Paint)
Secondary: N/A
Tertiary: Ceramic Tile (Restrooms)

Facility Group 4 wall materials shall be as follows.

Primary: Gypsum Board (Painted)
Secondary: N/A
Tertiary: Ceramic Tile (Restrooms)

1. Follow UFC 3-450-01 (Vibration and Noise Control) for acoustic design issues including speech privacy, sound isolation or sound masking.
2. Select and apply paint with sheens (gloss levels) appropriate for the application following UFGS Section 09 90 00 Paints and Coatings.
3. Provide ceramic tile on wet walls of kitchens, toilet rooms, locker rooms, etc., in all facility groups.
4. Neutral split-face or ground-face integrally colored block with a clear sealer may be used in Group 3. Do not paint block.
5. Provide rubber base on drywall partitions in Groups 1 and 2.
6. Hardwood base may only be used in Group 1 as approved on a case-by-case basis.
7. Hardwood chair rails / bumper rails may be used in high-use areas of Groups 1 and 2; aqueous clear finishes are preferred to reduce maintenance; plastic chair rails are permitted only in medical applications.
8. Decorative moldings may be used only in Group 1 when approved on a case-by-case basis.
9. Corner guards are permitted only in high traffic spaces with wheeled or cart use such as private service areas in Groups 1 and 2; stainless steel corners guards with a brushed finish may be judiciously used in Group 3.
10. Group 4 may use painted composite wood base.
11. Manufacturers listed below are only provided to establish a baseline of equivalency among all applicable manufacturers.

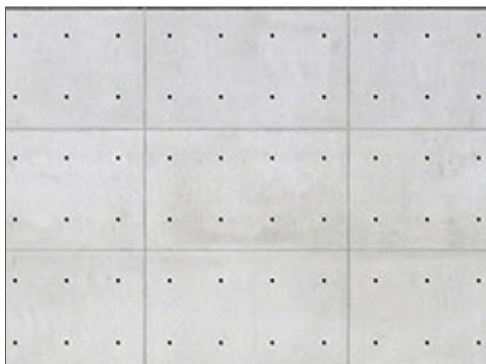
Note: Apply the below base-wide standards for Walls (products, materials and color). Then refer to the Appendix and apply any additional requirements specifically related to the Facility District in which the project is located.

E03.1.1. Concrete

☒ Applicable ☐ N/A

Number of base standards 1

Image Tool 250 x 188



Type: **Style 1**

Applies to: ☒ Group 1 ☐ Group 2 ☐ Group 3 ☐ Group 4 ☐ Other

Mfr: Transit Mix Colorado Springs

Color: Natural gray cement, neutral to red aggregates

Finish: Board-formed or panel-formed

Model #: Medium to small aggregate

Other: N/A

UFGS: Section 03 33 00 Cast-In-Place Architectural Concrete
<http://www.wbdg.org/FFC/DOD/UFGS/UFGS 03 33 00.pdf>

E03.1.2. Masonry

☒ Applicable ☐ N/A

Number of base standards 1

Image Tool 250 x 188



Type: **Style 1**

Applies to: ☒ Group 1 ☒ Group 2 ☒ Group 3 ☐ Group 4 ☐ Other

Mfr: General Shale, Denver

Color: Heritage 441

Finish: Light texture

Model #: Modular Face Brick

Other: Section 04 20 00 Unit Masonry
<http://www.wbdg.org/FFC/DOD/UFGS/UFGS%2004%2020%2000.pdf>

UFGS: Section 04 20 00 Unit Masonry
<http://www.wbdg.org/FFC/DOD/UFGS/UFGS 04 20 00.pdf>

E03.1.3. Ceramic Tile

☒ Applicable ☐ N/A

Number of base standards 1

Image Tool 250 x 188



Type: **Style 1**

Applies to: ☒ Group 1 ☒ Group 2 ☒ Group 3 ☒ Group 4 ☐ Other

Mfr: Daltile

Color: Earth tones

Finish: Gloss, Semi-gloss

Model #: Ceramic wall tile

Other: Located on wet walls in restrooms, square shapes are preferred in Groups 1, 2 and 3.

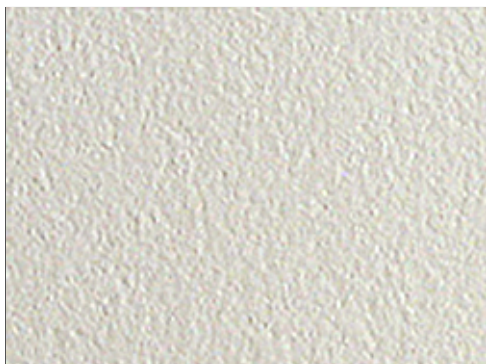
UFGS: Section 09 30 10 Ceramic, Quarry, and Glass Tiling
<http://www.wbdg.org/FFC/DOD/UFGS/UFGS 09 30 10.pdf>

E03.1.4. Gypsum Board

☒ Applicable ☐ N/A

Number of base standards 1

Image Tool 250 x 188



Type: **Style 1**

Applies to: ☒ Group 1 ☒ Group 2 ☐ Group 3 ☒ Group 4 ☐ Other

Mfr: US Gypsum

Color: Solid Earth tone colors

Finish: Paint (Sheen per UFGS)

Model #: Tapered edge

Other: N/A

UFGS: Section 09 29 00 Gypsum Board
<http://www.wbdg.org/FFC/DOD/UFGS/UFGS 09 29 00.pdf>
Section 09 90 00 Paints and Coatings
<http://www.wbdg.org/FFC/DOD/UFGS/UFGS 09 90 00.pdf>

E03.1.5. Metal Panels

☐ Applicable ☒ N/A

E03.1.6. Wood Paneling

☐ Applicable ☒ N/A

E03.1.7. Rapidly-Renewable Products

☐ Applicable ☒ N/A

E03.1.8. Other

☐ Applicable ☒ N/A

E04. Ceilings

Comply with Air Force Corporate Standards for Ceilings:
<http://afcfs.wbdg.org/facilities-interiors/ceilings/index.html>

E04.1. Ceiling Materials

Facility Group 1 ceiling materials shall be as follows.

- Primary: Exposed Framing (Roof / Floor Structure Above)
- Secondary: Grid and Acoustical Tile
- Tertiary: Gypsum Board (Painted)

Facility Group 2 ceiling materials shall be as follows.

- Primary: Exposed Framing (Roof / Floor Structure Above)
- Secondary: Grid and Acoustical Tile
- Tertiary: Gypsum Board (Painted)

Facility Group 3 ceiling materials shall be as follows.

- Primary: Exposed Framing (Roof / Floor Structure Above)
- Secondary: Exposed Framing (Roof / Floor Structure Above)
- Tertiary: Gypsum Board (Painted)

Facility Group 4 ceiling materials shall be as follows.

- Primary: Gypsum Board (Painted) (Restrooms)
- Secondary: N/A
- Tertiary: N/A

1. Accent ceiling materials such as metal, wood, and rapidly renewable may be used in Group 1 as approved on a case basis.
2. Follow UFC 3-450-01 (Vibration and Noise Control) for acoustic design issues including speech privacy, sound isolation or sound masking.
3. Manufacturers listed below are only provided to establish a baseline of equivalency among all applicable manufacturers.

Note: Apply the below base-wide standards for Ceilings (products, materials and color). Then refer to the Appendix and apply any additional requirements specifically related to the Facility District in which the project is located.

E04.1.1. Exposed Framing (Roof / Floor Structure Above)

☒ Applicable ☐ N/A

Number of base standards 1

Image Tool 250 x 188



Type: **Style 1**

Applies to: ☒ Group 1 ☒ Group 2 ☒ Group 3 ☐ Group 4 ☐ Other

Mfr: Vulcraft

Color: Color reviewed on a case basis

Finish: Field painted (Sheen per UFGS)

Model #: Formlok floor and roof decking

Other: N/A

UFGS: Section 05 30 00 Steel Decks

<http://www.wbdg.org/FFC/DOD/UFGS/UFGS 05 30 00.pdf>

E04.1.2. Exposed Concrete

☐ Applicable ☒ N/A

E04.1.3. Grid and Acoustical Tile

☒ Applicable ☐ N/A

Number of base standards 1

Image Tool 250 x 188



Type: **Style 1**

Applies to: ☒ Group 1 ☒ Group 2 ☐ Group 3 ☐ Group 4 ☐ Other

Mfr: Armstrong

Color: White

Finish: Factory

Model #: 2'x2' tegular with reveal edge and fine texture, grid 15/16"

Other: Performance characteristics are Class A; NRC-0.70; CAC-40; LR-0.86; minimum recycled content 82%.

UFGS: Section 09 51 00 Acoustical Ceilings

<http://www.wbdg.org/FFC/DOD/UFGS/UFGS 09 51 00.pdf>

E04.1.4. Gypsum Board

☒ Applicable ☐ N/A

Number of base standards 1

Image Tool 250 x 188



Type: **Style 1**

Applies to: ☒ Group 1 ☒ Group 2 ☐ Group 3 ☒ Group 4 ☐ Other

Mfr: US Gypsum

Color: Solid neutral colors

Finish: Paint (Sheen per UFGS)

Model #: Tapered edge

Other: N/A

UFGS: Section 09 29 00 Gypsum Board
<http://www.wbdg.org/FFC/DOD/UFGS/UFGS 09 29 00.pdf>
Section 09 90 00 Paints and Coatings
<http://www.wbdg.org/FFC/DOD/UFGS/UFGS 09 90 00.pdf>

E04.1.5. Metal Panels

☐ Applicable ☒ N/A

E04.1.6. Wood

☐ Applicable ☒ N/A

E04.1.7. Rapidly-Renewable Products

☐ Applicable ☒ N/A

E04.1.8. Other

☐ Applicable ☒ N/A

E05. Doors and Windows

Comply with Air Force Corporate Standards for Doors and Windows:

<http://afcs.wbdg.org/facilities-interiors/doors-and-windows/index.html>

E05.1. Doors and Windows and Frames Materials

Facility Group 1

door (frame) and window frame materials shall be as follows.

Primary: Aluminum, Clear Anodized

Secondary: Hollow Metal (Painted)

Tertiary: N/A

Facility Group 1

door (leaf) materials shall be as follows.

Primary: Hardwood veneer

Secondary: Hollow Metal (Painted)

Tertiary: N/A

Facility Group 2

door (frame) and window frame materials shall be as follows.

Primary: Aluminum, Clear Anodized

Secondary: Hollow Metal (Painted)

Tertiary: N/A

Facility Group 2

door (leaf) materials shall be as follows.

Primary: Hardwood Veneer

Secondary: Hollow Metal (Painted)

Tertiary: N/A

Facility Group 3

door (frame) and window frame materials shall be as follows.

Primary: Hollow Metal (Galvanized, Painted)

Secondary: Hollow Metal (Galvanized)

Tertiary: N/A

Facility Group 3

door (leaf) materials shall be as follows.

Primary: Hollow Metal (Galvanized, Painted)

Secondary: Hollow Metal (Galvanized)

Tertiary: N/A

Facility Group 4

door (frame) and window frame materials shall be as follows.

Primary: Wood

Secondary: N/A

Tertiary: N/A

Facility Group 4

door (leaf) materials shall be as follows.

Primary: Wood Solid Core

Secondary: Composite Solid Core

Tertiary: N/A

1. Hardwood casings may be provided over metal frames in Group 1 as approved on a case basis.

2. Paneled textured doors are preferred in Group 4.

3. Do not use hollow-core wood doors.

Note: Apply the below *base-wide standards* for Doors and Windows (products, materials and color). Then refer to the Appendix and apply any additional requirements specifically related to the Facility District in which the project is located.

E05.1.1. Aluminum

☒ Applicable ☐ N/A

Number of base standards 1

Image Tool 250 x 188



Type: **Style 1**

Applies to: ☒ Group 1 ☒ Group 2 ☐ Group 3 ☐ Group 4 ☐ Other

Mfr: Kawneer

Color: Clear anodized

Finish: Factory

Model #: InFrame Interior Framing, (2x4 nominal framing)

Other: Brushed stainless steel hardware

UFGS: Section 08 41 13 Aluminum-Framed Entrances and Storefronts
<http://www.wbdg.org/FFC/DOD/UFGS/UFGS 08 41 13.pdf>
Section 08 71 00 Door Hardware
<https://www.wbdg.org/FFC/DOD/UFGS/UFGS 08 71 00.pdf>

E05.1.2. Hollow Metal

☒ Applicable ☐ N/A

Number of base standards 2

Image Tool 250 x 188



Type: **Style 1 - Steel Doors**

Applies to: ☒ Group 1 ☒ Group 2 ☒ Group 3 ☐ Group 4 ☐ Other

Mfr: Steelcraft

Color: Neutral colors

Finish: Paint (Sheen per UFGS)

Model #: Hollow metal, 2" wide frames, 16 ga pressed steel min., welded corners

Other: Steel doors are only permitted in utility areas of Group 1 and 2. Provide A25 galvanized coating. All interior steel doors will have a factory applied primer finish, satin stainless steel hardware.

UFGS: Section 08 11 13 Steel Doors and Frames
<http://www.wbdg.org/FFC/DOD/UFGS/UFGS 08 11 13.pdf>
Section 08 71 00 Door Hardware
<https://www.wbdg.org/FFC/DOD/UFGS/UFGS 08 71 00.pdf>



Type: **Style 1 - Steel Frames**

Applies to: ☒ Group 1 ☒ Group 2 ☒ Group 3 ☐ Group 4 ☐ Other

Mfr: Steelcraft

Color: Neutral colors

Finish: Paint (Sheen per UFGS)

Model #: Hollow metal, frame grouted solid

Other: Provide in utility areas of Group 1 and 2. Provide A25 galvanized coating. All interior steel frames will have a factory applied primer finish.

UFGS: Section 08 11 13 Steel Doors and Frames
<http://www.wbdg.org/FFC/DOD/UFGS/UFGS 08 11 13.pdf>
 Section 08 71 00 Door Hardware
<https://www.wbdg.org/FFC/DOD/UFGS/UFGS 08 71 00.pdf>

E05.1.3. Wood

☒ Applicable ☐ N/A

Number of base standards 2

Image Tool 250 x 188



Type: **Style 1**

Applies to: ☒ Group 1 ☒ Group 2 ☐ Group 3 ☐ Group 4 ☐ Other

Mfr: Simpson

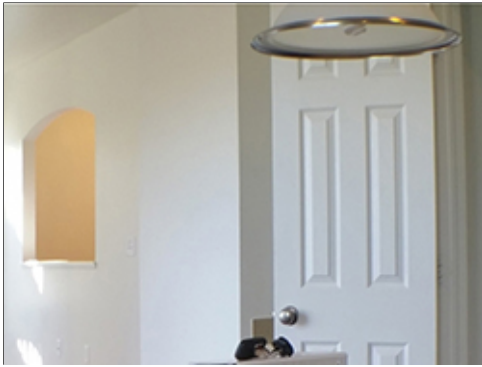
Color: Natural hardwood veneer

Finish: Clear Sealer, satin (aqueous)

Model #: Full slab

Other: 3'x7'x 1 3/4", solid core, stained birch veneer face, 5 ply construction, rotary cut finish. Provide satin stainless steel hardware. Glass lites may be used.

UFGS: Section 08 14 00 Wood Doors
<http://www.wbdg.org/FFC/DOD/UFGS/UFGS 08 14 00.pdf>
 Section 08 71 00 Door Hardware
<https://www.wbdg.org/FFC/DOD/UFGS/UFGS 08 71 00.pdf>



Type: **Style 2**

Applies to: ☐ Group 1 ☐ Group 2 ☐ Group 3 ☒ Group 4 ☐ Other

Mfr: Simpson

Color: Natural hardwood veneer or painted

Finish: Clear Sealer or paint, satin (aqueous)

Model #: Full slab or panels

Other: Satin nickel hardware

UGFS: Section 08 14 00 Wood Doors
<http://www.wbdg.org/FFC/DOD/UGFS/UGFS 08 14 00.pdf>
Section 08 71 00 Door Hardware
<https://www.wbdg.org/FFC/DOD/UGFS/UGFS 08 71 00.pdf>

E05.1.4. Other

☐ Applicable ☒ N/A

E06. Casework Systems

Comply with Air Force Corporate Standards for Casework Systems:
<http://afcfs.wbdg.org/facilities-interiors/casework-systems/index.html>

E06.1. Casework Materials

1. Select casework systems and materials considering durability, maintenance requirements and LCCA.
2. Natural stone and cast stone countertops may only be used in Group 1 with approval on a case basis.
3. Metal cabinets and countertops will be provided in heavy-use operations and in Group 3.
4. Refer to AFCFS for approved materials.
5. Manufacturers listed below are only provided to establish a baseline of equivalency among all applicable manufacturers.

E06.1.1. Plastic Laminate

☐ Applicable ☒ N/A

E06.1.2. Solid Polymer Surface

☐ Applicable ☒ N/A

E06.1.3. Rapidly-Renewable Products

☐ Applicable ☒ N/A

E06.1.4. Metal

☐ Applicable ☒ N/A

E06.1.5. Other

☐ Applicable ☒ N/A

E06.2. Countertop Materials

E06.2.1. Plastic Laminate

☐ Applicable ☒ N/A

E06.2.2. Solid Polymer Surface

☐ Applicable ☒ N/A

E06.2.3. Natural Stone

☐ Applicable ☒ N/A

E06.2.4. Cast Stone

☐ Applicable ☒ N/A

E06.2.5. Metal

☐ Applicable ☒ N/A

E06.2.6. Other

☐ Applicable ☒ N/A

E07. Furnishings

Comply with Air Force Corporate Standards for Furnishings:
<http://afcfb.wbdg.org/facilities-interiors/furnishings/index.html>

E07.1. Durability and Serviceability

Comply with AF Corporate Standards for Durability and Serviceability:
<http://afcfs.wbdg.org/facilities-interiors/furnishings/durability-and-serviceability/index.html>

E07.2. Accessories

Comply with AF Corporate Standards for Accessories:
<http://afcfs.wbdg.org/facilities-interiors/furnishings/accessories/index.html>

1. Comply with AFCFS.

E08. Interior Signs

Comply with Air Force Corporate Standards for Interior Signs:
<http://afcfs.wbdg.org/facilities-interiors/interior-signs/index.html>

E08.1 Types and Color

Comply with Air Force Corporate Standards for Types and Color:
<http://afcfs.wbdg.org/facilities-interiors/interior-signs/types-and-color/index.html>

E08.2. Interior Signs Materials

1. Natural stone, masonry and cast stone signs may only be used in Group 1 with approval on a case basis.
2. Comply with AFCFS.

E09. Lighting, Power and Communication

<http://afcfs.wbdg.org/facilities-interiors/lighting-power-and-communication/index.html>

E09.1. Functionality and Efficiency

Comply with Air Force Corporate Standards for Functionality and Efficiency:
<http://afcfs.wbdg.org/facilities-interiors/lighting-power-and-communication/functionality-and-efficiency/index.html>

E09.2. Types and Color

1. Comply with AFCFS.

F. APPENDIX - Facility Districts

- ☒ Applicable
- ☐ N/A

Comply with Air Force Corporate Standards for Facility Districts:
<http://afcfs.wbdg.org/facility-districts/index.html>

Facilities Districts Overview Map:

Image Tool 800 x 600



Note: Apply the base-wide standards in this IFS for Installation Elements, Site Development, Facilities Exteriors and Facilities Interiors (products, materials, color, etc.). Following application of the base-wide standards, refer to the Appendix and apply any additional requirements specifically related to the Facility District.

Enter No. of Facility Districts 8

The following Facility Districts list exceptions to the base standards that are unique to each district. Please refer to the Site Development, Facilities Exteriors, and Facilities Interiors sections of this IFS for base standards.

Image Tool 800 x 600

Map of District



Photos for each facility group within the Facility District as applicable.

Image Tool 250 x 188

Group 1 ☒ Applicable ☐ N/A





FACILITY DISTRICTS

Peterson Space Force Base is divided into eight (8) districts that align with land use zones as defined in the Installation Development Plan (IDP). Each district has designated uses that support the base's operations. Generally, match adjacent facilities in new construction to promote architectural compatibility throughout the installation. Please refer to Section D03.2. Contact the Base Civil Engineer, and Base Development (CES/CENB), for additional information. A brief description of each district follows.

1. COMMAND

The Command district is home to the headquarters for Space Operations Command (SpOC) (B1), North American Aerospace Defense Command (NORAD) and the U.S. Northern Command (NORTHCOM) (B2), and the U.S. Army Space and Missile Defense Command (SMDC)/Army Forces Strategic Command (ARSTRAT) (B3). Development has historically been limited to headquarters facilities, special space mission facilities, and supporting facilities. The heavily administrative use of the area and large scale of its facilities carries significant parking requirements. Additionally, this district includes the PSFB North Gate (B1398) and the Military Working Dog Kennel (B1868).

Facilities in the Command district should continue to be monumentally oriented in scale. The established architectural aerospace-related architectural theme is expressive of innovation and technology that represents Space Force Command and its mission. Facilities should generally match adjacent buildings to ensure architectural compatibility and will follow standards for Facility Group 1, Group 2 and Group 3 as defined in this IFS. Exceptions to the base wide standards for this district are listed below by section number.

B. INSTALLATION ELEMENTS (Only applicable sections are shown)

B03.1.1. Paved Plazas

1. Paver colors will be a grey tone pallet.

C. SITE DEVELOPMENT (Only applicable sections are shown)

C01. Site Design / NEPA

1. The following building types and storage facilities will not be permitted: storage sheds, pre-manufactured (temporary) buildings, wood gazebos, miscellaneous utility structures, transformer buildings and CONEX boxes.
2. Provide mini-storage warehouse structures at discreet locations. Such structures will be used in lieu of storage sheds, CONEX boxes, and similar scattered storage devices are not permitted.
3. All warehouse structures must provide upward-acting garage doors to provide access to individual compartments within each storage warehouse. All storage items must be located completely within the structures, such that they are not visible to the public when the compartment doors are closed.

C07. Site Furnishings

1. Illuminated bollards light shields will be stainless steel.
2. Site walls such as screen walls, fixed planters, retaining walls, and similar site related structures will match those used elsewhere on the adjacent building.
3. Trash enclosures will match the adjacent building.
4. Gates for trash dumpster enclosures will be steel.

D. FACILITIES EXTERIORS (Only applicable sections are shown)

D03. Architectural Features

1. This is an established space-related theme district. The materials used are technologically advanced, and the silhouettes of the buildings imply the sleek expression of space technology.

D04. Building Entrances

1. Entrances and all south facing fenestration will be recessed a minimum of four feet (4') (1.22 m) from the adjacent exterior wall planes, providing protection from the wind, rain, snow and sun.

D05. Wall Systems

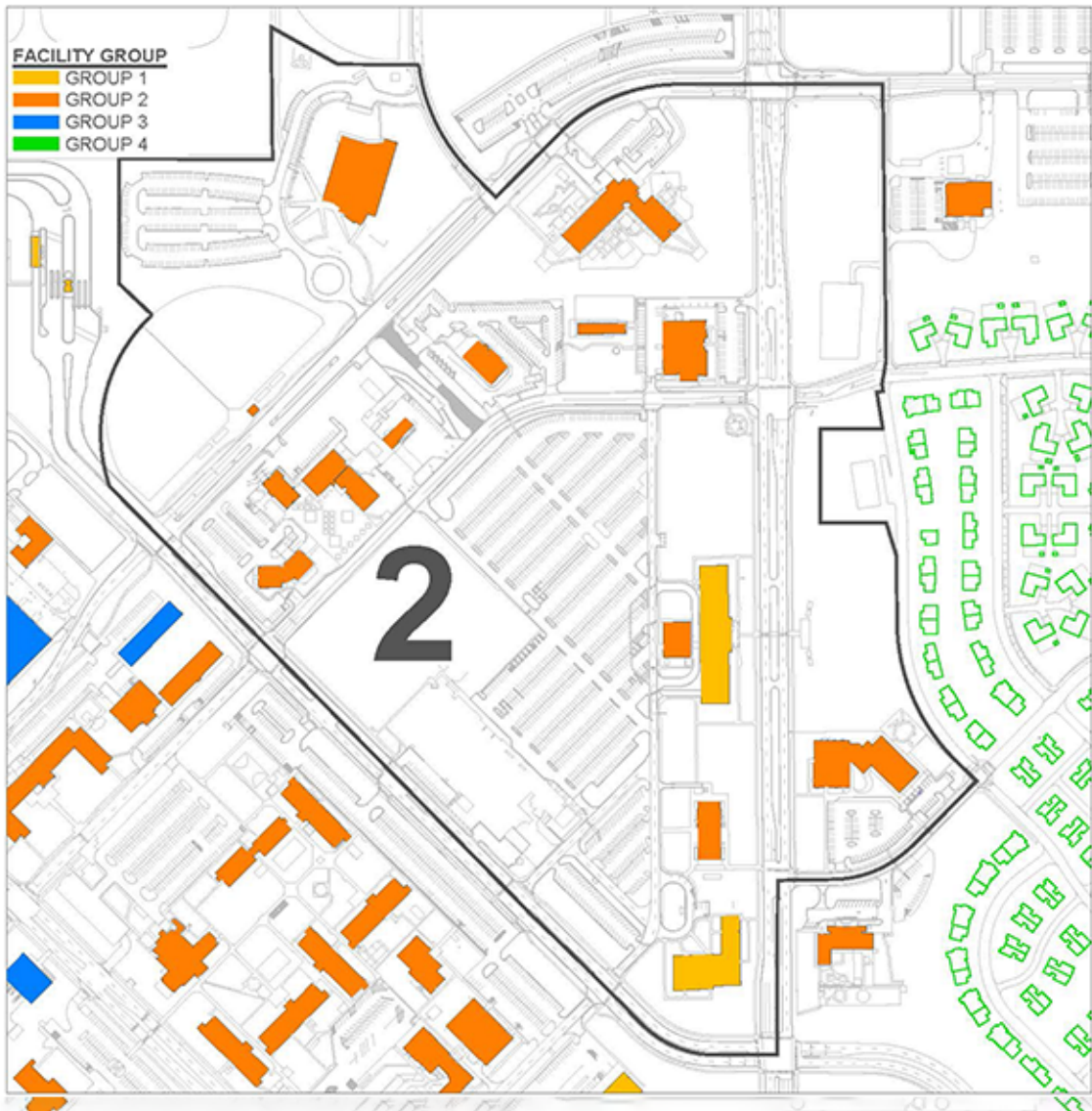
1. Match the metal panel color of adjacent buildings with either natural stainless steel or match Light Gray, FSC X6373. A single darker shade of blue will be used for the accent features, and will match Light Sky Blue, FSC X5526.
2. Architectural concrete will be a light to medium warm gray and will match the exposed aggregate texture of the adjacent building.

D06. Doors and Windows

1. South facing fenestration will be recessed a minimum of four feet (4'-0") (1.22 m) from the adjacent exterior wall planes.
2. All operable windows will be awning type.
3. Glazing will match glass color used on B1.
4. Window wall systems will be used for large areas of fenestration. Careful consideration must be used in selection and placement of fenestration when energy efficiency is to be maximized.
5. Large service or garage type doors will be carefully screened from entries or other public areas.

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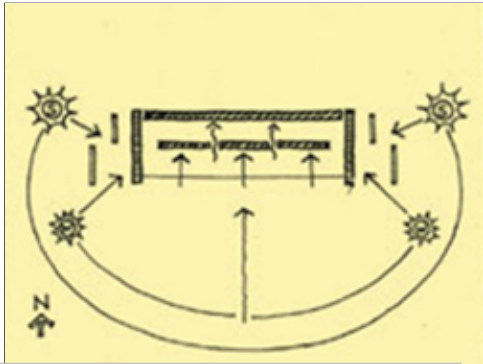
Map of District



Photos for each facility group within the Facility District as applicable.

Image Tool 250 x 188

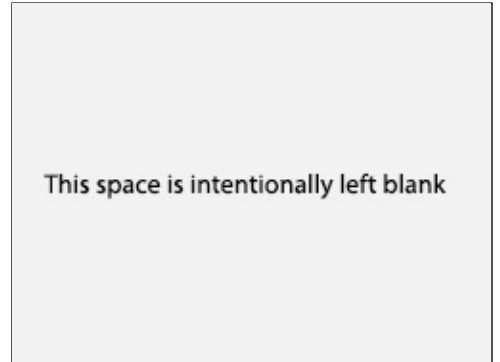
Group 1 ☒ Applicable ☐ N/A



Group 2 ☒ Applicable ☐ N/A



Group 3 ☒ Applicable ☐ N/A



Group 4 ☐ Applicable ☒ N/A

Other ☐ Applicable ☒ N/A

2. TRIANGLE

The Triangle district contains operational, educational, and various community support facilities. The Peterson Child Development Center (B1350), the Security Forces Headquarters (B1376), and the ENT Building (B1470), are focal points of ongoing activity for both personnel and dependents. Additionally, the Base Chapel (B1410), the Moorman Space Education Center (B1876), and various commercial services generate additional activity within the district. Facilities should continue to be pedestrian in scale. Facilities should generally match adjacent buildings to ensure architectural compatibility and will follow standards for Facility Group 1, Group 2 and Group 3 as defined in this IFS.

Image Tool 800 x 600

Map of District



Photos for each facility group within the Facility District as applicable.

Image Tool 250 x 188

Group 1 ☐ Applicable ☒ N/A

Group 2 ☒ Applicable ☐ N/A



Group 3 ☐ Applicable ☒ N/A

Group 4 ☐ Applicable ☒ N/A

Other ☐ Applicable ☒ N/A

3. GUARDIAN CAMPUS

The Guardian Campus district contains a mixed-use environment of facilities containing Dormitories, the Library (B1171), the Fitness Center (B560), the Bowling Center (B406) with the Strike Zone Cafe, the Aquatic Center (B404) and fitness related outdoor sports grounds. Additionally, this district includes Cpt David Lyon Memorial Park, the Open Space Preserve and a Static Display. Facilities should continue to be pedestrian in scale. Facilities should generally match adjacent buildings to ensure architectural compatibility and will follow standards for Facility Group 2 as defined in this IFS. Exceptions to the base wide standards for this district are listed below by section number.

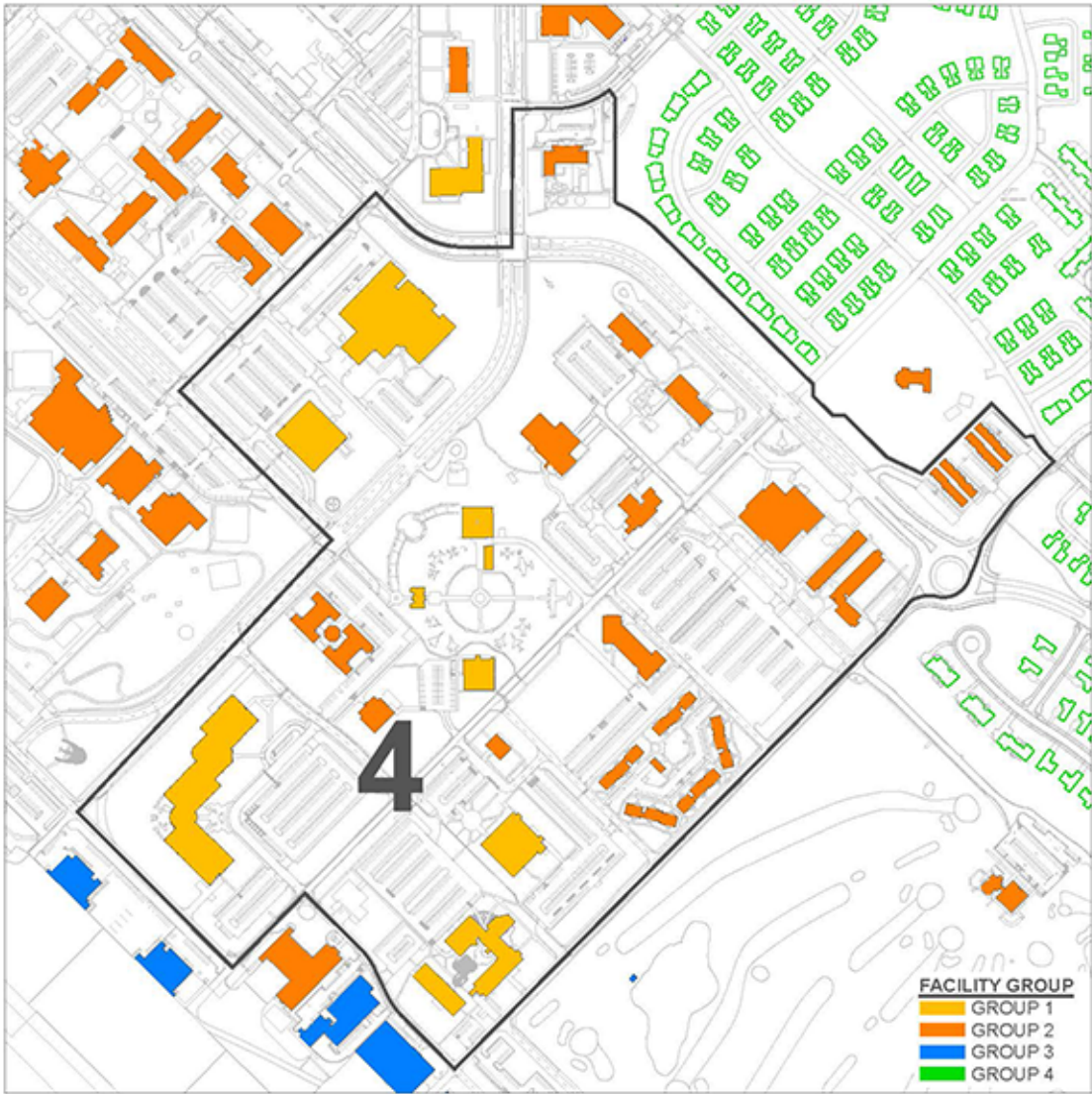
C. SITE DEVELOPMENT (Only applicable sections are shown)

C01. Site Design / NEPA

1. The continuity of the Peterson Corridor Open Space Preserve will be kept intact along Peterson Boulevard.

Image Tool 800 x 600

Map of District



Photos for each facility group within the Facility District as applicable.

Image Tool 250 x 188

Group 1 ☒ Applicable ☐ N/A



Group 2 ☒ Applicable ☐ N/A



Group 3 ☐ Applicable ☒ N/A

Group 4 ☐ Applicable ☒ N/A

Other ☐ Applicable ☒ N/A

4. PETE CENTRAL

The Pete Central district contains a mix use environment of headquarters, medical, the Historic district, operational, lodging and community support facilities. Diverse focal points would include the Space Force Delta 1 Headquarters (B350), Delta 2 and Delta 3 Headquarters (B845), 302d Airlift Wing Headquarters (B893), the 21 ST Medical Group Clinic (B959), the historic museum (Original Airport Terminal) (B981), the historic Spanish House (B999), Temporary Lodging Facilities (TLF's), and the Hub (B1013), which hosts community functions, and houses the Colorado Pizza & Sports Grill. Additionally, this district includes numerous Static Displays and Open Space Preserves. Facilities should continue to be pedestrian in scale. Facilities should generally match adjacent buildings to ensure architectural compatibility and will follow standards for Facility Group 1 and Group 2 as defined in this IFS.

Exceptions to the base wide standards for this district are listed below by section number.

C. SITE DEVELOPMENT (Only applicable sections are shown)

C01. Site Design / NEPA

1. The Peterson Corridor Open Space Preserve will be maintained for the full width and the entire length of Peterson Boulevard.

HISTORIC; C. SITE DEVELOPMENT (Only applicable sections are shown)

C01. Site Design / NEPA

1. Preserve the distinguishing original qualities of the site and its environment. Alterations that have no historical basis and which seek to create an earlier appearance are discouraged.

C07. Site Furnishings

1. All new site furnishings will match existing custom-designed furnishings.

HISTORIC; D. FACILITIES EXTERIORS (Only applicable sections are shown)

D03. Architectural Features

1. Preserve and provide an application of Art Deco and utilitarian themes and follow the Standards for Rehabilitation per the State Historic Preservation Office (SHOPO).

D06. Doors and Windows

1. City Hangar (B979); Preserve the existing aircraft doors for aesthetic and historic reasons. Preserve existing windows, which were re-glazed with insulating and ultra-violet light blocking glass.
2. Broadmoor Hangar (B982); Preserve the bronze aluminum and glass doors to each side of the building and the divided-lite casement windows.

Image Tool 800 x 600

Map of District



Photos for each facility group within the Facility District as applicable.

Image Tool 250 x 188

Group 1 ☐ Applicable ☒ N/A

Group 2 ☒ Applicable ☐ N/A



Group 3 ☒ Applicable ☐ N/A



Group 4 ☐ Applicable ☒ N/A

Other ☐ Applicable ☒ N/A

5. FLIGHT LINE

The Flight Line district includes facilities that are industrial in nature and contains both facilities that are pedestrian and monumental in scale and support flight line operations. Additional uses include the PSFB Main Gate (B1336), Visitor Center (B1334), Civil Engineering (B1324), Fire Station (B218) and fire training, the FAA Tower (B205), the base Passenger Terminal (B122), hangars, warehouses, maintenance, storage, utility functions, industrial services, communications, supply and equipment, fuel storage, open storage, emergency/disaster response facilities, and other industrial uses. Notable facilities are the Passenger Terminal, which serves as the gate way to the base for Distinguished Visitors (DV's) who would arrive via the base apron and Hangar 140 that hosts command ceremonies. Facilities should generally match adjacent buildings to ensure architectural compatibility and will follow standards for Facility Group 1, Group 2 and Group 3 as defined in this IFS. Exceptions to the base wide standards for this district are listed below by section number.

C. SITE DEVELOPMENT (Only applicable sections are shown)

C02. Utilities

1. Exterior equipment and vertical appurtenances near the flight line area will be painted Dark Bronze, FSC 30040. Painted surfaces will have a matte finish (low-luster).

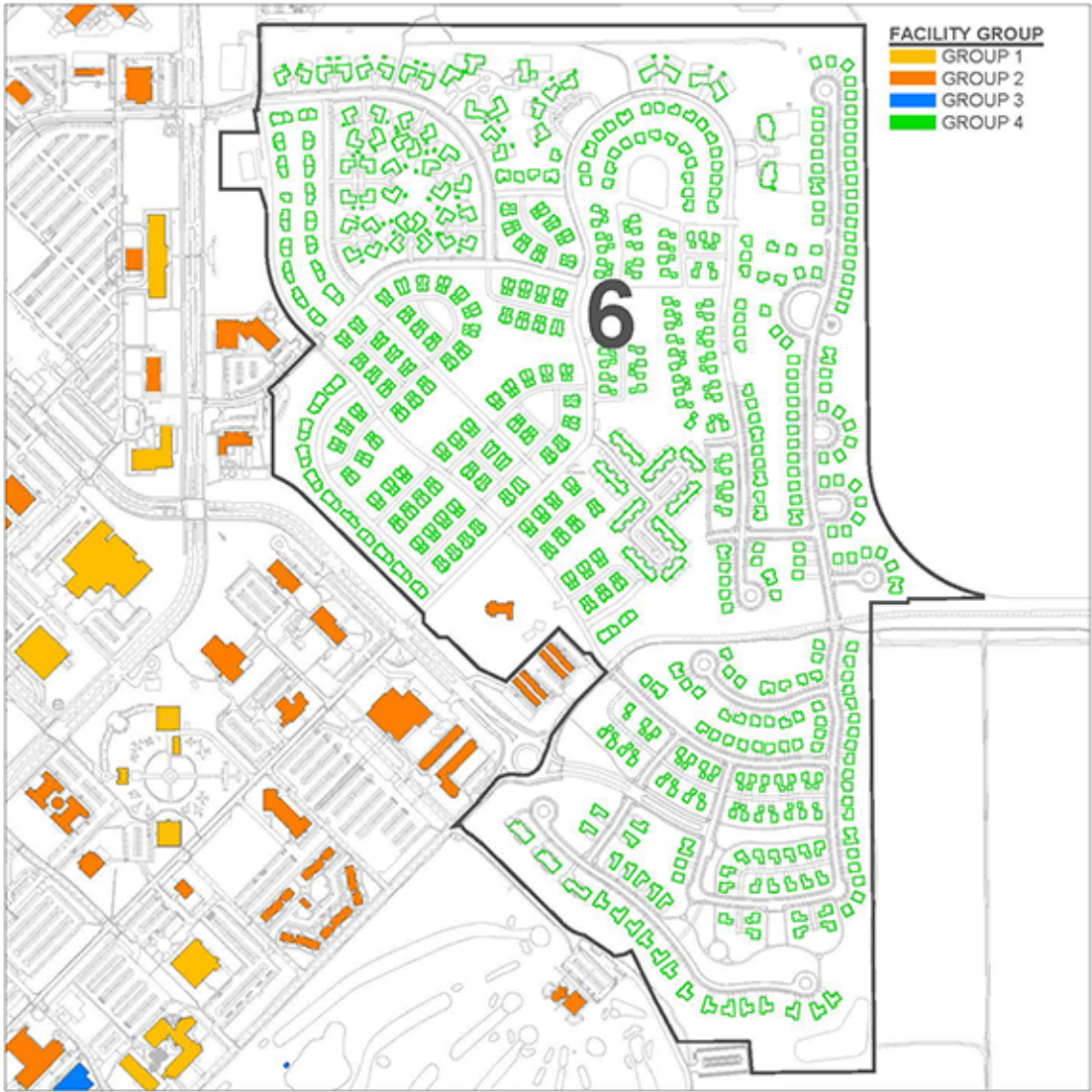
D. FACILITIES EXTERIORS (Only applicable sections are shown)

D06. Doors and Windows

1. Garage/service type doors and frames, and hangar doors and frames will be factory finished to match the metal wall panels. Color will match Dark Bronze, FSC 3004.

Image Tool 800 x 600

Map of District



Photos for each facility group within the Facility District as applicable.

Image Tool 250 x 188

- | | | |
|---------|----------------------------------|--------------------------------------|
| Group 1 | <input type="radio"/> Applicable | <input checked="" type="radio"/> N/A |
| Group 2 | <input type="radio"/> Applicable | <input checked="" type="radio"/> N/A |
| Group 3 | <input type="radio"/> Applicable | <input checked="" type="radio"/> N/A |

Group 4 ☒ Applicable ☐ N/A



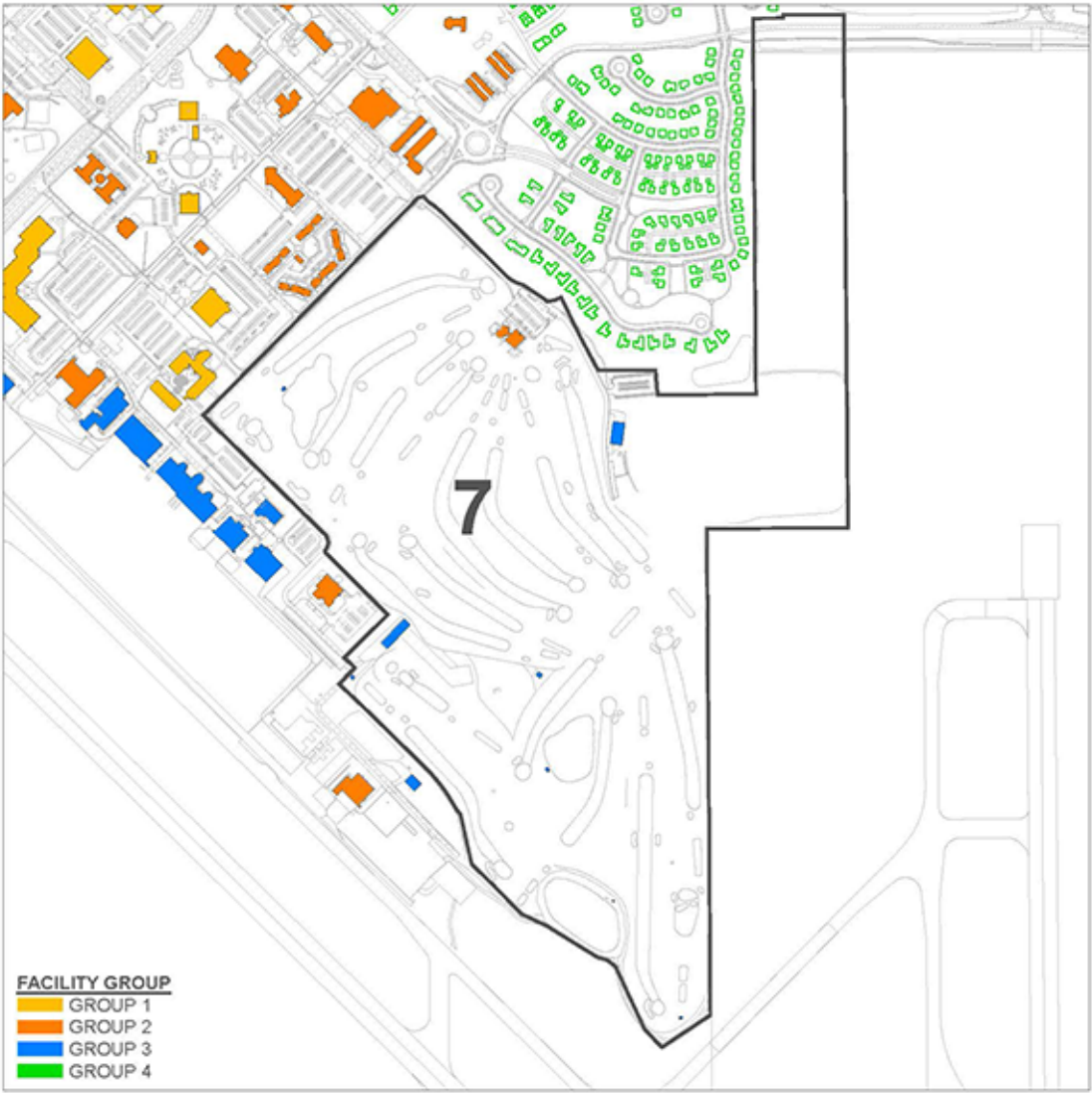
Other ☐ Applicable ☒ N/A

6. HOUSING

The Housing district consists of privatized single family residential units occupied by enlisted and officer families. This area is currently under a housing contract but will follow standards for Facility Group 4 as defined in this IFS. This district also includes the Housing Office (B1098), which is a Facility Group 2.

Image Tool 800 x 600

Map of District



Photos for each facility group within the Facility District as applicable.

Image Tool 250 x 188

Group 1 ☐ Applicable ☒ N/A

Group 2 ☐ Applicable ☒ N/A

Group 3 ☐ Applicable ☒ N/A

Group 4 ☐ Applicable ☒ N/A

Other

☒ Applicable ☐ N/A



7. RECREATION

The Recreation district containing the Silver Spruce Golf Course and the Golf Club House (B1054) and the Greenside Grill & Smokehouse Restaurant is currently closed. The Golf Course and the facilities are being redeveloped per the IDP.

Image Tool 800 x 600

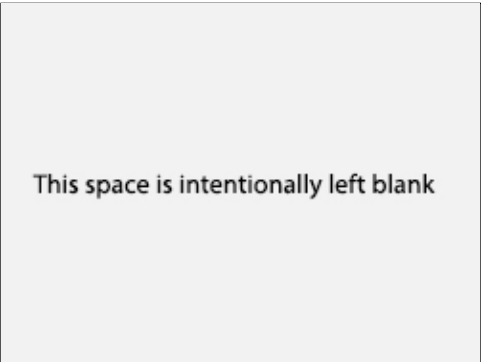
Map of District



Photos for each facility group within the Facility District as applicable.

Image Tool 250 x 188

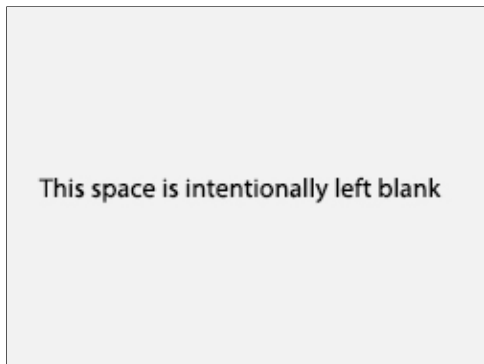
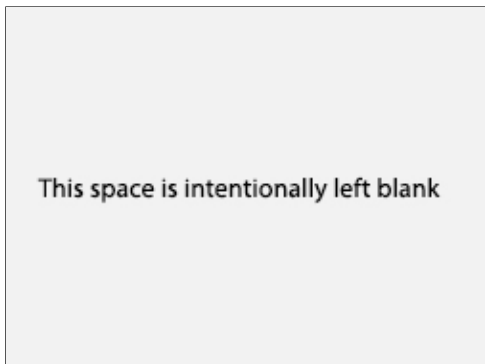
Group 1 ☒ Applicable ☐ N/A



Group 2 ☒ Applicable ☐ N/A



Group 3 ☒ Applicable ☐ N/A



Group 4 ☐ Applicable ☒ N/A

Other ☐ Applicable ☒ N/A

8. PETE EAST

The Pete East district has two distinct areas, one area is devoted to community commercial/service uses including the Exchange (BX) (B2017) that includes a Food Court, Stores and Services, the Commissary (B2019), the Child Development Center (CDC) (B2004), and the Dental Clinic (B2018); the other area to mission facilities including Space Systems Command (SSC) facility (B2025) and the Rapid Attack Identification, Detection, and Reporting System (RAIDRS) space control facility (B2017). This district also includes the PSFB East Gate (B2014). Many of the existing facilities have significant parking requirements that are currently met by expansive surface parking lots. Facilities should generally match adjacent buildings to ensure architectural compatibility and will follow standards for Facility Group 1, Group 2 and Group 3 as defined in this IFS.

Exceptions to the base wide standards for this district are listed below by section number.

\B. INSTALLATION ELEMENTS (Only applicable sections are shown)

B02. Street Envelope Standards

1. Traffic Signs: Pete East will use sign panel (s) mounted onto aluminum posts. Typically the post top ends will be closed with a flat aluminum plate. Part Numbers: EOCPS1 and EOFP51, 84" (2,133.6 mm) center post or flag post, choice of half round.

C. SITE DEVELOPMENT (Only applicable sections are shown)

C07. Site Furnishings

1. Bollards; Force Protection: Group 1 and 2 (3 and 4 N/A); Mfr: Materials Inc.; Style: Precast concrete; Color: Weatherstone Gray; Finish: Smooth; Model: 1852, Round (cylindrical) design; other: Dark bronze light shields for lighted option; UFGS: N/A.
2. Fencing: Group 2; Mfr: Custom; Type: High visibility, medium security; Color: Dark bronze; Finish: Powder coated; N/A; Other: Brick: 2'x2', Steel posts: 4"x4", Rails: 2"x2", Pickets: 1"x1" (6"o.c.). Close all ends of tubing. Bent tops of pickets will use circular bent for all Peterson East applications. UFGS: Section 05 50 13 Miscellaneous Metal Fabrications <http://www.wbdg.org/FFC/DOD/UFGS/UFGS%2005%2050%2013.pdf>

C08. Exterior Signs

1. C08.1.2 Installation and Gate Identification Signs; Level B, for Pete East requirement.

D. FACILITIES EXTERIORS (Only applicable sections are shown)

D05. Wall Systems

1. Metal panel color will be earth tones. Lighter shades of low-chroma colors may be used to visually complement the subtle colors of the natural prairie. Examples of appropriate composite panel colors include as manufactured by Alucobond Technologies, Inc. Classic Collection: Oyster (beige) or Canyon Brown, (tan)

Open Space and Preserves

Open space includes undeveloped land both inside and outside of the immediate cantonment area. It both separates and defines the various sections of the base and creates a natural setting for the cantonment area. Areas classified as open space may be undeveloped to act as a buffer space between incompatible uses or for safety or security clearances or there may be other constraints that are not readily visible. All development in this district requires prior coordination and approval from the Base Civil Engineer, Community Planner and Landscape Architect.

G. APPENDIX - References

Comply with Air Force Corporate Standards:

<http://afcs.wbdg.org/index.html>

Note: The below listed supplementary documents are provided as a supplement to this IFS. If there are any discrepancies between the requirements of the supplementary documents and this IFS, the IFS will govern.

21st CIVIL ENGINEER SQUADRON

G01 Peterson SFB IFS Plant List

http://www.wbdg.org/FFC/AF/AFIFS/G01_Peterson_SFB_IFS_Plant_List.pdf

G02 Peterson SFB IFS Plant List Lush Areas

http://www.wbdg.org/FFC/AF/AFIFS/G02_Peterson_SFB_IFS_Plant_List_Lush_Areas.pdf