
PRE-FINAL HURLBURT FIELD INSTALLATION FACILITIES STANDARDS (IFS)



Installation Elements



Site Development



Facilities Exteriors



Facilities Interiors

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Signature Field

Hurlburt Field IFS

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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. The IFS is a component plan of the Installation Development Plan (IDP) per Air Force Instruction (AFI) 32-7062 (replacing the Architectural Compatibility Plan). All military construction projects and Non-Appropriated Funds (NAF) facilities are required to comply with the IDP and its IFS component plan by AFI 32-1023. The Base Civil Engineer (BCE) maintains and implements the IDP and its component plans, to include 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.

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Coastal Setting



Integration of Native Plant Species



Historical Marker



Architectural Feature

A01. FACILITY HIERARCHY

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

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

A02. FACILITY QUALITY

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

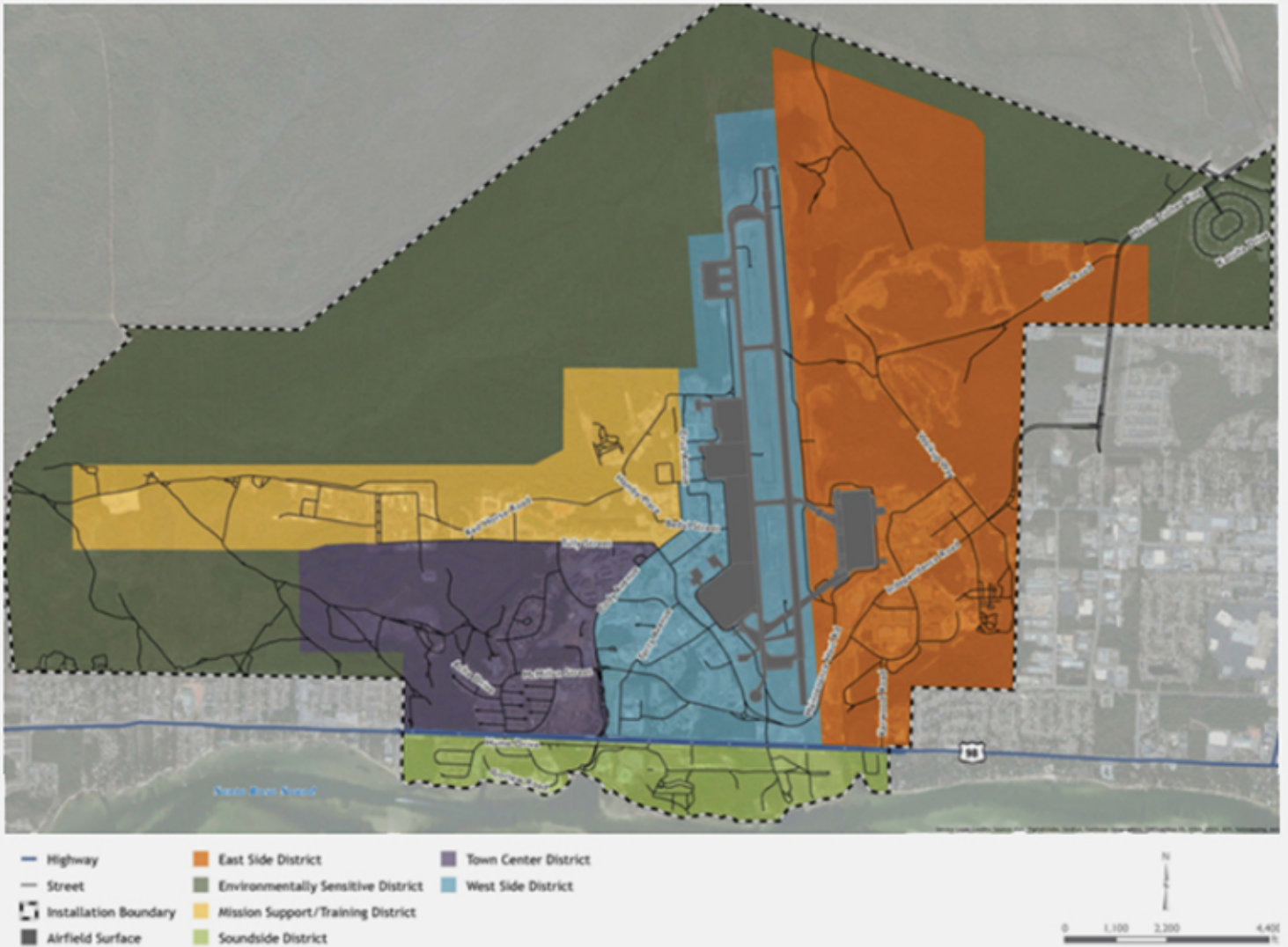
<http://afcs.wbdg.org/facility-quality/index.html>

A03. FACILITY DISTRICTS

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

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

B01. COMPREHENSIVE PLANNING

Comply with Air Force Corporate Standards for Comprehensive Planning:

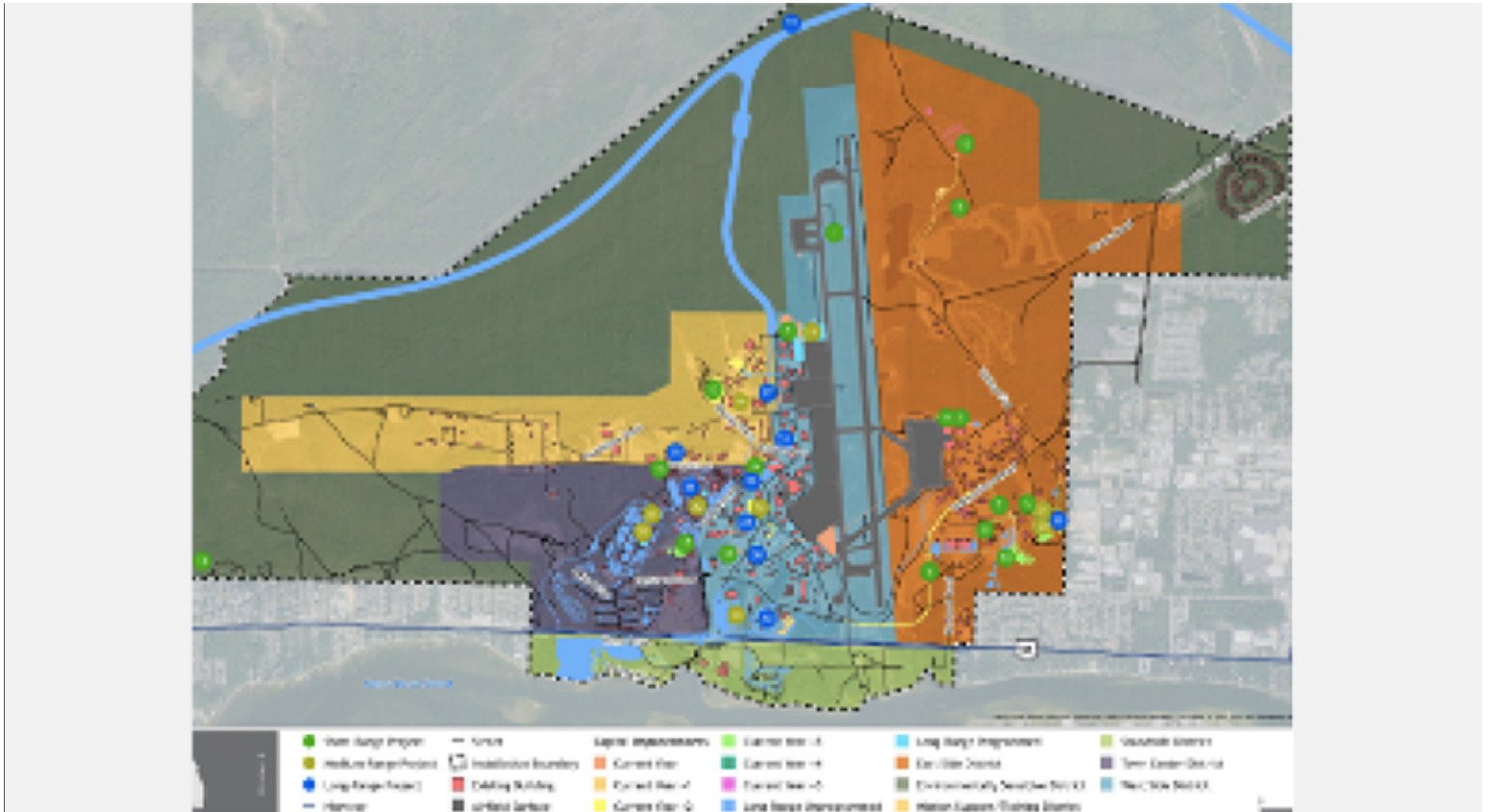
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B01.1. Installation Development Plan (IDP)

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IDP Graphic Indicating Facility Districts

1. The base is required to provide and maintain Installation Facilities Standards (IFS) as a Component Plan of the base's Installation Development Plan (IDP).
2. The Installation Development Plan (IDP) summarizes the results of the Air Force comprehensive planning process at a given point in time. This IDP is crafted to guide future development to improve mission effectiveness, enhance the natural and built environments, best leverage resources, and strategically align Hurlburt Field with the objectives of higher-level agencies.
3. Hurlburt Field plays a pivotal role within the Department of Defense (DOD) and must position itself for mission success through available resources and programming decisions. This chapter establishes the development principles and the planning vision for Hurlburt Field; it also outlines the alignment of the IDP vision at multiple organizational levels from DOD through the United States Air Force (USAF), Air Force Office of the Civil Engineer (A4C), Air Force Special Operations Command (AFSOC), and the 1st Special Operations Wing (1 SOW). This alignment helps best leverage resources and ensures that Hurlburt Field meets the objectives of higher-level agencies.

B01.1.1. IFS Component Plan of IDP

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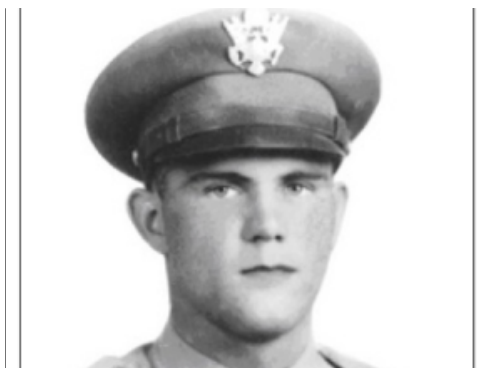
1. Maintain this Installation Facilities Standards (IFS) as a Component Plan of the base's Installation Development Plan (IDP).

B01.1.2. Brief History of Base

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1st Lieutenant Donald W. Hurlburt



Hurlburt Field Main Gate 1967



AC-130U Over Hurlburt Field



Airman Loading AC-130 Cannon

Hurlburt Field was established in the 1940s as Auxiliary Field No. 9 of Eglin AFB. In 1943, the auxiliary field was named Hurlburt Field after 1st Lieutenant Donald W. Hurlburt. An east-west runway was also built at this time. The 17th Light Bombardment Wing was the first unit stationed here and was replaced in 1958 by the 475th missile wing of the Air Defense Command.

In 1961, Hurlburt began its role in the development of Special Air Warfare Operations with the activation of the 4400 Combat Crew Training Squadron. The Squadron then became the 1st Air Commando Wing in 1963, which then became the 1 SOW.

The 1 SOW was consolidated with missions of the Air Force Special Operations Force (AFSOF) and was re-designated the 834th Tactical Composite Wing. In 1975, the wing once again became the 1 SOW and became part of the 23rd Air Force (23 AF). In 1990, the 23 AF became the AFSOC.

Hurlburt Field Main Gate in 1967

In 1993, to comply with then Air Force Chief of Staff General Merrill McPeak's directive that no active duty units would have the same designation, the Air Force decided to redesignate the 1 SOW rather than the 1st Fighter Wing located at Langley AFB, VA,

because the latter possessed a higher heritage score. On October 1, 1993, the Air Force officially redesignated the 1 SOW as the 16th Special Operations Wing.

In 2006, the Air Force announced the stand-up of a second active duty Air Force Special Operations Wing at Cannon AFB, NM. Because of the proud and rich heritage of special operations at Hurlburt Field, Air Force leadership decided that it would return the Hurlburt-based wing back to its original 1 SOW designation. Therefore, on November 16, 2006, the Air Force redesignated the 16 SOW back to the 1 SOW. The 1 SOW retained all the honors the 16 SOW garnered in its 13-year existence.

Today, Hurlburt Field is the home of the 1 SOW and HQ AFSOC, with the mission to organize, train, equip, and educate AFOSF for worldwide deployment and assignment to a regional unified command and a variety of tenants listed in 3.2.2.

The 1 SOW's "Air Commando Spirit" dates back to the jungles of the China-Burma-India Theater of operations during World War II. Flying P-51 to P-47 fighters, L-1 and L-5 observation planes, C-47 cargo and CG-4 and TG-5 gliders, and B-25 bombers, air commandos provided airdrop and landing of troops, equipment and supplies, evacuation of casualties, and attacks against enemy airfields and lines of communication. The airmen of the 1 SOW have proven their motto, "Any Time, Any Place" to be true, as they have been key players in such military contingencies as; the capture of Manuel Noriega in Panama, Operation Desert Storm, Operation Provide Hope in Somalia, Operation Uphold Democracy in Haiti, Operations Deny Flight and Joint Endeavor in the former Yugoslavia, and the Global War on Terror in Iraq and Afghanistan

B01.1.3. Future Development

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Developable Parcels Snapshot



Stationary Aircraft on Apron



Taxiing Aircraft

The IDP is the primary document upon which development planning and programming decisions are based. It combines existing resource plans, installation studies, master plans, ADPs, GIS mapping data, and the IDP vision, goals, and objectives into a composite view for development on Hurlburt Field.

This document and the development standards are prepared in accordance with AFI 32-7062 and the vision, goals, and objectives of Hurlburt Field, as well as those of higher-level organizations, as outlined in Chapter 4, Strategic Vision Alignment. These standards account for mission and training requirements, environmental sustainability, energy use, asset optimization and space use, and Major Command (MAJCOM) and tenant initiatives.

The district-specific guidance presents projects necessary to conduct the installation's missions efficiently and in an orderly manner. Plans and proposals for capital improvements in this IDP span more than 20 years. This includes significant changes including planned and ongoing consolidation and modernization of facilities, new construction, and the replacement of infrastructure and facilities at or near the end of their useful service lives.

Transportation systems and required improvements are also addressed, including vehicular circulation, parking, traffic control, pedestrian systems, and gate operations.

B02. STREET ENVELOPE STANDARDS

Comply with Air Force Corporate Standards for Installation Elements:

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

Comply with AF Corporate Standards for Street Envelope Standards:

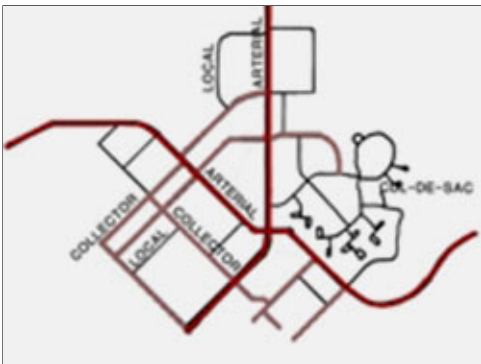
<http://afcs.wbdg.org/installation-elements/street-envelope-standards/index.html>

B02.1. Hierarchy of Streets

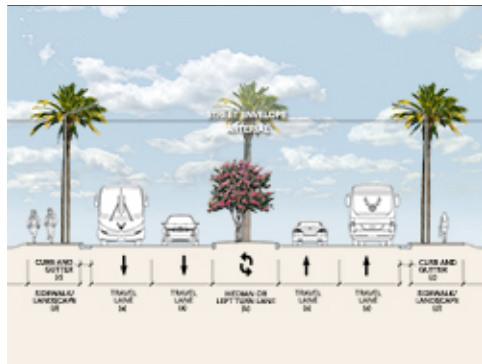
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Hierarchy of Streets



Street Envelope Section



Arterial Street

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 collector 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 following the IFS.

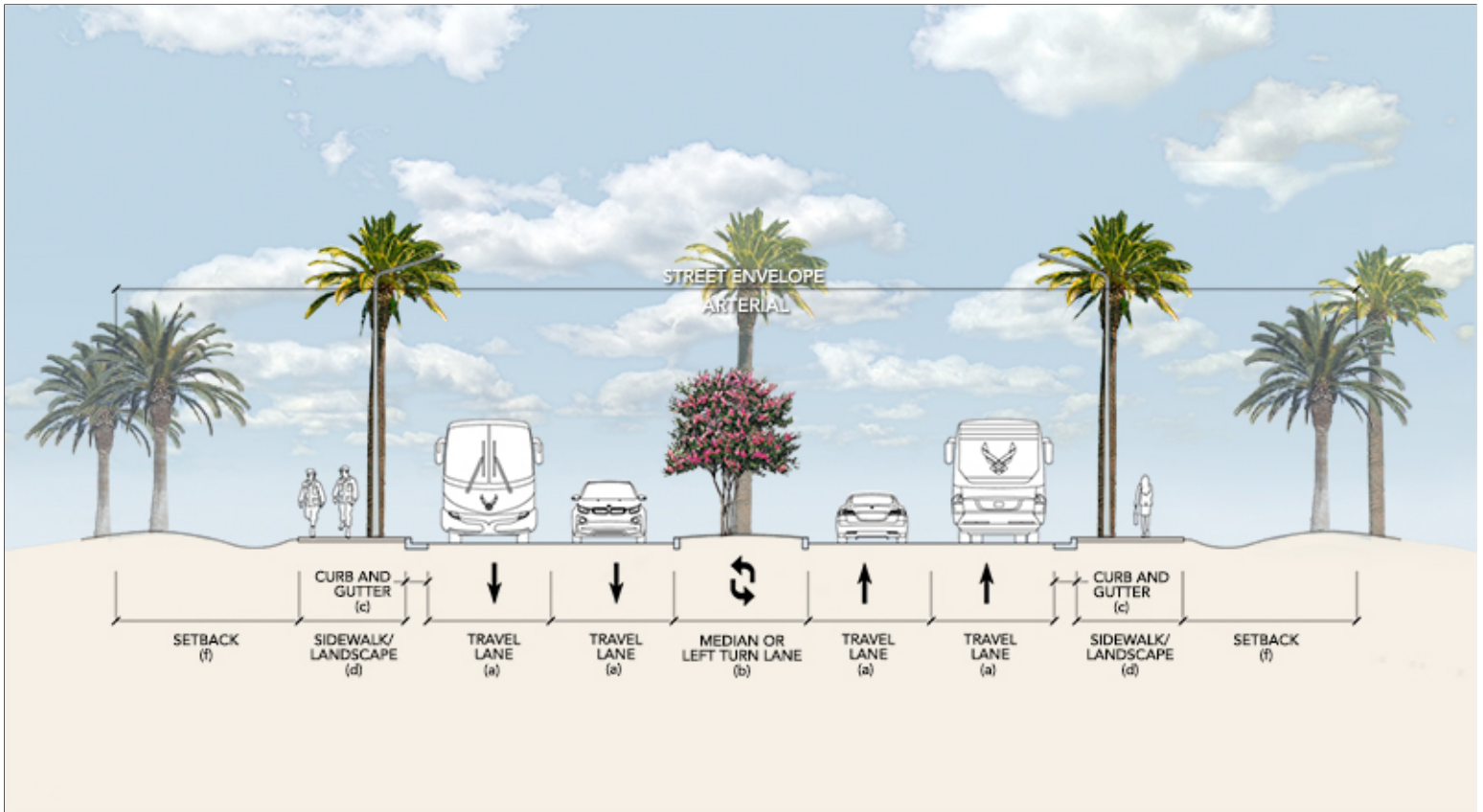
B02.1.1. Arterial Streets

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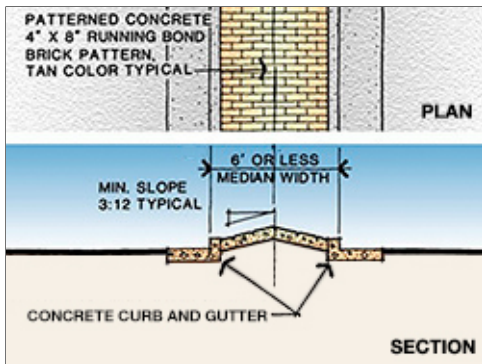
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Travel Lane (a): 12' Median (b): 12' Curb and Gutter (c): 2' Sidewalk/Landscape (d) 12' Setback (f): Min. 35' or per ATRP



Paved Median



Arterial Street



Arterial Street

1. These specific requirements shall be incorporated into all arterial projects including roadway modifications/upgrades and associated building sites adjacent to the street. Increase landscape setbacks along evacuation routes.
2. Limit curb cuts on arterial streets to entries into major facilities, building groups and major parking areas.
3. Signs, plantings and street lighting should be added to reinforce the importance of arterial streets.
4. Continue to maintain the streets currently designated as aerial streets in future development.

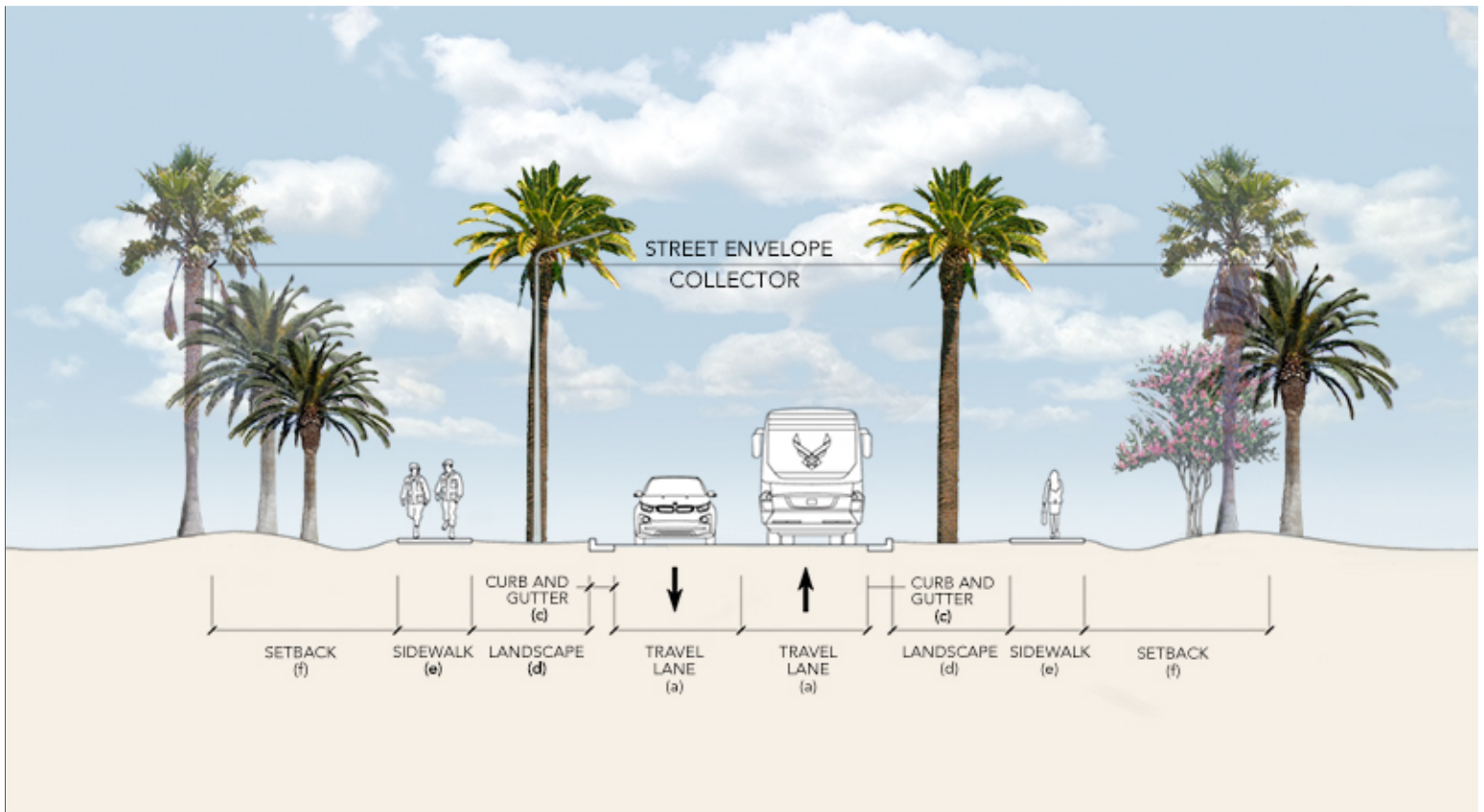
B02.1.2. Collector Streets

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Travel Lane (a): 12' Median (b): N/A Curb and Gutter (c): 2' Landscape (d): 10' Sidewalk (e): 6' Setback (f): 15' or per ATRP requirement



Typical Collector Street



Appropriate Level of Quality



Integrated Landscape Buffer

1. Design collector streets to be less prominent than arterials.
2. Match the level of quality of street elements to the adjacent Facility Group number.
3. On street parking may be allowed on one side where secondary roads are over 28 feet wide but not less than 34 feet wide. Parking shall not interfere with intersections or traffic flow.
4. Provide sidewalks on at least one side of collector streets. Buffers are preferred but not required on collector streets.

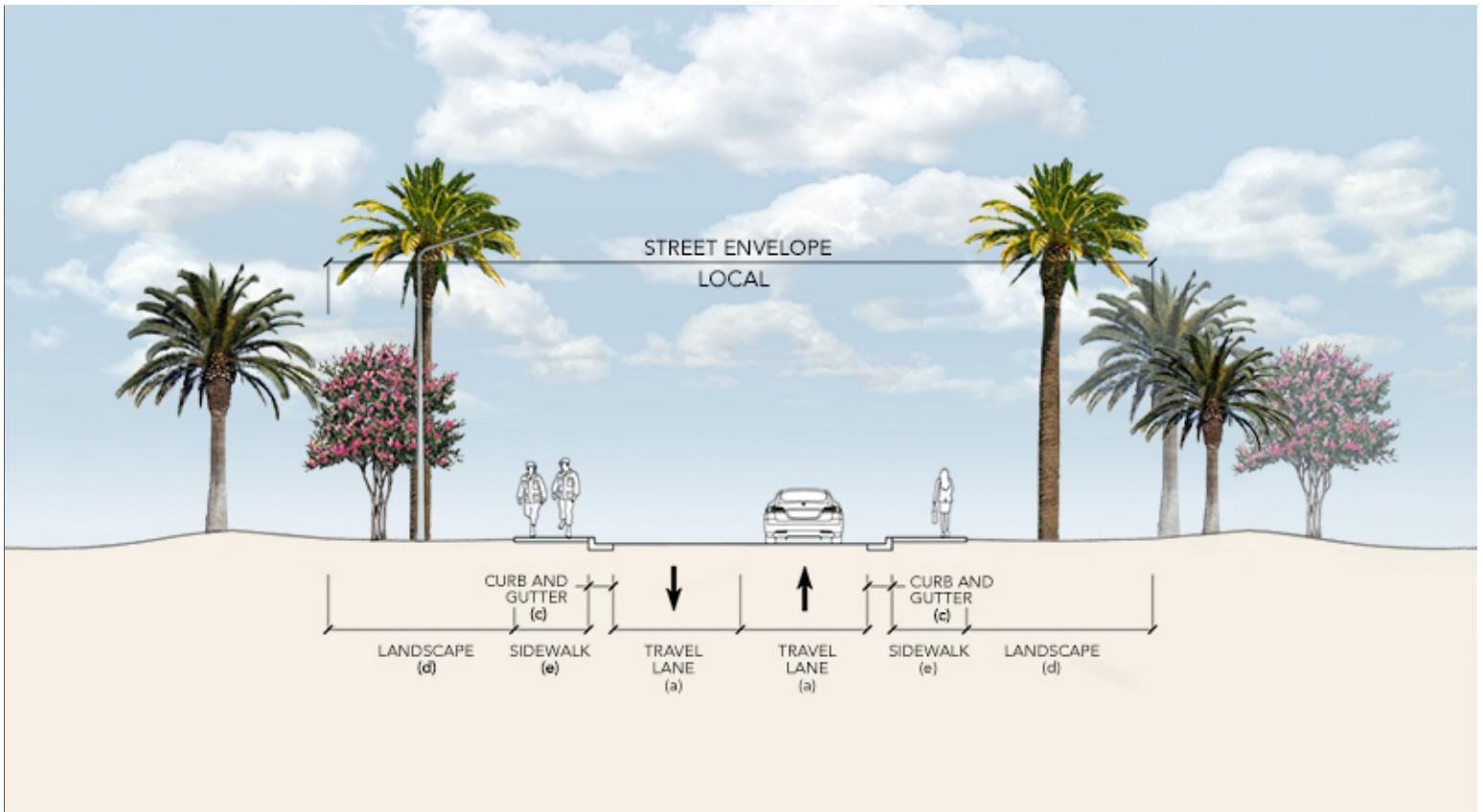
B02.1.3. Local Streets

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

Image Tool 250 x 188



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



Access to Group 2 Facility



Typical Local Street in Group 4



Integrated Landscape Island

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

- On street parking may be allowed on one side where secondary roads are over 28 feet wide but not less than 34 feet wide. Parking shall not interfere with intersections or traffic flow.

B02.1.4. Special Routes

Applicable N/A Large graphics do not apply

Applicable N/A Small graphics do not apply

- 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



Integrated Speed Control Device



Coordinated Crosswalks



Typical T-Intersection

- Provide a hierarchy of intersections to include arterial, arterial-collector, collector, collector-local and local following UFC 3-201-01 and its industry references.
- 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.
- Use a level of visual quality for an intersection equal to the 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

- Develop arterial intersections consistently with the adjacent facility group designation.
- Maintain appropriate sight lines at all intersections.
- Refer to UFC 2-100-01 Installation Master Planning for guidance on arterial streetscape design.

B02.2.2. Arterial/Collector

Applicable N/A Large graphics do not apply

Applicable N/A Small graphics do not apply

1. Develop arterial/collector intersections consistently with the adjacent facility group designation.
2. Maintain appropriate sight lines at all intersections.
3. Refer to UFC 2-100-01 Installation Master Planning for guidance on streetscape design.

B02.2.3. Collectors

Applicable N/A Large graphics do not apply

Applicable N/A Small graphics do not apply

1. Develop arterial/collector intersections consistently with the adjacent facility group designation.
2. Maintain appropriate sight lines at all intersections.
3. Refer to UFC 2-100-01 Installation Master Planning for guidance on streetscape design.

B02.2.4. Special Intersections

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



Monument in Island Adjacent to Group 1 Facility

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

B02.2.5. Street Frontage Requirements

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



Setback with Attached Sidewalk and Landscape Buffer

1. Consistently 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.

B02.2.6. Sight Lines

Applicable N/A Large graphics do not apply

Applicable N/A Small graphics do not apply

1. Provide adequate sight lines for an effective and safe traffic operation per American Association of State Highway and Transportation Officials (AASHTO) standards and local municipality guidelines.

B02.3. Street 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 3

Image Tool 250 x 188



Accessible Curb Ramp



Speed Control Device



Stiped Crosswalk

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 reflectivity of surfaces 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. Follow UFC 3-120-01 for directional and wayfinding signs and address both vehicular and pedestrian traffic.
7. 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 Select number of graphics / images (small: 250 px x 188 px) to insert 3

Image Tool 250 x 188



Asphaltic Paving



Concrete Paving



Asphaltic Paving in Group 4

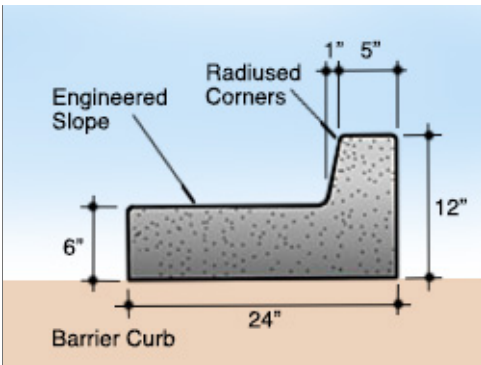
1. Pavement design shall comply with UFC 3-250-01. Ensure appropriate analysis and design of subgrade conditions to promote low maintenance, high performance pavements. Apply all applicable best practices from Appendix B of the UFC.
2. Materials shall be specified in accordance with UFC 3-250-01 and must conform to requirements set forth in the Unified Facility Guide Specifications (UFGS) for concrete and bituminous pavement.

B02.3.2. Curb and Gutter

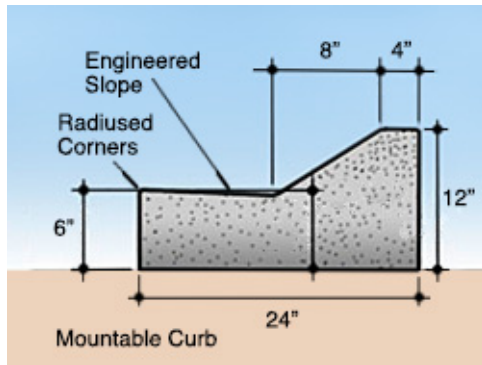
Applicable N/A Large graphics do not apply

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

Image Tool 250 x 188



Barrier



Mountable



Paving on Remote Road without Curb

1. Curb all parking, access roads and streets (except remote/isolated).
2. All arterial, collector and local streets should have integral concrete curbs and gutters. Remote streets and patrol roads may have paving without curbs. 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 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



Screened Utility Yard

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 and provide visual screening following Site Development, Landscaping.
2. Overhead service lines along streets adjacent to Facility Groups 2, 3 and 4 are discouraged.

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 Select number of graphics / images (small: 250 px x 188 px) to insert 1

Image Tool 250 x 188



Base Standard Lighting

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

Image Tool 250 x 188



Statuary on Stone Base in Paved Plaza



Markers along Walkway



Decorative Plaza Paving at Flagpole



Colored Concrete Paving

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 3

Image Tool 250 x 188



Inset of Contrasting Color



Natural Colored Concrete Paving



Colored Concrete Pavers

1. Mitigate heat island by providing high-albedo, shaded plazas. Pervious pavers shall be used on all plazas and courtyards in Facility Groups 1 and 2; use pervious concrete in Groups 3 and 4. The designer shall incorporate appropriate expansion and construction joints.
2. Pavers shall match the color of pavers used on adjacent sidewalks using base standard range of beiges, tans, browns, or terra cotta.

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 3

Image Tool 250 x 188



Bronze Plaque Marker



Multiple Markers Defining Plaza Space



Bronze Sculpture and Stone Base

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 shall 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 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



Ground-Mounted Display



Integrated Landscaping and Lighting



Display with Interpretive Marker

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 shall 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 shall 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 shall 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 above-ground equipment and associated components such as electrical piping or exposed plumbing lines dark bronze.
11. Maintain currently 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 aboveground lines serving the base.

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, 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 shall determine quantities, sizes, and products on a 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 6

Image Tool 250 x 188



Paved Trail in Park Area



Coordinated Park Buildings



Park Setting at Static Displays



Recreational Area



Park and Playground at Group 4



Pavilion at Recreational Area

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. Use only materials and detailing that is low maintenance and endures with minimal weathering.
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



Preserved Landscape Features



Native Setting



Preserved Coastline Feature

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 2

Image Tool 250 x 188



Fencing at Group 1 Facility



Fencing at Remote Roadway

1. Design, install and maintain the base's perimeter fence following UFC 4-022-03.
2. Stringently comply with ATFP 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 shall 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://afcs.wbdg.org/site-development/index.html>

C01. SITE DESIGN

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

Comply with AF Corporate Standards for Site Design / NEPA:
<http://afcs.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 Small graphics do not apply

Collect documentation to validate approvals and completion of the NEPA process.

2. Ensure site design compliance with the Installation Development Plan (IDP) and its component plans and Installation Facilities Standards (IFS).
3. 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.
4. Limit the impact of development on land and water resources. All site elements and infrastructure shall reinforce an image of sustainability, with reduced energy demand, renewable-energy usage, and water conservation.
5. 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, energy management (metering, EMCS).
6. 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.
7. New building projects should preserve open space and protect natural habitat.
8. 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.
9. 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.
10. 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.
11. Minimize existing and planned obstructions from landscaping, structures, topography, and adjacent developments to preserve solar access and natural ventilation.
12. Purposefully integrate service access, receiving and storage areas to eliminate the need for visual screening.
13. 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.
14. Applicably coordinate heat island mitigation in paving and roof designs when implementing an integrated approach to stormwater management.

15. Consider the location of "Designated Tobacco Areas."

C01.2. Building Orientation

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

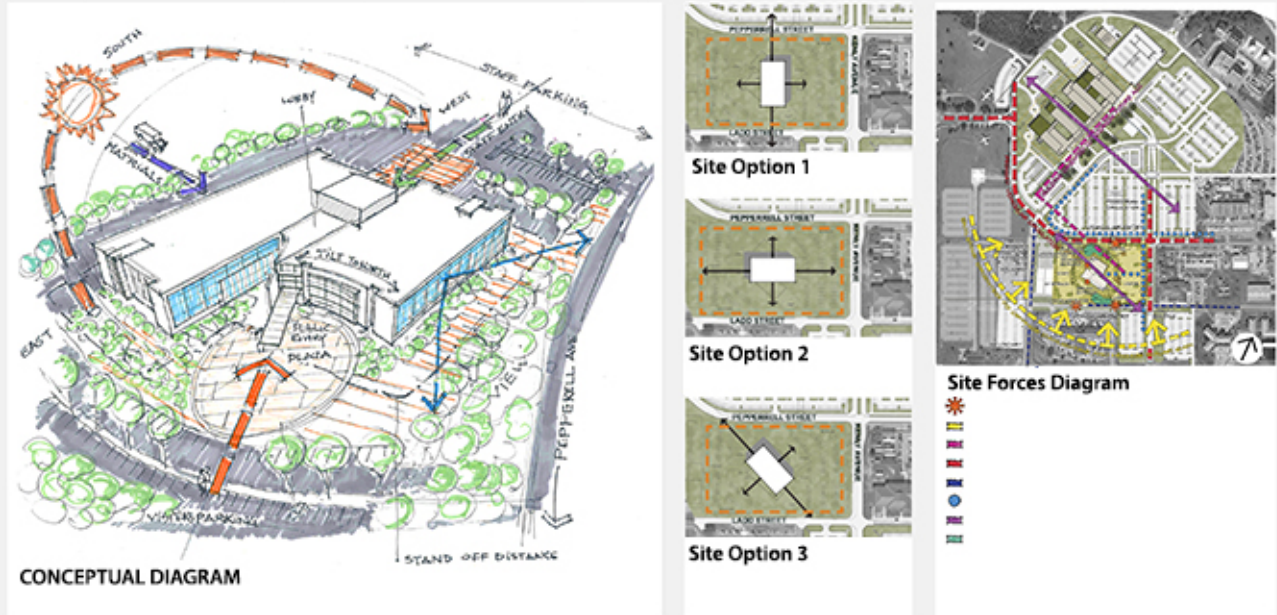
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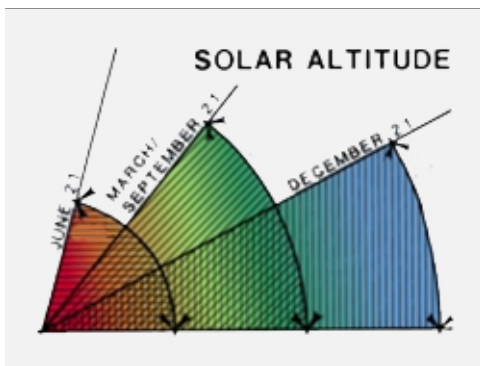
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DRIVING FACTORS

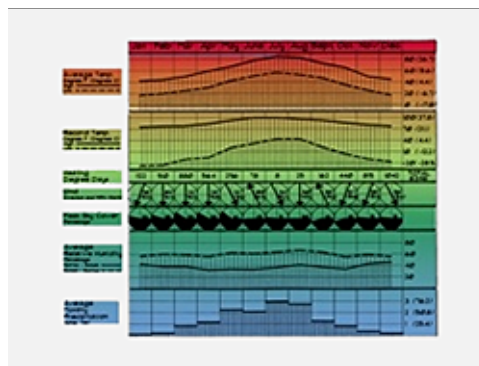
- | | | | |
|--|--|--|---|
| • Optimal solar orientation of the building. | • Maximize the daylight & desirable views. | • Meet the required AT/FP standoff distance | • Create a unified campus |
| • Main entrance from Pepperrell street. | • Saving existing vegetation and trees | • Separation between staff/public/materials entrance | • Outdoor healing environment |
| • Addressing the orientation of the future ACC | • Visibility of the new facility from main roads | • Required parking spaces for public and staff | • Implementation of landscape zones A, B, C & D |



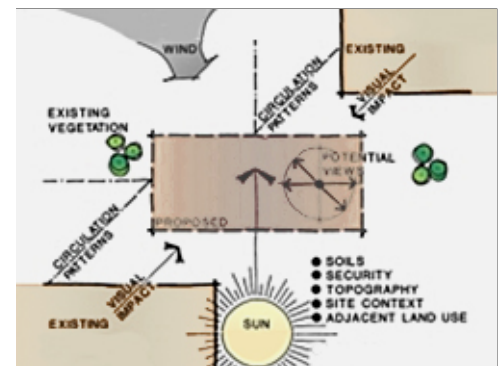
Conceptual Site Analysis and Site Design Diagram



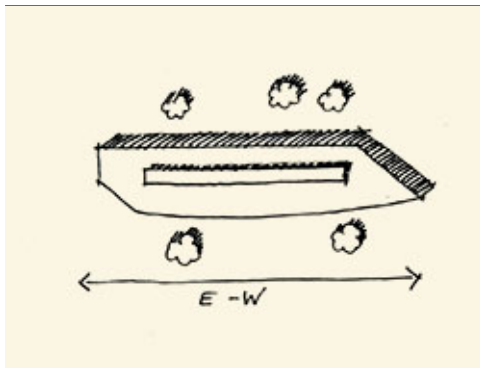
Local Solar Data



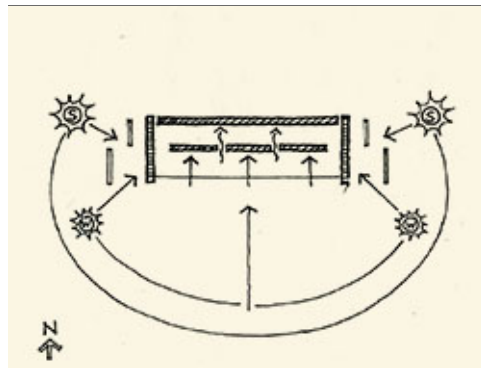
Local Climate Data



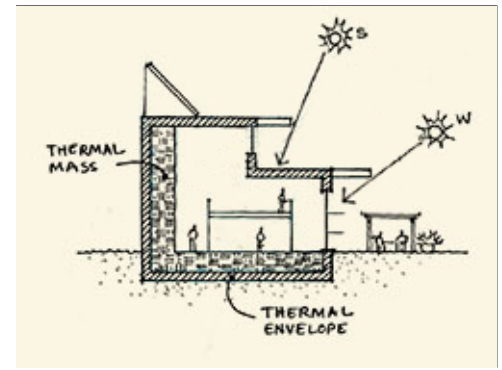
Site Data



East-West Axis



Optimum Solar Control



Maximized Shading

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 the locations of the building's passive and renewable-energy systems --including geothermal and solar systems --and exterior shading systems.
3. Locate the building(s) and permitted ancillary structures to promote solar gain, solar shading, natural ventilation, rainwater harvesting, wind buffering and other beneficial passive systems. Consider natural ventilation during the design of HVAC systems.
4. 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.
5. Consider the "public side" of the building, its views and the location of the main entrance.
6. 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.
7. At a minimum, a courtyard must have one trash receptacle, one bench, and one (1) picnic table with seating. Generally use concrete or brick paving at all courtyards following standards for plazas.

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 3

Image Tool 250 x 188



Ground-Mounted Gear



Weathering Cover



Landscape Screening at Utility Structure

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 the locations of the building's passive and renewable-energy systems --including geothermal and solar systems --and exterior shading systems.
3. Locate the building(s) and permitted ancillary structures to promote solar gain, solar shading, natural ventilation, rainwater harvesting, wind buffering and other beneficial passive systems. Consider natural ventilation during the design of HVAC systems.
4. 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.
5. Consider the "public side" of the building, its views and the location of the main entrance.
6. 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.
7. At a minimum, a courtyard must have one trash receptacle, one bench, and one (1) picnic table with seating. Generally use concrete or brick paving at all courtyards following standards for plazas.

C03. PARKING AREAS

Comply with AF Corporate Standards for Site Development:

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

Comply with AF Corporate Standards for Parking Areas:

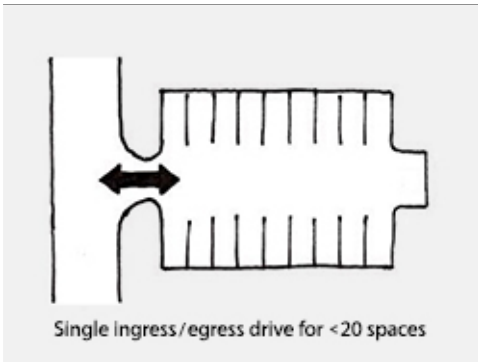
<http://afcs.wbdg.org/site-development/parking-areas/index.html>

C03.1. Configurations and Design

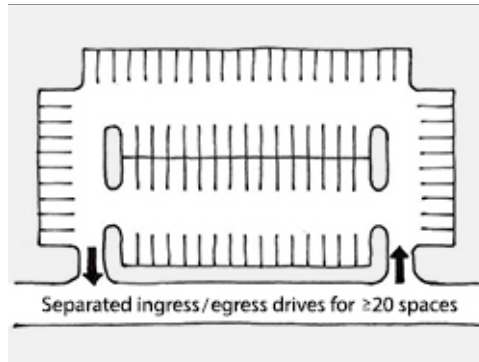
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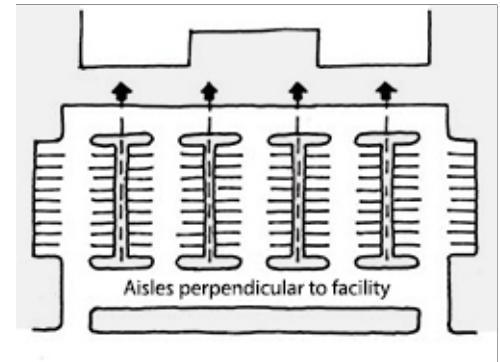
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Small Lot Configuration



Large Lot Configuration



Facility Group 1 Configuration



90-Degree Configuration



Adjacent Accessible Parking



Integrated Sidewalks

1. Evaluate adjacent sites and cost-effectively consolidate parking areas to maximize efficient use; ensure that all areas meet accessibility guidelines.
2. 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 ATRP requirements.
3. Parking lots shall be designed to minimize the visual impact of parking areas by creating smaller, well-screened, landscape parking areas located behind the facilities they serve. Reduce the visual impact of oversized parking areas with landscaped medians and islands.
4. Parking areas shall be located within 500 feet of the facilities they serve but no closer than the minimum allowed by ATRP standard or as directed by the AT office or its representatives.
5. Parking lots must accommodate all vehicles that will serve the facility. Provide access for fire apparatus according to NFPA.
6. Consider locations and requirements of near term and future electric vehicle charging stations.
7. Provide parking spaces for disabled use in quantities, sizes and locations as prescribed in the Architectural Barriers Act (ABA).
8. 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.

9. Define pedestrian access with approved hardscape and provide shading along the primary path from the parking area to the main entrance of the building.
10. Coordinate suitable landscape or barriers integrated with walls and fences to ensure adequate force protection.
11. Accessible parking spaces shall be marked according to UFC 3-120-01 and its references in ABAAS and the MUTCD.
12. Curbing shall be continuous where possible and serve as the wheel stop. The use of parking bumpers or wheel stops at vehicle parking areas is not permitted.
13. Parking lots that promote cross-traffic between parallel streets should be avoided.
14. Consider locations and requirements of near term and future electric vehicle charging stations.
15. Designate preferred parking spaces for electric vehicles and carpools near the main entrance.
16. Consider cost-effectively integrating solar photovoltaic arrays into covered parking structures.
17. Reserved parking is discouraged except for Facility Group 1 and 2.
18. Locate lighting poles in center or side islands at least 3 feet from face of curb and their location shall be fully coordinated with landscaping plan.
19. On-street parking is discouraged except in multi-use areas. When used, provide approved on-street parking configurations following UFC 3-201-01.
20. Access and service drives should accommodate the largest vehicle serving the facility.
21. Motorcycle parking spaces shall be provided at the end of the parking row with signage, 4'-6" by 12' long minimum. All motorcycle parking shall be located on a concrete pad.
22. Driveway aisles and other dimensions:
 - a. Two-way aisles: 24' wide
 - b. One-way 45 degree aisle: 13' wide
 - c. One-way 60 degree aisle: 18' wide
 - d. Landscaped medians: 12' wide preferred, 6' wide minimum
 - e. Landscaped islands: 9' wide
23. Parking space dimensions:
 - a. 90 degree: 10' x 20'
 - b. 45 degree: 10' x 20'-6"
 - c. 60 degree: 10' x 23'
 - d. Parallel: 11' x 21'
 - e. First/last stall of each row: add 1' to standard width

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: Asphaltic concrete

Secondary: Concrete

Accent: Permeable pavers

Facility Group 2 paving materials shall be as follows.

Primary: Asphaltic Concrete

Secondary: N/A

Accent: N/A

Facility Group 3 paving materials shall be as follows.

Primary: Concrete where operationally required

Secondary: Asphaltic Concrete

Accent: N/A

Facility Group 4 paving materials shall be as follows.

Primary: Asphaltic Concrete

Secondary: N/A

Accent: N/A

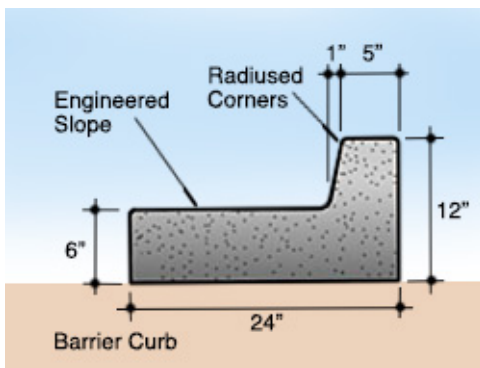
1. All new parking lots in Groups 1 and 2 shall be constructed of asphaltic concrete paving.
2. Porous paving may be considered on a case basis.
3. Cost-effectively provide light-colored concrete to reduce heat island effect; otherwise install asphaltic concrete paving. Dirt, gravel, and grass lots are not allowed.
4. Use consistent striping, angles and stall sizes in all parking areas.
5. All parking shall be marked with white stripes of paint or applied vinyl coatings. Red or yellow markings shall only be used for safety purposes and must be kept to a minimum. All lines shall be four inches (4") wide.

C03.1.2. Curbing

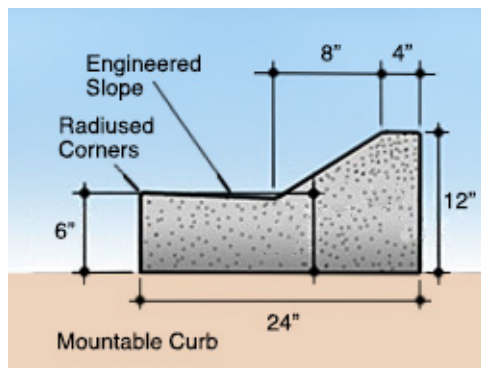
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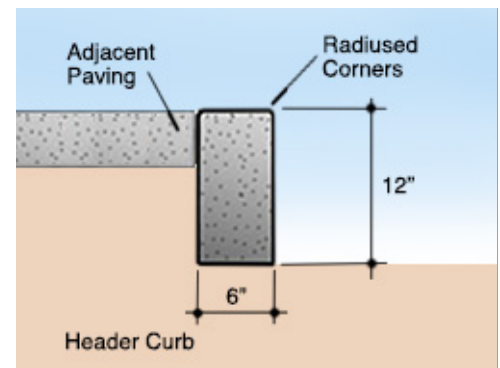
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"Barrier" Curb



"Mountable" Curb



Header Curb

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 shall be the rolled (mountable) type with a 6-inch high street-side face and a 6-inch top face.
2. Group 3 parking areas and service yards are not required to have edge curbing but dirt areas directly adjacent to parking areas and driveways shall be compacted base course or decomposed granite, extended 6' to 8' from the paved areas.
3. Integrate curbing to direct stormwater to bioswales and rain gardens as source water for regionally appropriate native vegetation.
4. 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 2

Image Tool 250 x 188



Ornamental Tree and Shrubs



Landscaped Median

1. Install landscape islands and medians as visual breaks, to reduce heat island effects and to accommodate bioswales and rain gardens. Coordinate suitable landscape or barriers integrated with walls and fences to ensure adequate force protection.
2. 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 ATFP 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 Small graphics do not apply

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.
4. Define pedestrian access with approved hardscape, provide shading, and provide safe, efficient travel from vehicles along the primary path from the parking area to the main entrance of the building. Emphasize building main entrances in the alignment of landscape median/pedestrian paths.

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 3

Image Tool 250 x 188



Swale with Native Grasses



Swale with Rip-Rap



Retention Pond as an Amenity

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. Where low-slope roofs are permitted, the roof must be drained to the exterior walls. Rain leaders should be used in lieu of exterior downspout conductors.
3. Group 1 facilities shall use closed-face gutters and downspouts on the outside of the building line. Coordinate the material and color of gutters and downspouts with roof and wall materials for Group 1, 2, 3 and 4 facilities.
4. Incorporate bioswales into the design of all roadway, parking and facility roof systems to enhance water quality and support the overall stormwater system.
5. Permeable paving may be used in areas that are not subjected to severe freeze-thaw cycles.
6. 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.
7. 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.
8. Cost-effectively integrate stormwater systems with ATRP measures.

C05. SIDEWALKS, BIKEWAYS AND TRAILS

Comply with AF Corporate Standards for Site Development:

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

Comply with AF Corporate Standards for Sidewalks, Bikeways and Trails:

<http://afcfs.wbdg.org/site-development/sidewalks-bikeways-trails/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



Sidewalk Connection to Entrance Plaza



Concrete Paving



Sidewalk Attached to Parking Lot



Detached Sidewalk along Roadway



Unit Pavers



Concrete with Decorative Edging

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

Primary: Pervious Pavers

Secondary: Concrete Edging

Accent: N/A

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

Primary: Pervious Pavers

Secondary: Concrete Edging

Accent: N/A

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

Primary: Permeable concrete

Secondary: N/A

Accent: N/A

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

Primary: Permeable concrete

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 ATRP. 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 shall provide a direct path using "safe islands" and "peninsulas" to encourage safety. Walks parallel to streets shall follow streetscape guidelines. Clearly mark pedestrian crossings at vehicular routes.
4. Mitigate heat island by providing high-albedo, shaded sidewalks. Pervious pavers shall be used on all sidewalks, plazas and courtyards in Facility Groups 1 and 2; use pervious concrete in Groups 3 and 4. The designer shall 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 shall 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 cars park adjacent and head-in to the sidewalk and wheel stops are not used, such perimeter walks shall be increased to a minimum width of 8' to accommodate overhangs of the parked vehicles.
10. All sidewalks shall have positive drainage to prevent ponding of water accumulation with slopes ranging from 2.1% to 4.2%. Walks with a slope greater than 4.2% shall be designed as ramps following accessibility guidelines. All walks shall have a minimum cross slope of 2.1%.
11. Pavers shall conform to the following range of color: Earth tones corresponding with the surrounding building categories. Pavers used on walks shall typically be 4"x8" nominal 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 for future trails, bicycle paths, and sidewalks.
14. Provide connecting sidewalks from all building entrance/exits. Mechanical, electrical, and communications room entrances shall be accessible via sidewalks or pavements.

C05.1.1. Ramps and Stairs

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



Site Stair with Pipe Railing



Lumber Framing at Recreational Area

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.
3. Provide proper lighting at outdoor spaces that are intended for evening use to ensure visibility.

C06. LANDSCAPE

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

Comply with AF Corporate Standards for Landscape:
<http://afcs.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



Native Grasses



Regionally Appropriate Trees



Ornamental Trees and Native Grasses

1. Use only native, naturally occurring, drought tolerant indigenous 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.
2. Follow details and specifications of the American Standard for Nursery Stock, current edition.

C06.1.1. Landscape Design Concept

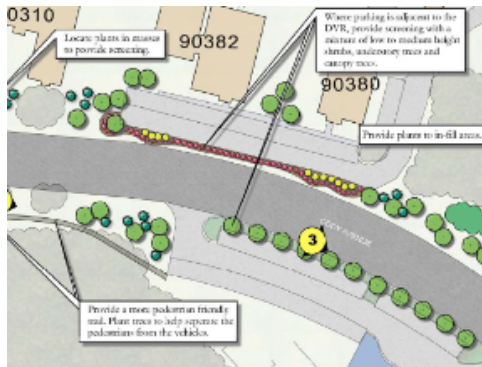
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Landscape Site Plan Graphic



Streetscape Planting Graphic

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. Follow UFC 3-201-02 Landscape Architecture.
2. Landscaping is required for all newly developed sites and facilities; preserve existing native landscape where possible and avoid overplanting.
3. Concentrate landscaping in Facility Group 1 and along major thoroughfares and integrate these landscaped areas into the base's stormwater management plan. Refer to the Streetscape Envelope Standards in this IFS.

4. All Facility Group 1 and 4 sites shall 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.
5. Facility Group 2 and 3 sites may have a native undisturbed landscape except at the main entrances of Group 2, which should be newly landscaped.
6. Facility plantings shall 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.
7. 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.
8. 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.
9. In tree clusters replace grass with naturalized shrub beds and leaf litter mulch to eliminate mowing requirements.
10. Use plantings in open spaces to reinforce the space as a visual asset.
11. Consider landscape windbreaks when suitable for the local climate.
12. Integrate security requirements into the landscape design. Coordinate the heights of trees and shrubs and note restrictions for plantings following UFC 4-010-01.
13. 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

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Raised Planter



Foundation Planting



Xeric Species

1. Apply xeriscape 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.

C06.1.3. Minimizing Water Requirements

Applicable N/A Large graphics do not apply

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Grey Water Irrigation Area



Xeric Plantings



Organic Mulch Beds

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

Image Tool 250 x 188



Native Grasses



Low-Maintenance Planting



Ornamental Trees and Shrubs in Plaza

1. Use only native, naturally occurring 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.
2. New facilities are encouraged to use native plant species as indicated on the plant lists available from the BCE.
3. 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.
4. Ground covers are only recommended when minimal maintenance is required.
5. 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.

6. Analyze soils and provide organic amendments as needed to improve plant growth and conserve water.
7. All plant material shall have one-year warranty and is subject to approval by the Base Landscape Architect.

C06.1.5. Water Budgeting (Hydrozones)

Applicable N/A Large graphics do not apply

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Image Tool 250 x 188



Xeric Planting at Group 3



Turf Area at Static Display Park



Xeric Shrubs with Mulch

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 shall 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. 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. Life cycle cost-effectively equip irrigation systems 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

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Image Tool 250 x 188



Concentration of Trees and Shrubs at Group 1



Native Trees, Shrubs and Groundcover



Drought-Tolerant Grasses

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 Large graphics do not apply

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Landscape Setback



Grasses and Integrated Fencing



Landscape at Detached Sidewalk

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.

C06.1.8. Pedestrian Circulation Landscaping

Applicable N/A Large graphics do not apply

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Landscape Defining Sidewalk



Raised Planters Defining Space



Planting at Pavilion

1. Define walkways with landscaping where appropriate.
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

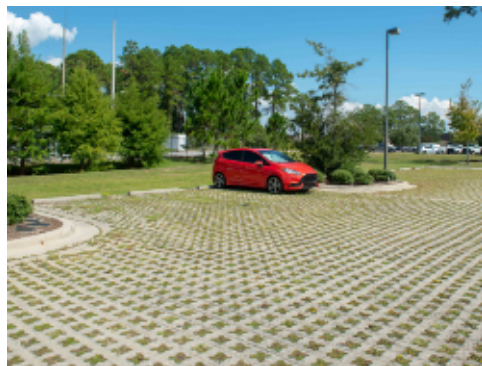
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Landscaped Islands



Grass Paving Systems



Landscaped Island

1. Integrate appropriate landscaping elements into parking areas to visually soften the appearance at a minimum rate of ten percent of the total area.
2. Avoid trees that drop sap, fruit, or seeds, and use long-lived species; keep trees trimmed, removing dead and dying trees or branches.
3. Provide planting in islands within parking lots for shade and appeal following IFS and the base stormwater management plan.

4. Rain garden islands shall be landscaped to receive 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 without supplemental irrigation once established.

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

Image Tool 250 x 188



Screening at Utility Elements



Accent Planting at Sidewalk



Accent Landscaping at Median

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; berming and mounding may supplement landscape screening.

C06.1.11. Other

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



Landscaping at Seating Wall

1. Integrate landscaping with low walls to visually soften the appearance.

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 3

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Coordinated Site Furnishings



Bike Rack Near Main Entrance



Screen Wall at Utility Elements

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. Group 1 and 2 site furnishings shall be metal. Group 3 and 4 site furnishings shall be metal framing with recycled-content components. 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 shall match facility architecture.
5. Benches in Groups 1, 2 and 3 shall be metal frames with metal slats or perforated sheet. Provide metal frames with recycle plastic slat benches in 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 ATRP requirements.
7. Limit the use of bollards, but when necessary for force protection use cast aluminum with anodized finishes in Groups 1 and 2; recycled plastic-clad steel bollards in Group 3; timber bollards in Group 4 and parks and trails. Illuminated bollards may be used as approved on a case basis.
8. Locate architecturally coordinated containers for recycling, litter, ash, vending, etc., to minimize visual clutter and not 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 shall comply with the guidance for the display of flags in AFI 34-1201. 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 and approved waivers (AF Form 679) must be maintained by the installation protocol office. Flagpoles using approved materials may be installed at locations designated by IFS, and in accordance with AFI 34-1201.

11. Refer to the Overview Section “Facility Hierarchy” topic of this AFCFS for guidelines regarding ancillary structures such as pavilions and shade shelters.
12. Bus shelters shall be provided only where there is a documented need and when approved on a case basis. Generally emulate the designs of adjacent shelters using powder coated or anodized aluminum components.
13. Monuments and static displays shall be limited. New elements are generally discouraged unless these are fully vetted through the base’s approval process and designed following IFS.
14. When visual screening is necessary, consider landscaping as the first option; screen walls are permitted only in Group 1 when finished to match the adjacent building’s wall systems.
15. 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 where there is sustained maintenance. Define all levels of security and visual quality.
16. Do not use chain-link fencing at 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.
17. Wood fencing may be used in Facility Group 4 and in recreation areas following IFS for material and finish when there is sustained periodic maintenance.
18. Provide trash dumpster enclosures for Group 1, 2 and 3 with wall materials to match adjacent facilities; all gates shall be metal factory finished bronze.
19. Specify screen wall materials and finishes that do not require painting or maintenance beyond periodic cleaning.
20. Group 1, 2 and 3 picnic tables and seating shall be anodized aluminum. Group 4 and recreational areas shall have galvanized steel or aluminum frame picnic tables and seating with matching or recycled plastic components . Generally limit picnic tables, barbeque grills and drinking fountains to lodging, dormitories, housing areas, parks and recreation areas.
21. Limit the use of freestanding planters to areas with ongoing maintenance.
22. 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.
23. 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

C07.2.2. Benches

Applicable N/A

Number of base standards 2

Image Tool 250 x 188



Type: **Perforated Steel**

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

Mfr: Wayfair / Anova

Color: Bronze

Finish: Powder coat

Model #: Ultra Perforated Steel Contour Park Bench

Other: Surface mount

UFGS: N/A



Type: **Recycled plastic**

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

Mfr: The Park Catalog

Color: Slats: cedar or brown; black base

Finish: Factory

Model #: 289-1106, 6ft Comfort Park Avenue Recycled Plastic Bench

Other: Recreational areas only

UFGS: N/A

C07.2.3. Bike Racks

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: Brandir International Inc.

Color: Bronze

Finish: Powder coat

Model #: The Ribbon Bike Rack, RB-07

Other: N/A

UFGS: N/A



Type: **Style 2**

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: N/A

C07.2.4. Bike Lockers

Applicable N/A

C07.2.5. Bollards

Applicable N/A

Number of base standards 2

Image Tool 250 x 188



Type: **Dome Top Lighted Bollard**

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

Mfr: Lithonia

Color: Bronze

Finish: Powder coat

Model #: KBD or KBA LED

Other: Flat top may be used to match adjacent facilities

UFGS: N/A

Type: **Building Protection, Steel**

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

Mfr: (Bollard Cover) Reliance Foundry

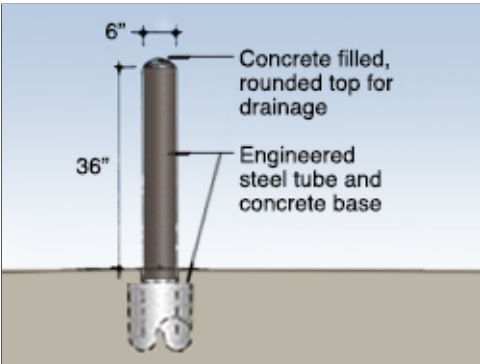
Color: Brown cover may be field painted bronze

Finish: Factory

Model #: 6" Steel pipe, concrete filled, Cover: R-7173

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

UFGS: Section 05 50 13 Miscellaneous Metal Fabrications



C07.2.6. Bus Shelters

Applicable N/A

Number of base standards 2

Image Tool 250 x 188



Type: **Freestanding Metal**

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

Mfr: Tolar Manufacturing

Color: Bronze

Finish: Powder Coat

Model #: Center posts with vaulted glass roof

Other: Integrated benches

UFGS: N/A



Type: **Residential Bus Shelter**

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

Mfr: Custom

Color: Earth tones to match adjacent housing

Finish: Cementitious siding components, concrete tile roofing

Model #: Four post, hipped roof structure

Other: Provide wind screen wall and integral bench

UFGS: N/A

C07.2.7. Drinking Fountains

Applicable N/A

C07.2.8. Dumpster Enclosures / Gates

Applicable N/A

Number of base standards 1

Image Tool 250 x 188



Type: **CMU and Steel**

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

Mfr: Custom

Color: Beige CMU and galvanized or powder coated dark bronze gates

Finish: Split face CMU, factory-finished gates

Model #: 8x8x16 Nominal, face and corner CMU units

Other: Gates: Steel frame with steel slats or Berridge Deep-Deck; gates are optional in low visibility areas of Group 3

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

C07.2.9. Fencing

Applicable N/A

Number of base standards 2

Image Tool 250 x 188



Type: **Style A Barrier: High security, high visibility**

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

Mfr: Custom

Color: Tan brick, bronze railing

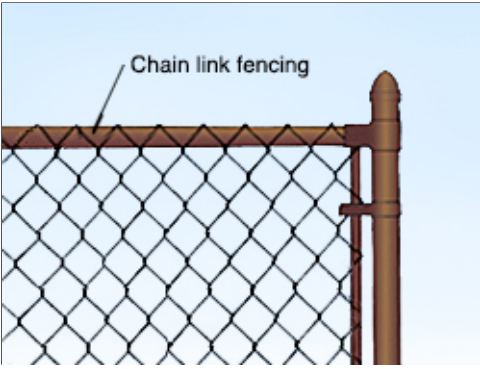
Finish: Smooth face brick, powder coated steel

Model #: Brick piers, brick low wall, precast cap / coping, metal railing

Other: N/A

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

Type: **Style b Barrier: High security, low visibility**



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

Mfr: Custom

Color: Bronze

Finish: Powder coated galvanized steel

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

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

UFGS: Section 32 31 13 Chain Link Fences and Gates

C07.2.10. Flagpoles

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: 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 1

Image Tool 250 x 188



Type: **Precast Panels with Steel Frame**

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

Mfr: Belson

Color: Bronze, beige

Finish: Factory

Model #: 3970 Driftwood with 4003, River Rock

Other: Landmark Series, 35 Gallon waste container, dome top; may be used in parks and commercial areas

UFGS: N/A

C07.2.13. Picnic Tables

Applicable N/A

Number of base standards 1

Image Tool 250 x 188



Type: **Hexagonal Table**

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

Mfr: Fibrex Group, Suffolk, VA

Color: Black base, wood-tone top

Finish: Factory

Model #: Recycled content table and benches

Other: N/A

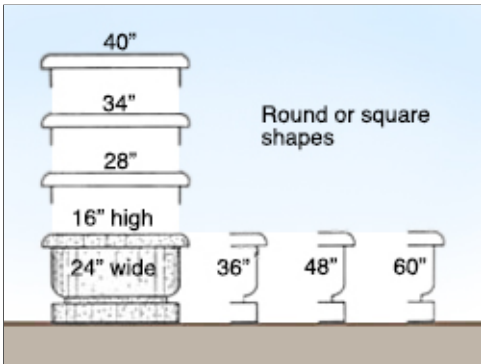
UFGS: N/A

C07.2.14. Planters

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: Materials, Inc.

Color: Weatherstone Gray

Finish: Smooth

Model #: Santa Fe

Other: N/A

UFGS: N/A

C07.2.15. Play Equipment

Applicable N/A

Number of base standards 2

Image Tool 250 x 188



Type: **Steel / Plastic**

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

Mfr: Little Tikes Commercial

Color: Vaires

Finish: Powder coated steel

Model #:

Other: Provide shade shelters

UFGS: N/A



Type: **Water Park**

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

Mfr: My Splash Pad

Color: Varies

Finish: Factory

Model #: Fixed spray features

Other: N/A

UFGS: N/A

C07.2.16. Screen Walls

Applicable N/A

Number of base standards 2

Image Tool 250 x 188



Type: **CMU**

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

Mfr: Custom

Color: Light beige

Finish: Split face

Model #: 8x8x16 Nominal, face and corner CMU units

Other: Gates: Steel frame with steel slats or Berridge Deep-Deck

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



Type: **CMU with Metal Panels**

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

Mfr: Custom

Color: Light beige

Finish: Split face CMU, powder coated aluminum

Model #: 8x8x16 Nominal, face and corner CMU units, louvered metal panels

Other: N/A

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

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: N/a

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>

Comply with AF Corporate Standards for Exterior Signs:

<http://afcfs.wbdg.org/site-development/exterior-signs/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. 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 strictly prohibited by UFCthe BCE.
6. Raised "standout" letters and numbers may be used for Group 1 with approval on a case basis.
7. Group 2 and 3 facilities shall 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 identification sign is permitted at each building entrance. Include a building address consistent with US Postal Service protocols following UFC 3-120-01.
9. Traffic Control Devices, which regulate vehicular traffic on the installation, shall 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.
10. Provide Directional and Wayfinding Signs and address both pedestrian and vehicular traffic following UFC 3-120-01 for size, layout and content.
11. Reserved parking signs should must be kept to a minimum. When approved, provide postcurb-mounted sign faces in base standard materials and colors. Consider "bracketing" a designated area with a single sign at each end.
12. Parking lot identification signs may be used to identify areas or rows within large lots.
13. Follow the guidelines and requirements in ABAAS and the MUTCD for accessible parking signs.
14. Follow UFC 3-120-01 for Informational and Motivational Signs for size, layout and content.
15. Symbols or pictographs (graphic expressions of actual objects) may be used to indicate service, mandatory / prohibitory, sports, and recreation when rapid communication is necessary.
16. Force Protection signage may be applied to glass doors using white vinyl lettering.
17. Refer to UFC 3-120-01 for prohibited signs, which include those with animated, blinking, chasing, flashing, or moving effects.

18. 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 flat aluminum sheet, minimum 12 gauge for durability, that are removable for easy replacement. Provide extruded aluminum, square posts with flat-capped top ends and set on a concrete base. Use medium brown sign faces and dark bronze posts in all applications.
2. Fence mounted sign panels may be attached with exposed fasteners.
3. All signage shall 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.
 - a. Standard Blue
 - b. Standard Dark Bronze (also Federal Standard Color 30040)
 - c. Standard Red
 - d. Standard Black (non-reflective)
 - e. Standard White
 - f. Standard Brown

Materials and Color Specifications

Applicable N/A Number of base standards 3

Image Tool 250 x 188



Type: **Typical Sign Face**

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

Mfr: Custom

Color: Medium bronze

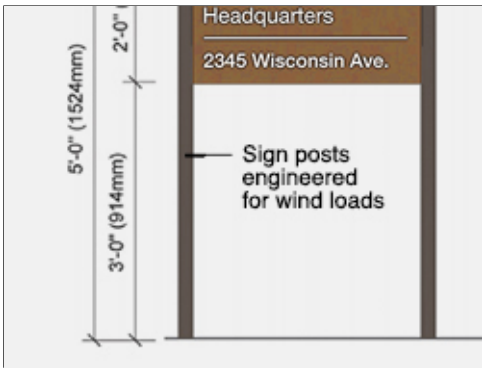
Finish: Matte vinyl

Model #: Aluminum flat sheet

Other: Mount to square posts. Provide sizes following UFC

UFGS: N/A

Type: **Typical Sign Post**



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

Mfr: Custom

Color: Dark bronze, powder coat finish

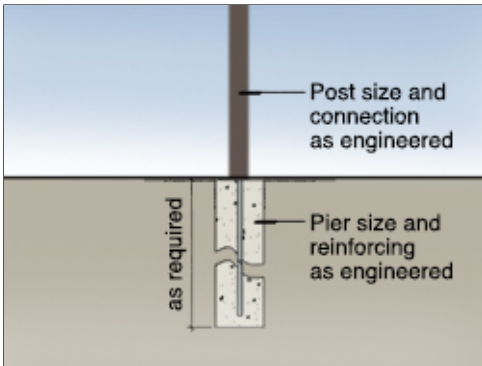
Finish: Matte

Model #: Extruded aluminum with capped top ends

Other: Square posts and squared ends. Provide engineered sizes.

UFGS: N/A

Type: **Typical Sign Base**



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

Mfr: Custom

Color: Natural Gray

Finish: Sonotube-formed

Model #: 30" height x 12" diameter

Other: At grade with 3/4" chamfer. Provide engineered sizes.

UFGS: N/A

C08.1.2. Installation and Gate Identification Signs

Applicable N/A

Number of base standards 1

Image Tool 250 x 188



Type: **Base Entrance Sign**

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

Mfr: Custom

Color: Dark bronze, brushed aluminum, accents per UFC

Finish: Powder coat or vinyl sign face per UFC

Model #: Metal frame and panels, buff stone base

Other: Note: Existing sign is shown. All new signs shall follow UFC 3-120-01 in materials and dimensions. Secondary and tertiary signs shall follow UFC.

UFGS: N/A

C08.1.3. Building Identification Signs

Applicable N/A

Number of base standards 2

Image Tool 250 x 188



Type: **Building Number, Wall Mounted**

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

Mfr: Hurlburt Sign Shop

Color: Medium brown, white lettering

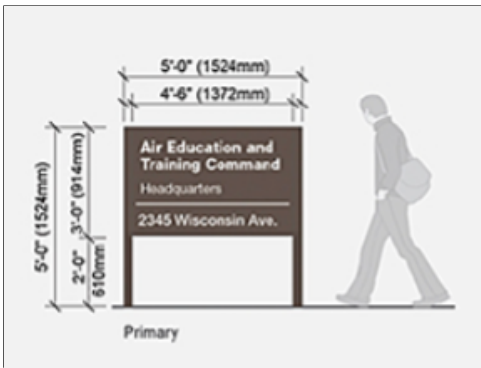
Finish: Satin vinyl applied to aluminum sheet

Model #: Aluminum sheet with vinyl face and vinyl lettering

Other: Note: Existing sign is shown. Provide layout and sizes for all new signs following UFC.

UFGS:

Type: **Freestanding Primary Sign (Sizes and Uses per UFC)**



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

Mfr: Hurlburt Sign Shop

Color: Medium brown face, dark bronze posts, white vinyl lettering

Finish: Powder coat or vinyl sign face

Model #: Aluminum sheet face, extruded aluminum posts

Other: Provide layout and sizes following UFC.

UFGS: N/A

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: Hurlburt Sign Shop

Color: White reflective lettering on a standard brown background

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: N/A

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 Standard Brown 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 shall be seven inches (7", 177.8mm) high. Provide a 1/2" (12.7mm), white rule line around the sign edge (insert 1" (25.4mm) 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 shall be mounted at each intersection on the horizontal member of the streetlight, or on poles fifteen feet from the curb line. The tops of signs mounted on poles shall be seven feet (7'-0", 2.13m) 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

Image Tool 250 x 188



Type: **Vehicular**

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

Mfr: Hurlburt Sign Shop

Color: Medium brown face, dark bronze posts, white reflective lettering

Finish: Powder coat or vinyl sign face

Model #: Aluminum sheet face, extruded aluminum posts

Other: Conform to the requirements of the MUTCD and its DoD Supplement. Provide types and sizes where required by UFC.

UFGS: N/A

Type: **Pedestrian**

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

Mfr: Hurlburt Sign Shop

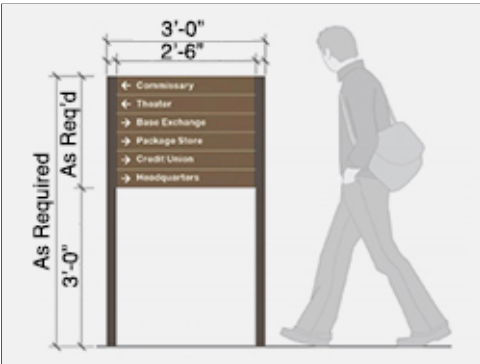
Color: Medium brown face, dark bronze posts

Finish: Powder coat or vinyl sign face

Model #: Aluminum sheet face, extruded aluminum posts

Other: White vinyl lettering. Provide types and sizes where required by UFC.

UFGS: N/A



C08.1.6. Informational Signs

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



Recreational Area Sign

1. Minimize informational signs such as static display signs, hours of operation, and project signs to reduce visual clutter.
2. Static display signs shall have standard brown background.
3. Hours of operation signs shall have a level of quality equivalent to the Facility Group number.
4. Temporary / Project Signage shall 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 Small graphics do not apply

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 shall 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 with a natural warm gray color.

C08.1.8. Parking Lot Signs

Applicable N/A

C08.1.9. Regulatory Signs

Applicable N/A

1. White lettering on standard brown background

C08.1.10. Other

Applicable N/A

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, placement and spacing following Installation Facilities Standards (IFS); ensure the level of quality is consistent with the adjacent facility group number. Pole-mounted and wall-mounted 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. Use appropriately designed or shielded luminaires to direct light downward to minimize light pollution and intrusion onto adjacent sites and to facilitate night training.
5. Calculate illuminant levels for all lighting applications following UFC 3-530-01 and ensure compliance with pre-curfew maximum brightness level requirements.
6. Sufficiently address environmental factors to prevent corrosion and weathering of fixtures, plinths and other components.
7. Wall mounted fixtures should respond to the architectural character of the facility.
8. 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.
9. Comply with UFC 3-530-01 for light source technology and lamp types. High efficiency lamping such as LED is preferred for most applications.
10. Provide round tapered, square non-tapered, or round non-tapered concrete poles and aluminum fixtures with square, rectangular or circular housings in colors and shapes to match adjacent facilities and the facility district.

11. Install path lighting only at Group 1 and high-traffic Group 2 facilities. Generally match materials, colors and shapes of adjacent facilities and the facility district.
12. 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 shall have at-grade bases. Group 3 shall have taller bases for added durability.
13. 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.
14. Consistently install lighting for sidewalks, bikeways and trails to match adjacent facilities.
15. Landscape accent lighting may not be used.

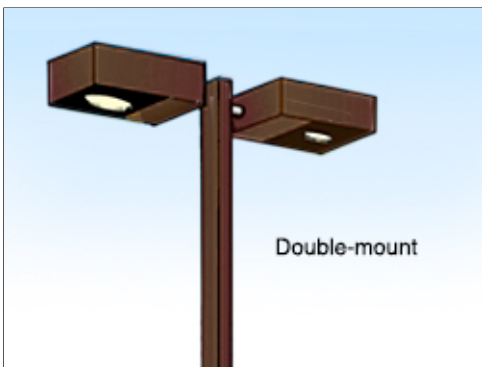
C09.2. Light Fixture Types

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 1

Image Tool 250 x 188



Type: **Rectilinear Cutoff**

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

Mfr: Hubbell, Kim Lighting

Color: Dark bronze anodized (or clear anodized as approved by BCE)

Finish: Factory

Model #: Rectilinear cutoff, single arm or dual arm mount

Other: Lamp: LED. Follow manufacturer's recommendations for fixture base.

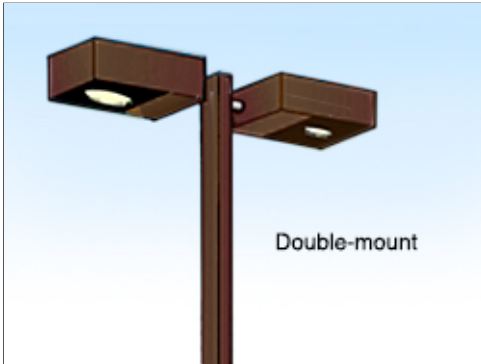
UFGS: N/A

C09.2.2. Parking Lot Lighting

Applicable N/A

Number of base standards 2

Image Tool 250 x 188



Type: **Rectilinear Cutoff**

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

Mfr: Hubbell, Kim Lighting

Color: Dark bronze anodized (or clear anodized as approved by BCE)

Finish: Factory

Model #: Rectilinear cutoff, single arm or dual arm mount

Other: Lamp: LED. Follow manufacturer's recommendations for fixture base.

UFGS: N/A

Type: **Parking Lot Fixture Base**

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

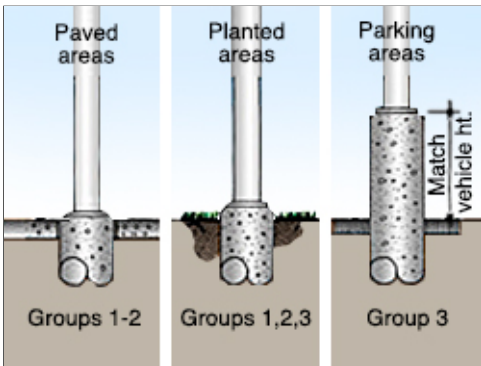
Mfr: Custom

Color: Natural gray

Finish: Trowel

Model #: Form-cast, round

Other: N/A



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: **Dome Top Lighted Bollard**

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

Mfr: Lithonia

Color: Bronze

Finish: Powder coat

Model #: KBD or KBA LED

Other: Flat top may be used to match adjacent facilities.

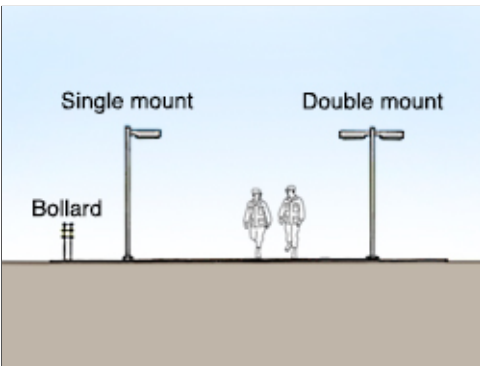
UFGS: N/A

C09.2.4. Sidewalk Lighting

Applicable N/A

Number of base standards 1

Image Tool 250 x 188



Type: **Rectilinear Cutoff**

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

Mfr: Hubbell, Kim Lighting

Color: Dark bronze anodized (or clear anodized as approved by BCE)

Finish: Factory

Model #: Rectilinear cutoff, single arm or dual arm mount

Other: Lamp: LED. Follow manufacturer's recommendations for fixture base.

UFGS: N/A

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: Clear anodized aluminum, or stainless steel

Finish: Satin

Model #: Aluminum step light, linear louvered

Other: Lamp: LED

UFGS: N/A

C09.2.6. Other

Applicable N/A

D. FACILITIES EXTERIORS

Comply with Air Force Corporate Standards for Facilities Exteriors:

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

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



Group 1 Headquarters Facility



Group 2 Administrative



Group 3 Industrial



Group 4 Family Housing

D01. SUPPORTING THE MISSION

Comply with AF Corporate Standards for Supporting the Mission:

<http://afcs.wbdg.org/facilities-exteriors/supporting-the-mission/index.html>

D02. SUSTAINABILITY

Comply with Air Force Corporate Standards for Sustainability:

<http://afcs.wbdg.org/facilities-exteriors/supporting-the-mission/index.html>

D03. ARCHITECTURAL FEATURES

Comply with AF Corporate Standards for Facilities Exteriors:

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

Comply with AF Corporate Standards for Architectural Features:

<http://afcs.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. Limit the height of all buildings (except dormitories) to two stories. Dormitories may be three stories.
5. Combine functions where practical to avoid a proliferation of small, independent structures.
6. Use and coordinate shading devices with orientation and for function.

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 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 campus atmosphere with human scaled features and elements. Ensure a professional appearance with an image of quality and permanence.
5. All facilities shall express sustainability through their orientation, massing, shape, form, materials, and detailing. Provide 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.

D03.3. Details and Color

1. Provide a palette of earth-tone colors related to the native landscape in brick, block, stucco and powder-coated metals. Refer to 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.

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: High potential for flooding and corrosion.

Other: Potential for high winds.

Facility: Narrow buildings along E-W axis

Wall: Integral shading features and devices

Doors: Recessed

Windows: Limit non-shaded windows / maximize windows on south façades with shading

Roof: High to medium albedo, minimal to moderate slope

Structure: (exposed) Factory finished non-ferrous metals or concrete

MEP: Ground-source and solar photovoltaic following LCCA

Other: Internal thermal mass walls may be used for cooling following LCCA

Other:

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: Clear or Dark Bronze

Finish: Anodized

Model #: 2x4, Awning or Slider 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 14 00 Wood Doors

D03.3.3. Thermal Mass

Applicable N/A

Number of base standards 1

Image Tool 250 x 188

Type: **Style 1 Interior Wall Material - Brick**



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

Mfr: TBD

Color: Beige

Finish: Light texture

Model #: Coursed Unit Masonry

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: Medium bronze

Finish: Factory, to match frames

Model #: Louver

Other: Shading devices may be attached to frames or structure

UFGS: 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: Custom

Color: Medium bronze

Finish: Factory, to match frames

Model #: Louver, powder coated

Other: Shading devices may be attached to frames or structure

UFGS: Section 05 50 13 Miscellaneous Metal Fabrications

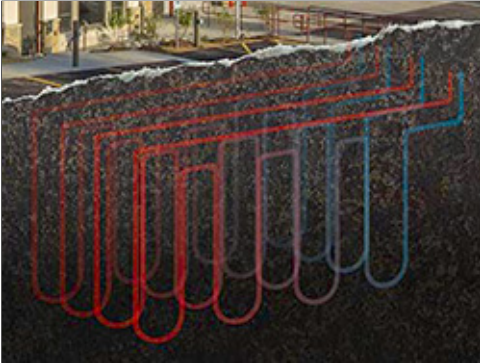


D03.3.5. Renewable Heating/Cooling

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 #: Heat Exchanger (Cooling)

Other: Vertical ground loop well field

UFGS: 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

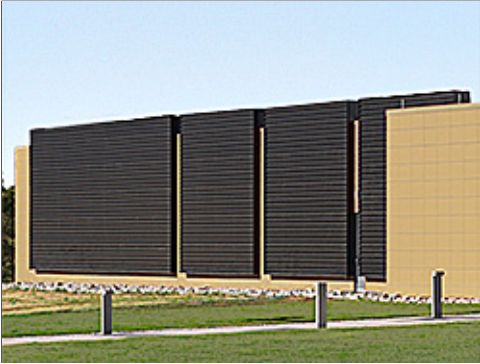
UFGS: Section 26 31 00 Solar Photovoltaic (PV) Components

D03.3.7. Solar Thermal System

Applicable N/A

Number of base standards 1

Image Tool 250 x 188



Type: **Wall-Mounted or Roof-Mounted Panels**

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

UFGS: Section 48 14 13.00 20 Solar Liquid Flat Plate and Evac. Tube Collectors

D04. BUILDING ENTRANCES

Comply with AF Corporate Standards for Facilities Exteriors:

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

Comply with AF Corporate Standards for Building Entrances:

<http://afcfs.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. Ensure the main entrance is clearly visible from the main viewing street and the parking area.
2. All exterior entrance doors must have protective cover at least the width of the doors and 60 inches deep. Roof overhangs, recesses, colonnades or other integrated elements may be used. Separate elements applied to the exterior walls, like cantilevered or bracketed canopies or glass roofed vestibules, are discouraged. Fabric canopies on buildings are not acceptable.
3. Address the entire entry sequence beginning with vehicular/pedestrian circulation routes and terminating in the building lobby. Where both a front (street) and a back (parking) entrance are required, both building entrances should connect to the main lobby.
4. Provide vestibules at entries in Groups 1, 2 and 3 unless used infrequently or serving unconditioned space following ASHRAE 90.1.
5. Fully integrate all elements including the design of handicap ramps in the overall design of the primary entrance in an organized uncluttered appearance.
6. Install paved transitional spaces sized for the building function and occupancy.
7. Install appropriate lighting and site furniture following ATFP and IFS.
8. 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 Doors and Windows:

<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 and 2 facilities shall be a combination of precast concrete, split-faced or fluted CMU, or brick; using an exterior insulation and finish system requires Base Civil Engineer approval. A metal panel system is acceptable for Group 3 facilities and inconspicuous areas of Group 2 facilities. Refer to the Appendix for special requirements of Facility Districts.
3. Group 4 shall be a combination of two of the following materials: Vinyl siding with metal trim.
4. Use high-performance building envelopes following UFC 1-200-02.
5. Use detailing not subject to excessive weathering. Provide wall accents consistently throughout the base.
6. Use integrally colored materials and factory-finished metals except all exterior CMU shall be cleaned and two coats of paint installed as part of the project. Paint colors for CMU shall be as follows: standard field color shall match SW 2186 Townhouse Tan from Sherwin-Williams. Accent color shall match SW 2303 Kissing Gate from Sherwin- Williams, and/or SW 2014 Beatrix Brown.
7. 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.
8. 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 as 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.
6. All joint sealants shall 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.

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 shall match the wall color.

- Items such as exhaust fans, gutters, downspouts, vent stacks, louvers, etc., shall match the color of the surface on which they are installed. The color shall be factory installed, not field painted. For items that cannot be factory finished, the color shall match SW 2186 Townhouse Tan from Sherwin-Williams when the item is installed on CMU painted light tan and SW 2014 Beatrix Brown from Sherwin-Williams when the item is installed on metal items with medium bronze finish.

D05.4 Wall Systems Materials

Facility Group 1 wall materials shall be as follows.

Primary: Precast concrete panels

Secondary: Brick or Split-face CMU

Accent:

Facility Group 2 wall materials shall be as follows.

Primary: Brick or Split-face or fluted CMU

Secondary: Metal panels or architectural precast

Accent: Precast concrete

Facility Group 3 wall materials shall be as follows.

Primary: Ribbed Metal Sheeting

Secondary: Split-face or fluted CMU

Accent: Precast concrete

Facility Group 4 wall materials shall be as follows.

Primary: Vinyl siding

Secondary: Brick

Accent: metal trim/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: **Flat Metal Panels**

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

Mfr: Alucobond

Model #: Rainscreen I

Color: Anodic Clear Mica PVDF 2

Finish: Factory

Other: Route and Return Dry Seal

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: **Tan Blend Brick**

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

Mfr: Cunningham Brick Company

Model #: Severe Weathering (SW) face brick. 2.6x4x8 nominal

Color: Winestone Rockface or Winestone

Finish: Severe Weathering (SW) face brick

Other: N/A

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

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

D05.4.7. Tilt-Up Concrete

Applicable N/A Number of base standards 1

Image Tool 250 x 188



Type: **Panel System**

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

Mfr: Custom

Model #: Custom panel system

Color: White or light beige

Finish: Light texture

Other: Coordinate thermal insulation

UFGS: Section 03 47 13 Tilt-Up Concrete:
<http://www.wbdg.org/FFC/DOD/UFGS/UFGS 03 47 13.pdf>

D05.4.8. Ribbed Metal Sheeting

Applicable N/A Number of base standards 1

Image Tool 250 x 188



Type: **Lap Seam Panel**

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

Mfr: TBD

Model #: Lap Seam Panel

Color: Beige (Match SW 2186 Townhouse Tan from Sherwin Williams)

Finish: Factory finished

Other: 24 gauge steel, embossed texture

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

Number of base standards 1

Image Tool 250 x 188



Type: **Continuous Insulation and Finish System**

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

Mfr: Dryvit

Model #: Mechanically fastened as approved by BCE

Color: Light beige as approved by the BCE

Finish: Sand as approved by the BCE

Other: Confirm class of system with the BCE

UFGS: Section 07 24 00 Exterior Insulation and Finish Systems:
http://www.wbdg.org/FFC/DOD/UFGS/UFGS_07_24_00.pdf

D05.4.10. GFRC

Applicable N/A

D05.4.11. Concrete Block

Applicable N/A

Number of base standards 1

Image Tool 250 x 188



Type: **Split-face or fluted**

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

Mfr: Local TBD

Model #: 8x8x16 nominal, face and corner units

Color: Beige (Match SW 2186 Townhouse Tan from Sherwin-Williams)

Finish: Heavy texture

Other: Accent color shall match SW 2303 and/or SW 2014

UFGS: Section 04 20 00 Unit Masonry:
http://www.wbdg.org/FFC/DOD/UFGS/UFGS_04_20_00.pdf

D05.4.12. Fiber Cement Siding

Applicable N/A

Number of base standards 1

Image Tool 250 x 188



Type: **Hardie Plank, Hardie Shingle**

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:

Other: N/A

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://afcs.wbdg.org/facilities-exteriors/index.html>

Comply with AF Corporate Standards for Doors and Windows:

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

Comply with AFCFS Recommended Materials:

<http://afcs.wbdg.org/facilities-exteriors/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. Bronze colored anodized aluminum doors, windows and frames with thermal breaks are preferred for Facility Groups 1-3. For renovation projects the color of new windows, doors and frames may match the existing ones.
2. Aluminum clad wood windows are preferred for Facility Group 4.
3. Standard-sized hinged doors are preferred. Use sliding, folding, overhead, 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. Hollow metal doors and frames match the adjacent tan painted surfaces.
7. Utility and emergency egress doors shall match the wall color.
8. Passive thermal comfort methods of ventilation are encouraged where life cycle cost justified.
9. Windows must meet force protection requirements.
10. Adjacent joint sealants should be slightly darker than the frame color.
11. Install built-in storm/hurricane shutters on all buildings as part of the construction contracts
12. 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 shall augment interior lighting and space conditioning needs.
4. Protect against vandalism, intrusion and coordinate sound ratings.
5. Main entrances to facilities shall be designed to be readily discernible.
6. The main entrance(s) shall generally include a building canopy that is part of the building architecture for new facilities and major renovations.
7. Large service or garage doors shall be carefully screened from entries and areas of frequent circulation.

D06.3. Glazing and Shading

1. Medium bronze tinted, energy-efficient, low-e, double-pane glazing; insulated, single hung windows, with thermally broken frames (exterior glazed muntins and screens to be determined where operable windows are utilized).
2. Recommend fully tempered tinted exterior pane, air space, and clear laminated interior pane.
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. Where appropriate, install window screens to take advantage of natural ventilation.

D06.4. Hardware

1. Provide hardware appropriate for the Facility Group while considering activity and frequency of use and local climate; 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.
6. Hardware must be able to accept the Best cores that are Hurlburt Field standard requirements. All proposed hardware schedules must be reviewed by the base locksmith for compliance as well as keying.
7. All facility primary entrances shall be equipped with a Knox Box for fire department emergency access. For new facilities, use a recessed 3200 series. For renovations, use a surface-mounted 3275 series. Both shall be equipped with a multi-purpose electrical switch for door control. Procurement forms shall be approved by the Hurlburt Fire Prevention office.

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: **Style 1**

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

Mfr: Kawneer (or equivalent)

Color: Dark bronze

Finish: Class 1 anodized

Model #: 2x4 frame

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: **Style 1**

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

Mfr: Steelcraft (or equivalent)

Color: Match adjacent wall

Finish: Factory powder coat

Model #: 2x4 frame

Other: N/A

UFGS: Section 08 11 13 Steel Doors and Frames:

<http://www.wbdg.org/FFC/DOD/UFGS/UFGS 08 11 13.pdf>

D06.5.3. Aluminum-clad Wood

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: Marvin (or equivalent)

Color: White or Earth tones

Finish: Factory powder coat

Model #: Single hung

Other: N/A

UFGS: Section 08 14 00 Wood Doors

<http://www.wbdg.org/FFC/DOD/UFGS/UFGS 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-exteriors/index.html>

Comply with AF Corporate Standards for Roof Systems:

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

Comply with AFCFS Recommended Materials:

<http://afcfs.wbdg.org/facilities-exteriors/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. Gable or hip roofs are preferred. Design one primary roof form throughout a building. Secondary roof forms may be used if needed to provide a human scale.
3. Group 1 and 2 buildings shall use sloped standing seam metal roofs. Minimal-slope "flat" membrane roofs may be used as approved on a case basis.
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 3 such as warehouses and industrial settings but not any office or administrative space within Group 3 buildings.
6. Group 2 and 3 facilities under 5,000 sf and narrow in plan geometry, may use 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 shall have gabled or hipped composite shingle roofs. Shingles are not permitted for Group 2 dormitories.
8. Roof eaves shall extend 24 inches beyond the exterior wall for roof drainage and shading. Provide overhangs for shading in response to local climatic conditions, sized and proportioned to the height of the facility and to the window openings being shaded.
9. South-facing eaves shall coordinate with adjacent wall-mounted shading devices.
10. Provide wide ridge caps on all roofs. Align seams of roof and fascia.
11. The color, shape and slope of the eave and soffit shall be compatible with adjacent facilities.
12. Keep roofs uncluttered and minimize penetrations.
13. Diminish massive roofs into coordinated smaller consistent with adjacent facilities; avoid random, arbitrary changes.
14. Increase the insulation value of existing roofing systems during renovations if supported by life cycle cost and structural analysis.
15. Roofs shall be maintained for the life of the system and replaced in accordance with UFC 3-110-04 and AFI 32-1051. A warranty is required on all new roofs.
16. 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 shall use a roof slope of 3:12. Any deviation from 3:12 needs approval.
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 shall 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.
6. Provide underlayments as required for the roofing type as directed by the UFC.

D07.3. Parapets and Copings

1. Extend wall materials vertically above the roof line and provide metal copings to match compliment the wall. Ensure copings are properly flashed and detailed to avoid roof leaks.
2. The use of parapet walls shall be avoided unless approved by the BCE.
3. Minimal sloped "flat" roofs with parapet conditions are not permitted for structures under 5,000 square feet in roof area.

D07.4. Color and Reflectivity

1. Sloped roofs in Groups 1 and 2 and smaller facilities in Group 3 shall be medium bronze with Kynar finish to match adjacent facilities and follow requirements of IFS.
2. All minimal-slope membrane roofs shall 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 shall be earth tones.
4. Comply with UFC 3-110-03 and ASHRAE 90.1 for Solar Reflectance Index (SRI) and thermal requirements.
5. All roof flashing shall match the color of the predominant background material.

D07.5. Gutters, Downspouts, Scuppers, Drains

1. Insure all gutters and downspouts are located on the outside of the building envelope. Avoid using gutters and downspouts on single story buildings less than 5000 square feet. On single story buildings less than 5000 square feet, the roof design shall divert the roof discharge away from the main entry. Avoid poor placement of gutters and downspout. Make sure any wood associated with the gutter construction is fireproofed.
2. Gutters shall be outside the fascia. Do not use concealed gutters or interior leaders to avoid potential leakage. Ensure rain diverters or gutters and downspouts are be provided over building entrances.
3. Internal roof drainage systems are not permitted in new construction. Minimal-sloped roofs shall be sloped to drain to the building perimeter through to gutters or scuppers into downspouts.
4. All gutters, downspouts and fascia's shall match the roof color.
5. Provide screens and strainers on all gutters.
6. Size the roof drainage system per IBC and SMACNA for the region.
7. Use scuppers as required in parapet walls. Arrange scuppers in an orderly manner consistent with other elements of the wall system.
8. When open scuppers are connected to downspouts, provide transitions consistent with adjacent facilities.
9. 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 (not contrasting it).
10. Fabricate downspouts from non-corrosive materials such as aluminum or zinc-coated steel. Provide powder-coated finishes in medium bronze.
11. All downspouts shall be solid.

12. Provide angled transitional pieces for downspouts to fit closely against the wall for their entire length.
13. Coordinate locations of downspouts to conceal control joints in masonry walls when possible.
14. Place downspouts away from building entries. Water discharged should not run across sidewalks. Terminate at concrete splash blocks or storm water drainage system. Most single story facilities will not require gutters/downspouts. Coordinate approval with the base architect on case-by-case basis.

D07.6. Roof Vents and Elements

1. Minimize and consolidate roof penetrations into a single, inconspicuous point whenever possible. Roof penetrations should be made on the least visible sides of the roof (back or side elevations).
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. Provide soffit (vented and non-vented) from the same manufacturer of the metal roof so that color finish matches.
8. Match roof color for all exposed equipment and vents.
9. Avoid roof-mounted antenna systems.
10. Arrange Lightning Protection Systems (LPS) components in an ordered, uncluttered, inconspicuous appearance and integrated into the organization of the roof and wall systems.
11. Ensure that LPS roof mounting systems are approved by the roofing manufacturer.
12. Additions to a roof shall not interfere with LPS or other rooftop systems that may be required.
13. Permanent fall protection shall be included with any addition to a roof with a slope above 3:12 per UFC 3-110-03 to a roof with a slope above 3:12 per UFC 3-110-03.

D07.7. Clerestories and Skylights

1. Clerestories and skylights 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, when permitted, must be simple in shape and integrated with the roof system to eliminate leakage.
3. Design clerestories and skylights 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 and skylights must comply with UFC 4-10-01.

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

Image Tool 250 x 188



Type: **Style 1**

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

Mfr: Berridge

Color: Medium bronze or light tan / gray as approved by the BCE

Finish: Kynar

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

Image Tool 250 x 188



Type: **Style 1**

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

Mfr: Carlisle Systems

Color: White

Finish: TBD

Model #: TPO single-ply, "flat" minimal slope

Other: N/A

UGFS: Section 07 53 23 Ethylene-Propylene-Diene-Monomer Roofing
http://www.wbdg.org/FFC/DOD/UGFS/UGFS_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

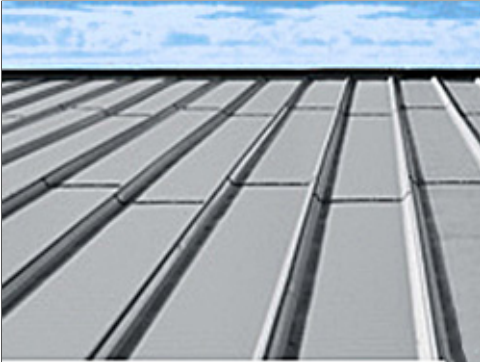
Applicable N/A

D07.9.8. Ribbed Metal Sheeting

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: Berridge

Color: Galvalume or bronze as approved by the BCE

Finish: Factory

Model #: High Seam Tee-Panel

Other: 24 gauge steel, Width: 16" Batten height: 1-3/4"

UFGS: Section 07 41 13.19 Batten-Seam Metal Roof Panels
(Not Available on UFGS)

D07.9.9. Composite Shingles

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: Tamko

Color: Earth Tones

Finish: Factory

Model #: Heritage

Other: Gabled or hipped with transverse gabled or hipped features

UFGS: Section 07 31 13 Glass-fiber-reinforced Asphalt Shingles
http://www.wbdg.org/FFC/DOD/UFGS/UFGS_07_31_13.pdf

D07.9.10. Other

Applicable N/A

D08. STRUCTURAL SYSTEMS

Comply with AF Corporate Standards for Facilities Exteriors:

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

Comply with AF Corporate Standards for Structural Systems:

<http://afcs.wbdg.org/facilities-exterior/structural-systems/index.html>

Comply with AFCFS Recommended Materials:

<http://afcs.wbdg.org/facilities-exterior/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. Hurlburt Field, Florida, is located within seismic zone 0, as per AFJMAN 32-1049 (AFM 88 3), Chapter 13. Seismic Data (Site Class B): $S_s = 9$; $S_1 = 5$; $0.2S_s = 3$; $0.2S_1 = 2$ (UFC 3-301-01; Table E-2).
2. Design for wind load will be in accordance with the most current version of American Society of Civil Engineers Standard (ASCE) 7, Minimum Design Loads for Buildings. The design wind speed for Hurlburt Field is 156 mph. (UFC 3-301-01/ ASCE 7-10).
3. Pre-engineered structural steel framing may be used for Groups 1, 2 and 3 facilities; Installation-appropriate thermal envelopes, materials and detailing are required.
4. Select economical structural systems that integrate roof and wall systems.
5. 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.
6. Fully coordinate structural grids with exterior window systems to align columns with window frames or wall systems.
7. When structure is exposed provide an organized appearance and coordinate with mechanical, electrical, plumbing, fire protection, information technology, and communications systems.
8. Limit the use of specialty systems (such as space frames, vaults or domes) and of structure as a visual feature.
9. Cost-effectively design interior bearing walls as thermal mass.
10. 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: **Post and Beam with CMU Infill**

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

Mfr: Local (TBD)

Color: Natural concrete

Finish: Light texture

Model #: Cast-in-place

Other: N/A

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

D08.2.2. Insulated Concrete Forming (ICF)

Applicable N/A

Number of base standards 1

Image Tool 250 x 188



Type: **Interlocking Units**

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

Mfr: TBD

Color: Factory

Finish: Factory

Model #: ICF Block, interlocking units with webbing for reinforcing

Other: N/A

UGFS: Section 03 30 53 Miscellaneous Cast-In-Place Concrete
<http://www.wbdg.org/FFC/DOD/UGFS/UGFS 03 30 53.pdf>
Section 03 11 19 Insulating Concrete Forming
(Not Available on UFGS)

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: Local (TBD)

Color: Shop primed

Finish: Matte

Model #: Structural steel shapes

Other: N/A

UFGS: Section 05 12 00 Structural Steel

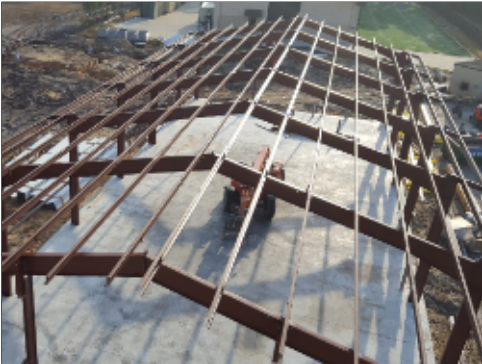
<http://www.wbdg.org/FFC/DOD/UFGS/UFGS 05 12 00.pdf>

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: Local (TBD)

Color: Factory primed

Finish: Matte

Model #: Moment frame components

Other: Draped insulation may be used behind wall finish system;
Manufacturer standing seam roof system may be used for Group 3;
provided deflection values per IBC

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

Number of base standards 1

Image Tool 250 x 188



Type: **Reinforced Load-Bearing CMU Walls**

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

Mfr: Local (TBD)

Color: Natural concrete

Finish: Light texture

Model #: N/A

Other: N/A

UFGS: Section 04 20 00 Unit Masonry

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

D08.2.6. Heavy Timber

Applicable N/A

D08.2.7. Light-gauge Steel

Applicable N/A

Number of base standards 1

Image Tool 250 x 188



Type: **Steel Framing**

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

Mfr: Local TBD

Color: Factory galvanized

Finish: Galvanized

Model #: Standard framing sections

Other: May be used for interior partitions in all facility groups.

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: **Dimensional Lumber**

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

Mfr: Local TBD

Color: Natural

Finish: S4S

Model #: Structural dimensional framing lumber

Other: N/A

UFGS: Section 06 10 00 Rough Carpentry
<http://www.wbdg.org/FFC/DOD/UFGS/UFGS 06 10 00.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://afcs.wbdg.org/facilities-exterior/index.html>

Comply with AF Corporate Standards for Mechanical, Electrical and Plumbing:

<http://afcs.wbdg.org/facilities-exterior/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 ATFP 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.

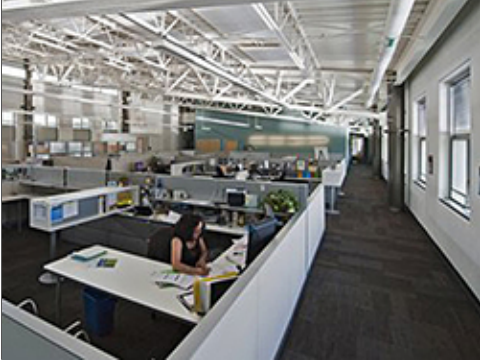
E. FACILITIES INTERIORS

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

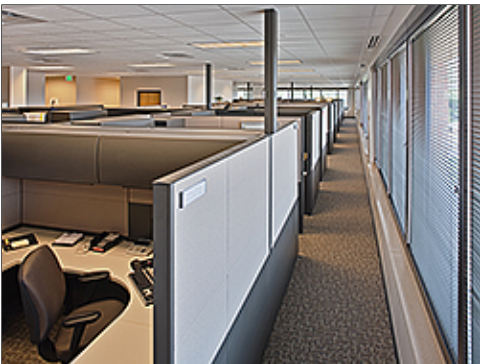
Insert 3 photos for each facility group.

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 lifespan.
2. Create flexible interior configurations using Furniture, Fixtures & Equipment (FF&E) and limit private offices and private rooms. Refer to AFMAN 32-1084 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. Ensure passive design strategies are cost effectively incorporated before active mechanical systems are designed.
5. Comply with UFC 1-200-01, 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 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 shall follow UFC 3-120-10.
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 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 govern "Use and Occupancy Classification" for example.
2. Fire code requirements shall be 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.

4. All interior designs must comply with ADA/ABA requirements unless directed otherwise by base management or special circumstances.

E01.2. Quality and Comfort

Comply with Air Force Corporate Standards for Quality and Comfort:

<http://afcs.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://afcs.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. All finishes shall be an appropriate level of quality and durability for the facility Group number and appropriate for the use and functions of the building.
2. Natural stone and terrazzo flooring may be used in high traffic areas of Group 1 as approved on a case basis.

3. Resilient and rapidly renewable flooring may be used in low traffic areas in Group 1, 2 and 4.
4. Acceptable resilient floor includes rubber, VCT, LVT, cork, and linoleum. Resilient flooring may be used for stairs, office break rooms, dining areas, fitness areas and (rubber) floor base.
5. Use carpet tiles under system furniture installations. Refer to TARR Rating for carpets following AF criteria. Refer to AFCFS.
6. Manufacturers listed below are only provided to establish a baseline of equivalency among all applicable manufacturers.

CERAMIC AND PORCELAIN TILE

- a. Ceramic tile flooring - use textured unglazed tile flooring products in high traffic and high abuse areas (i.e., entries, kitchens, rest rooms, corridors, and copy rooms).
- b. All areas that are to have tile floors, including high use public rest rooms, are to have epoxy grout
- c. Provide tile flooring under water fountains
- d. Where budget is limited, vinyl composition or solid vinyl tile can be used in high traffic abuse areas. In high visibility areas using vinyl composition or vinyl tile, use a pattern that will create interest and eliminate an institutional look.

CARPET

- a. All work to be performed by contractors/installers who are certified Certified Flooring covering-Installers (CFI) from the International Certified Flooring Installer Association or manufacturer approved installer.
- b. All carpeted areas must conform to CFR Part 1630, Standard for the Surface Flammability of Carpets and Rugs (FF 1-70) (pill test) and performance characteristics.
- c. Federal agencies are required by law, Executive Orders (EO), FAR, Defense Federal Acquisition Regulation (DFAR), and Air Force Policy to consider environmentally preferable products (ETL 07-04: Air Force Carpet Standard).
- d. Carpet tiles are to be used for administrative spaces with over 5 workstations in one room. All other administrative areas are to use broadloom carpeting. Only expend funds on carpet boarders in open spaces such as conference rooms and entries, not in offices except for highest level management.
- e. Provide low volatile organic compound (VOC) products for carpet, adhesives, sealants, and carpet cushions.
- f. Install solid colored carpets only in commanders' suites, chapels, DV suites, and family housing units or as borders.
- g. Static free Carpet: Computer Rooms, etc

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 2

Image Tool 250 x 188



Type: **Style 1, Ground and Polished**

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

Mfr: Local (TBD)

Color: Natural gray cement, light to dark beige aggregates

Finish: Fine polished texture

Model #: Medium to small aggregate

Other: N/A

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

Type: **Style 2, Medium Polished**

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

Mfr: Local (TBD)

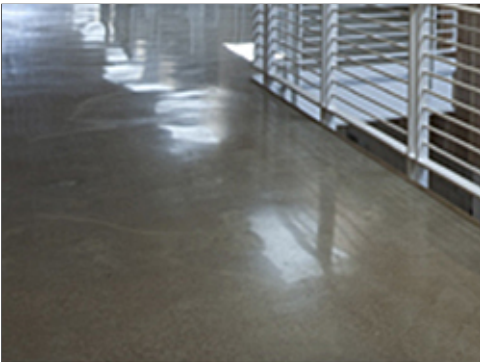
Color: Natural gray cement, light to dark beige aggregates

Finish: Medium polished texture, slip resistant

Model #: Medium to small aggregate

Other: N/A

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



E02.1.2. Natural Stone and Terrazzo

Applicable N/A

Number of base standards 2

Image Tool 250 x 188



Type: **Ground and Polished Terrazzo**

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

Mfr: Local (TBD)

Color: Natural gray cement, light to dark beige aggregates

Finish: Fine to medium polished texture, slip resistant

Model #: Medium to small aggregate

Other: N/A

UGFS: Section 09 63 40 Stone Flooring
(Not Available on UFGS)

Section 09 66 13 Portland Cement Terrazzo Flooring

<http://www.wbdg.org/FFC/DOD/UGFS/UGFS 09 66 13.pdf>

Type: **Stone Slab Paving**

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

Mfr: Local (TBD)

Color: Neutral, light to medium Earth tones

Finish: Fine to medium polished texture, slip resistant

Model #: Dimensional stone tiles

Other: N/A

UGFS: Section 09 63 40 Stone Flooring
(Not Available on UFGS)

Section 09 66 13 Portland Cement Terrazzo Flooring

<http://www.wbdg.org/FFC/DOD/UGFS/UGFS 09 66 13.pdf>



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 #: Dimensional tile

Other: Use in commercial kitchen flooring.

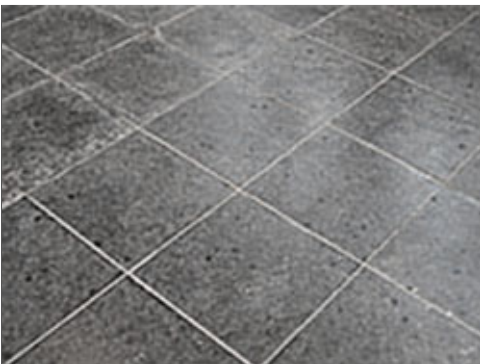
UFGS: Section 09 30 10 Ceramic, Quarry, and Glass Tiling
<http://www.wbdg.org/FFC/DOD/UFGS/UFGS 09 30 10.pdf>

E02.1.4. Ceramic Tile

Applicable N/A

Number of base standards 1

Image Tool 250 x 188



Type: **Style 1**

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

Mfr: American-Olean

Color: Earth tones; SH51 Beach Sand

Finish: Matte slip resistant

Model #: Porcelain tile; Shadow Bay 12"x12" with 4"x12" cove base

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>

E02.1.5. Resilient Floor

Applicable N/A

Number of base standards 2

Image Tool 250 x 188



Type: **Style 1 Vinyl Composition Tile**

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

UGFS: Section 09 65 00 Resilient Flooring

<http://www.wbdg.org/FFC/DOD/UGFS/UGFS 09 65 00.pdf>

Type: **Style 2 Stair Treads**

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

UGFS: Section 09 65 00 Resilient Flooring

<http://www.wbdg.org/FFC/DOD/UGFS/UGFS 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: Tandus Centiva

Color: Neutral multi-colored tones; 48011, 48001 or 48010

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

Model #: Carpet tiles, 01957 Crayon

Other: 48011 Bonfire, 48001 Goldfish or 48010 Precious Metal

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

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

Number of base standards 1

Image Tool 250 x 188



Type: **Bamboo Flooring**

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

Mfr: Plyboo

Color: Natural Bamboo

Finish: Satin clear

Model #: Plyboo Flat Grain

Other: N/A

UFGS: Section 09 62 23 Strand Woven Bamboo Flooring
(Not Available on UFGS)

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: Concrete or brick

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 block

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. Painted block may be allowed under special conditions for Group 2 with Base Civil Engineer approval.
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 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 / bumper rails are permitted only in medical applications.
8. Decorative moldings may be used only in Group 1 when approved on a case basis.
9. Corner guards are permitted in all high traffic areas such as corridors, lobbies, elevator areas, large open offices, and service areas. Use 2" solid color vinyl in office areas; use satin stainless steel angle in service areas and areas of heavy use. 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

E03.1.2. Masonry

Applicable N/A

Number of base standards 2

Image Tool 250 x 188



Type: **Modular Face Brick**

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

Mfr: Local (TBD)

Color: Neutral, Earth tones

Finish: Light texture

Model #: Coursed Unit Masonry

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>

Type: **CMU**

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

Mfr: Block USA

Color: Neutral, Earth tones

Finish: Split face

Model #: Coursed Unit Masonry

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>



E03.1.3. 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

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: **Painted Wallboard**

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

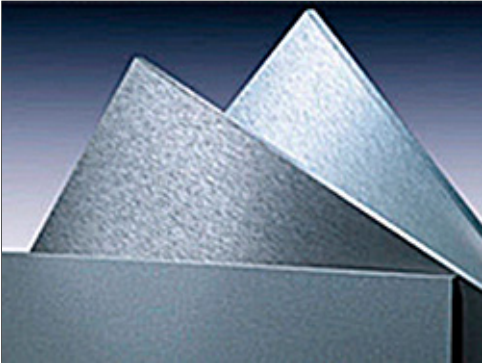
UFGS: Section 09 29 00 Gypsum Board
<http://www.wbdg.org/FFC/DOD/UFGS/UFGS 09 29 00.pdf>
Section 09 90 00 Paints and Coatings
<http://www.wbdg.org/FFC/DOD/UFGS/UFGS 09 90 00.pdf>

E03.1.5. Metal Panels

Applicable N/A

Number of base standards 1

Image Tool 250 x 188



Type: **Metal Cladding**

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

Mfr: McNichols

Color: Natural non-ferrous metals

Finish: Mill

Model #: Standard sheet sizes and custom sizes

Other: Provide an adequate gauge to prevent "oil-canning."

UFGS: Section 05 72 00 Decorative Metal Specialties
<http://www.wbdg.org/FFC/DOD/UFGS/UFGS 05 72 00.pdf>

E03.1.6. Wood Paneling

Applicable N/A

Number of base standards 1

Image Tool 250 x 188



Type: **Finished Wood Panels**

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

Mfr: Local TBD

Color: Natural wood tones

Finish: Satin clear

Model #: Dimensional paneling

Other: Conceal all fasteners with overlapping panel profile. Face nailing is not permitted.

UFGS: Section 06 26 00 Board Paneling
(Not Available on UFGS)

E03.1.7. Rapidly-Renewable Products

Applicable N/A

Number of base standards 1

Image Tool 250 x 188



Type: **Bamboo Wallboard**

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

Mfr: Plyboo

Color: Natural or stained Earth tones

Finish: Satin clear

Model #: Linear Sound Collection or Sound Collection

Other: Linear Collection may be used when acoustical treatments are coordinated

UFGS: Section 09 74 13 Decorative Wood Wall Panels
(Not Available on UFGS)

E03.1.8. Other

Applicable N/A

E04. Ceilings

Comply with Air Force Corporate Standards for Ceilings:
<http://afcf.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) (restrooms)

Facility Group 4 ceiling materials shall be as follows.

Primary: Gypsum board (painted)
Secondary:
Tertiary:

1. Provide durable low-maintenance ceiling materials for a long facility life span with flexibility.
2. Structural roof and floor decks and other components may be exposed when cost effective to eliminate or minimize secondary suspended ceilings. Promote passive heating and cooling, natural ventilation and daylighting to the maximum extent possible.
3. Provide daylighting for occupied interiors whenever possible. Create a cost-effective layered system of ambient light, task light and accent light. A single overhead illumination system (with equal lighting throughout open plans) is discouraged.
4. All individual elements placed on ceilings or suspended from ceilings shall be fully coordinated and have an ordered appearance. Ceiling types, layouts and materials should be cohesive and consistent throughout a facility.
5. Accent ceiling materials such as metal, wood, and rapidly renewable may be used in Group 1 as approved on a case basis.
6. Follow UFC 3-450-01 (Vibration and Noise Control) for acoustic design issues including speech privacy, sound isolation or sound masking.
7. 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: **Structural Dimensional Lumber**

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

Mfr: Local TBD

Color: Paint color must be reviewed on a case basis

Finish: S4S, Field painted (Sheen per UFGS)

Model #: Dimensional lumber

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: **Suspended Ceiling System**

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: Limit suspended ceilings to locations where acoustics require these.

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: **Suspended or Over Framing**

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: Limit hard lid ceilings to areas that require these, such as kitchens, clean rooms, restrooms, etc.

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.
4. Generally match original hardware in renovations.
5. All door locks shall be keyed to BEST commercial/heavy duty locks.
6. Install glazing in doors and locate windows to preserve paths of sunlight. Create openings to enhance air flow and to facilitate passive ventilation. Balance building performance with occupant comfort, health, safety, security and productivity.
7. Manufacturers listed below are only provided to establish a baseline of equivalency among all applicable manufacturers.

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: Satin 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 1

Image Tool 250 x 188



Type: **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" w. frames, 16 gauge (welded corners) grouted solid

Other: Provide in Group 3 and in utility areas of Group 1 and 2. Provide A25 "galvannealed" coating. All interior steel doors shall have a factory applied primer finish. Provide 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>

E05.1.3. Wood

Applicable N/A

Number of base standards 2

Image Tool 250 x 188



Type: **Style 1, Administrative**

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

Mfr: Simpson

Color: Natural hardwood veneer

Finish: Clear Sealer, satin (aqueous)

Model #: 3'x7'x 1 3/4", solid core

Other: Satin stainless steel hardware, Glass lites may be used. Stained birch veneer face, 5 ply construction, rotary cut finish.

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>

Type: **Style 2, Residential**

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

Mfr: Simpson

Color: Natural hardwood veneer or paint grade

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

E06.1. Casework Materials

1. Cabinets, countertops and hardware shall be appropriate for the Facility Group and for the particular application and frequency of use. Materials should be durable and not show excessive wear over their lifespan. Countertops should be neutral in color, smooth-to-light textured and compatible with adjacent cabinet surfaces and plumbing fixtures.
2. When used for storage, furniture systems are preferred rather than built-in cabinetry or casework in office, administrative and operational applications. Casework or architectural millwork may be provided in main lobbies in Groups 1 and 2, consolidated break areas and work areas, and food service areas in Groups 1, 2, and 3 and in kitchens and baths in Group 4.
3. Materials, shapes, and detailing should convey an image of long-lasting quality without extravagance; avoid trendy designs. Comply with Architectural Woodwork Institute (AWI).
4. Select casework systems and materials considering durability, maintenance requirements and LCCA.
5. Natural stone and cast stone countertops may only be used in Group 1 with approval on a case basis.
6. Metal cabinets and countertops shall be provided in heavy-use operations and in Group 3.
7. Refer to AFCFS for approved materials.
8. Manufacturers listed below are only provided to establish a baseline of equivalency among all applicable manufacturers.

E06.1.1. Plastic Laminate

Applicable N/A

Number of base standards 1

Image Tool 250 x 188



Type: **Low Use Areas**

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

Mfr: Formica

Color: Medium Earth tones and neutral tones

Finish: Light texture

Model #: High pressure laminate

Other: Combine with matching solid-surface banding on casework edges.

UFGS: Section 06 41 16.00 10 Plastic-Laminate-Clad Architectural Cabinets
http://www.wbdg.org/FFC/DOD/UFGS/UFGS_06_41_16.00_10.pdf

E06.1.2. Solid Polymer Surface

Applicable N/A

Number of base standards 1

Image Tool 250 x 188



Type: **High Use Areas**

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

Mfr: Corian

Color: Medium Earth tones and neutral tones

Finish: Light textured

Model #: Solid Surface

Other: Faces and edge banding

UFGS: Section 12 36 00 Countertops

[http://www.wbdg.org/FFC/DOD/UFGS/UFGS 12 36 00.pdf](http://www.wbdg.org/FFC/DOD/UFGS/UFGS_12_36_00.pdf)

E06.1.3. Rapidly-Renewable Products

Applicable N/A

Number of base standards 1

Image Tool 250 x 188



Type: **Style 1 Moderate Use Areas**

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

Mfr: Plyboo

Color: Natural or amber

Finish: Satin

Model #: Flat grain bamboo plywood

Other: FSC® Certified 100%.

UFGS: Section 12 32 00 Manufactured Wood Casework

[http://www.wbdg.org/FFC/DOD/UFGS/UFGS 12 32 00.pdf](http://www.wbdg.org/FFC/DOD/UFGS/UFGS_12_32_00.pdf)

E06.1.4. Metal

Applicable N/A

Number of base standards 1

Image Tool 250 x 188



Type: **Style 1 Heavy Use Areas**

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

Mfr: Local (TBD)

Color: Natural stainless steel or neutral colors (steel)

Finish: Mill (stainless) or Powder coated (steel)

Model #: Lab, workbench, computer workstation

Other: Provide highly durable fabrications and finishes in Group 3 which are subjected to heavy use.

UFGS: Section 12 31 00 Manufactured Metal Casework
<http://www.wbdg.org/FFC/DOD/UFGS/UFGS 12 31 00.pdf>

E06.1.5. Other

Applicable N/A

E06.2. Countertop Materials

E06.2.1. Plastic Laminate

Applicable N/A

Number of base standards 1

Image Tool 250 x 188



Type: **Low Use Areas**

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

Mfr: Formica

Color: Medium Earth tones and neutral tones

Finish: Light texture

Model #: High pressure laminate

Other: Only use rounded half or full bullnose and integral backsplash. Do not use plastic laminate edge banding on front edges.

UFGS: Section 06 41 16.00 10 Plastic-Laminate-Clad Architectural Cabinets
http://www.wbdg.org/FFC/DOD/UFGS/UFGS_06_41_16.00_10.pdf

E06.2.2. Solid Polymer Surface

Applicable N/A

Number of base standards 1

Image Tool 250 x 188



Type: **High Use Areas**

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

Mfr: Corian

Color: Medium Earth tones and neutral tones

Finish: Light textured

Model #: Solid Surface

Other: Faces and edges

UFGS: Section 12 36 00 Countertops
http://www.wbdg.org/FFC/DOD/UFGS/UFGS_12_36_00.pdf

E06.2.3. Natural Stone

Applicable N/A

Number of base standards 1

Image Tool 250 x 188



Type: **Group 1 High Visibility, Heavy Use**

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

Mfr: Local (TBD)

Color: Neutral tones

Finish: High polish, sealer

Model #: N/A

Other: Custom cut slabs

UFGS: Section 12 36 00 Countertops

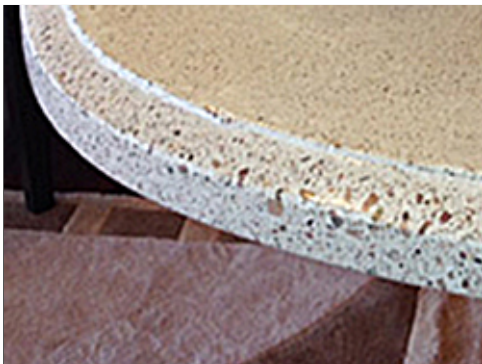
[http://www.wbdg.org/FFC/DOD/UFGS/UFGS 12 36 00.pdf](http://www.wbdg.org/FFC/DOD/UFGS/UFGS_12_36_00.pdf)

E06.2.4. Cast Stone

Applicable N/A

Number of base standards 1

Image Tool 250 x 188



Type: **Group 1 High Visibility, Heavy Use**

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

Mfr: Local (TBD)

Color: Neutral tones

Finish: High polish, sealer

Model #: N/A

Other: Custom cast or cut slabs

UFGS: Section 12 36 00 Countertops

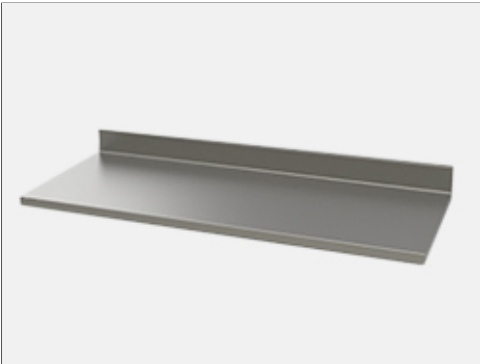
[http://www.wbdg.org/FFC/DOD/UFGS/UFGS 12 36 00.pdf](http://www.wbdg.org/FFC/DOD/UFGS/UFGS_12_36_00.pdf)

E06.2.5. Metal

Applicable N/A

Number of base standards 1

Image Tool 250 x 188



Type: **Style 1 Heavy Use Areas**

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

Mfr: Local (TBD)

Color: Natural stainless steel

Finish: Mill

Model #: Custom fabricated countertops

Other: Provide integral fronts, sides and backsplash

UGFS: Section 12 31 00 Manufactured Metal Casework
<http://www.wbdg.org/FFC/DOD/UGFS/UGFS 12 31 00.pdf>

E06.2.6. Other

Applicable N/A

E07. Furnishings

Comply with Air Force Corporate Standards for Furnishings:
<http://afcfs.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>

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://afcs.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. All interior signage shall follow UFC-3-120-01.

E09. Lighting, Power and Communication

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

E09.2. Types and Color

1. Interior lights must be of the make/model below. All light fixtures at Hurlburt Field have been replaced with LED energy saving fixture with the implementation of a Utility Energy Savings Contract. This standardized the light fixtures for all future projects.
2. All interior lighting shall follow UFC 3-520-01.
<http://www.wbdg.org/ffc/dod/unified-facilities-criteria-ufc/ufc-3-520-01>
3. All communication systems must follow UFC 3-580-01. <http://www.wbdg.org/ffc/dod/unified-facilities-criteria-ufc/ufc-3-580-01>

F. APPENDIX - Facility Districts

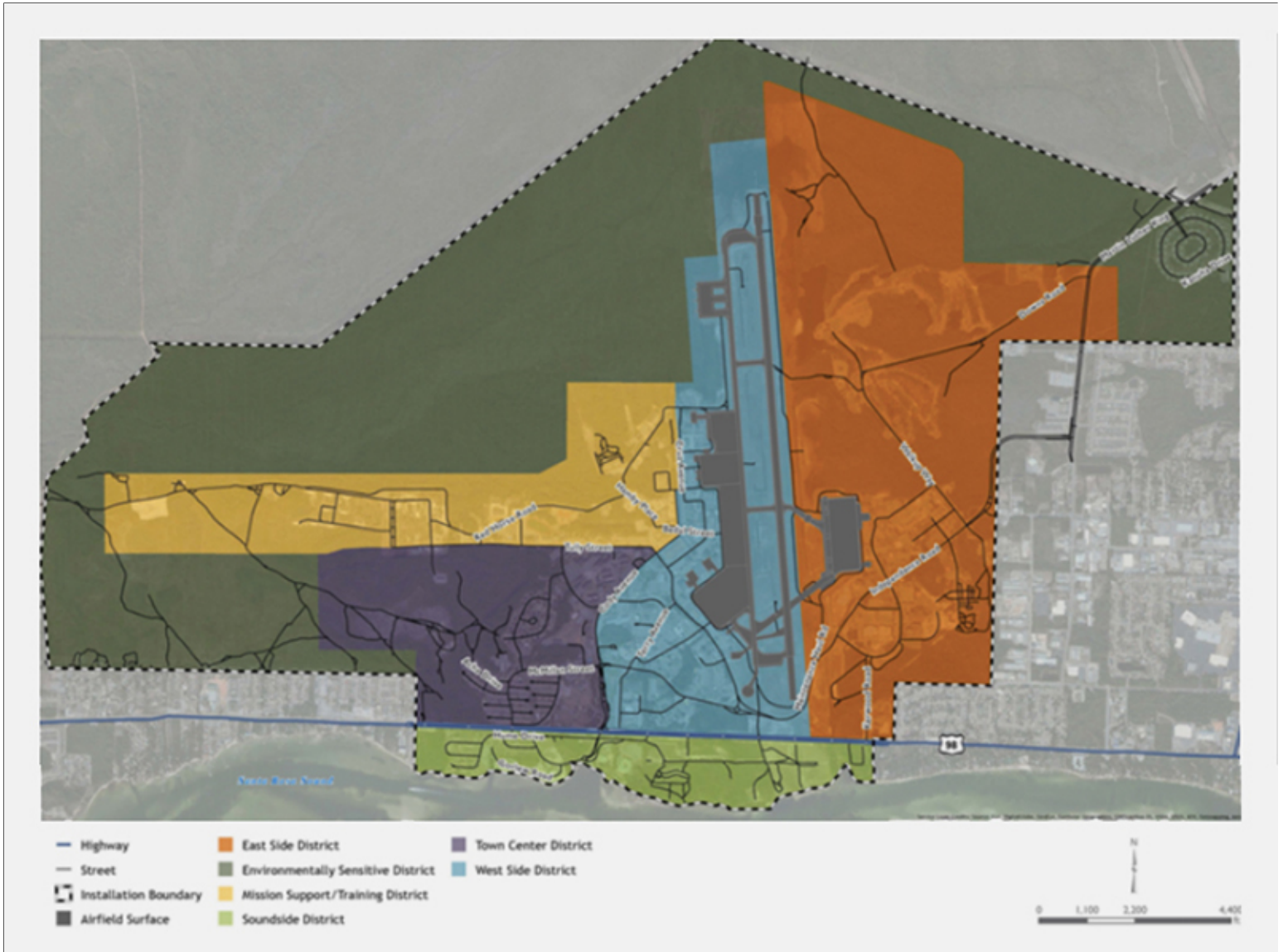
- Applicable
- N/A

Comply with Air Force Corporate Standards for Facility Districts:

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

Facilities Districts Overview Map:

Image Tool 800 x 600



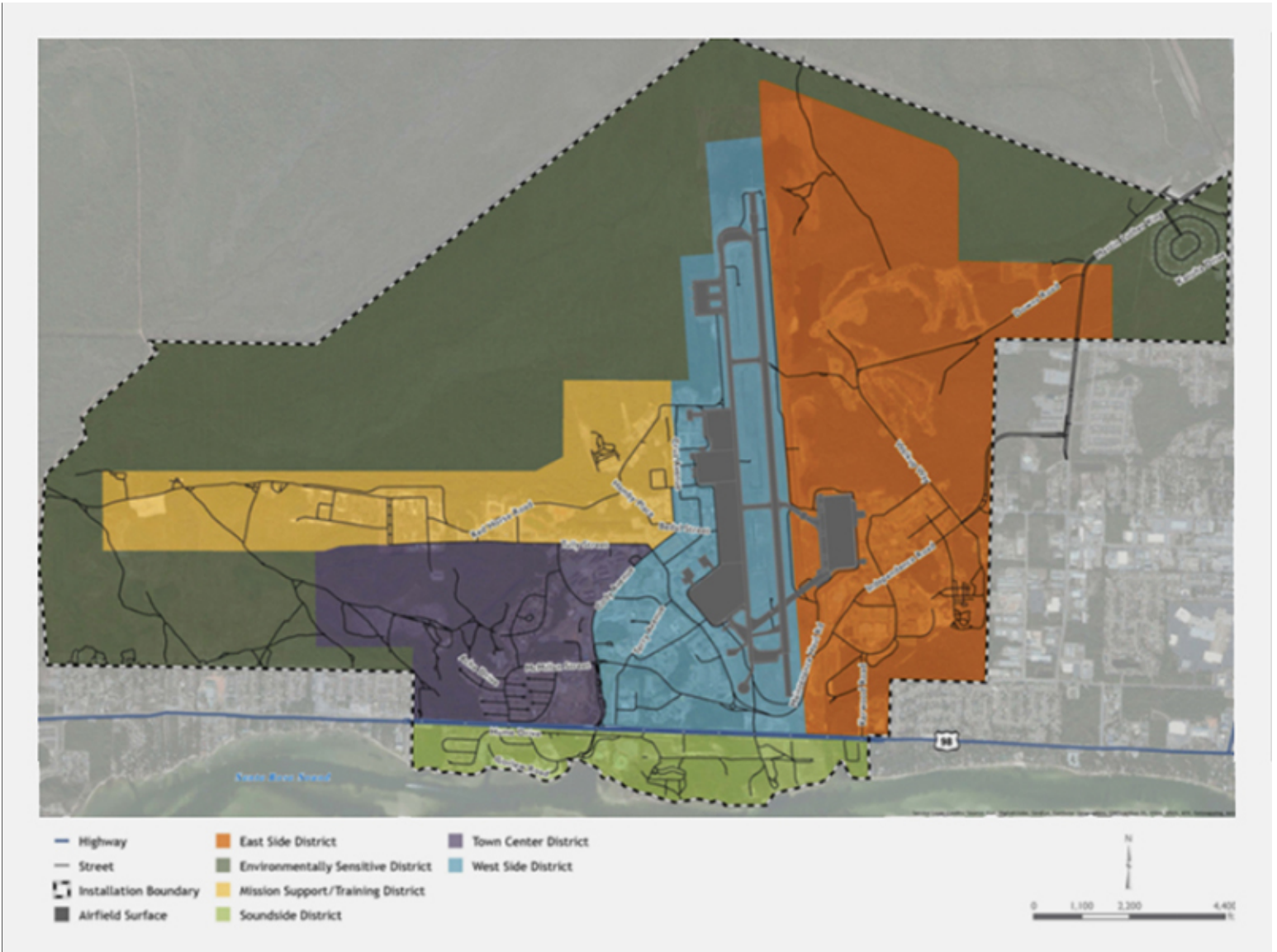
Note: Apply the base-wide standards in this IFS for Installation Elements, Site Development, Facilities Exteriors and Facilities Interiors (products, materials, color, etc.). Following application of the base-wide standards, refer to the Appendix and apply any additional requirements specifically related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

Enter No. of Facility Districts 1

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

Group 2 Applicable N/A

Group 3 Applicable N/A

Group 4 Applicable N/A

Other Applicable N/A

FACILITY DISTRICTS

Hurlburt Air Force Base is divided into districts that align with land use zones as defined in the Installation' Development Plan. 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. and contact the Base Civil Engineer for additional information. A brief description of each district follows.

1. East Side

Facilities in the East Side District should continue to be pedestrian in scale. Application of the installation prevailing architectural theme, creating a campus atmosphere, should be implemented during major renovations or new construction as appropriate. Follow standards for Facility Group 1, 2 and 3 as defined in this IFS.

2. Environmentally Sensitive

The Environmentally Sensitive District includes open space and 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.

3. Mission Support/Training District

The Mission Support/Training District includes facilities that are industrial in nature and may support flightline operations or for various training operations. Industrial uses may include warehouses for various base activities such as maintenance, storage, utility functions, industrial services, transportation storage, communications, civil engineering, supply and equipment, fuel storage, vehicle maintenance/motor pool complex, open storage, emergency/disaster response facilities, ordnance and weapons storage areas, and other industrial uses. Training facilities are generally developed as administrative, classroom and industrial spaces. Facilities in this district, which are industrial in nature, should generally match adjacent buildings to ensure architectural compatibility and shall follow standards for Facility Group 3 as defined in this IFS. Training facilities shall generally follow standards for Group 2.

4. Southside

The Southside District consists recreational facilities and detached single-family residential units occupied by enlisted and officer families. Recreational facilities shall generally follow Facility Group 2 as defined in this IFS. The housing area is currently under a housing privatization contract, but shall follow standards for Facility Group 4.

5. Town Center

The Town Center District includes administrative and community buildings. Application of the installation prevailing architectural theme, creating a campus atmosphere, should be implemented during major renovations or new construction as appropriate. Follow standards for Facility Group 1 and 2 as defined in this IFS.

6. West Side

The West Side District should be monumental in scale. Follow standards for Facility Group 3 as defined in this IFS.

G. APPENDIX - References

Comply with Air Force Corporate Standards:

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