SLD45 IFS
22 APRIL 2024

SPACE LAUNCH DELTA 45 (SLD45)
PATRICK SFB & CAPE CANAVERAL SFS
INSTALLATION FACILITIES STANDARDS (IFS)


Installation Elements


Site Development


Facilities Exteriors


Facilities Interiors

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AIR FORCE INSTALLATION FACILITIES STANDARDS

2024

SLD45 (Patrick SFB / Cape Canaveral SFS) 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. All Air Force designs including Non-Appropriated Funds (NAF) facilities are required to conform to AFCFS per Air Force Instruction (AFI) 32-1023; AFCFS will be used to formulate Installation Facilities Standards (IFS) per the AFI. The Base Civil Engineer (BCE) maintains and implements the IFS.

4. Please refer to the AFCFS website as a portal to reference materials and requirements documents for design and construction projects (via links). Specific references to current DoD memoranda and Air Force criteria are updated periodically to provide the most current guidance and requirements. Programming, design and contract documents should list "current edition" for all reference and requirements documents. The documents in force at the date of execution of the design and/or construction contract will 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 will implement IFS under their Joint-Base designation with volume numbers for individual installations following the IFS Development Tool template. For example, for Joint Base Langley-Eustis, provide: Vol. 1 Langley AFB and Vol. 2 Fort Eustis.

7. References and Supplementary Documents listed in Appendix G are included in these Installation Facilities Standards by reference and are fully part of this document. Please refer to Appendix G for a listing of documents, which are available via hyperlink for viewing and downloading.

8. Host Nation Facilities: Use the International Building Code(r) (IBC) for planning, design and construction of all facilities built for Host Nation personnel use outside of the United States and its territories and possessions. Use the IBC in conjunction with Status of Forces agreements (SOFA), bilateral agreements or other Host Nation (HN) agreements.
   UFC 1-200-01 DoD Building Code: https://www.wbdg.org/FFC/DOD/UFC/ufc_1_200_01_2022_c2.pdf

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Group 2 Base-wide Standard Materials and Colors for Florida Mediterranean Architecture

Group 1 Administrative Use

Group 3 Industrial

Group 4 Recreational

A01. FACILITY HIERARCHY

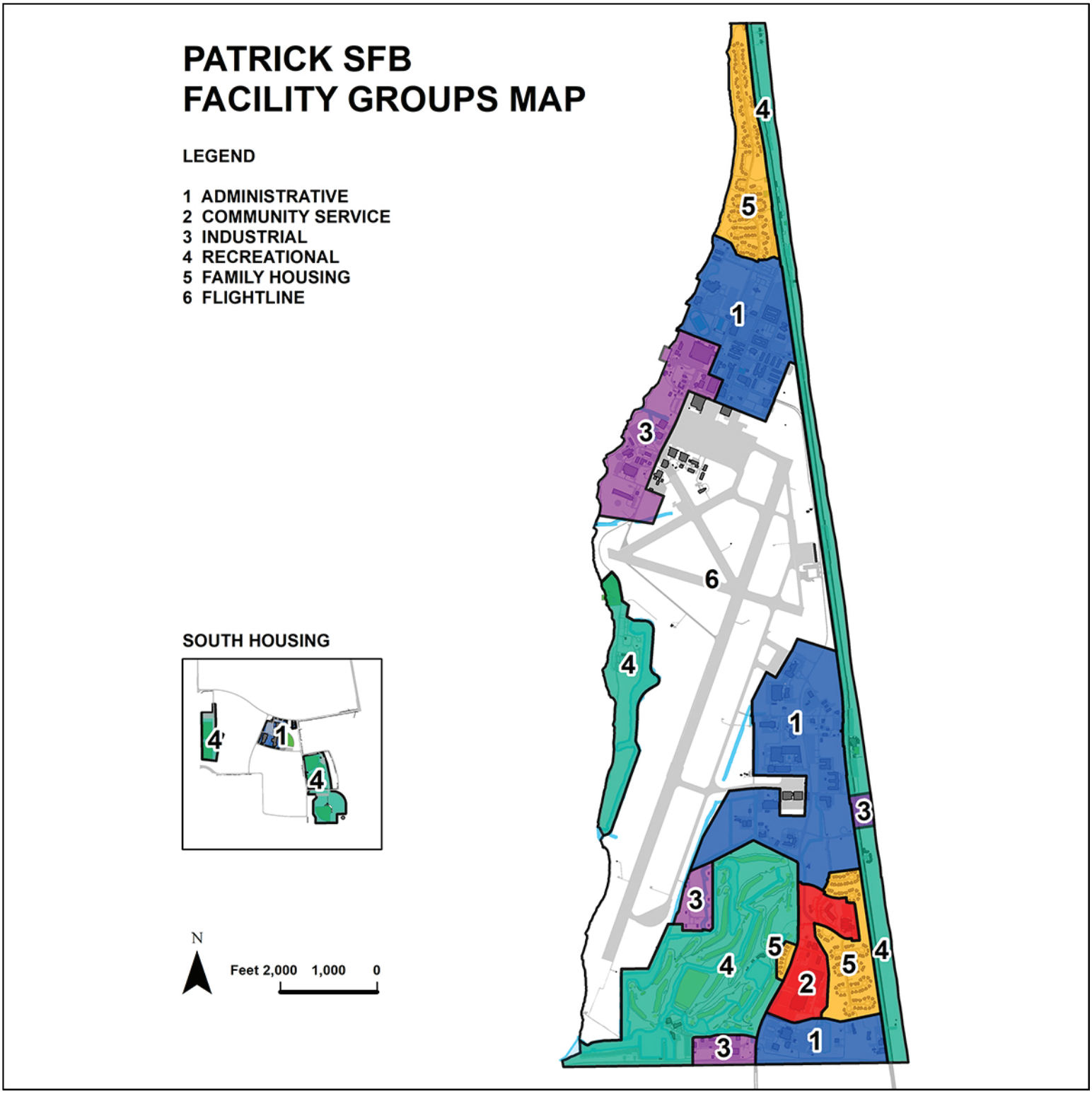
Comply with AF Corporate Standards for Facility Hierarchy (and subsections):
http://afcfs.wbdg.org/facility-hierarchy/index.html

A02. FACILITY QUALITY

Comply with AF Corporate Standards for Facility Quality (and subsections):
http://afcfs.wbdg.org/facility-quality/index.html

A03. FACILITY DISTRICTS

Comply with AF Corporate Standards for Facility Districts (and subsections):
http://afcfs.wbdg.org/facility-districts/index.html



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

B. INSTALLATION ELEMENTS

Comply with Air Force Corporate Standards for Installation Elements:
http://afcfs.wbdg.org/installation-elements/index.html

B01. COMPREHENSIVE PLANNING

Comply with Air Force Corporate Standards for Comprehensive Planning:
http://afcfs.wbdg.org/installation-elements/comprehensive-planning/index.html

B01.1. Installation Development Plan (IDP)

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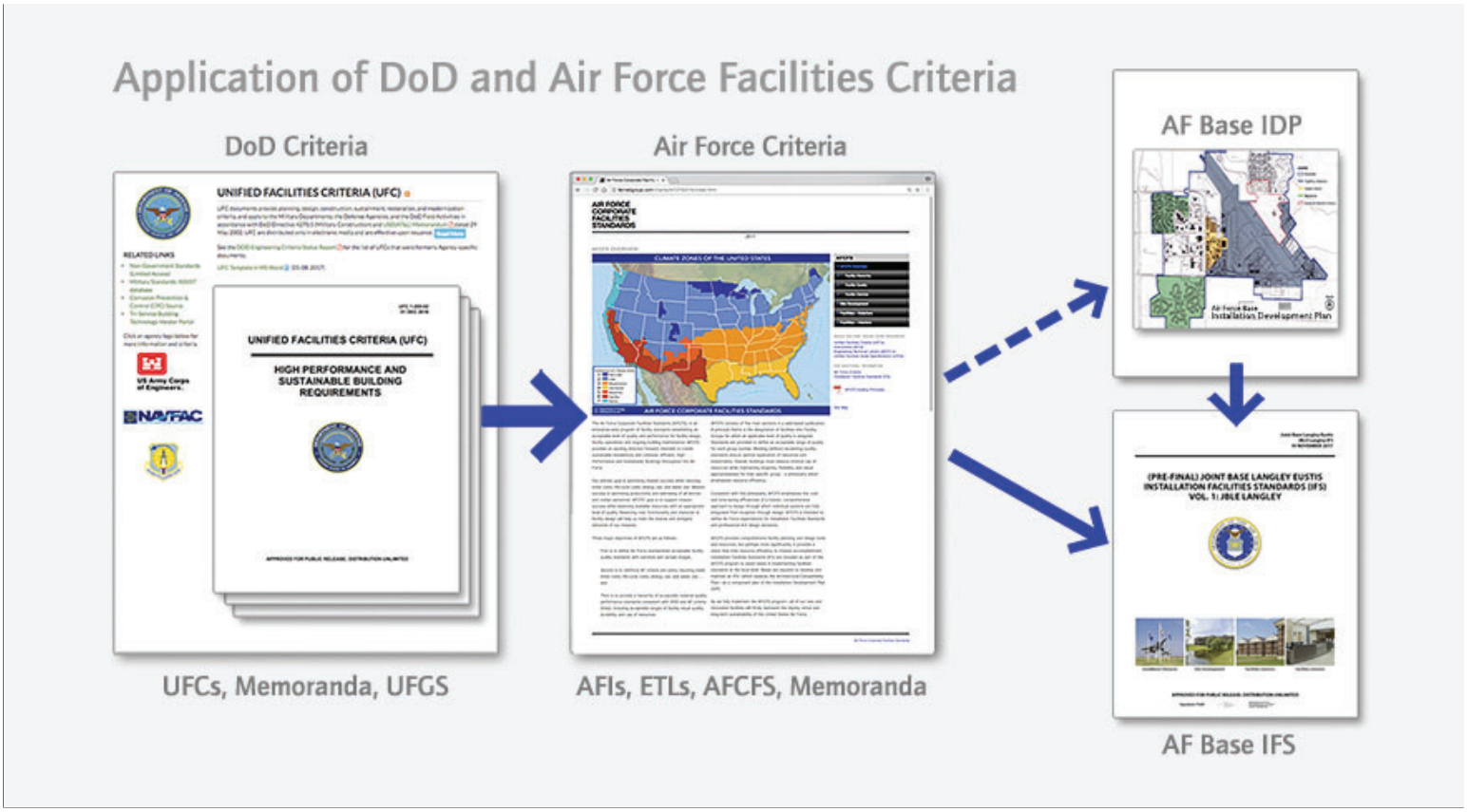

Department of Defense, Department of the Air Force and Air Force Facilities Criteria

1. The Base Civil Engineer (BCE) is responsible for developing, maintaining and implementing the installation's Comprehensive Planning Documents and to ensure that the Installation Development Plan (IDP) is prepared, maintained, and implemented following AFI 32-1015. This IFS will ensure that proposed future development and infrastructure improvements at CCSFS and PSFB meet current and anticipated launch requirements while promoting sustainable and resilient development within the installations.

2. The Space Launch Delta 45 (SLD 45), formally the 45th Space Wing, Installation Development Plan was completed in July 2017 and includes recommended Planning Districts and Sub-Districts. The Patrick Space Force Base (PSFB) and Cape Canaveral Space Force Station (CCSFS) General Plans will continue to be followed for guidance on Area Development Plans. The Facility Groups included in Appendix F of this Patrick SFB IFS are representative of the Planning Districts for the purpose of architectural compatibility.

3. The SLD 45 is responsible for delivering assured space launch, range, and combat capabilities to the nation. SLD 45 provides activities and resources for flight safety, range instrumentation, infrastructure, and scheduling required to support and assure space and ballistic launches, and other operations. The Delta manages space launch operations from the Eastern Range (ER) for

the United States Space Force. It is responsible for operating three airfields and maintaining billions of dollars in instrumentation and infrastructure for the ER.

4. The ER was developed in the 1950's and now encompasses fifteen million square miles that extends from Florida across the southern Atlantic Ocean and into the Indian Ocean. SLD 45 and its ER assets continue to provide a vast network of radar, telemetry and communications, instrumentation support to facilitate safe launch operations for the Department of Defense, National Aeronautics and Space Administration, National Oceanic and Atmospheric Administration (NOAA), Naval Ordnance Test Unit (NOTU), and other government and commercial partners.

SLD 45 administers the following ER installations:
Patrick Space Force Base
Cape Canaveral Space Force Station (CCSFS)
Malabar Transmitter Annex (MTA)
Jonathan Dickinson Missile Tracking Annex (JDMTA)
Wallops Flight Facility
Ascension Auxiliary Airfield
Off-base meteorological instrumentation sites

Other Major Tenant Units on PSFB:
920th Rescue Wing, Air Force Reserve Command; search and rescue missions globally; majority of airfield and ramp use.
DEOMI; Defense Equal Opportunity Management Institute; joint services school and research lab.
AFTAC; Air Force Technical Applications Center; monitors nuclear treaties and performs surveillance globally.
Dept of State Air Wing; conducts air operations and aircraft maintenance; airfield and ramp use.

B01.1.1. IFS Requirements and Documents

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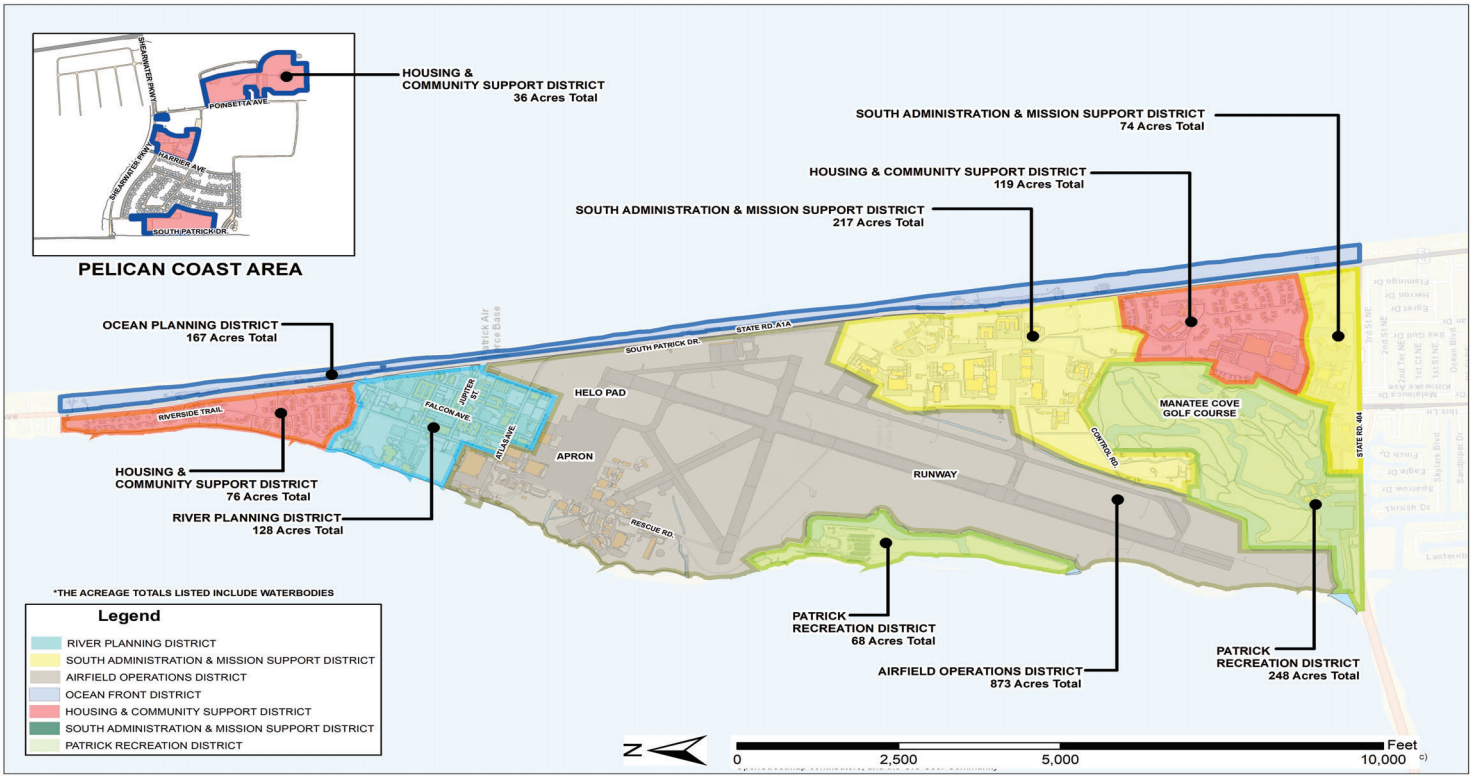
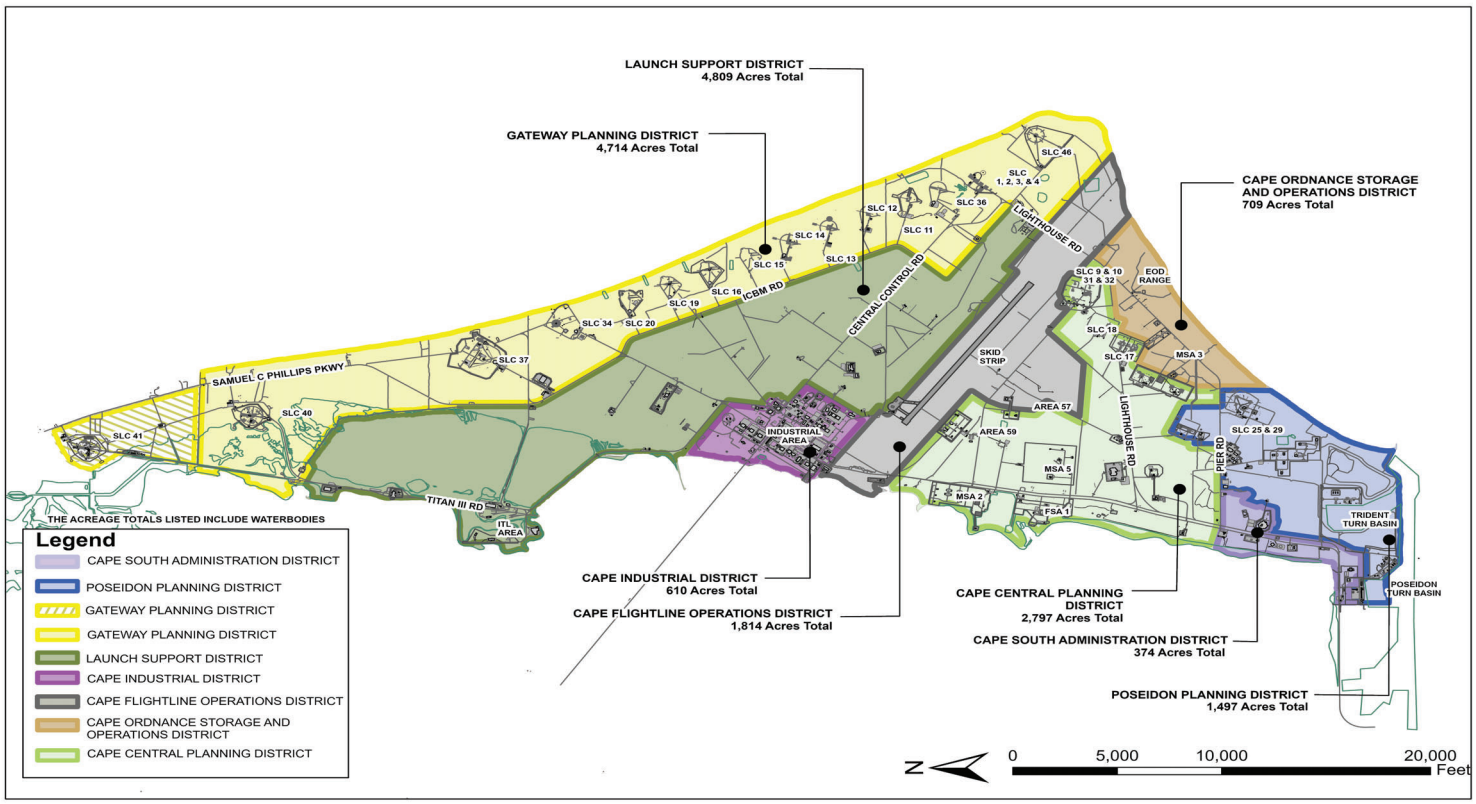


Patrick SFB Planning Districts



Cape Canaveral SFS Planning Districts

1. Maintain this Installation Facilities Standards (IFS) as a Component Plan of the base's Installation Development Plan (IDP). Comprehensive Planning Platform (CPP), Infrastructure Roadmap (IR) Report, Spaceport of the Future District Plans for Patrick Space Force Base (PSFB) and Cape Canaveral Space Force Station (CCSFS). This IFS is maintained by the Base Civil Engineer (BCE) as required under AFI 32-1023 and any deviations to it will require a waiver from the Base Civil Engineer.

2. All units that are located on properties of the Space Launch Delta 45 (SLD 45) must comply with installation planning criteria, architectural compatibility, and facility standards set forth in this IFS. All Designs must conform to the standards specified in the Air Force Corporate Facility Standards (AFCFS), this IFS, the Unified Facilities Criteria (UFC) for U.S. Air Force.

3. The delineation of planning districts and sub-districts is supported by the installation's layout and infrastructure as indicated in the planning district maps. It also is intended to ensure that future development is achieved in an orderly manner, to complement the installation's environment and effectively meet the priorities defined in the Vision Statement.

5. Patrick SFB was divided into two planning districts as part of the 2017 IDP efforts. Relevance of the two Planning districts has waned over time as transportation network, mission operations, and established land use patterns has significantly changed. Rather than using the two Planning Districts, the established six sub-districts are a good representation of the Planning Districts as it exists today and better reflect the renewed vision for future development at the base. Planning will be done at the sub-district level and the six sub-districts will replace the two planning districts.

Below is a brief overview of each Planning District:

5.1. Ocean Planning District: Provides beachfront recreational, dining, lodging opportunities with public access to the Atlantic Ocean. It includes the beachfront cottages, Tables Beach, the Beach House, 2nd Light Beach, Hangar's Beach, The Tides Club, base radar facilities, and Pineda Beach Park.

5.2. Housing and Community Support District: This is a non-contiguous district made up of three separate areas of 76 acres, 119 acres and 36 acres. This district supports health and welfare through retail, health care, entertainment, and leased housing facilities, Child Development Center, Youth Center, Chapel, Base Exchange (BX), pharmacy, fueling station with car wash, and quick service restaurant. It also includes the Pelican Coast housing area which provides permanent housing and includes the privately operated North Housing facility.

5.3. River Planning District (North Administration District): Is the primary access point at the north end of PSFB. The area supports administration and support facilities for a broad range of base tenants and community support facilities for the base. It serves as the administrative center for PSFB. It includes SLD 45 Headquarters and administrative offices, DEOMI training facilities, dormitory housing, lodging facilities, recreational facilities, chapel, A1A East Gate, and other storage and support facilities.

5.4. South Administration and Mission Support District**:** This is a non-contiguous district made up of two separate areas of 217 acres and 74 acres. This district is characterized by maintenance, operations, or mission-specific buildings and facilities. It Includes the fire station, AFTAC, Hazardous Materials (HazMat) operations facility, DoS air operations, the air passenger terminal, Traffic Management, the Logistics Readiness Squadron (LRS) storage facility, Security Forces Squadron, CES storage, mechanical and electrical shops, the Commercial Vehicle Gate, and the Munitions Storage Area (MSA). Other facilities are Security Forces Squadron kennel and operations; medical, dental, and veterinary clinics; Air Rescue Medical Training facilities; the South Gate, warehouse facilities, and recreational vehicle (RV) parking.

5.5. Airfield Operations District: This district consists of hangars, two runways and associated taxiways, aprons/ramps and other airfield supporting facilities. It also includes facilities and operations that support 920 RQW such as the Fuel Storage Area, 920 RQW operations and maintenance facilities, Squadron Operations and Aircraft Maintenance, indoor Combat Arms Training and Maintenance (CATM) facility, Guardian Angels, and various Civil Engineer Squadron (CES) functions.

5.6. Patrick Recreational District: This is a non-contiguous district made up of two separate areas of 68 acres and 248 acres. This district contains facilities supporting physical fitness training and recreational activities. Includes Chevron Park and the Manatee Cove Family Campground (FAMCAMP), the Manatee Cove Golf Course and support facilities, and the Manatee Cove Marina.

6. Cape Canaveral SFS was divided into three planning districts as part of the 2017 IDP efforts. Relevance of the three Planning Districts has waned over time as transportation network, mission operations, and established land use patterns has significantly changed. Rather than using the three Planning Districts, the established eight sub-districts are a good representation of the Planning Districts as it exists today and better reflect the renewed vision for future development at the base Planning will be done at the sub-district level and the eight sub-districts will replace the three planning districts.

Below is a brief overview of each Planning District:

6.1. Gateway Planning District (Launch Operations District): Intended for space launch complexes and other facilities that directly support these complexes. Contains all land within CCSFS currently or previously utilized for vertical launch operations north of the airfield, together with activities and facilities required in direct support of those launch operations. Facilities include SLCs east of ICBM Road (SLCs 11-16, SLCs 19-20, and SLC 34), SLCs 1-4, SLC 36, SLC 46, SLC 37, SLC 40, SLC 41, and new SLC 50

6.2. Launch Support District: The Launch Support Planning District is intended for facilities that directly support launch operations. Contains facilities supporting payload processing, vehicle integration, storage, maintenance/repair, and other launch support operations. Includes Integrate-Transfer-Launch (ITL) processing and support areas, DoD and commercial research and development, lighthouse, and undeveloped land west of ICBM Road. Also includes launch operations that depend on close proximity to the airfield. Includes the undeveloped land north of the airfield and the landfill.

6.3. Cape Industrial District: The goal for the Industrial Planning District is to become the primary location for non-hazardous launch support facilities at CCSFS. It is characterized currently by administrative, maintenance and launch support operations. Operations are subject to mandatory evacuations during launch periods. Future land use will focus on launch support functions. Currently, the area includes SLD 45 facilities (administrative and contracting offices, maintenance shops, and storage), food court, water tower, various hangars, Hangar AF wharf, communications center, chapel, and shoppette.

6.4. Cape Ordnance Storage and Operations District: The Ordnance Storage and Operations District is designated to store munitions, explosives, and other hazardous materials on CCSFS. Hazardous operations also include the firing range and Explosive Ordnance Disposal. Characterized by munitions storage and ordnance operations. It includes MSA-3, storage buildings, the Explosive Ordnance Disposal (EOD) Range, the Small Arms Range, and undeveloped land east of Pier Road

6.5. Cape Flightline Operations Planning District - The major feature of the Cape Flightline Operations District is the Skid Strip. In addition, a restricted access area will provide higher levels of security for the airfield, government agency operations, and launch-related operations. A secondary goal is to provide SLD 45 users with an area of higher security for sensitive operations. Characterized by DoD and SLD 45 mission operations that depend on close proximity to the airfield. Includes the Skid Strip and the undeveloped land south of the airfield.

6.6. Cape Central Planning District: The goal for the Central Planning District is to provide the government and commercial users with a multi-use area for facilities that support launch, base, or tenant operations. Facilities may include payload processing, refurbishment, maintenance, storage, and administration facilities. Developed areas are typically lower density and facilities are more separated from each other than similar facilities in the Industrial Area or South Administration Area.

6.7. Poseidon Planning District: This area is primarily used by NOTU, other Navy units, and agencies that require use of the wharves in the Trident or Poseidon basins. Characterized by administrative, staging, storage, recovery, and NOTU operations. Utilization of land area is significantly restricted due to Explosive Safety Quantity Distance (ESQD) arcs associated with wharf operations. Includes Munitions Storage Area (MSA) 4; SLC 25, SLC 29, SLC 30, USAF Wharf, Poseidon dredged material management area (DMMA), administration, maintenance, recreation areas, warehouses, staging areas, and the Poseidon and Trident wharves with related NOTU operations:

6.8. Cape South Administration District: The South Administration District is the primary public access point for Cape Canaveral Space Force Station. It will provide access and services to the majority of public-facing base operations. Characterized by administrative, operations, storage, maintenance, and operations and launch support. It includes the South Entry Gate, Pass and Identification facility, an office complex currently occupied by Space Florida and SpaceX, SLD 45 CCSFS headquarters, the MOC, NOTU storage and support buildings, and vehicle maintenance.

End of Section B01.1.1.

B01.1.2. Brief History of Base

◉ Applicable ○ N/A Large graphics

◉ Applicable ○ N/A Small graphics

Aerial View of Patrick SFB from the Northwest

U.S. Naval Air Station Banana River FL

45th Space Wing Patrick Air Force Base

SLD 45 Patrick Space Force Base

For 75 years, the Air Force's continuous participation in missile and space operations on the Eastern Range has been a particular source of pride for the Space Launch Delta 45(SLD 45) and its predecessor organizations such as 45th Space Wing. The SLD 45 supports the Space Force & Air Force in providing an effective national defense force, with space power being a critical component. The delta's vision - "to be the world's premier gateway to space" - is embodied in the individual efforts of the installation staff.

Both PSFB and CCSFS are located in Brevard County, Florida, and are approximately 9.5 miles from each another. The installations are within the Eastern Range and work concurrently under the command of the Space Systems Command, the SLD 45. The SLD 45 Headquarters building and administrative facilities are based at PSFB and work to support the USSF mission of space and cyberspace operations, which are located at CCSFS.

CCAFS was transferred from the U.S. Navy to the USAF in 1948. Formerly named Banana River Naval Air Station, the USAF first renamed the installation Joint Long Range Proving Ground (JLRPG), as the area commonly was used for missile testing. The installation was known as JLRPG only for three months in 1951 before it was renamed to CCAFS. In 2019, under the directive of the president of the United States, CCAFS was renamed to Cape Canaveral Space Force Station (CCSFS).

PAFB was a deactivated Naval Air Station in 1948, and was transferred to the USAF in 1949. Formerly named Banana River Naval Air Station, in 1950 the USAF renamed the installation Patrick Air Force Base after Army Major General Mason Patrick. The primary function at PAFB is administration of space launch operations at CCAFS, to assure access to space. In 2019, under the directive of the president of the United States, PAFB was renamed to Patrick Space Force Base (PSFB).

Ranging in average elevation from 8 to 9.8 feet above mean sea level, PSFB/CCSFS are situated on a barrier island along the eastern coastline of Brevard County, Florida, approximately 60 miles east of Orlando, 155 miles south of Jacksonville, and 210 miles north of Miami. Development is constrained on both installations by the Atlantic Ocean to the east, the Banana River to the west, and community development in-between. Known locally as the Space Coast, Brevard County houses a resident population of 606,612, with the communities of Cape Canaveral, Cocoa Beach, and Satellite Beach adjacent to the installations. CCSFS is bounded by Port Canaveral to the south and Kennedy Space Center (KSC) to the north and west. Together, CCSFS and KSC are referred to as the Cape Canaveral Spaceport (CCS). South of CCSFS, Cape Canaveral and Cocoa Beach geographically separate CCSFS and PSFB, and frequently are occupied by a tourist population on their beaches as well as at space exploration-related amenities available to the public.

In 1947, Cape Canaveral was selected to be the host site for a U.S. Missile Testing Range. That was the same year nearby Banana River Naval Air Station (later to be re-designated as Patrick Air Force Base) began participating in space-based missions. Milestones of early space development at CCAFS include the early American sub-orbital rocket flights that were achieved in 1956; the first United States artificial satellite launch attempt in 1957; and the founding of NASA in 1958, when Air Force crews launched missiles for NASA. In 1961, CCAFS crews prepared NASA's first manned spaceflight program, known as Project Mercury and Project Gemini, that investigated human performance, function, and recovery. As a part of the early Apollo Missions, the first four Saturn I development launches were made during the first half of the 1960s. Apollo 7 was launched from CCAFS in October 1968. During the height of historical space flight operations of the 1950-1960s, Space Launch Complexes (SLC) at CCAFS were designed for specific launch vehicles. Once the programs ended, many of the SLCs were abandoned.

RECENT HISTORY & NEW MISSIONS:

The U.S. Space Force was established December 20, 2019. Space plays a central role for national security and competitors are posing an increasing threat. USSF was established to be a military service that focuses on pursuing superiority in the space

domain. Guardians are the Space Force's war fighters and PSFB and CCSFS play a critical role in the U.S. Space Force Mission.

On December 9, 2020, Patrick Air Force Base and Cape Canaveral Air Force Station were renamed Patrick Space Force Base and Cape Canaveral Space Force Station. On May 11, 2021, the 45th Space Wing was re-designated as Space Launch Delta 45. The change moved SLD 45 from an Air Force unit to a Space Force unit. The change coincided with other Space Force structural changes. The name and organization changes reflect the continued alignment of PSFB and CCSFS missions to those of USSF.

Commercial Customers:

The DoD relies on the commercial launch industry for affordable and reliable access to space, and advances in the private sector directly benefit the warfighter. The commercial launch industry is evolving rapidly to support government and private industry customers. A new generation of launch operators and launch vehicles are coming online and CCSFS is planning to accommodate and support these new systems.

B01.1.3. Future Development

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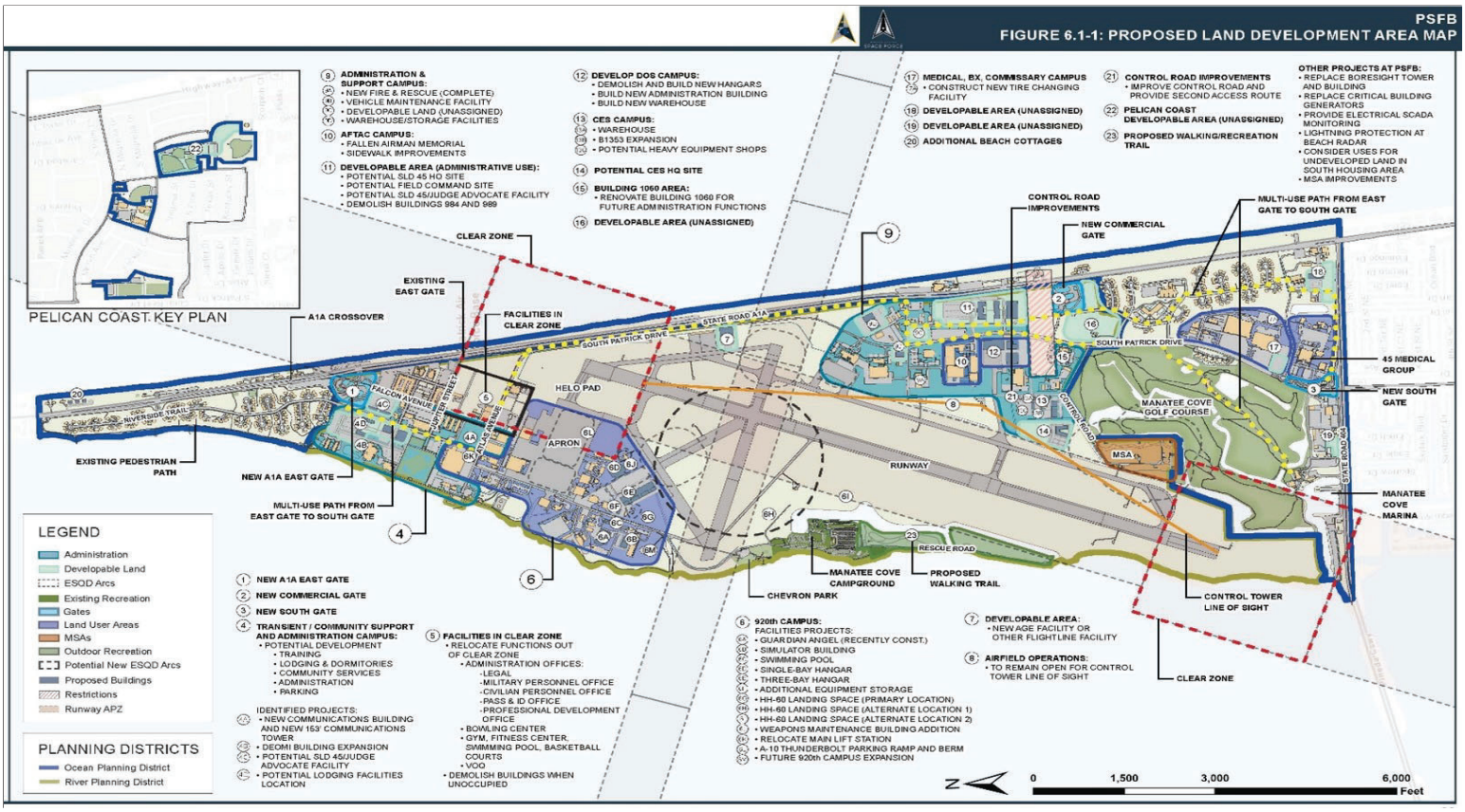
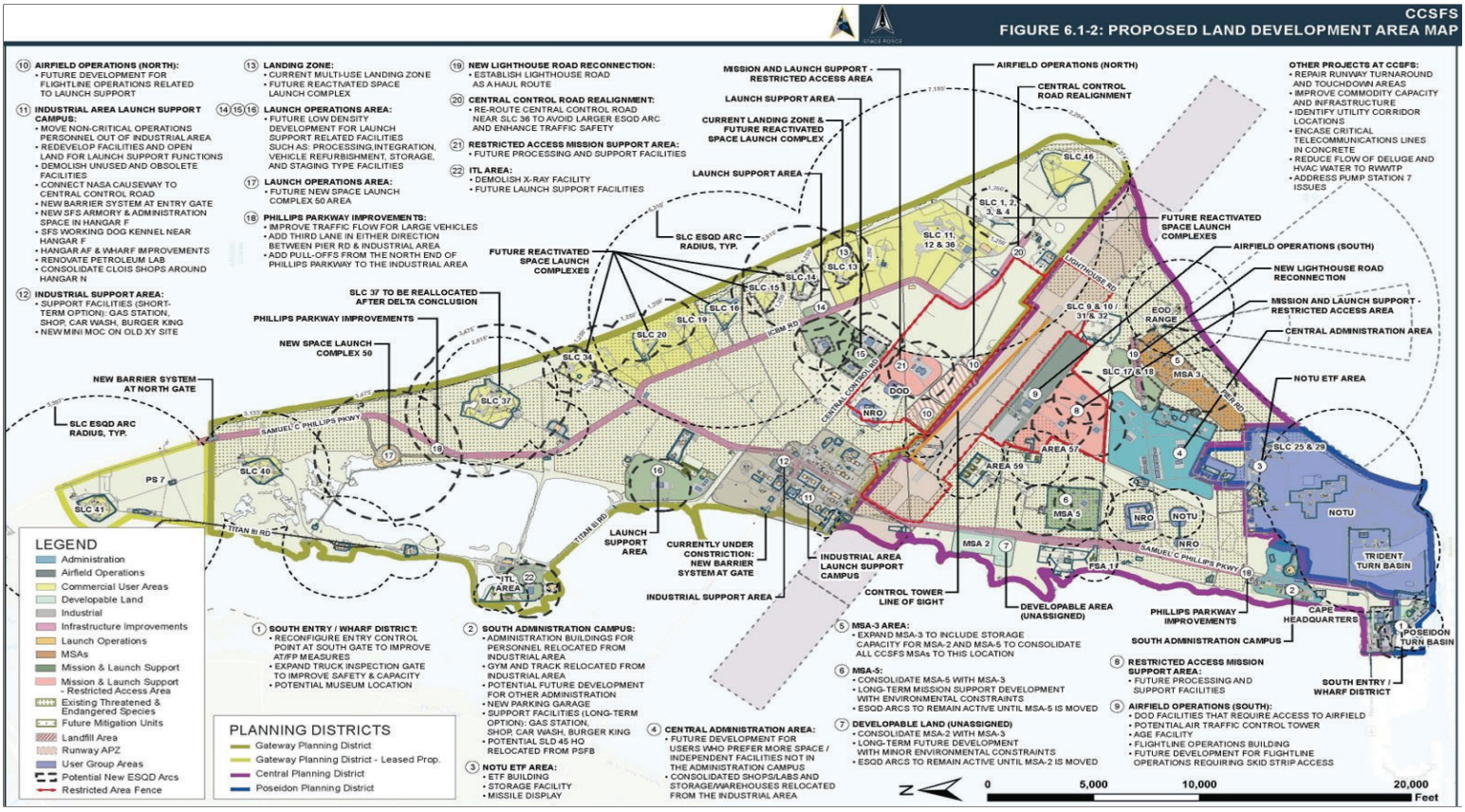


Patrick SFB 5-10 Year Future Development Plan



Cape Canaveral SFS 5-10 Year Future Development Plan

The existing physical layout of Patrick SFB is a result of historic development, physical limitations, systems technology, and military strategy. The array of land uses and the location of buildings, roads, and utilities have changed over time, as missions and needs evolved. The placement of activities has also responded to the physical and natural environs that existed when each use was developed. The locations of infrastructure, the proximity of functionally-related activities, and constraints and opportunities have, in combination, determined the arrangement of structures and activities on PSFB.

The base contains 2,254 acres, of which 70 acres are water. It is split into two land parcels, with the South Housing Area physically located one mile south of the base and surrounded by Brevard County and the City of Satellite Beach. The predominant land use on PSFB is associated with the Airfield, which uses 693 acres for runways, taxiways, and aprons, and 33 acres for aircraft operations and maintenance. The other main land uses on PSFB include 408 acres for family housing and 273 acres for outdoor recreation, most of which is occupied by the golf course and the marina.

Industrial land use encompasses 217 acres, while 74 acres are administrative land use. There are 352 acres of open space on the base, but a large part of it is found on the 4.2mile Atlantic Ocean beach-front. There is also some open space on the eastern side of the airfield and along the Banana River to the west of the airfield, which may be available for facility development. Smaller land uses include Community Commercial (74 acres), Community Service (13 acres), and Unaccompanied Housing (24 acres), areas that take up 111 acres total. Medical land use accounts for 22 acres of on-base land. The industrial area, located along the Banana River, abuts the base's administrative and Unaccompanied Housing areas.

Several types of land uses occur on sites within the Airfield Clear Zones, including industrial, administrative, community services commercial, and outdoor recreation facilities. Many of these incompatible land uses are scheduled for phased removal from the Clear Zones. One of the more interesting land uses at PSFB is a 2-acre plot of Launch and Range Control property that supports the CCSFS launch mission. It is located east of SR-A1A, south of the Tides Club.

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

Comply with the regulatory framework governing the physical appearance of projects at SLD 45 installations. In addition to federal, DoD, UFC, AFI, ROTF/SOTF, IDP/CPP, IFS and installation-specific requirements for project design, comply with all applicable requirements set forth as required.

B02. STREET ENVELOPE STANDARDS

Comply with Air Force Corporate Standards for Installation Elements:
http://afcfs.wbdg.org/installation-elements/index.html

Comply with AF Corporate Standards for Street Envelope Standards:
http://afcfs.wbdg.org/installation-elements/street-envelope-standards/index.html

B02.1. Hierarchy of Streets

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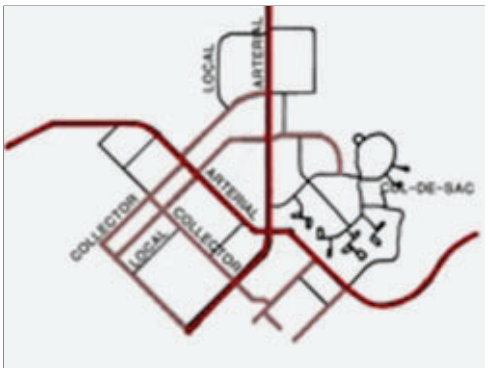
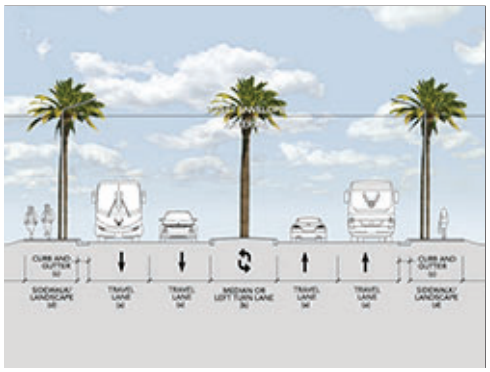
◉ Applicable ◯ N/A Small graphics



Hierarchy of Streets


Street Envelope Section

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 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. Provide two basic types of lanes (travel and auxiliary) throughout the street system to accommodate continuous “through” traffic and to satisfy requirements for turning, parking, and emergency and service vehicles. Turning lanes may be used as either left-turn or right-turn lanes at intersections.

11. Define bicycle traffic routes in the Installation Development plan or its applicable component plans. Currently there is too little bicycle traffic to warrant designate bike lanes on streets. Bike trails with connections to off-installation trails should be considered.

12. Use consistent landscape treatment at all base entrances. Plant material massing, spacing, and height are characteristics that should visually reinforce the type of street.

B02.1.1. Arterial Streets

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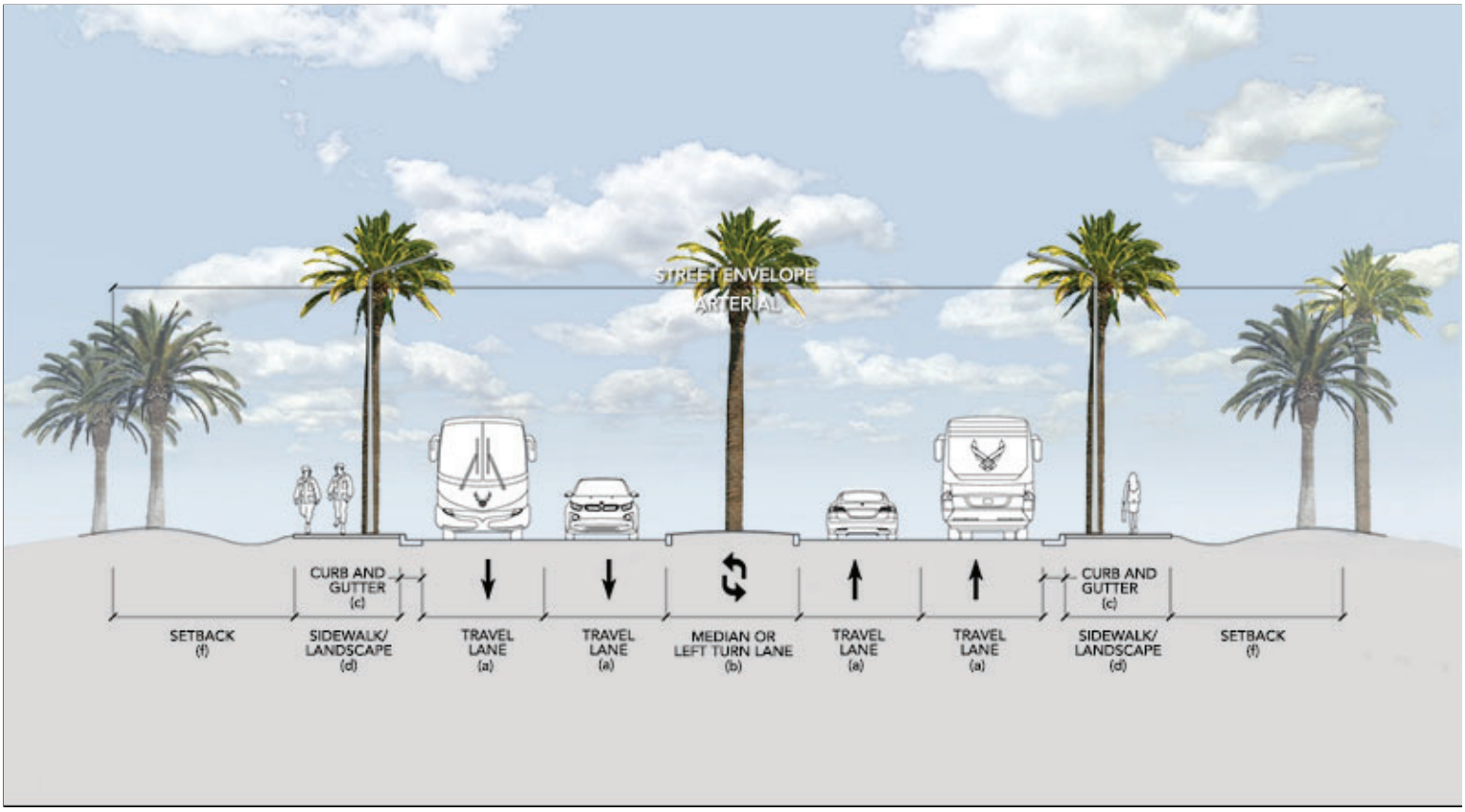
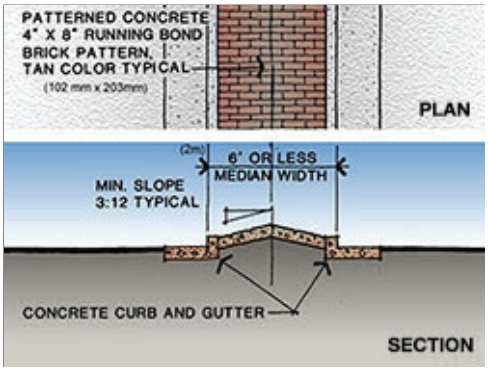
◉ Applicable ○ N/A Small graphics

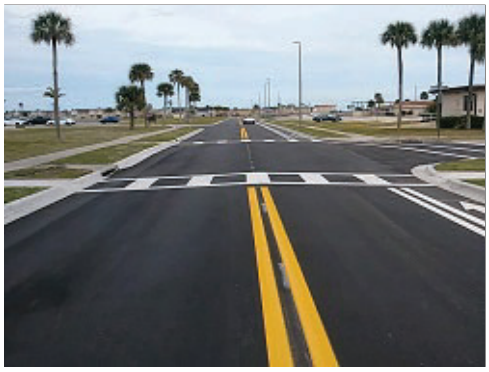


Travel Lane (a): 12′ Median (b): 12′ Curb and Gutter (c): 2′ Sidewalk / Landscape (d): 12′) Setback (f): Min. 35' or per AT



Paved Median

Axial Relationship



Intersection

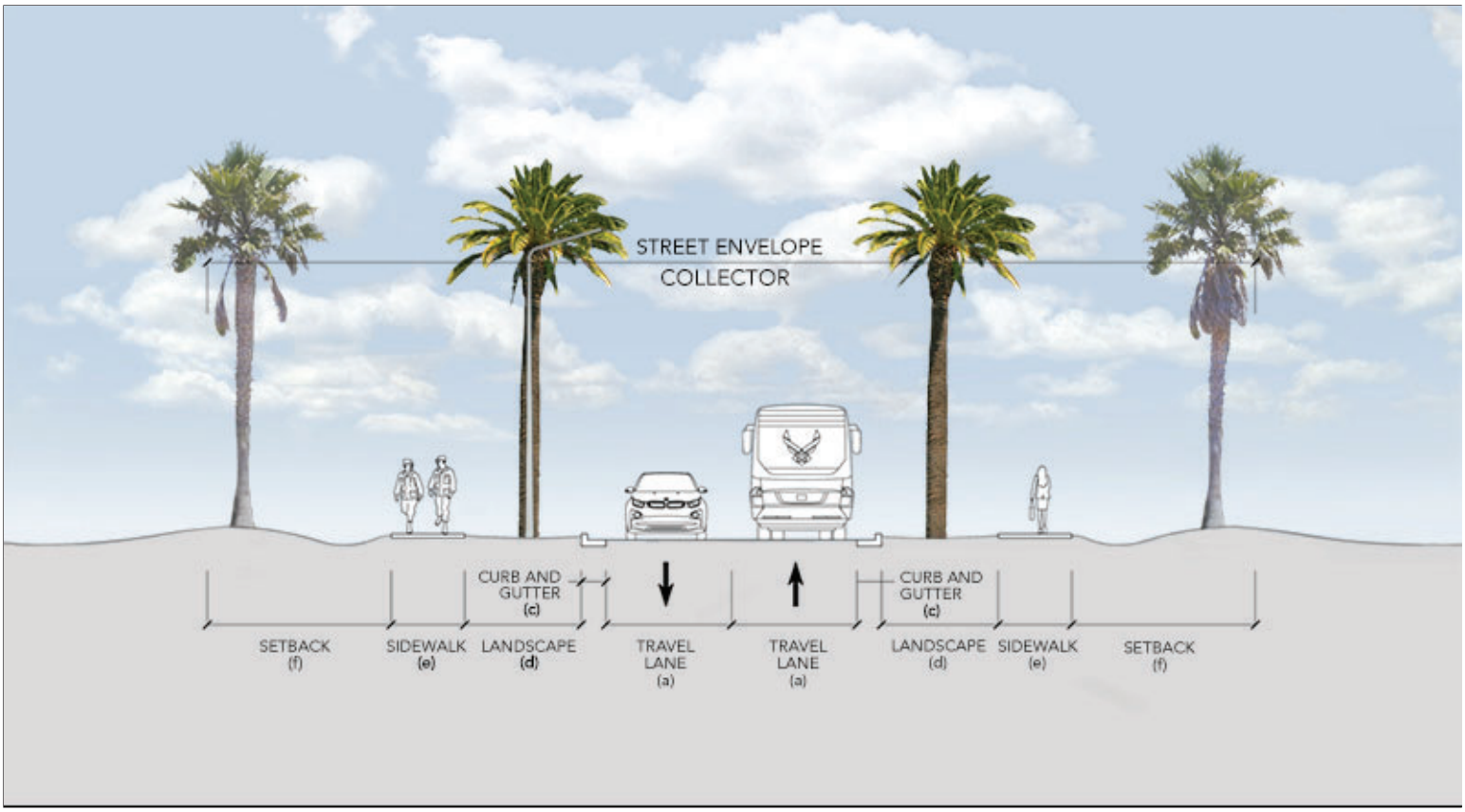
1. Maintain the following with this designation as arterial streets: Spacelift Avenue from the new Main Gate and the section of South Patrick Drive from the AFTAC Area to the South Gate. Refer to the illustration for general dimensions that pertain to all base arterial streets.

2. The following specific requirements will be incorporated into all arterial projects including roadway modifications/upgrades and associated building sites adjacent to the street.

B02.1.2. Collector Streets

◉ Applicable ○ N/A Large graphics

○ Applicable ◉ N/A Small graphics



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

1. Design collector streets less prominent than arterials.

2. Maintain the following as collector streets: Spacelift Avenue, Atlas Avenue, and Rescue Road.

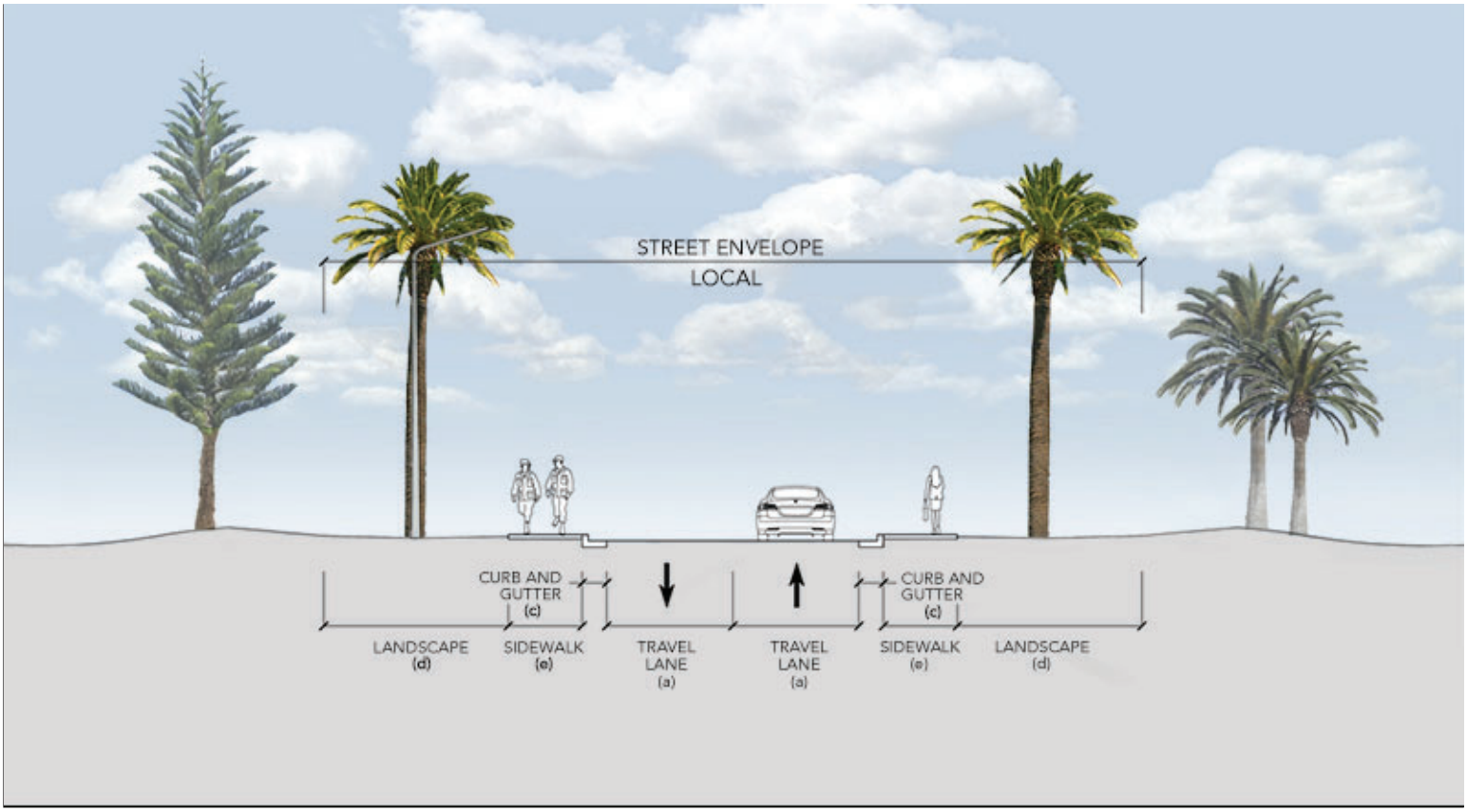
3. Match the level of quality of street elements to the adjacent Facility Group number.

End of Section

B02.1.3. Local Streets

◉ Applicable ○ N/A Large graphics

○ Applicable ◉ N/A Small graphics



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

1. Design and maintain local streets in due proportion to the amount of traffic.

2. Generally encourage the development of street frontage of adjacent sites to positively contribute features such as landscaping.

3. Maintain consistent local streetscapes for visual and functional continuity.

B02.1.4. Special Routes

○ Applicable ◉ N/A Large graphics

○ Applicable ◉ N/A Small graphics

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

B02.2. Hierarchy of Intersections

○ Applicable ◉ N/A Large graphics

○ Applicable ◉ N/A Small graphics

1. Provide a hierarchy of intersections to include arterial, arterial-collector, collector, collector-local and local following UFC 3-201-01 and its industry references.

2. Passive systems such as traffic circles are preferred to active systems such as signalized intersections. Aggressively pursue passive systems to lower maintenance requirements and reduce energy use.

3. Use 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

○ Applicable ◉ N/A Small graphics

1. Provide a circular design that encompasses the four corners of the intersection with a double row of orrnamental trees. In front of this, provide a large shrub bed made up of indigenous shrubs. Provide a perennial flower bed in front of the shrubs.

B02.2.2. Arterial/Collector

○ Applicable ◉ N/A Large graphics

○ Applicable ◉ N/A Small graphics

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

B02.2.3. Collectors

○ Applicable ◉ N/A Large graphics

○ Applicable ◉ N/A Small graphics

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

End of Section

B02.2.4. Special Intersections

◯ Applicable ◉ N/A Large graphics

◉ Applicable ◯ N/A Small graphics

Coordinated Signs


Signalized Intersection


Intregated Landscape

1. Develop all special intersections consistently with those adjacent to Group 1 facilities such as AFTAC as an example.

B02.2.5. Street Frontage Requirements

◯ Applicable ◉ N/A Large graphics

◯ Applicable ◉ N/A Small graphics

1. Maintain open space buffers.

2. Refer to C06.1.7. Streetscape Landscaping for planting and screen wall requirements along street frontage.

3. Open parking spaces (except in family housing areas) will be screened from view from adjacent streets to a minimum height of 3’ by the use of berms, plantings and trees.

B02.2.6. Sight Lines

◯ Applicable ◉ N/A Large graphics

◯ Applicable ◉ N/A Small graphics

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

2. Sight lines will vary based on the speed and classification of the roadway or intersection. Plants and any related signage within the sight triangle should follow these rules:
• Shrubs may not exceed thirty inches (30") growing height within sight triangles.
• Trees may not be located in the sight line triangle unless there is a minimum clear understory of 6’ in height.

End of Section

B02.3. Street Elements

○ Applicable ◉ N/A Large graphics

○ Applicable ◉ N/A Small graphics

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.

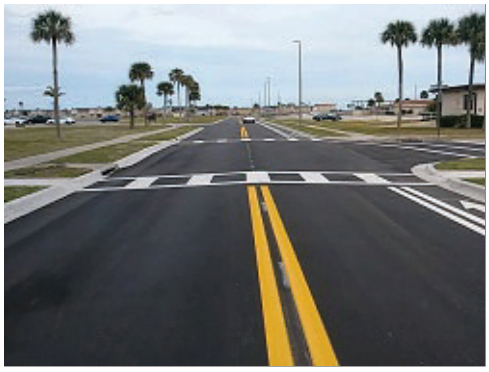
B02.3.1. Paving

○ Applicable ◉ N/A Large graphics

◉ Applicable ○ N/A Small graphics


Placement of Compliant Materials


Compaction Process


Standard Striping

1. Pavement design will comply with UFC 3-250-01. Ensure appropriate analysis and design of subgrade conditions to support low maintenance high performance pavements.

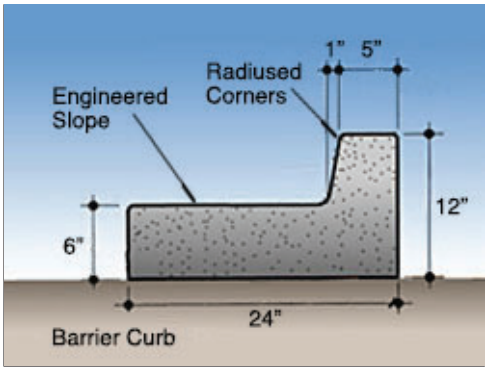
2. Materials for pavements will be specified in accordance with UFC 3-250-01 and must conform to requirements set forth in the Unified Facility Guide Specifications (UFGS) for concrete and asphaltic concrete.

3. SLD45 installations located in the State of Florida will follow Florida Dept of transportation regulations and standard specifications, unless otherwise stated or outline in the UFC or design.

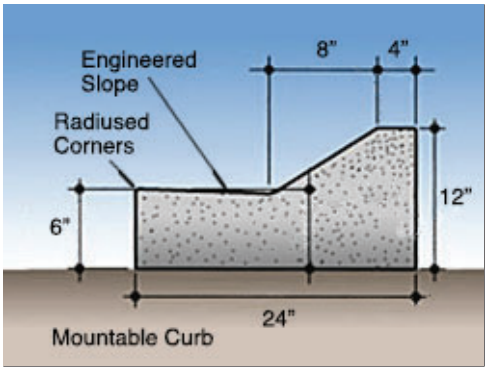
B02.3.2. Curb and Gutter

◯ Applicable ◉ N/A Large graphics

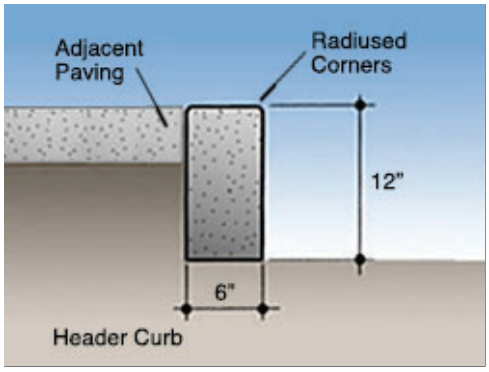
◉ Applicable ◯ N/A Small graphics



Barrier



Mountable



Header

1. Continuous concrete curbs will be provided at paved roads and parking areas adjacent to Group 1, Group 2 and Group 4 facilities.

2. Integral concrete curb and gutter will be used at areas with drainage (asphalt sloped towards curb). A header curb without gutter will be allowed in areas if adjacent asphalt is sloped away.

3. A minimum standard curb height of 6 inches will be consistently maintained. "Rolled" mountable curbs are allowed in Facility Group 4.

B02.3.3. Utility Service Elements

◯ Applicable ◉ N/A Large graphics

◯ Applicable ◉ N/A Small graphics

1. Provide all utility service lines below grade; when mounting elements (such as utility cabinets, communications equipment and water valves) above grade is unavoidable, paint these either Dark Green (factory) finish for transformers and switch gear, etc. or inorganic zinc (IOZ) for incidental metal piping, etc. as appropriate and with markings as required by UFC or code. Provide visual screening following Site Development, Landscaping.

2. Overhead service lines are prohibited. Exception is only for temporary power during construction projects for office or bathroom trailers. On ground rigid conduits is also allowed for temporary power.

3. See also appendix G11, G14 & G16 for further detailed directives.

B02.3.4. Traffic Signs

◯ Applicable ◉ N/A Large graphics

◯ Applicable ◉ N/A Small graphics

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

○ Applicable ◉ N/A Small graphics

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

B02.3.6. Other

○ Applicable ◉ N/A Large graphics

○ Applicable ◉ N/A Small graphics

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 Large graphics

◉ Applicable ○ N/A Small graphics


Central Plaza


Monument Feature


AFTAC Memorial

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 a 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 applicable sections of 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

◉ Applicable ○ N/A Small graphics

Riverside Dining Facility Outside Dining Area

SLD 45 Memorial Plaza

Outdoor Courtyard

1. Mitigate heat island by providing high-albedo, shaded plazas. Pervious pavers will be used on all plazas and courtyards in Facility Groups 1 and 2; use pervious concrete in Groups 3 and 4. The designer will incorporate appropriate expansion and construction joints.

2. Concrete masonry pavers or tiles may be used as accent materials at courtyards and similar public spaces to provide a different texture. Where such pavers are used, the color will conform to the range of beiges with accents in terra cotta. Pavers used on walks will be solid and set with mortar. Use pavers or stone walkways only to emphasize high profile facilities in Facility Groups 1 and 2 or to achieve some special effect. Use these types of walks sparingly because they are traditionally more expensive and require more maintenance than concrete sidewalks.

3. Scored/tooled concrete can also be used. Concrete stain can be used to highlight the scored area. Example shown has 24"x24" scored concrete with 6" quarry tiles as an accent. Use Wausau tile brick and concrete pavers, or equal.

End of Section

B03.1.2. Sculptures, Markers and Statuary

◉ Applicable ○ N/A Large graphics

◉ Applicable ○ N/A Small graphics

Approved Monument Sign with Sculpture

Marina Fallen Soldier

Apollo Capsule

Track Memorial

1. Relate new sculpture, markers and statuary to the SLD45 space mission 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. The new Main (East) Gate at Patrick SFB will be the initial area of focus.

3. All proposed memorials must 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 prohibited due to added maintenance cost and requirements.

4. Match the materials and / or color palette of adjacent buildings.

5. Use direct or indirect lighting to accentuate features or enhance an intended effect as approved by the BCE. Accent and aesthetic lighting is not authorized from 1 May to 31 October due to USFWS light management requirements for threatened and endangered sea turtle protection (45 SWI 32-7001 latest edition or appendix G08). Additionally, no uplighting is authorized for sea turtle and migratory bird protection.

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

○ Applicable ◉ N/A Small graphics

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. Structural requirements must be considered due to hurricane prone area and corrosion. Any exposed structural steel elements will be coated with gray inorganic zinc (IOZ).

3. At static displays where pedestrian paths are provided, a minimum of one trash receptacle and one bench must be provided. Receptacle and bench design must conform to IFS requirements.

B03.2. Grounds and Perimeters

○ Applicable ◉ N/A Large graphics

◉ Applicable ○ N/A Small graphics

Fencing along River

Retention Pond in Open Space

Open Space Buffer

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. See appendix G04 for further detailed directives.

4. Identify and describe base-wide utility corridors in the IDP.

5. Base-wide utility infrastructure will be inconspicuous. Bury all utility service lines below grade per UFC and codes.

6. Follow the requirements of this IFS regarding all utility structures 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. Only 2 sides may be covered to allow for visual inspection IAW UFC 4-022-03.

8. Reduce visual clutter and visual impact of the following items through a combination of careful placement, screen walls, landscaping and painting:
• Electrical switch-stations.
• Sewage lift stations.
• Water well pumps, storage tanks and/or related structures.
• Gas piping, meters and similar incidental items.
• Above ground fuel storage tanks.
• Any ground-mounted freestanding utility item exposed to view.

9. Larger structures such as electrical switch-stations, sewage lift stations, fuel storage tanks and mechanical/electrical equipment will be screened from view, using materials, forms, and colors in the screen walls which 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 in either Dark Green (factory) finish for transformers and switch gear, etc. or Patrick SFB Conch Shell for incidental piping, etc. as appropriate and with markings as required by UFC or code.

11. Maintain currently buried utility service lines as a visual asset.

12. Consolidate and enclose service utility lines in underground utility corridors when feasible. Create routes along the inside edge of parking lot islands.

13. Consider concrete precast walls to block prevailing ocean breeze to prevent premature corrosion.

14. See appendixes G09, G10, G11, G14, G16 for further detailed directives.

B03.2.1. Parade Grounds

○ Applicable ◉ N/A Large graphics

○ Applicable ◉ N/A Small graphics

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 ongoing maintenance are required. The Base Civil Engineer will determine quantities, sizes, and products on a case by case basis.

End of Section

B03.2.2. Parks

○ Applicable ◉ N/A Large graphics

◉ Applicable ○ N/A Small graphics

Beach Restrooms

Typical Pavilion

Riverside Running Trail

Notu HQ Pavilion, CCSFS

Notu HQ Pavilion, CCSFS

Covered Truss

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 or metal pre-manufactured storage sheds. Pavilions should be permanent in nature and constructed of concrete masonry block (CMU) with integral stucco finish or split face concrete block. Any fasteners used must be SS 316. Covering trusses with hardiboard type/ cemetitious soffit material to prevent corrosion.

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.

End of Section

B03.2.3. Preserves

○ Applicable ◉ N/A Large graphics

◉ Applicable ○ N/A Small graphics

Dune and Beach Protection NEED NEW PIC


South Base Stormwater Canals


Dune and Beach Protection


Native Species


Preserved Dune Vegetation


Preserved Open Space

1. Preserve areas that are designated as open space on the General Plan.

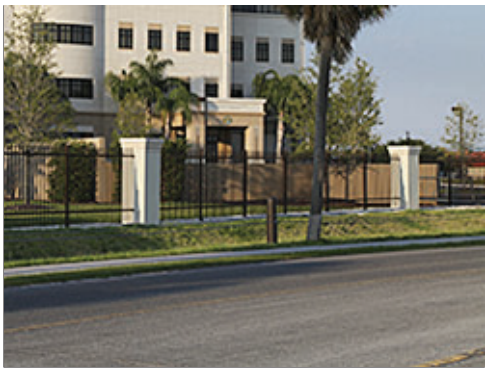
2. Provide minimal maintenance with mowing as needed for controlling bird behavior for airfield safety, or eliminating fire hazards.

End of Section

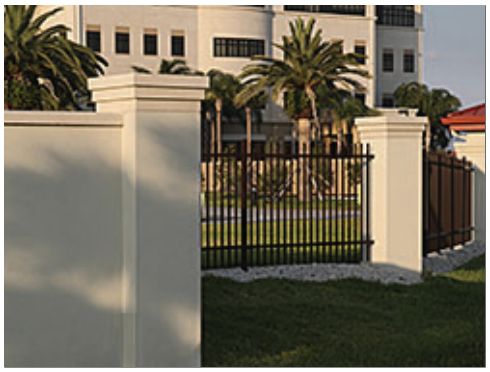
B03.2.4. Perimeter Fence

○ Applicable ◉ N/A Large graphics

◉ Applicable ○ N/A Small graphics



Anodized Aluminum Fencing



Perimeter Fence Detail

Cable Barrier

1. Design, install and maintain the base's perimeter fence following UFC 4-022-03.

2. Stringently comply with AT requirements following UFC 04-010-01 for all spaces adjacent to the base's perimeter fence and all base entrance gates

3. Fencing, gates and other elements that are associated with the main gates will be a level of quality equivalent to Facility Group 1. Perimeter base walls and housing walls will be constructed of stacked split face block to match the existing tan and terra cotta colors of the established Mediterranean architecture. Masonry joints will match the block color. Installation gates and decorative fencing must be black anodized aluminum picket with stucco "conch shell" colored pilasters or stacked split face block pilasters to match existing. Any approved chain link fencing must be black fused bonded PVC/vinyl coated galvanized chain link with black fused binded PVC/vinyl coated galvanized posts.

4. Maintain a positive visual quality along the traffic corridor on both sides of the installation gates and reinforce the base's space mission visual theme in applicable elements and features. Specifically address pedestrian access, circulation and common areas.

End of Section

C. SITE DEVELOPMENT

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

C01. SITE DESIGN

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

C01.1. Site Design Considerations

○ Applicable ◉ N/A Large graphics

◉ Applicable ○ N/A Small graphics

Generally Flat Site

Integrated Water Feature

Connectivity

1. The topography of Patrick SFB is generally flat. The drainage canals convey runoff from the north area of the base south to the Golf Course canals that ultimately discharges to the Banana River Lagoon. All new construction sites will take note the very low elevation of the installation and subsequent roads and airfield pavement areas constructed in the 1940's.

2. Comply with latest waste management implementation guidance in support of the SAF/IEE memorandum, managing AFFF-related perfluorooctane sulfonate and perfluorooctanoic acid (PFOS/PFOA) waste that directs the management of PFOS/PFOA-containing waste to protect human health. This AFGM will be updated as needed to address changes in regulatory requirements, DoD determinations of risk, or development of new technologies.

3. New construction must adhere to a finish floor elevation (FFE) at a minimum elevation of 10.5 feet MSL (NAVD88). This minimum requirement is based on storm surge predicted from the National Oceanic Atmospheric Administration (NOAA) Sea, Lake and Overland Surges from Hurricanes (SLOSH) model although according to Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM), Map Number 12009C0451E, many sites on Patrick SFB are located in Zone X-Other Areas which is defined as areas determined to be outside the 500-year flood plain. The SLD 45 has determined that no project to include Mission Partner facilities will be constructed under 9.5 feet based on NAVD88 and all sites will receive final approval of the FFE from the BCE. Recent MILCON projects include the AFTAC Campus, the Security Forces Facility, the Child Development Center, the 920th RQW Weapons Maintenance Facility, the 920 RQW Aircrew Life Support Facility, and the Fire Crash/Rescue Facility have been constructed with the approved FFE.

4. Dewatering in areas that are suspect of PFAS/PFOA must not be sent to areas of lower concentration of the contaminant. Only send dewatering affluent to a temporary earth berm containment or tanker containment.

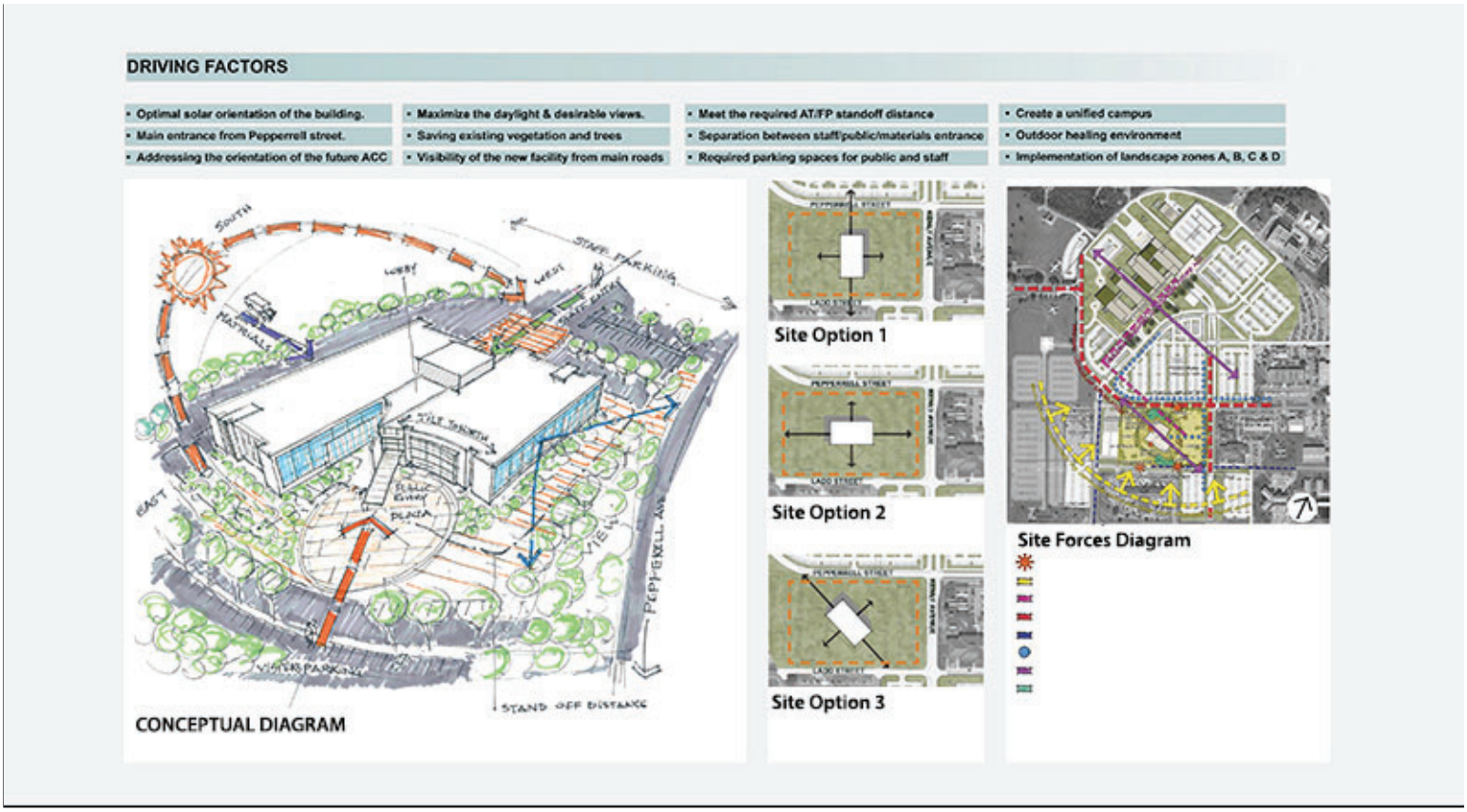
5. Foundations that cannot be constructed at the FFE of 10.5 feet MSL will consider pile driven pier foundations and grade beam design. This will alleviate the need to dewater for large foundations which is very costly. This structural design consideration will be mandatory for flightline/ramp areas adjacent to the airfield pavements that will use or need access to aircraft hangers etc. All flightline areas are suspected of being contaminated with PFAS/PFOA.

End of Section

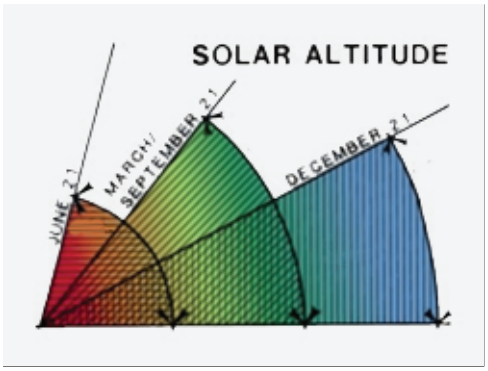
C01.2. Building Orientation

◉ Applicable ○ N/A Large graphics

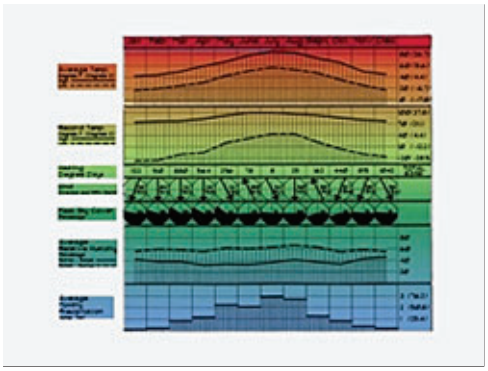
◉ Applicable ○ N/A Small graphics



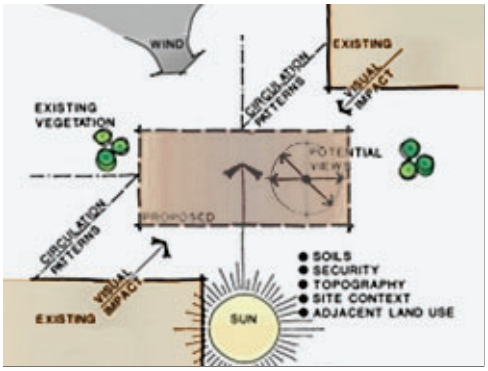
Conceptual Site Analysis and Site Design Diagram



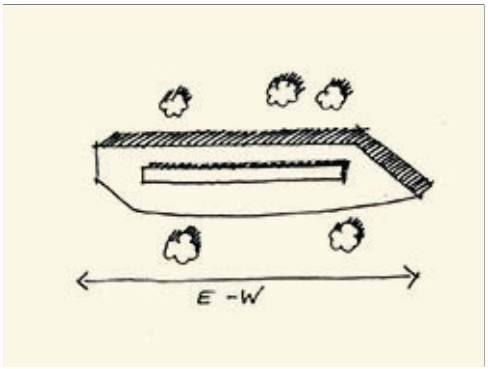
Local Solar Data



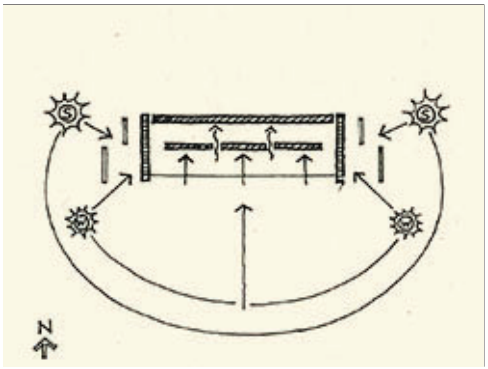
Local Climate Data



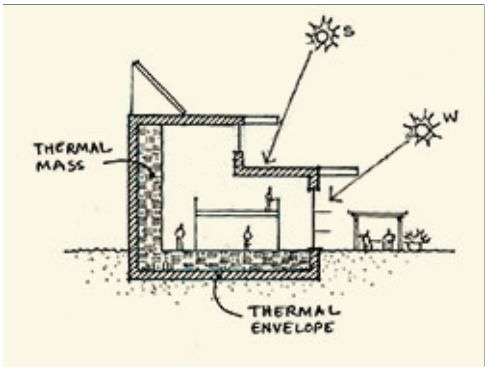
Site Data



East-West Axis



Optimum Solar Control



Maximized Southern Exposure

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

2. Meet Installation Facilities Standards (IFS) requirements for locating the building's passive and renewable-energy systems and exterior shading systems.

3. Locate buildings and permitted ancillary structures to promote solar gain (winter), solar shading (summer), daylighting, natural ventilation, rainwater harvesting, wind buffering and other beneficial passive systems. Consider natural ventilation during the design of HVAC systems.

4. Limit the use of courtyards and restrict their use to Group 1 and 2 facilities. When provided, conform to the geometry of rectilinear narrow buildings developed along an east-west axis. Define space with a building's exterior wall and with supplementary screen walls matching facility materials and detailing. Locate these near the main entrance, align with view corridors, and provide appropriate landscaping, site furnishings and lighting.

5. At a minimum, a courtyard must have one trash receptacle, one bench, movable or built-in planters, and one (1) picnic table with seating. Generally use concrete or brick paving at all courtyards following standards for plazas.

6. Consider relationships to adjacent sites and their facilities and infrastructure, and cost effectively integrate building systems to harvest solar, wind, grey water or other beneficial byproducts.

7. Consider the "public side" of the building, its views and the location of the main entrance.

8. Consider locating mechanical / electrical equipment on west side of buildings to shield from corrosive salt spray.

C02. UTILITIES

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

Comply with AF Corporate Standards for Utilities:
http://afcfs.wbdg.org/site-development/utilities/index.html

C02.1. Utility Components

○ Applicable ◉ N/A Large graphics

◉ Applicable ○ N/A Small graphics

Underground Utility Services

Screened Utility Component

Finishes to Match Wall

Screened Retaining Walls

Underground Utility Services

Underground Utility Services

Concrete utility pole

Concrete double walled fuel tank

Electrical Switchgear

1. Provide all on-site utility service lines below grade. 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) and in appendixes G.

2. Overhead service lines are prohibited. Bury these lines to include: electrical power grid and service lines; telephone, cable TV, and communications lines; exterior lighting service lines; and any similar system serving SLD 45 facilities.

3. Consolidate and enclose buried service lines in underground utility corridors and route these along the inside edge of parking lot islands. Keep all new underground utilities off roadway and under facilities. Use sidewalk corridors.

4. Define all service entry points into the building and route distribution below grade into an interior space within the facility; exposed conduits, cables and wires on exterior walls are not permitted for Facility Group 1 and 2 and must be avoided as much as possible.

5. Screen the following elements with screen walls integrated into the adjacent building design: storage buildings, temporary buildings, miscellaneous utility structures, transformer buildings, etc.

6. Screen utility equipment and structures while allowing required clearance for safety and maintenance for the following: building-related mechanical/electrical equipment; gas piping, meters and similar incidental items; and any ground-mounted free-standing utility item exposed to view. (Note: window air conditioners are not permitted.)

7. Paint above-ground equipment and associated components such as electrical piping or exposed plumbing lines in either Dark Green (factory) finish for transformers and switch gear, etc. or gray inorganic zinc (IOZ) for incidental metal piping, etc. as appropriate and with markings as required by UFC, code. See appendix G09, G11, G14, G16.

9. Include consideration of appropriate placement of meters in support of Automated Revenue Management Services (ARMS). Place meter in mechanical rooms. See appendix G13, G14

10. Limit exterior mechanical distribution systems such as chilled water distribution to Group 3 facilities; when required for Group 1 and 2 facilities integrate with the architecture and provide visual screening following IFS.

11. Direct roof drainage to underground collection when feasible or provide splash blocks / paved channels to intercept roof drainage at grade. Include rock perimeter around facilities to keep edge of exterior walls away from grass mowing.

C03. PARKING AREAS

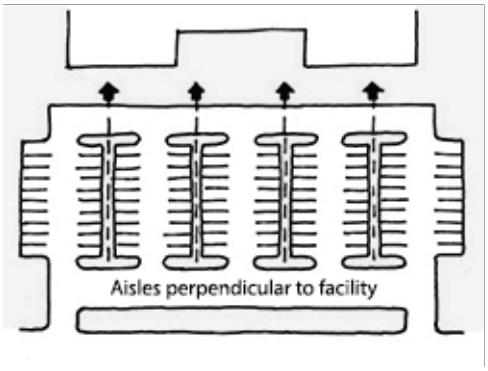
Comply with AF Corporate Standards for Site Development:
http://afcfs.wbdg.org/site-development/index.html

Comply with AF Corporate Standards for Parking Areas:
http://afcfs.wbdg.org/site-development/parking-areas/index.html

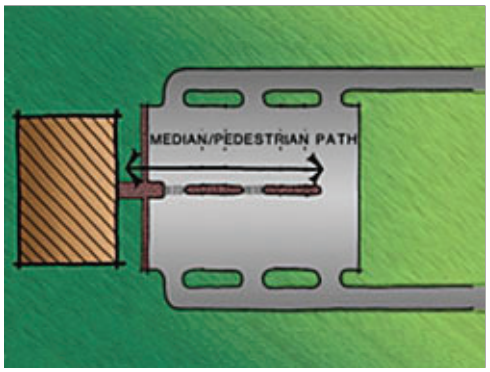
C03.1. Configurations and Design

○ Applicable ◉ N/A Large graphics

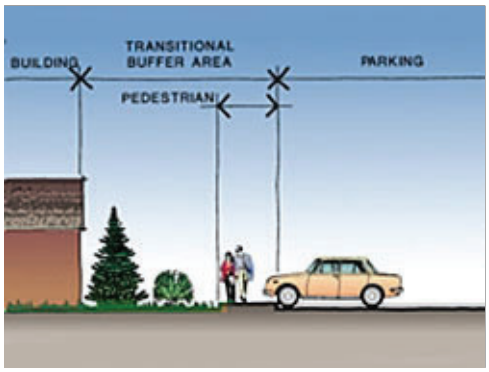
◉ Applicable ○ N/A Small graphics



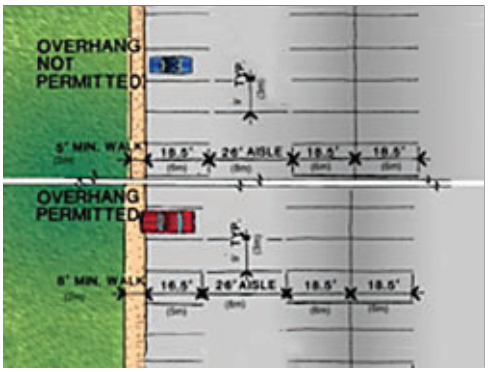
Appropriate Size and Configuration



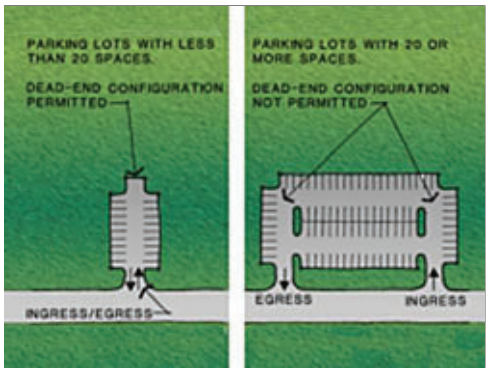
Defined Pedestrian Path



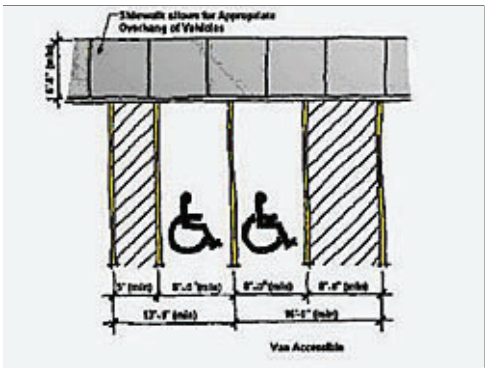
Appropriate Buffers



Preferred Geometry



Internal Layout


ADAG/ABA Parking

1. Evaluate adjacent sites and cost-effectively consolidate parking areas to maximize efficient use; ensure that all areas meet accessibility guidelines.

2. The preferred arrangement is off-street lots containing no more than seventy-five (75) to one hundred (100) full-car spaces. Facilities requiring more than one hundred (100) spaces will have a series of lots connected by an external perimeter access drive.

3. Provide the number of spaces required for a facility on the site and meet design requirements for following Air Force Manual 32-1084. Allow sufficient space and potential future expansion.

4. Parking lots must accommodate all vehicles that will serve the facility. Provide access for fire apparatus according to NFPA. Consider parking garages for large occupancy facilities, since PSFB is land-constrained and has limited space.

5. Parking lot layouts that promote cross-traffic between parallel streets should be avoided for safety reasons.

6. 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.

7. Locate all parking lots outside required setbacks and preserves. Encroachments must be approved on a case basis and incorporate landscaping, berms, and screen walls as required by Installation Facilities Standards (IFS). Setback requirements from buildings will be calculated from UFC 4-010-01 Anti-terrorism Standoff Distances for Buildings.

8. Appropriately size loading and service dock areas based on operational requirements. Locate these areas to the rear or sides of a building, away from the main building entrance, related high visibility areas, or an incompatible adjacent land use. Clearly separate service areas from adjacent parking lots and access drives with curb and gutter and landscaped "divider strips."

9. Dead-end parking lots will be avoided and two access drives provided for lots exceeding twenty (20) spaces. If additional access (ingress/egress) drives cannot be provided for larger lots, convenient interior circulation should allow for efficient maneuvering of vehicles.

10. Access drives, which serve parking lots, may be either two-way or one-way.

11. Two-way access drives will be twenty-six feet (26') wide measured from back of curb to back of curb. One-way access drives will be fifteen feet (15') wide measured from back of curb to back of curb.

12. Access drives will be separated from street intersections by a minimum distance of: (a) one hundred feet (100') along arterial streets, (b) seventy-five feet (75') along collector streets, and (c) fifty feet (50') along local streets. To minimize conflicts with street traffic, parking lot ingress and egress access roads should be kept to the minimum necessary.

13. Access and service drives should accommodate the largest vehicle serving the facility.

14. 90-degree spaces and two-way traffic aisles will typically be used. If required by site limitations or high rate of turnover, 60-degree spaces may be used with one-way traffic aisles. Use consistent and stall sizes throughout a parking area.

15. Parking space dimensions will be nine feet (9') by eighteen feet (18'-0"); where vehicle overhang is permitted, provide stalls nine feet (9') by sixteen feet six inches (16'-6").

16. Motorcycles can be placed at 4 ½' width, thus two per standard vehicle space.

17. Motorcycle parking is also permitted at the end of parking lanes in yellow or white hashed areas. Motorcycle parking must have concrete pavement surfaces to support motorcycle kick stands.

18. Provide parking spaces for disabled use in quantities, sizes and locations as prescribed in the Architectural Barriers Act (ABA).

19. Reserved parking is discouraged except for Facility Group 1. Organizations requesting reserved parking spaces must submit their request through their facility manager via the work task to 45 CES customer service. The request must be approved by the organization's unit commander or designated representative prior to submission.

20. On-street parking is discouraged except in multi-use areas and family housing areas. When used, provide approved on-street parking configurations following UFC 3-201-01.

21. Drainage water from parking lots should be directed to adjacent landscaped areas and storm water retention areas as required which may be necessary to accommodate runoff from larger paved areas.

22. A principal factor in parking lot grading will be to provide positive drainage away from buildings and to prevent ponding of water on pavement surfaces.

C03.1.1. Paving and Striping

○ Applicable ◉ N/A Large graphics

◉ Applicable ○ N/A Small graphics

Asphaltic Paving

White Striping

Tactile Warning BUMPS

Facility Group 1 paving materials will be as follows.

Primary:	Asphaltic concrete
Secondary:	Concrete
Accent:	Permeable pavers

Facility Group 2 paving materials will be as follows.

Primary:	Asphaltic Concrete
Secondary:	N/A
Accent:	N/A

Facility Group 3 paving materials will be as follows.

Primary:	Concrete where operationally required
Secondary:	Asphaltic Concrete
Accent:	N/A

Facility Group 4 paving materials will be as follows.

Primary:	Concrete
Secondary:	N/A
Accent:	N/A

1. Parking stall areas in Groups 1 and 2 will be constructed of asphalt or permeable paver's / asphalt. If provided, paver stall areas will be separated from the asphalt drive aisles with a 6" wide by 12" deep at grade concrete edge barrier.

2. 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.

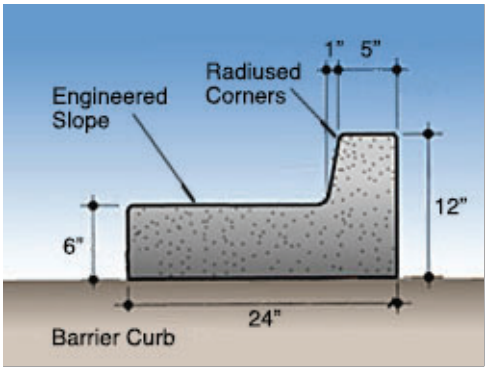
5. All parking will be marked with white stripes of paint or applied vinyl coatings. Yellow markings will only be used for safety purposes and must be kept to a minimum. All lines will be four inches (4") wide.

6. Disabled spaces will be marked with signs following section C08.1.8.

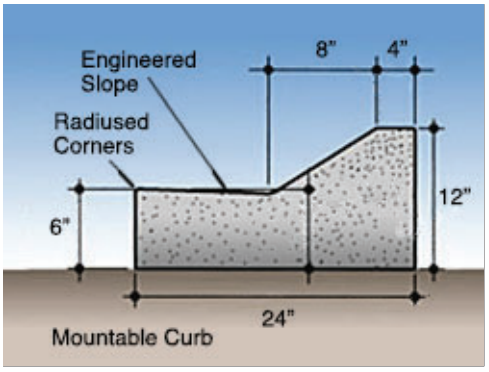
C03.1.2. Curbing

○ Applicable ◉ N/A Large graphics

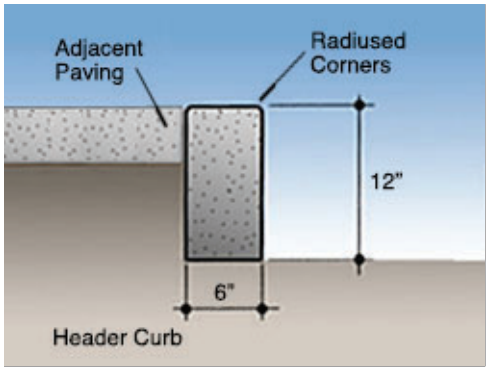
◉ Applicable ○ N/A Small graphics



"Barrier" Curb



"Mountable" Curb



Header Curb

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

Primary: Concrete

Secondary: N/A

Accent: N/A

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

Primary: Concrete

Secondary: N/A

Accent: N/A

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

Primary: Concrete

Secondary: N/A

Accent: N/A

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

Primary: Concrete

Secondary: N/A

Accent: N/A

1. Define all parking lots edges with curbing to present a clean, orderly appearance, eliminate significant safety hazards, and to define and conserve transitional landscaped areas between parking lots and adjacent buildings. All curbs will be the rolled (mountable) type.

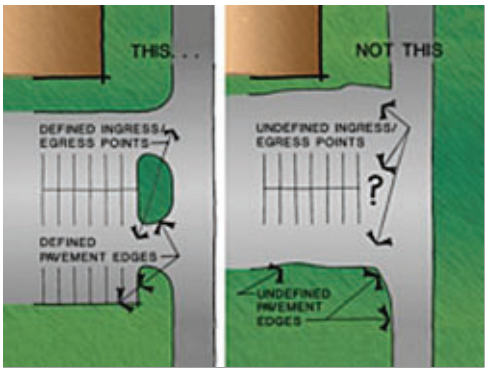
2. Integrate curbing, asphalt pavements, permeable paved areas, and parking islands with the stormwater system and consider stormwater as source water for regionally appropriate native vegetation.

3. Wheel stops are allowed on a case-by-case basis. If used, it will be concrete.

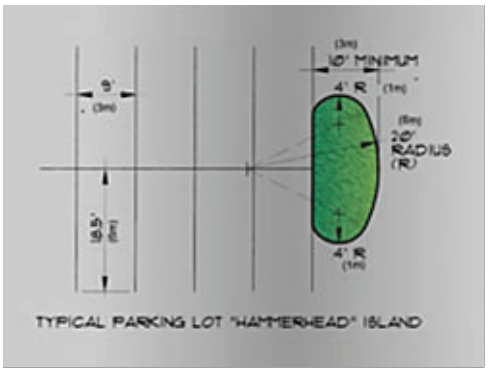
C03.1.3. Internal Islands and Medians

○ Applicable ◉ N/A Large graphics

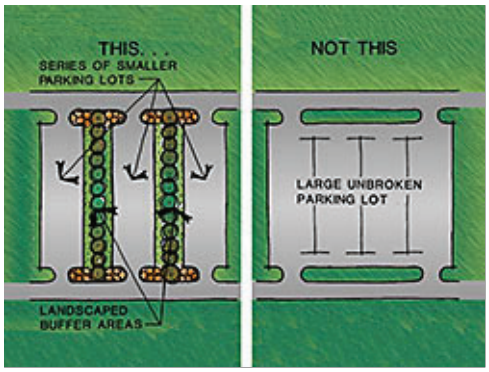
◉ Applicable ○ N/A Small graphics



Defined Entrance



Internal Island



Internal Median

1. Do not Install internal medians. Use landscape internal islands. Coordinate suitable landscape or barriers integrated with walls and fences to ensure adequate force protection if required.

2. When lighting is necessary, contain fixture bases within internal landscape islands. Accent and aesthetic lighting are not authorized from 1 May to 31 October due to USFWS light management requirements for threatened and endangered sea turtle protection (45 SWI 32-7001 or latest edition). Additionally, no uplighting is authorized for sea turtle and migratory bird protection.

End of Section

C03.2. Parking Structures

○ Applicable ◉ N/A Large graphics

◉ Applicable ○ N/A Small graphics

AFTAC Parking Structure

AFTAC

AFTAC

1. Parking structures are permitted in land-constrained locations such as the new AFTAC campus where economically feasible.

2. Consider opportunities for integrating parking structures into multi-use developments with pedestrian-oriented uses located on the ground floor and parking on upper levels. Any exposed infrastructure elements in the parking garage must consider corrosion and use inorganic zinc coatings, etc.

C03.3. Connectivity

○ Applicable ◉ N/A Large graphics

○ Applicable ◉ N/A Small graphics

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. Evaluate the IDP for the current and planned network of roads and optimally develop vehicular access to and from the site.

3. Define pedestrian access with approved hard-scape, 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://afcfs.wbdg.org/site-development/index.html

Comply with AF Corporate Standards for Stormwater Management:
http://afcfs.wbdg.org/site-development/stormwater-management/index.html

C04.1. Stormwater Requirements

○ Applicable ◉ N/A Large graphics

◉ Applicable ○ N/A Small graphics

Stormwater Pond

Stormwater System

South Base Regional Stormwater Canal

1. Stormwater management is a significant concern with any new construction and may require permitting through Saint Johns River Water Management District (SJRWMD) and/or the Florida Department of Environmental Protection (FDEP), IAW62-330 the Clean Water Act (CWA) and F.A.C. 62-330. All stormwater permitting should be coordinated through the BCE.

2. Sustainable site design will include the application of stormwater management strategies. Configure project sites to minimize stormwater runoff where possible.

3. 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.

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. When underground drainage systems are required establish a maintenance program to include removal of sediments and debris; inspect joints seasonally for alignment to prevent leakage and the development of voids and surface failures.

6. Install water quality ponds or oil grit separators as surface water runoff filtration systems.

7. Cost-effectively integrate stormwater systems with AT measures.

8. See Appendix G03 for further detailed directives.

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

◉ Applicable ○ N/A Small graphics

Riverside Dining Facility Courtyard

SLD 45 Memorial Plaza

Riverside Trail

Sidewalk adjacent to Memorial Plaza

Typical sidewalk

Broadwalk at Outdoor Recreation

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

Primary:	Travertine Pavers on conc formed ramps/patios
Secondary:	Natural Travertine, slip resistant finish
Accent:	N/A

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

Primary:	Pervious Pavers or wood for shoreline areas
Secondary:	Concrete Edging as appropriate
Accent:	N/A

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

Primary:	Permeable concrete or Pervious Pavers
Secondary:	N/A
Accent:	N/A

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

Primary:	Permeable concrete or wood for shoreline areas
Secondary:	N/A
Accent:	N/A

1. Maintain efficient geometry and accessibility to connect building entrances to adjacent parking areas and activity areas and to the base transportation system following AT. Efficiently use materials to optimize life-cycle costs and to minimize maintenance.

2. Generally conform horizontal layouts of sidewalks to the geometric configuration of adjacent buildings, streets, parking lots, and other adjacent related site amenities. Occasional meanders and/or jogs may be included to capture views, to coordinate with landscaping or accommodate site constraints.

3. Walks in parking areas will provide a direct path using "safe islands" and "peninsulas" to encourage safety. Walks parallel to streets will follow streetscape guidelines. Clearly mark pedestrian crossings at vehicular routes.

C05.1.1. Ramps and Stairs

○ Applicable ◉ N/A Large graphics

◉ Applicable ○ N/A Small graphics

Ramp Integrated with Building

Ramp with Coordinated Railings

Stair with Highly Durable Finishes

1. Use ramps instead of steps for sidewalks, bikeways and trails and at all buildings. Where steps are unavoidable, the following will apply:
a. The minimum clear width of steps will be five feet.
b. Materials will be limited to combinations of concrete and brick pavers conforming to this IFS.
c. Minimum riser height will be 4" and a maximum of 7", and the minimum tread depth will be 11".
d. Open treads or recesses at nosings that may catch shoe toes will not be used.
e. Provide black anodized aluminum handrails (picket style) at steps containing two (2) or more risers. Do not use a central rail unless steps are more than 88" wide.

C05.1.2. Lighting

○ Applicable ◉ N/A Large graphics

◉ Applicable ○ N/A Small graphics

Coordinated Path and Entrance Lighting

Pedestrian Scaled Fixture

Lighted Bollards Defining Entrance

1. Lighting will be provided for all steps and landing areas where traffic warrants. Appropriate fixtures that maintain shielded light on walkways is necessary instead of non-directional lighting that illuminates entire areas (USFWS light management requirements).

2. Refer to the Lighting section for path lighting along sidewalks, bikeways and trails.

C06. LANDSCAPE

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

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

C06.1. Climate-based Materials

○ Applicable ◉ N/A Large graphics

◉ Applicable ○ N/A Small graphics


Seagrape


Pink Muhly Grass


Florida Coontie

1. Please refer to the SLD45 Master Plant List contained in the Appendixes for a complete listing of approved indigenous and native groundcover, palms, shrubs, trees, and turf. Also reference the Florida Exotic Pest Plant Council 2019 list of Category I and II invasive plants. See appendix G07 for detailed full listing.

2. 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.

End of Section

C06.1.1. Landscape Design Concept

○ Applicable ◉ N/A Large graphics

◉ Applicable ○ N/A Small graphics

Ornamental Species at Group 1

Native Species

Zeroscape

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 will be landscaped at their entire perimeter; limit formal planting arrangements to formal spaces typically associated with Group 1. Landscape public spaces near the main entrances of Group 1 facilities.

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 must 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. Use plantings in open spaces to reinforce the space as a visual asset.

10. Consider landscape windbreaks when suitable for the local climate.

11. Integrate security requirements into the landscape design. Coordinate the heights of trees and shrubs and note restrictions for plantings following UFC 4-010-01.

12. Berms may be used as an integral part of the overall landscape strategy for screening, security and/or visual interest.

13. Landscaping is prohibited in areas that have the potential to penetrate airfield imaginary surfaces as identified in UFC 3-260-01. Only use sod in these areas.

C06.1.2. Xeriscape Design Principles

○ Applicable ◉ N/A Large graphics

◉ Applicable ○ N/A Small graphics

Predominant Use of Rock Mulch

Trees and Shrubs Planting

Xeric Plant 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

○ Applicable ◉ N/A Small graphics

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

◉ Applicable ○ N/A Small graphics

Typical Groundcover

Fantail Palm

White Geiger Tree

Silver Buttonwood

Sunshine Mimosa

Cabbage, Sabal and Canary Date Island Palms

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 SLD45 Master plant management list; See appendix G07.

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. Consider underground utilities and possible root travel of trees. Do not plant trees that will become large such as oaks near building foundations and paving and utilities.

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 will have one-year warranty and is subject to approval by the Building Official/AHJ.

C06.1.5. Water Budgeting (Hydrozones)

○ Applicable ◉ N/A Large graphics

◉ Applicable ○ N/A Small graphics

Foundation Planting

Preserved Native Vegetation

Planting Bed in Group 5

1. Comply with DoD and Air Force policy on potable-water irrigation systems.

2. Provide irrigation systems in new construction to establish plant materials following “Water for Landscaping” in UFC 1-200-02. Note the climate zone and annual rainfall for the locale.

3. New buildings will cost-effectively integrate a grey-water reclamation system following UFC 1-200-02, which provides source water for an automatic drip irrigation system; connect adaptive plantings adjacent to facilities to a grey-water irrigation system when available and discontinue the use of potable water for irrigation after the establishment period.

4. Users must be briefed that landscape irrigation systems are not maintained by BCE and may be paid for by individual units if they so choose.

5. Irrigation design will follow 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).

C06.1.6. Base Entrance Landscaping

○ Applicable ◉ N/A Large graphics

◉ Applicable ○ N/A Small graphics

Ornamental Native Species

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.

End of Section

C06.1.7. Streetscape Landscaping

○ Applicable ◉ N/A Large graphics

◉ Applicable ○ N/A Small graphics

Street Trees and Grasses

Predominant Use of Grasses

Accent Planting at Intersection

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

◉ Applicable ○ N/A Small graphics

Detached Sidewalk at Street

Attached Sidewalk at Parking Area

Xeric Planting of Trees and Shrubs

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.

End of Section

C06.1.9. Parking Lot Landscaping

○ Applicable ◉ N/A Large graphics

◉ Applicable ○ N/A Small graphics

Landscape Island

Xeric Plantings

Landscape Used for Visual Screen

1. Integrate appropriate landscaping elements into parking areas to visually soften the appearance and to provide shading as needed for the application.

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 will 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

◉ Applicable ○ N/A Small graphics

Landscape Screening

Parking Lot Island with Screening

Accent Planting at Secondary Entrance

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

○ Applicable ◉ N/A Small graphics

C07. SITE FURNISHINGS

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

Comply with AF Corporate Standards for Site Furnishings:
http://afcfs.wbdg.org/site-development/site-furnishings/index.html

C07.1. Furnishings and Elements

○ Applicable ◉ N/A Large graphics

◉ Applicable ○ N/A Small graphics


Concrete Bollards


Coordinated Concrete Site Furnishings


Screen Walls and Planters

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, vending machines, walls and fences to reduce visual clutter and to lessen the requirements for maintenance.

3. Group 1 and 2 site furnishings will be architecturally compatible, able to withstand the extreme corrosive environment and must be approved by the BCE. Group 3 and 4 site furnishings will be vinyl-coated galvanized aluminum or equal utilizing a mesh, open-weave design. Generally match the site furniture of adjacent facilities and the facility district.

4. Install needed outdoor seating (benches and low walls) in public gathering spaces near main and secondary building walls will match facility architecture.

5. Provide bicycle racks as needed. Use the approved stanchion design or curvilinear design with black anodized aluminum or heavy-duty galvanized steel. Locate racks per AT requirements.

6. Limit the use of bollards except as a best choice for walkways to direct lighting on the path and reduce unnecessary wasted area lighting. When required for force protection use precast concrete non-illuminated bollards for all facility groups, parks and trails. Illuminated bollards may be used as approved on a case basis; light shields will be factory finished black anodized aluminum.

7. When visual screening is necessary, consider landscaping as the first option; screen walls are permitted finished with split face block with integral color or concrete masonry block (CMU) with integral colored stucco and detailed to match the adjacent facilities.

8. Perimeter base walls and housing walls will be constructed of stacked split face block to match the existing tan and terra cotta colors of the established Mediterranean architecture. Masonry joints will match the block color. Installation gates and decorative fencing must be black anodized aluminum picket with stucco "conch shell" colored pilasters or stacked split face block pilasters to match existing. Any approved chain link fencing must be black vinyl coated galvanized chain link with black vinyl coated galvanized posts.

9. Provide trash dumpster enclosures with split face block with integral color with caps or concrete masonry block (CMU) with integral colored stucco detailed to match the adjacent facilities. Construct only two sides per AT requirements.

10. Group 1, 2 and 3 picnic tables and seating will be precast concrete with a textured finish to match similar to benches. Group 4 and recreational areas will have vinyl-coated galvanized steel picnic tables and seating in an open mesh design. Generally limit picnic tables, barbecue grills and drinking fountains to lodging, dormitories, housing areas, parks and recreation areas.

11. Limit the use of freestanding planters to areas with ongoing maintenance.

12. Flagpoles using Patrick SFB standards may be installed in accordance with AFI 34-1201 as approved on a case basis. Flagpole lighting requires coordination with the BCE to ensure special requirements are met due to sea turtle protection requirements.

13. Refer to the Overview Section “Facility Hierarchy” topic of this IFS for guidelines regarding ancillary structures such as pavilions.

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 1

Type: **Concrete Bench**

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

Mfr: Dura Art Stone

Color: Weatherstone Gray

Finish: Standard Finish (Smooth)

Model #: N/A

Other: N/A

UFGS: N/A

C07.2.3. Bike Racks

◉ Applicable ○ N/A Number of base standards 1

Type: **Multiple bike rack**

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

Mfr: Brandir International Inc.

Color: Black

Finish: Black Anodized aluminum or Factory finished or powder coated

Model #: The Ribbon Bike Rack, RB-07

Other: Racks should be secured to the ground and constructed for high security and heavy use

UFGS: N/A

C07.2.4. Bike Lockers

○ Applicable ◉ N/A

C07.2.5. Bollards

◉ Applicable ○ N/A Number of base standards 1

Type: **Pre-cast concrete**

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

Mfr: Dura Art Stone

Color: Weatherstone Gray

Finish: Textured

Model #: Rock and seashell aggregate

Other: Bollards will be of durable pre-cast concrete construction and treated for outdoor use and the salt environment. Light options for effective walkway downlighting must be turtle-friendly and approved by the BCE

UFGS: N/A

C07.2.6. Bus Shelters

○ Applicable ◉ N/A

C07.2.7. Drinking Fountains

◉ Applicable ○ N/A Number of base standards 1

Type: **Pedestal**

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

Mfr: Most Dependable Fountains, Inc.

Color: Natural

Finish: Stainless Steel

Model #: MDF 440 SMSS

Other: Accessible

UFGS: N/A

C07.2.8. Dumpster Enclosures / Gates

◉ Applicable ○ N/A Number of base standards 1

Type: **Concrete Masonry Block (CMU) with Stucco or Split Face Block**

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

Mfr: Demaco Block or equivalent

Color: Camel to match Patrick SFB Conch Shell color

Finish: CMU/integral stucco finish or split face block with precast top cap

Model #: Match adjacent building

Other: Powdered coated or anodized aluminum gates and hardware, black

UFGS: Section 04 20 00 Unit Masonry

C07.2.9. Fencing

◉ Applicable ○ N/A Number of base standards 3

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

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

Mfr: General Wire Co.

Color: Black

Finish: Black fused bonded PVC coated

Model #: 9 gauge, 2" Chain link, steel posts and rails, gates and accessories

Other: N/A

UFGS: Section 32 31 13 Chain Link Fences and Gates

Type: **Style B Barrier: High security, medium visibility**

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

Mfr: Custom

Color: Black Picket Fencing/Patrick AFB Conch Shell Columns

Finish: Powder coated aluminum railing/CMU with integral 5-part STO stucco

Model #: Aluminum grid, verticals, round rod horizontals

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

UFGS: N/A

Type: **Cable Barrier**

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

Mfr: Custom

Color: Glavanized

Finish: Factory

Model #: N/A

Other: N/A

UFGS: N/A

C07.2.10. Flagpoles

◉ Applicable ○ N/A Number of base standards 2

Type: **1**

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

Mfr: Stresscrete

Color: Beige tones to terra cotta

Finish: Aggregate texture

Model #: As approved by BCE

Other: Installation flagpole and decorative flagpoles in Memorial Plaza

UFGS: N/A

Type: **Spun Aluminum**

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

Mfr: Eder Flag

Color: Natural aluminum

Finish: Satin Lustre

Model #: ECL30 IH, Internal Halyard

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

UFGS: N/A

C07.2.11. Lighting – Landscape / Accent

Please refer to the Lighting section.

C07.2.12. Litter and Ash Receptacles

◉ Applicable ○ N/A Number of base standards 2

Type: **Style 1: Precast concrete**

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

Mfr: Dura Art Stone

Color: Weatherstone Gray

Finish: Smooth

Model #: As approved by the BCE

Other: Rigid plastic internal liner

UFGS: N/A

Type: **Style 2: Metal**

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

Mfr: Wabash Valley

Color: Black

Finish: Perforated Pattern

Model #: Urbanscape “E” with liner, 32 Gallon

Other: With dome top, without side door

UFGS: N/A

C07.2.13. Picnic Tables

◉ Applicable ○ N/A Number of base standards 1

Type: **Precast concrete**

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

Mfr: Dura Art Stone

Color: Weatherstone Gray

Finish: Standard Finish (Smooth)

Model #: As approved by BCE

Other: N/A

UFGS: N/A

C07.2.14. Planters

◉ Applicable ○ N/A Number of base standards 1

Type: **Precast concrete**

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

Mfr: Dura Art Stone

Color: Weatherstone Gray

Finish: Standard finish (smooth)

Model #: Size and shape as approved by the BCE

Other: N/A

UFGS: N/A

C07.2.15. Play Equipment

◉ Applicable ○ N/A Number of base standards 1

Type: **AF Corporate Contract**

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

Mfr: N/A

Color: Muli-color

Finish: Factory

Model #: N/A

Other: N/A

UFGS: N/A

C07.2.16. Screen Walls

◉ Applicable ○ N/A Number of base standards 2

Type: **Split-face block**

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

Mfr: Demaco

Color: Camel tones to match Patrick SFB Conch Shell color

Finish: Split-face block

Model #: CMU stacked bond with matching grout and precast top cap

Other: CMU (or stucco) piers and concrete infill panels may be used or anodized aluminum or powdered coated black fencing will be allowed

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

Type: **Concrete Masonry Block (CMU) with stucco**

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

Mfr: N/A

Color: Camel tones to match Patrick SFB Conch Shell color

Finish: Medium stucco texture

Model #: N/A

Other:

UFGS:

C07.2.17. Tree Grates

◉ Applicable ○ N/A Number of base standards 1

Type: **Cast Iron**

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

Mfr: Neenah Enterprises, Inc.

Color: Natural cast iron or black

Finish: Cast

Model #: 2-Piece, round or square

Other: N/A

UFGS: N/A

C07.2.18. Other

◉ Applicable ○ N/A Number of base standards 2

Type: **Decorative Walls**

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

Mfr: Quartzite stone panels

Color: Grey tones as approved by the BCE

Finish: Textured

Model #: Stone veneer facing on concrete walls

Other: Builders Direct, www.builddirect.com or equal

UFGS: N/A

Type: **Sun Shades**

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

Mfr: Pre-manufactured Membrane Sun Shades

Color: To be approved by the BCE

Finish: Use stainless steel hardware and connectors

Model #: TBD

Other: Sun shades are only allowed in recreational or operational areas as required and approved by the BCE. Structures must meet Florida Bldg Code and fabric must be able to be easily removed in high wind.

UFGS: 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

○ Applicable ◉ N/A Small graphics

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.

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. Maintain the existing Installation and Gate Identification Signs in color, lettering, materials and construction methods and match these in future entrance signs. Follow UFC 3-120-01 for sign layout and content. No unit names, unit mottos, or names and titles of individuals are permitted.

5. Provide Building Identification Signs following UFC 3-120-01 for size, layout and content. Color will be black with white numbers.

6. Group 1 facilities will have a freestanding monolithic facility sign in metal on an understated natural warm gray concrete base or brick base. Provide Black backgrounds with white Helvetica Medium sentence case lettering, 6" capital and 3” lower case letters. Organizational emblems in full color (command shield, branch insignia, shoulder sleeve insignia, coat of arms, etc.) may be included 6” from top at the left side of the panel following UFC 3-120-01.

7. Display of emblems on building exterior walls or other permanent structures is strictly prohibited.

8. Raised “standout” letters and numbers may be used for Group 1 with approval on a case basis. Clear anodized aluminum with a smooth surface or SLD45 standard Black or Silver letters depending on background color. Lettering should be in direct contrast to the background color it's on. Variations may be directed by the Base Civil Engineer. PSFB and CCSFS will mostly be black lettering due to light exterior colors.

9. Group 2 and 3 facilities will have wall mounted facility signs. Provide 2'-3" x 2'-3" x 2" panels with general layouts following UFC 3-120-01, except provide only the building’s address number and not the street name. Signs are not permitted for Group 4 facilities.

10. 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.

11. Traffic Control Devices, which regulate vehicular traffic on the installation, must conform to the standards in the Manual of Uniform Traffic Control Devices (MUTCD) published by the Federal Highway Administration. Provide street signs following this IFS.

12. Provide Directional and Wayfinding Signs and address both pedestrian and vehicular traffic following UFC 3-120-01 for size, layout and content.

13. Reserved parking signs should be kept to a minimum. When approved, provide post-mounted sign faces with Patrick SFB Black backgrounds and white Helvetica lettering, 1-1/2” in height.

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. Provide a square symbol background with rounded corners and a consistent border line-weight for all symbols.

16. Force Protection signage may be applied to glass doors using white vinyl lettering. The sign will be oval in shape with a ¼" white border. FP CON lettering will be 1 3/8" Arial Bold with the words "REAL" and "EXERCISE" letter in ¾" Arial Regular lettering spaced accordingly. The bottom of this lettering will be placed at the midpoint of border.

17. Refer to UFC 3-120-01 for prohibited signs, which include those with animated, blinking, chasing, flashing, or moving effects.

18. To reduce costs, Patrick SFB prefers to fabricate signs in house where possible. This has been successful in saving money and creating a consistent aesthetic thread throughout the base. See destination signage for dimensional requirements.

C08.1.1. Materials and Color Specifications

○ Applicable ◉ N/A Large graphics

◉ Applicable ○ N/A Small graphics

Standard Post Mounting

Standard Street Signs


Monument Sign

1. Follow UFC 3-120-01 for size, layout and content except as indicated in this IFS.

2. Fabricate sign panels from aluminum. Sign posts will be tubular black vinyl coated steel with capped ends in a concrete base.

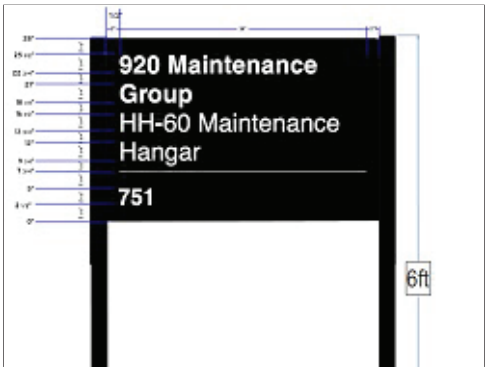
3. Fence mounted sign panels may be attached with 316 stainless steel exposed fasteners.

4. All signage will follow Federal Highway Administration (FHWA) Manual on Uniform Traffic Control Devices (MUTCD) using standard colors. Refer to MUTCD color specifications, which provide cross-referenced Pantone Matching System (PMS) numbers.
   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

Refer to the Materials and Color Specifications which follow.

Materials and Color Specifications

◉ Applicable ○ N/A Number of base standards 3



Type: **Typical Sign Face**

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

Mfr: Custom

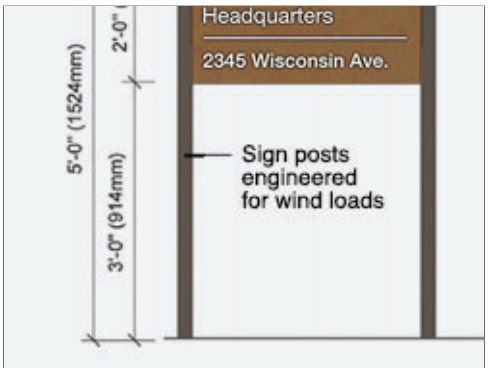
Color: Black background with white lettering

Finish: Matte vinyl

Model #: Aluminum flat sheet

Other: Mount to square posts. Provide sizes following UFC.

UFGS: Section 05 50 13 Miscellaneous Metal Fabrications



Type: **Typical Sign Post**

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

Mfr: Custom

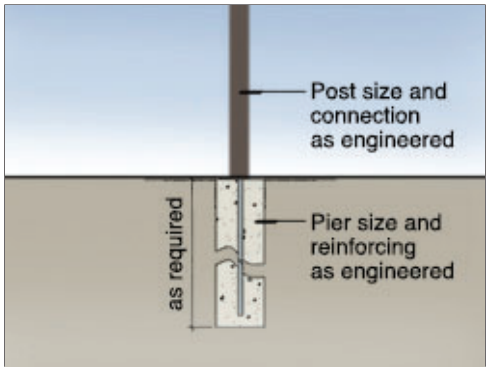
Color: Black anodized Alluminum

Finish: Matte

Model #: Extruded aluminum with capped top ends

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

UFGS: Section 05 50 13 Miscellaneous Metal Fabrications



Type: **Typical Sign Base**

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

Mfr: Custom

Color: Black.

Finish: Sonotube-formed

Model #: 24" height x 12" diameter, as engineered.

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

UFGS: UFGS 03 30 00 Cast-in-place Concrete

C08.1.2. Installation and Gate Identification Signs

◉ Applicable ○ N/A Number of base standards 1

Type: **Primary, Secondary and Tertiary (Uses per UFC)**

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

Mfr: Custom

Color: Black, brushed aluminum, accents per UFC

Finish: Powder coated aluminum or vinyl sign face

Model #: Monument base split face CMU or CMU with 5-part STO integral stucco

Other: White vinyl lettering. Provide dimensions per UFC. Secondary signs will match primary sign's materials, but will be smaller in size per UFC. Tertiary signs will follow the UFC.

UFGS: Section 05 50 13 Miscellaneous Metal Fabrications

C08.1.3. Building Identification Signs

◉ Applicable ○ N/A Number of base standards 5

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

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

Mfr: Custom

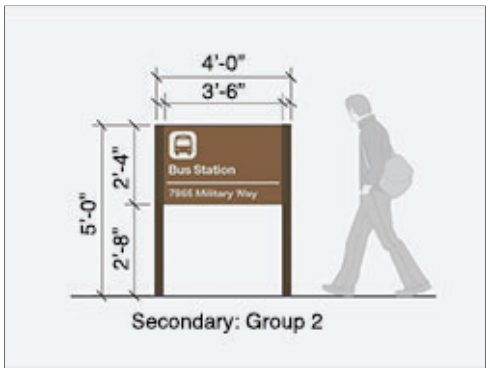
Color: Black background with white vinyl lettering

Finish: Black anodized Aluminum or Powder coat or vinyl sign face

Model #: Aluminum sheet face, extruded aluminum posts

Other: Provide layout and sizes per UFC.

UFGS: Section 05 50 13 Miscellaneous Metal Fabrications



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

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

Mfr: Custom

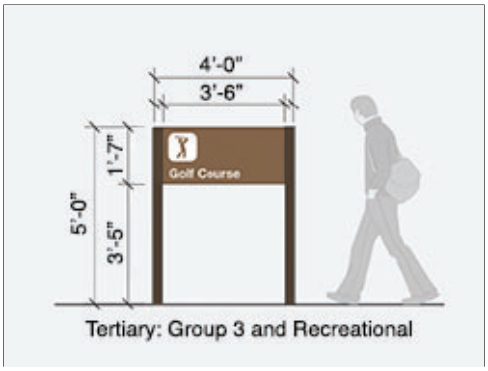
Color: Black background with white vinyl lettering

Finish: Black anodized Aluminum or Powder coat or vinyl sign face

Model #: Aluminum sheet face, extruded aluminum posts

Other: Provide layout and sizes per UFC.

UFGS: Section 05 50 13 Miscellaneous Metal Fabrications



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

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

Mfr: Custom

Color: Black background with white vinyl lettering

Finish: Black anodized Aluminum or Powder coat or vinyl sign face

Model #: Aluminum sheet face, extruded aluminum posts

Other: Provide layout and sizes per UFC.

UFGS: Section 05 50 13 Miscellaneous Metal Fabrications

Type: **Wall Mounted**

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

Mfr: Custom

Color: Black background with white vinyl lettering

Finish: Satin vinyl applied to aluminum sheet

Model #: Aluminum sheet with vinyl face and vinyl lettering

Other: Provide layout and sizes following UFC.

UFGS: N/A

Type: **Glass Mounted**

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

Mfr: Custom

Color: Black or White vinyl lettering

Finish: Matte vinyl

Model #: Machine-cut sheet vinyl

Other: Apply vinyl lettering to glass. Provide sizes following UFC. Pick black or white based upon constrast.

UFGS: N/A

C08.1.4. Traffic Control Devices (Street Signs)

◉ Applicable ○ N/A Number of base standards 1

Type: **Street Signs**

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

Mfr: Custom

Color: White reflective lettering on a Black background

Finish: Powder coat or vinyl sign face

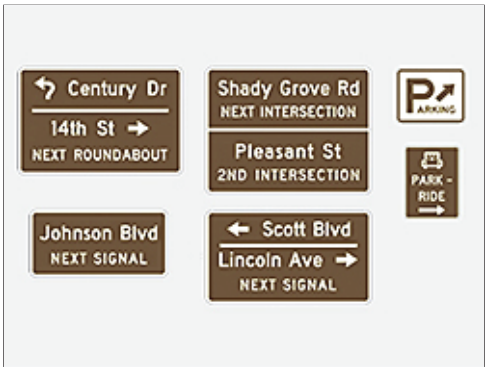
Model #: Aluminum sign face, control arm or pole mounted

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

UFGS: Section 05 50 13 Miscellaneous Metal Fabrications

C08.1.5. Directional and Wayfinding Signs

◉ Applicable ○ N/A Number of base standards 2



Type: **Vehicular**

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

Mfr: Custom

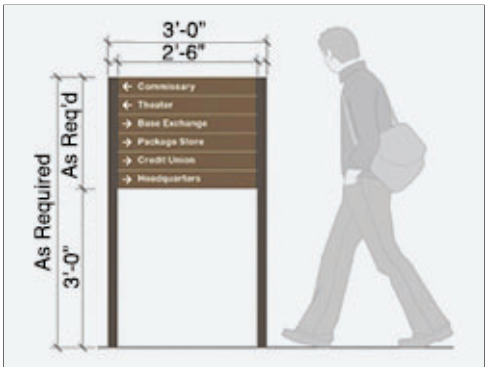
Color: Black face, Black posts, white reflective lettering

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: Section 05 50 13 Miscellaneous Metal Fabrications



Type: **Pedestrian**

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

Mfr: Custom

Color: Black background with white vinyl lettering

Finish: Black anodized Aluminum or 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: Section 05 50 13 Miscellaneous Metal Fabrications

C08.1.6. Informational Signs

○ Applicable ◉ N/A Large graphics

○ Applicable ◉ N/A Small graphics

1. Minimize informational signs such as static display signs, hours of operation, and project signs to reduce visual clutter.

2. Static display signs will have standard blue background.

3. Hours of operation signs will have a level of quality equivalent to the Facility Group number.

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

C08.1.7. Motivational Signage

○ Applicable ◉ N/A Large graphics

○ Applicable ◉ N/A Small graphics

1. Temporary signs are not permitted. Motivational information may also be posted in a small, printed format in approved, high-use pedestrian areas.

2. Follow UFC 3-120-01 for color and layout. Note that animated, blinking, chasing, flashing, or moving effects are prohibited by the UFC.

C08.1.8. Parking Lot Signs

○ Applicable ◉ N/A

C08.1.9. Regulatory Signs

○ Applicable ◉ N/A

1. Regulatory signage, which restricts, warns and advises, will be limited to those mandated under Florida DOT/Highway/Traffic, Government Warning, and/or Parking Regulation. Follow UFC 3-120-01 and its industry references for color and layout.

2. Provide a comprehensive, systematic approach to regulatory signage to avoid clutter and confusion from "over signage."

3. Maintain base warning signs for safety and security at the base perimeter and at specific secure areas. Use these to notify visitors of restrictions governing conduct on the base, as well as other security procedures.

C08.1.10. Other

◉ Applicable ○ N/A Number of base standards 1

Type: **Roof Warranty**

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

Mfr: Custom

Color: Black background with white vinyl lettering

Finish: Aluminum sheet face

Model #: N/A

Other: N/A

UFGS: 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

○ Applicable ◉ N/A Small graphics

1. Provide a coordinated life cycle cost efficient lighting system for parking lots, pedestrian routes, and facilities to promote operations and safety while preserving a visual environment appropriate for the facility group. All lighting must comply with sea turtle friendly requirements as outlined in the 45 SWI 32-7001. All proposed light fixtures and cut sheet data must be reviewed by the BCE for review/approval. See Appendix G08 Exterior Lighting Management: for for further detailed directives.

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.

5. Wall mounted fixtures should respond to the architectural character of the facility.

6. Calculate illuminant levels for all lighting applications following UFC 3-530-01 and ensure compliance with pre-curfew maximum brightness level requirements.

7. Accent and aesthetic lighting of architectural and landscape features is not authorized as it is not mission-essential and not in compliance with sea turtle light management requirements. Shielded and downward directed sign lighting can be installed on top of signs to shine down and new LED signs can be programmed to shut off during the critical times of 2100 to 0600 from 1 May to 31 October.

8. Comply with UFC 3-530-01 for light source technology and lamp types. High efficiency lamping such as LED is preferred for most applications.

9. Provide round tapered or round non-tapered concrete aggregate poles and aluminum fixtures with square, rectangular or circular housings in colors and shapes to match adjacent facilities and the facility district.

10. Install lighted bollards only at Group 1 and high-traffic Group 2 facilities. Generally match materials, colors and shapes of adjacent facilities and the facility district.

11. Install natural warm gray color, smooth finished concrete bases for all poles in heights appropriate for the facility group and application. Generally Groups 1, 2 and 4 will have at-grade bases. Group 3 will have taller bases for added durability.

12. 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 island.

13. Consistently install lighting for sidewalks, bikeways and trails to match adjacent facilities.

14. Manufacturers listed in sections C09.2.1. - C09.2.6. are provided only to establish a level of quality for use when designers write the salient characteristics of the brand-name item in project specifications following Federal Acquisition Regulations (FAR).

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

Type: **Street Lighting**

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

Mfr: Hubbell, Kim Lighting

Color: Black or clear anodized in the AFTAC Campus

Finish: Factory

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

Other: Lamp: LED. Follow manufacturer's recommendations for fixture base. All lighting must comply with sea turtle friendly requirements.

UFGS: N/A

C09.2.2. Parking Lot Lighting

◉ Applicable ○ N/A Number of base standards 1

Type: **Parking Lot Lighting**

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

Mfr: Hubbell, Kim Lighting

Color: Black or clear anodized in the AFTAC Campus

Finish: Factory

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

Other: Lamp: LED. Follow manufacturer's recommendations for fixture base. All lighting must comply with sea turtle friendly requirements.

UFGS: N/A

C09.2.3. Lighted Bollards

◉ Applicable ○ N/A Number of base standards 1

Type: **Lighted Bollard**

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

Mfr: Dura Art Stone

Color: Weatherstone gray

Finish: Standard Finish (smooth), black louver

Model #: As approved by the BCE

Other: Flared cone, 3000K LED Lamp. Follow manufacturer's recommendations for fixture base. All lighting must comply with sea turtle friendly requirements.

UFGS: N/A

C09.2.4. Sidewalk Lighting

◉ Applicable ○ N/A Number of base standards 1

Type: **Rectilinear Cutoff**

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

Mfr: Hubbell, Kim Lighting

Color: Black or clear anodized

Finish: Anodized aluminum

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

Other: Lamp: LED. Follow manufacturer's recommendations for fixture base. All lighting must comply with sea turtle friendly requirements.

UFGS: N/A

C09.2.5. Walls / Stairs Lighting

◉ Applicable ○ N/A Number of base standards 1

Type: **LED Wall luminaire**

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

Mfr: Landreth

Color: Black

Finish: Aluminum

Model #: Check on latest

Other: Ensure model is Wildlife certified or turtle friendly.

UFGS: N/A

C09.2.6. Other

○ Applicable ◉ N/A

D. FACILITIES EXTERIORS

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

◉ Applicable ○ N/A Large graphics

◉ Applicable ○ N/A Small graphics

Group 1 Administrative Facility Florida Mediterranean Palette of Color

Group 2 with Standard Sloped Red Roof

Group 3 Apparatus Bays at Fire Station

Group 5 Family Housing

D01. SUPPORTING THE MISSION

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

D02. SUSTAINABILITY

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

D03. ARCHITECTURAL FEATURES

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

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

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.

◉ Applicable ○ N/A Large graphics

◉ Applicable ○ N/A Small graphics

South-Facing Exposure with Solar Shading

Articulated Massing for Human Scale

Stair Tower as a Focal Point

Florida Coastal Features and Materials

3. Maintain a human scale and reduce the visual scale of large buildings with sub-massing related to interior functional operations; create consistent form and scale in adjacent buildings with compatible profiles or silhouettes.

4. Building heights will not be limited; however, building heights over 2 stories will be considered on a case-by-case basis.

5. Combine functions where practical to avoid a proliferation of small, independent structures.

6. Use and coordinate shading devices with orientation and for function.

D03.2. Architectural Character

The functional land uses of Patrick AFB develop distinct visual areas. Although diverse, these areas should blend and create an architecturally compatible campus. Two styles of architectural character are prominent at Patrick SFB. Florida Mediterranean architecture was adopted by the base in the early 1990s based on the location, natural vegetation, and use of materials and compatibility. This architecture involves principles responding to climate and environment, while using indigenous materials and simple, intuitive building techniques. The Florida Coastal architecture evolved to serve a functional role by providing shelter from sun and rain along the coastal perimeter of the Banana River. These two styles have been established as the standard for Patrick Space Force Base. While Florida Mediterranean architecture is the primary, base-wide detail, Florida Coastal architecture is reserved for use primarily in areas adjacent to the Banana River. Each style is discussed in more detail in the following sections and in each of the District Architectural Character Sections to follow.

Florida Mediterranean architecture involves the principles of providing comfortable shelter, using indigenous materials and simple, intuitive building techniques. Florida Mediterranean architecture achieves a sensitive interaction with the environment using simple rectangular forms of stucco with deep recesses, covered walkways/entrances, accents at roofs, and subtle sun-washed wall color. Florida Mediterranean is the primary architecture for buildings at Patrick SFB.

◉ Applicable ○ N/A Large graphics

◉ Applicable ○ N/A Small graphics

Group 1 Facilities with Features and Materials Indicative of Florida Mediterranean Architecture

Curtain Wall Glazing Feature Used to Define Entrance

"Sun-Washed" Wall Colors

Standard Colors / Operable Solar Shade

Arched Openings

Florida Mediterranean is architecture of shared or common building elements. Facades, roofs, and finishes continuously flow, connecting a variety of building forms into common visual composition. Shared elements create architecture of efficiency and community.
Entrances and common areas are elevated, enhanced, and expressed through landscape and hardscape.

Characteristics include:

- Human scale and massing.
- Minimal overhang with detailed eaves.
- Arched entryways and openings.
- Upper level balconies.
- Covered walkways.
- Recessed doors and windows.
- Barrel tile roofing on gabled or hipped roofs.
- Light "sun-washed" wall colors and accent colors.
- Flat roof with parapet banding.
- Black railings and accessories.
- Divided light doors and window detail.

- Two- to three-story buildings.
- Main entrances signified with porticos and formal landscaping.
- Punched windows.
- Defined exterior courtyards with arcades and building placement.

A developed material, detail, and landscape hierarchy is also a characteristic. This hierarchy should make important facilities visually prominent and lesser facilities more subtle in appearance. See building types for hierarchy standards. The latest implementations of this style includes the new AFTAC Campus, new Security Forces Facility, new Fire Crash/Rescue Facility, new Air Passenger Terminal/Base Supply Campus, and proposed new 920 RQW Guardian Angel Facility. These designs successfully combine recessed alcoves, tile roofs, covered walkways, and portico entrances. Clusters of palms and native vegetation provide a tropical buffer from the elements.

Florida Coastal

Florida Coastal architectural style evolved to provide shelter from sun and rain, similar to architecture found along the coastal waterways. Although created from necessity, the Florida Coastal architecture transitions well from the Mediterranean detailing through use of the same geometric shapes and clearly defined hierarchy of space. The use of yellow tones for walls and weathered silver for roofing complements the Florida Mediterrean styles while providing a distinct recreational architecture. The latest implementations of this style includes the new Beach House, the Beach area pavilions and bath facilities, and Family Campground new construction. These designs successfully combine metal roofs, warm yellow tones and exterior clapboard similar to architecture found along the Florida coast. Clusters of palms and native vegetation provide a tropical buffer from the elements.

Proportion and scale are the basis of Florida Coastal architecture, with simple openings centered in the walls and simple roof structures providing relief from sun and wind. Pedestrian approach to this architecture follows an axially organized path created by landscaped buffers and textured walkways, emphasizing river view and breezes in lieu of complicated architecture. Characteristics include:

- Docks, decks and piers.
- Metal roofing on gabled or hipped roofs - ridge parallel to entry.
- Exposed rafter eaves.
- Entry centered in façade.
- Overhangs.
- Aluminum hurricane shutters.
- Stucco columns and walls.
- Timber construction.
- Indigenous landscaping.
- Main entrances signified with entrance canopies and landscaping.
- Punched windows
- Simplicity.
- Tongue-and-groove decking.

Florida Coastal - Materials and Color

Choose materials for their longevity and maintenance characteristics.

- Use materials with integral colors -avoid painting exterior colors.
- Use yellow tones of colored stucco or hardi-board architectural planks for exterior walls.
- Add sun-washed accent colors sparingly. Accent colors can be used in recesses and to accent certain portions of a building's façade.
- Use prefinished materials where possible -gutters, window frames, door frames, etc.
- Use v-crimped weathered galvalume roofs to match the concrete barrel tile roofs on sloped roofs.
- Exposed treated lumber is acceptable.
- Use marine grade wood in lieu of recycled material for boardwalks, piers, decks, etc. for ease of long term maintenance.
- Refer to the sustainability section of this document for recycled product information.

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 environment and educational theme with a related architectural theme expressive of innovation and technology that represents the current mission.

5. All facilities will 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. For both architectural styles at Patrick SFB, choose materials for their longevity and maintenance characteristics. Use materials with integral colors -avoid painting exterior colors. Florida Mediterranean style facilities should use base standard "conch" colored stucco for exterior walls. Add sun-washed accent colors sparingly. Accent colors can be used in recesses and to accent certain portion. Use prefinished materials to include copper gutters, anodized aluminum window frames, door frames, etc. Use blended color clay barrel tiles on pitched roofs. Use Modified Bitumen or Fibertite on flat roofs. Refer to the sustainability section of this document for recycled product information.

◉ Applicable ○ N/A Large graphics

◉ Applicable ○ N/A Small graphics

Base Standard Wall and Roof Tile Color and Material

Wall Details of Florida Mediterrainean

Architectural Precast Medallion

Standard Roof Tile

2. The Florida Mediterranean architectural style has been adopted by Patrick Space Force Base as the standard. There are, however, exceptions to this standard. Certain recreational facilities located along the Banana River and Atlantic Ocean are to follow the criteria for the Florida Coastal style. If there is a facility where the Florida Mediterranean style is not to be used, it will be listed as an exception under the facility types listed below. Anyone reading these standards should also reference the Facilities portion of the Development Considerations, Exteriors section. These pages have further information regarding the architectural styles and specific recommendations for each facility and facility type.

3. Provide a palette of earth-tone colors in block, stucco and powder-coated metals. Refer to wall systems for detailed material listings.

4. Relate the level of architectural detailing to the Facility Group number.

5. Use only integrally colored materials as the predominant exterior building material; do not use materials that require field painting and ongoing maintenance.

6. 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.

7. Noncorrosive metals with factory applied color finishes are required.

8. Combine details and color with orientation, massing, scale and architectural character to maintain base compatibility.

9. Manufacturers listed below are only provided to establish a baseline of equivalency among all applicable manufacturers.

10. Manufacturers listed in sections D03.3.2. - D03.3.7. are provided only to establish a level of quality for use when designers write the salient characteristics of the brand-name item in project specifications following Federal Acquisition Regulations (FAR).

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: Consider the potential for flooding and corrosion.

Other: N/A

Facility: Narrow buildings along E-W axis are preferred

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

Doors: Recessed doors, openings and walkways. Consider vestibule areas for entrances.

Windows: Provide low-e solar gray insulating glazing on north-facing windows / maximize shading for windows on south façades

Roof: High to medium albedo, moderate slope for all buildings except hangars / large industrial facilities

Structure: Use inorganic zinc coating on any type of ferrous metals or provide factory finished non-ferrous metals or concrete

MEP: Always consider LCCA. Never consider GSHP. Solar is not an option. DOAS systems life cycle cost is to too high.

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

Other: N/A

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 1

Type: **Style 1 Aluminum Windows**

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

Mfr: Kawneer (or equivalent)

Color: Black (or clear anodized as approved by BCE)

Finish: Anodized Aluminum

Model #: N/A

Other: Provide thermally broken frames; 2x4, double/single hung or casement, ensure % of openings allow for secondary means of egress in non-sprinkled facilities while considering both hurricane and AT require

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

D03.3.3. Thermal Mass

◉ Applicable ○ N/A Number of base standards 1

Type: **Style 1 Interior Wall Material**

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

Mfr: Custom, TBD

Color: CMU / Plaster

Finish: Light texture

Model #: Coursed unit masonry

Other: Concrete block may only be used when finished with cement plaster as approved by the BCE. Base standard is Sto 5-part intregral stucco system with plastic lath only or integral colored split-face stucco.

UFGS: Section 04 20 00 Unit Masonry

D03.3.4. Thermal Shading

◉ Applicable ○ N/A Number of base standards 1

Type: **Style 1 Wall Devices**

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

Mfr: N/A

Color: Black or treated lumber

Finish: N/A

Model #: N/A

Other: Shading devices may be attached to frames or structure

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

D03.3.5. Renewable Heating/Cooling

○ Applicable ◉ N/A

D03.3.6. Solar Photovoltaic System

○ Applicable ◉ N/A

D03.3.7. Solar Thermal System

○ Applicable ◉ N/A

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

Group 1

Group 2

Group 3

Group 4

D04.1. Primary Entrances

1. Emphasize the primary entrance in the overall building design with a projecting or recessed covering for weather protection following Installation Facilities Standards (IFS) for Facility Group designations.

2. Group 1 entrances will be identified by the use of wall plane changes, vertical elements, or similar manipulation entrance design elements and/or changes in materials.

3. Group 2 entrances may have adjacent pedestrian gathering space to enhance a sense of entrance to facilities.

4. Express primary building entrances as the focal point of the façade and align these with pedestrian access points. Locate main building entrances on south facades whenever possible.

5. Provide vestibules at entries in Groups 1, 2 and 3 unless used infrequently or serving unconditioned space following ASHRAE 90.1.

6. Fully integrate all elements including the design of handicap ramps in the overall design of the primary entrance in an organized uncluttered appearance.

7. Install paved transitional spaces sized for the building function and occupancy.

8. Install appropriate lighting and site furniture following AT and IFS.

9. Provide porte cocheres or covered drop-offs when justified for lodging and medical facilities; do not use for prestige 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 weatherstripping 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.

9. Covered walkways are building elements, but are discussed in this section due to their use as connectors between various site areas. These structures provide shelter for pedestrians walking between buildings and parking lots or other buildings. In the hot, yet rainy, Florida climate, the rain protection and shade provided by these walkways can make a great difference in the pedestrian's experience when walking even short distances. Covered walkways should be designed to conform to the established base-wide Mediterranean architectural theme consisting of red Spanish clay tiles on pitched roofs, and a 5-part synthetic integral stucco with plastic lath as an exterior wall material.

End of Section

D05. WALL SYSTEMS

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

Comply with AF Corporate Standards for Wall Systems:
http://afcfs.wbdg.org/facilities-exteriors/wall-systems/index.html

Comply with AFCFS Recommended Materials:
http://afcfs.wbdg.org/facilities-exteriors/wall-systems/materials/index.html

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 will be a combination of concrete block with integral synthetic five-part stucco finish, integral color split face masonry units or precast architectural precast panels at Patrick SFB. Insulated powder-coated or hot-dipped pre-finished galvanize aluminum sandwich panels at Cape Canaveral SFS and pre-engineered pre-finished ribbed metal building panels at Patrick SFB is acceptable for Group 3 facilities. Refer to the Appendix for special requirements of Facility Districts.

Provide Split Face block in running bond or stack bond, or provide concrete block with 5-part integral synthetic stucco finish with plastic mesh.

Stucco finish: Sto DrainScreen, Sto BTS Xtra, Sto Mesh, Sto Guard Mesh 4.2.5, Sto Primer Sand, Sto Essence Fine Sand Finish, 11.OIDS - StoQuck Silver Drain Screen System Components.

Wall materials listed under D05.4.8. Ribbed Metal Sheeting will be A1046/A0146M standard specification for steel sheet, zinc-aluminum-magnesium alloy-coated by the hot-dipped process (91% zinc, 6% aluminum, and 3% magnesium) to ensure corrosion resistance in lieu of conventional galvalume.

3. Group 4 will be a combination of two of the following materials: concrete block with integral synthetic five-part stucco finish first floor and metal stud second floor is acceptable with integral 5-part stucco finish.

4. Multi-story Group 1 and 2 facilities may include a transition in material, color or detailing to create a visual base. Generally, limit accent split face block or ribbed masonry block accents to a single color on Group 3 and 4 facilities.

5. Use high-performance building envelopes following UFC 1-200-02.

6. Use detailing not subject to excessive weathering. Provide wall accents consistently throughout the base.

7. Use integrally colored materials and factory-finished metals conducive to the extreme corrosive environment. Do not paint concrete block or pre-finished metal building materials.

8. Translucent wall and roof 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. Consider the use of translucent panels in replacement hangar door panels to provide natural light and AT protection. All glass in windows and doors of beachfront facilities that are in line of sight of the beach must have tinting meeting the Florida Statute 62B-55.006 for 45% transmittance (inside to outside) or less.

9. Manufacturers listed in sections D05.4.1. - D05.4.13. are provided only to establish a level of quality for use when designers write the salient characteristics of the brand-name item in project specifications following Federal Acquisition Regulations (FAR).

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 will be slightly darker than adjacent surfaces.

7. Materials requiring regular maintenance are not permitted; do not use exposed structural steel or other materials that require painting.

8. Refer to C07.2.16. Screen Walls for materials and colors of freestanding walls.

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, factory finish these elements to match the adjacent wall surface.

3. Avoid visual clutter and where surface-mounted elements are required they will match the wall color.

D05.4 Wall Systems Materials

Facility Group 1 wall materials will be as follows.

Primary:	Architectural precast
Secondary:	CMU / integral synthetic five-part stucco finish
Accent:	Integral colored split-faced CMU or stone veneer

Facility Group 2 wall materials will be as follows.

Primary:	Tilt-up Concrete, Painted or stucco finish
Secondary:	CMU / integral synthetic five-part stucco finish
Accent:	N/A

Facility Group 3 wall materials will be as follows.

Primary:	Pre-finished aluminum insulated wall panel
Secondary:	Optional: CMU / five-part Stucco
Accent:	N/A

Facility Group 4 wall materials will be as follows.

Primary:	Fiber cement siding factory finish or stone veneer
Secondary:	Synthetic stucco over sheeting
Accent:	Concrete or Brick Foundation Cladding

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

D05.4.1. Flat Metal Panels

◯ Applicable ◉ N/A

D05.4.2. Brick Veneer

◯ Applicable ◉ N/A

D05.4.3. Architectural Precast

◉ Applicable ○ N/A Number of base standards 2

Type: **Style 1; Architectural Precast Panels**

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

Mfr: (Local Precast Company)

Model #: N/A

Color: Patrick SFB Conch Shell with accent

Finish: Smooth Casting

Other: Very Light texture

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

Type: **Style 2; Architectural Precast Coursed Units**

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

Mfr: (Local Precast Company)

Model #: N/A

Color: Patrick SFB Conch Shell with accent

Finish: Smooth Casting

Other: Very Light texture

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

D05.4.4. Stucco Over Sheathing

◉ Applicable ○ N/A Number of base standards 1

Type: **Cementitious Stucco with Synthetic Finish**

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

Mfr: Sto

Model #: StoQuik Silver Drain Sto Emerald Coat

Color: Patrick SFB Conch Shell

Finish: Very Light Texture

Other: Refer to D05.1.2.

UFGS: Section 09 24 23 Cement Stucco:
http://www.wbdg.org/FFC/DOD/UFGS/UFGS 09 24 23.pdf

D05.4.5. Curtain Wall

◉ Applicable ○ N/A Number of base standards 1

Type: **Curtain Wall**

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

Mfr: N/A

Model #: N/A

Color: Anodized Aluminum Black or mill finish if in AFTAC campus area

Finish: Very Light Texture

Other: N/A

UFGS: Section 08 44 00 Curtain Wall and Glazed Assemblies:
http://www.wbdg.org/FFC/DOD/UFGS/UFGS 08 44 00.pdf

D05.4.6. Cast-In-Place Concrete

◉ Applicable ○ N/A Number of base standards 1

Type: **Cast In Place**

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

Mfr: N/A

Model #: N/A

Color: N/A

Finish: Smooth

Other: N/A

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

D05.4.7. Tilt-Up Concrete

◉ Applicable ○ N/A Number of base standards 1

Type: **Tilt-Up Concrete, Painted or Stucco Finish**

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

Mfr: N/A

Model #: N/A

Color: PSFB Conch Shell

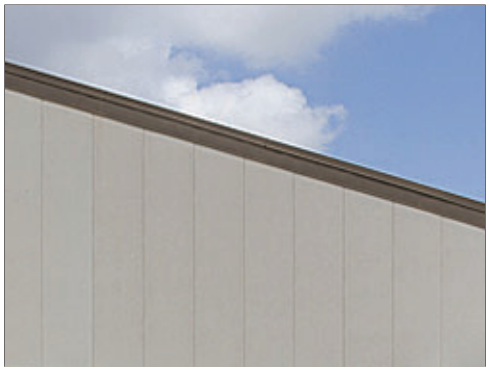
Finish: Stucco

Other: N/A

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



Type: **Flush Seam**

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

Mfr: TBD

Model #: Only use for Aircraft hangers or as approved by the BCE only.

Color: Patrick SFB Conch Shell

Finish: Factory finished

Other: Refer to D05.1.2.

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

D05.4.9. EIFS

○ Applicable ◉ N/A

D05.4.10. GFRC

○ Applicable ◉ N/A

D05.4.11. Concrete Block

◉ Applicable ○ N/A Number of base standards 2

Type: **Split-Face Concrete Block / Concrete Masonry Unit (CMU)**

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

Mfr: (Local Manufacturer)

Model #: Demaro Block or equivalent

Color: Camel to match Patrick AFB Conch Shell or similar accents

Finish: Very Light Texture; w/matching colored grout; precast concrete cap

Other: Refer to D05.1.2.

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

Type: **Stone Veneer**

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

Mfr: TBD

Model #: N/A

Color: Neutral Grays

Finish: Textured

Other: Top cap to match

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

Type: **Style 1**

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

Mfr: James Hardie Building Products, Inc.

Model #: Horizontal Architectural Lap Siding, Shingle Siding

Color: Yellow tones for recreational facilities or housing only

Finish: Wood Texture

Other: Fiber Cement HardiePlank Clapboards and Trim

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

D05.4.13. Other

○ Applicable ◉ N/A

D06. DOORS AND WINDOWS

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

Comply with AF Corporate Standards for Doors and Windows:
http://afcfs.wbdg.org/facilities-exteriors/doors-and-windows/index.html

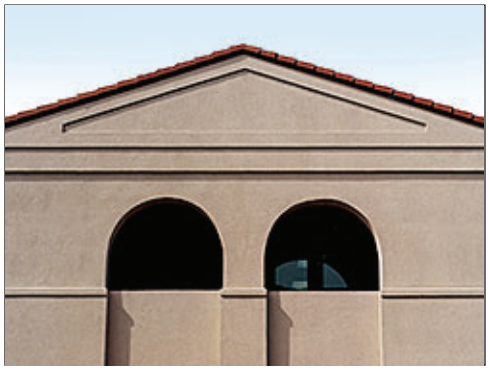
Comply with AFCFS Recommended Materials:
http://afcfs.wbdg.org/facilities-exteriors/doors-and-windows/materials/index.html

Group 1



Group 2





Group 3



Group 4



D06.1. Types

1. Door and window frame systems will be a storefront type and incorporate a thermal break feature. All doors and windows must meet Anti-Terrorism requirements as well as the latest Florida Building Code hurricane wind requirements. All exterior systems must also meet Miami-Dade standards.

2. Black anodized aluminum finishes are required with the exception of the AFTAC campus facilities which will use clear anodized aluminum finishes; match the color of the door and frame. For renovation projects the color of new windows, doors and frames may match existing.

3. Group 1 and 2 facilities will have casement operable windows for a minimum of one half (1/2) of the total window area unless prohibited by interior operations.

4. All Groups and all facilities will have black anodized windows, doors and frames.

5. Reserved.

6. Group 3 facilities will have black anodized aluminum windows, doors and frames factory finished to match black.

7. Group 3 secondary entrances must also be black anodized aluminum.

8. Group 3 and 4 buildings will employ casement or double hung operable windows for a minimum of one half (1/2) of the total window area. Casement windows may be used when matching existing conditions.

9. Provide insulation in and thermal breaks in frames.

10. Standard-sized hinged doors are preferred. Use sliding, folding, overhead, sectional and other door configurations only to support mission operations on case basis.

11. Automatic doors are allowed only where functionally necessary for public.

12. Utility and emergency egress doors will match.

13. Passive thermal comfort methods of ventilation are encouraged where life cycle cost justified.

14. Windows and doors must meet force protection requirements.

15. Adjacent joint sealants should be slightly darker than the frame color.

16. See G04 for further directives.

17. Manufacturers listed in sections D06.5.1. - D06.5.4. are provided only to establish a level of quality for use when designers write the salient characteristics of the brand-name item in project specifications following Federal Acquisition Regulations (FAR).

D06.2. Layout and Geometry

1. Develop fenestration geometries in new construction and renovations generally matching adjacent facilities and to promote horizontal visual emphasis. Horizontal and vertical alignment of fenestration units as a visual composition in the exterior building envelope is required.

2. All south facing fenestration will be recessed a minimum of four feet (4') (1.22 m) from the adjacent exterior wall planes (or shading device), providing protection from the wind and sun.

3. Visually and functionally compose openings in walls for the climate-specific exposure.

4. Consistently use opening type, size, placement, mullion pattern, and color to reinforce the overall architectural design.

5. Openings will augment interior lighting and space conditioning needs.

6. Protect against vandalism, intrusion and coordinate sound ratings.

7. Large service or garage doors will be carefully screened from entries and similar "people" places.

D06.3. Glazing and Shading

1. Provide 1" insulating glass at all window and door applications, tempered where required by code, and laminated safety glass at sloped applications. Install 1/4" glass at spandrel panel (opaque) locations.

2. All window and door glass will be solar gray in color of the manufacturer's standard tint, visible light transmittance of 42% and shading coefficient of 0.64 for 1/4" thick glass. Insulating glass units: daylight transmittance - 40% maximum, daylight reflectance (outdoors) - 8% maximum, shading coefficient (no shade) - 0.60 maximum. This is for all new construction and in renovations as approved by the BCE.

A. Buildings and structures, and every portion thereof, must be designed and constructed to meet the requirements of Chapters 26 through 31 of ASCE 7. All parts or systems of a building or structure envelope such as, but not limited, to exterior walls, roof, outside doors, skylights, glazing and glass block will meet impact test criteria. The Large Missile Impact test will be conducted on three test specimens in accordance with test protocols TAS 201 and TAS 203. This test will be applicable to the construction units, assemblies and materials to be used up to and including 30 feet (9.1 m) in height in any and all structures. The Small Missile Impact test will be conducted on three test specimens in accordance with test protocols TAS 201 and TAS 203. This test will be applicable to the construction units, assemblies, and materials to be used above 30 feet (9.1 m) in height in any and all structures. Construction assemblies deemed to comply: Exterior concrete masonry walls of minimum nominal 8-inch (203 mm) thickness, constructed in accordance with Chapter 21 (High-Velocity Hurricane Zones) of the Florida Building Code, Latest Edition.

B. Exterior frame walls or gable ends constructed in accordance with Chapters 22 and 23 (High-Velocity Hurricane Zones) of the Florida Building Code, sheathed with a minimum $^{19}/_{32}$-inch (15 mm) CD exposure 1 plywood and clad with wire lath and stucco installed in accordance with Chapter 25 of the Florida Building Code.

Exterior frame walls and roofs constructed in accordance with Chapter 22 (High-Velocity Hurricane Zones) of the Florida Building Code, sheathed with a minimum 24-gage rib-deck-type material and clad with an approved wall finish.

C. Exterior reinforced concrete elements constructed of solid normal weight concrete (no voids), designed in accordance with Chapter 19 (High-Velocity Hurricane Zones) of the Florida Building Code, and having a minimum 2 inches (51 mm) thickness.

Roof systems constructed in accordance with Chapter 22 or Chapter 23 (High-Velocity Hurricane Zones) of the Florida Building Code, sheathed with a minimum $^{19}/_{32}$-inch (15 mm) CD exposure 1 plywood or minimum nominal 1-inch (25 mm) wood decking and surfaced with an approved roof system installed in accordance with Chapter 15 of the Florida Building Code. All connectors will be specified by the building designer of record for all loads except impact.

3. Provide High Solar Heat Gain Coefficient (SHGC) dual-pane glazing where interior thermal mass walls and operable insulating curtains are installed.

4. Translucent wall panels may be approved on a case by case basis.

5. Do not use mirrored glazing due to Flight Safety. PSFB is a very narrow flightpath, and all structures are within the glidepath of view.

6. Fully integrate applicable shading designs for overhangs, louvers, light shelves and grilles.

7. Install window screens on operable windows.

8. Requirements applicable unless otherwise allowed by BCE.

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 corrosive elements.

4. Use consistent finish and color on window and door systems throughout a facility. For renovation projects the color of new hardware may match existing.

5. Design building systems to eliminate the need for security screens whenever possible.

6. Per security protocol, the core system must be Small Format Interchangeable Cores (SFIC) BEST COREMAX and can only be procured via two approved vendors. These vendors are listed in the appendix G04.

7. See G04 for further hardware directives.

D06.5. Doors and Windows Materials

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

D06.5.1. Anodized Aluminum

◉ Applicable ○ N/A Number of base standards 1

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

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

Mfr: N/A

Color: Anodized Aluminum Black or mill finish if in AFTAC campus area

Finish: Matte

Model #: Engineered frame sizes

Other: Provide thermally broken frames.
Overhead doors will be the black anodized aluminum or insulated and factory prefinished color to be determined by BCE.

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

D06.5.3. Aluminum-clad Wood

○ Applicable ◉ N/A

D06.5.4. Other

◉ Applicable ○ N/A Number of base standards 3

Type: **Fiberglass Reinforced Panel**

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

Mfr: N/A

Color: Translucent or match adjacent walls

Finish: Smooth

Model #: N/A

Other: This panel is used to replace/repair old windows. New windows must be hurricane ratings, but the framing will not allow, so can become cost impact. Mostly used on skylight type windows.

UFGS: N/A

Type: **Roller Shades**

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

Mfr: N/A

Color: Biege

Finish: Fabric

Model #: N/A

Other: With metal cover color match factory coated beige. Manual operation.

UFGS: N/A

Type: **Interior Lockset**

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

Mfr: BEST

Color: Stainless Steel

Finish: Satin 626

Model #: 9K Series

Other: Heavy duty Stainless Steel lockset 2-3/4" backset

UFGS: UFGS 08 71 00 Door Hardware

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

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, to include compliance with the latest Florida Building Code.

2. Generally match the roof type and form of existing adjacent facilities in new construction.

3. Group 1 and 2 buildings will use hipped roof clay or concrete barrel tile roofs as appropriate with a combination of "flat" membrane roofs with parapets, emphasizing the horizontal lines of the building.

4. Provide screens for roof-mounted appendages and equipment of the same materials, which are used predominantly in the building's wall systems.

5. Group 4 facilities will have gabled or hipped concrete barrel tile or composite shingle roofs.

6. Roof eaves will extend 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.

7. South-facing eaves will coordinate with adjacent wall-mounted shading devices.

8. The color, shape and slope of the eave and soffit will be compatible with adjacent facilities.

9. Keep roofs uncluttered and minimize penetrations.

10. Diminish massive roofs into coordinated smaller consistent with adjacent facilities; avoid random, arbitrary changes.

12. Increase the insulation value of existing roofing systems during renovations if supported by life cycle cost and structural analysis.

13. Roofs must 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. All facilities must be carefully designed for wind uplift. All roofs should be designed according to the latest edition ASCE 7 and latest adopted edition of Florida Building Code and IBC. Damage occurs from uplift at building overhangs and roofs, caused by differential pressures.

14. All Florida Mediterranean facilities will have clay barrel tile roofs, concrete barrel tile roofs, or pre-finished aluminum architectural standing seam roofing material factory painted. Use a blended color for the terra cotta clay or concrete roofing materials. Boral has been used successfully in the past for concrete barrel tile roofs. All flat roofs will be a white granulated top ply similar to Soprastar by Soprema with an aged solar reflective index of 86, a modified bitumen membrane, or a FiberTite hybrid roofing system as approved by the BCE. Use only non-ferrous or stainless-steel fasteners and components that are compatible with the roof material and ensure that they are strong enough to support gutters, downspouts, etc. and able to withstand extreme corrosive environment. Pre-engineered metal buildings where approved by the BCE should use inorganic zinc or hot-dipped galvanized materials.

15. In areas where Florida Coastal architectural style is specified, use 0.040” thick aluminum material with a "12” corrugated v-crimp" pattern and a simulated aged galvalume KYNAR 500 (PVDF) finish. Use only stainless steel fasteners, joists, hangars, and associated components/connectors compatible with the roof material and meeting current ASCE 7 wind speed design requirements. Use separation barriers to prevent reaction where dissimilar metals come into contact with each other. Fabricate “Florida Coastal” style gutters, downspouts, and other roofing components from 0.040” (or thicker) aluminum (with simulated aged galvalume KYNAR 500 (PVDF) coating). No ferrous exterior components are allowed.”

16. Manufacturers listed in sections D07.9.1. - D07.9.10. are provided only to establish a level of quality for use when designers write the salient characteristics of the brand-name item in project specifications following Federal Acquisition Regulations (FAR).

D07.2. Roof Slope

1. Group 1, 2 and 3 buildings will use minimum 4:12 slope dependent on adjacent facilities and facility requirements. Larger facilities may use sloped-roof features with min. 1/2":12” roofs. Regardless of Group and style facility, material and slope will be reviewed with BCE on case by case basis prior to design completion.

2. Group 4 facilities will use 4:12 roof slopes.

3. Ensure adequate drainage and connect to the rain collection system.

4. Vegetated roofs will not be considered.

5. Provide roof slopes to accommodate solar thermal, passive systems and daylighting when applicable following UFC 1-200-02.1.

6. Provide underlayment's 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 complementary horizontal copings to conceal all structural roof elements. Ensure copings are properly flashed and detailed to avoid roof leaks.

D07.4. Color and Reflectivity

1. Sloped roofs in Group 1 and 2 and smaller facilities in Group 3 will follow the architectural style of adjacent facilities and follow requirements of the IFS.

2. All minimal-slope membrane roofs will use only use high-albedo, high reflectivity color to help decrease the temperature around the buildings and minimize damage to human and wildlife habitat.

3. Sloped roofs in Group 4 will be integrally colored earth tones unless otherwise determined by the BCE to meet energy efficiency initiatives.

4. Comply with UFC 3-110-03 and ASHRAE 90.1 for Solar Reflectance Index (SRI) and thermal requirements.

5. All roof flashing will match the color of the predominant background material.

D07.5. Gutters, Downspouts, Scuppers, Drains

1. Provide copper gutters with all clay tile or concrete tile roof systems in Group 1-4 facilities.

2. Provide factory finished aluminum gutters and downspouts for all Florida Coastal architectural style to match simulated aged galvalume Kynar500 finish corrugated aluminum "v-crimp" material in Group 2 facilities.

3. Provide integral gutters and downspouts to match silver colored Kynar500 finish galvalume standing seam metal roof materials in Group 2 and 3 facilities.

4. All sloped roofs will use gutters and downspouts. Gutters will be outside the fascia.

5. Internal roof drainage systems are not permitted in new construction. Minimal-sloped roofs will be sloped to drain to the building perimeter through scuppers into downspouts.

6. Size the roof drainage system per IBC and SMACNA for the region unless otherwise specified by the BCE.

7. Use scuppers as required in parapet walls. Arrange scuppers in an orderly manner consistent with other elements of the wall system. When open scuppers are connected to downspouts, provide transitions consistent with adjacent facilities.

8. 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). All downspouts will be solid.

9. Fabricate downspouts from non-corrosive materials such as aluminum or zinc-coated steel. Provide powder-coated finishes when not copper.

10. Provide angled transitional pieces for downspouts to fit closely against the wall for their entire length.

11. Coordinate locations of downspouts to conceal control joints in masonry walls when possible.

12. Place downspouts away from building entries. Water discharged should not run across sidewalks.

13. Splash blocks will be placed on compacted surface area, not on soft soil that is prone to erosion.

D07.6. Roof Vents and Elements

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

2. On sloped roofs clad pipe penetrations to match the roofing material.

3. Avoid the use of rooftop mechanical equipment, however for renovations and unavoidable configurations ensure units are screened.

4. Provide access points and service routes to equipment that protect the roof.

5. Screen all large vents.

6. Ensure attic spaces are properly vented at ridges and soffits.

7. Match roof color for all exposed equipment and vents.

8. Avoid roof-mounted antenna systems.

9. Arrange Lightning Protection Systems (LPS) components in an ordered, uncluttered, inconspicuous appearance and integrated into the organization of the roof and wall systems.

10. Ensure that LPS roof mounting systems are approved by the roofing manufacturer.

11. Additions to a roof will not interfere with LPS or other rooftop systems that may be required.

12. Permanent fall protection must be included with any addition to a roof with a slope above 3:12 per UFC 3-110-03. to a roof.

D07.7. Clerestories and Skylights

1. Clerestories and skylights are permitted in Group 1 facilities and allowed in Group 2, 3 and 4 facilities only when serving passive systems, are justifiable by life-cycle analysis and as approved by the BCE. Use of Kalwall brand or equal translucent panels as the preferred product is recommended. Skylights when within direct visibility of the beach or for large facilities where interior lighting will be visible to the exterior and will cause excessive light pollution/sky glow. All skylights must be approved by the BCE.

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 4-010-01 DoD Minimum Anti-terrorism Standards for Buildings.

D07.8. Vegetated Roof

1. Vegetated roofs at SLD45 are cost prohibitive regarding maintenance and therefore prohibited.

D07.9. Roof Systems Materials

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

D07.9.1. Standing Seam Metal

◉ Applicable ○ N/A Number of base standards 1

Type: **Standing Seam Panels**

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

Mfr: N/A

Color: Dark red, silver or white as determined by the BCE

Finish: Kynar500 coated aluminum 20yr warranty

Model #: Tee-Panel

Other: Shed, gabled or hipped standing seam metal depending on location and adjacent facilities. 12 3/4" wide exposure with 1" high standing snap lock seams.

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

D07.9.2. Membrane Single-ply

◉ Applicable ○ N/A Number of base standards 1

Type: **Single-Ply Membrane**

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

Mfr: Suprema Soprastar or equal

Color: White or approved design

Finish: Smooth

Model #: TPO single-ply, “flat” minimal slope

Other: White granulated top ply with an aged solar relective index of 86

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

D07.9.3. Built-up Multi-ply

◯ Applicable ◉ N/A

D07.9.4. Concrete Tile

◉ Applicable ◯ N/A Number of base standards 1

Type: **Concrete S-Tile**

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

Mfr: Boral or equivalent

Color: Terracotta, Dark Red flashed or blended or as approved by the BCE

Finish: Factory

Model #: Barcelona 900 (Large), Villa 900 (Smaller) with ridge tiles and closures

Other: Concrete tile roofing for Group 1 facilities to be approved by BCE. Only tile roofing accent features are permitted for Group 3 facilities. Only use Florida Standard Weight concrete tile as recommended for Florida.

UFGS: Section 07 32 16 Concrete Roof Tile
(Not Available on UFGS)

D07.9.5. Clay Tile

◉ Applicable ◯ N/A Number of base standards 1

Type: **Clay S-Tile**

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

Mfr: Boral or equivalent

Color: Terracotta or as approved by the BCE

Finish: Factory

Model #: Fire Flash, El Camino or Newport Blend S-Tile w/ridge caps and closures

Other: Clay tile roofing will be used for Group 1 facilities - exceptions will be approved by the BCE.

UFGS: Section 07 32 13 Clay Roof Tiles
(Not Available on UFGS)
Section 07 32 14 Clay Tile Roofing Replacement or Repair
http://www.wbdg.org/FFC/DOD/UFGS/UFGS 07 32 14.pdf

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

D07.9.9. Composite Shingles

◉ Applicable ○ N/A Number of base standards 1

Type: **Style 1**

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

Mfr: GAF

Color: Sunset Brick or blended tones as determined by the BCE

Finish: 25 year Architectural dimensional tab

Model #: Timberline Armorshield

Other: Gabled or hipped with transverse gable 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 Number of base standards 1

Type: **Corrugated Kynar500 aluminum V-Crimp roofing**

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

Mfr: Local Manufacturer TBD

Color: Simulated aged galvalume Kynar500 finish

Finish: Florida Coastal Style

Model #: V-Crimped profile, Cementious hard board vented soffit. Min. = 10 S.F.

Other: Corrugated .040 alum “V Crimp” roof (1/2" corrugations @ 12" O.C. w 2 intermediate corrugations) simulated "galvalume" Kynar500 finish. SS clips fasteners, joists, hangars, & associated components/connections

UFGS: N/A

D08. STRUCTURAL SYSTEMS

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

Comply with AF Corporate Standards for Structural Systems:
http://afcfs.wbdg.org/facilities-exteriors/structural-systems/index.html

Comply with AFCFS Recommended Materials:
http://afcfs.wbdg.org/facilities-exteriors/structural-systems/materials/index.html

Group 1



Group 2



Group 3



Group 4



D08.1. Systems and Layouts

1. Concrete framing is preferred for all Facility Groups. All pre-engineered structural steel framing will be INORGANIC ZINC coated, and is acceptable for Groups 1, 2 and 3 facilities; conventional thermal envelopes and IFS-approved wall materials and detailing are required. Rigid steel framing may be used for Groups 1 and 2 but must be inorganic zinc coated (IOZ).

2. Wood framing or light-gauge steel framing will be used for Group 4. Any steel will be coated in inorganic zinc.

3. Narrow buildings 60' or less in width with column-free interiors are preferred for office, administrative and personnel spaces; when interior columns are required optimize the structural grid layout for open-plan arrangements.

4. Fully coordinate structural grids with exterior window systems to align columns with window frames or wall systems.

5. When structure is exposed provide an organized appearance and coordinate with mechanical, electrical, plumbing, fire protection, information technology, and communications systems.

6. Specialty systems (such as space frames, vaults or domes) and of structure as a visual feature may be approved on a case basis.

7. Cost-effectively designed interior bearing walls may be used for thermal mass.

8. Manufacturers listed in sections D08.2.1. - D08.2.9. are provided only to establish a level of quality for use when designers write the salient characteristics of the brand-name item in project specifications following Federal Acquisition Regulations (FAR).

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

Type: **Concrete**

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

Mfr: Custom

Color: Natural Gray

Finish: Light texture

Model #: Post and beam, waffle slab

Other: N/A

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

D08.2.2. Insulated Concrete Forming (ICF)

○ Applicable ◉ N/A

D08.2.3. Steel

◉ Applicable ○ N/A Number of base standards 1

Type: **Rigid Framing**

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

Mfr: US Steel

Color: Inorganic Zinc Coated Steel

Finish: Matte

Model #: Structural steel shapes

Other: Protective coating of exterior exposed carbon steel, stainless steel, and aluminum must comply with NASA-STD-5008B, latest edition, for protective coatings to mitigate corrosion. Inorganic Zinc Coatings Stds.

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

Type: **Moment Frame**

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

Mfr: Local TBD

Color: Inorganic Zinc coated Steel

Finish: Matte

Model #: Moment Frame

Other: Draped insulation may be used behind wall systems. Deflection criteria must follow IBC.
Comply with NASA-STD-5008B, latest ed. for metal coatings.

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

Type: **Split-Face CMU block**

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

Mfr: N/A

Color: Patrick "Conch Shell"

Finish: Natural

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 Number of base standards 2

Type: **Heavy Timber with Corrugated Alum Kynar500 V-crimped Roofing**

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

Mfr: Custom

Color: Natural Marine Grade Lumber - natural rot and insect resistant

Finish: Sealed

Model #: CCA .60

Other: All open structures will be constructed of heavy timber. Use of lumber and pre-engineered trusses is unacceptable. All fasteners will be concealed stainless steel. Use IPE wood top caps and stl steel cable infill.

UFGS: Section 06 13 00 Heavy Timber Construction
(Not Available on UFGS)

Type: **Heavy Timber with Thatch Roofing**

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

Mfr: Custom

Color: Natural Marine Grade Lumber - natural rot and insect resistant

Finish: Sealed

Model #: CCA .60

Other: All open structures will be constructed of heavy timber only. Fasteners will be concealed stl steel. Use 1-1/2" tube high grade type 316 stl steel for exterior handrails/posts w/IPE wood top caps, stl steel mesh infill.

UFGS: Section 06 13 00 Heavy Timber Construction
(Not Available on UFGS)

D08.2.7. Light-gauge Steel

◉ Applicable ○ N/A Number of base standards 1

Type: **Light Gauge Steel Framing**

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

Mfr: Local

Color: Inorganic Zinc Coated

Finish: Matte

Model #: Standard Structural Shapes

Other: Protective coating of exterior exposed carbon steel, stainless steel, and aluminum must comply with NASA-STD-5008B, latest edition, for protective coatings to mitigate corrosion. Inorganic Zinc Coatings Stds.

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

Type: **Lumber Framing**

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

Mfr: Local

Color: Natural Marine Grade

Finish: Sealed

Model #: Standard S4S framing lumber

Other: Lumber framing is only allowed for use on enclosed facilities and not on open structures. All fasteners will be concealed and will be stainless steel

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 Number of base standards 2

Type: **Tilt-Up**

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

Mfr: Custom

Color: Patrick SFB Conch shell

Finish: Stucco finish

Model #: N/A

Other: N/A

UFGS: N/A

Type: **Towers**

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

Mfr: Rohn

Color: Grey

Finish: Inorganic Zinc (IOZ) coated

Model #: N/A

Other: N/A

UFGS: N/A

D09. MECHANICAL, ELECTRICAL AND PLUMBING

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

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

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, which is dominated by mechanical cooling loads, 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 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 or natural gas domestic hot water systems are required when life cycle cost effective.

6. Integrate shading into building exteriors to reduce solar heat gain during the summer.

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. Refer to Appendixes for detailed base requirements. Make considerations due to the corrosive environment

2. Ensure direct exterior access is provided (for CE) to main mechanical and electrical rooms from exterior as much as possible. All mechanical rooms will be climate controlled. Electronics in all systems are prone to corrosion here at SLD45 installations.

3. Screen exterior equipment from primary views (landscape, building masses, screen walls) and comply with AT requirements. Orient equipment from ocean prevailing winds if possible, otherwise use walls.

4. Keep equipment away from main building entrances; locate service area/yard on least visible side of a building.

5. Locate all meters inside mechanical rooms. Coordinate LOCATION with 45 CES.

6. Design emergency generator systems integrally with all other building systems and avoid incompatible building additions; locate generators near service areas and not visible from primary entrances. Design generator setups to allow for future replacement with additional switches to enable manual bypassing.

7. When structure is exposed as a finished ceiling, fully integrate MEP and fire protection systems to provide an organized uncluttered appearance.

8. Conceal ducts, piping, conduits, devices, etc., when permanent walls, suspended ceilings or raised floors are provided; locate sprinkler heads in orderly configuration.

9. Limit interior wall-mounted equipment in occupied personnel spaces; avoid surface-mounted conduit and pipes.

10. Provide efficient mechanical/utility rooms with layouts to facilitate system performance and maintenance; provide convenient access to controls, clearly label systems and include operating and maintenance instructions. ALL mechanical spaces must be conditioned space due to the corrosive environment.

11. Separate mechanical, electrical, fire and communications rooms when possible.

12. Integrate recessed and wall-mounted fixtures such as fire standpipe cabinets and drinking fountains within permanent walls.

13. Paint the body of all fire hydrants PSFB Conch Shell Color. Paint bonnets and fire connections only per NFPA based on the established flow of the hydrant or red. All backflow prevention devices must be located inside mechanical rooms and not painted.

D09.2.1. Mechanical/Equipment Rooms

1. Design equipment rooms to be located along exterior walls with exterior access.

2. Sufficiently large doors or easily removable panels will be designed to allow passage of large piece of equipment without the need to dismantle.

3. Floors are to be sloped to interior drain. Interior drains must go to sanitary sewer. All drains will have P-trap gravity plugs.

4. Room will be provided with domestic water with hose bib and 120-volt power outlets.

5. Adequate wall space or full-standing partitions will be provided for mounting of controls.

6. All equipment pads will be 12" high off finished floor and have 12" minimum of horizontal space from edge of equipment.

7. All equipment rooms must be conditioned space due to corrosion of electronics.

D09.2.2. Gas & Fuel Systems

1. Natural gas distribution lines will be polyethylene pipe, yellow or orange in color, conforming to AGA standard PE 2406 or PE 2306. Connections will be made by heat fusion and metallic tape will be installed above.

2. Gas meters will be installed for new construction or in renovation projects and installed by Florida City Gas to their standards.

3. Use of natural gas is preferred.

4. Liquid fuel tanks will be installed in concrete vaults above ground.

5. See APPENDIX G11 for further details for fuels.

D09.2.3. Heating, Ventilation & Air Conditioning (HVAC) Standards

1. See Appendix G10 for further detailed directives.

D09.2.4. Plumbing, Water, Sewer & Fuels Standards

1. See Appendix G11 for further detailed directives.

D09.2.5. Fire Alarm & Mass Notification (FA&MNS) Standards

1. All Fire Alarm systems will be Monaco at all SLD45 installations unless otherwise directed by the BCE. This single brand streamlines maintenance and training. The Standard Fire Alarm Control Panel (FACP) is **Monaco MAAP-X** for all SLD45 Installations. All control panels must be addressable type and be point to point capable with the D-21 central receiving station.

2. See Appendix G12 for further detailed directives.

D09.2.6. Energy Management & Controls Systems (EMCS) Standards

1. See Appendix G13 for further detailed directives.

D09.2.7. Electrical Standards

1. See Appendix G14 for further detailed directives.

D09.2.8. Communications Standards

1. See Appendix G15 for further detailed directives.

D09.2.9. Fire Protection (FP) Standards

1. See Appendix G16 for further detailed directives.

D09.2.10. Security Standards

1. See Appendix G17 for further detailed directives.

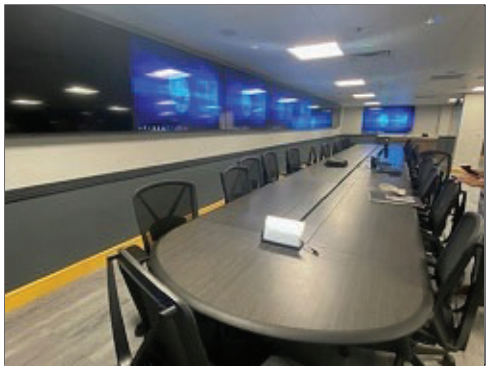
End of Section

E. FACILITIES INTERIORS

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

Group 1





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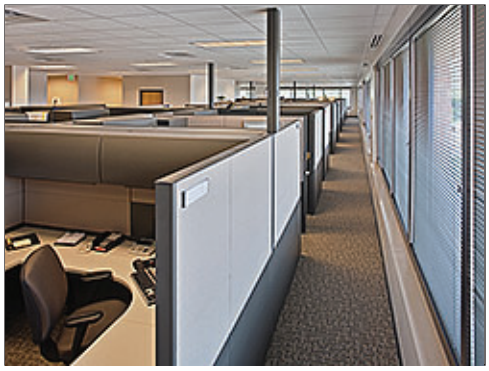
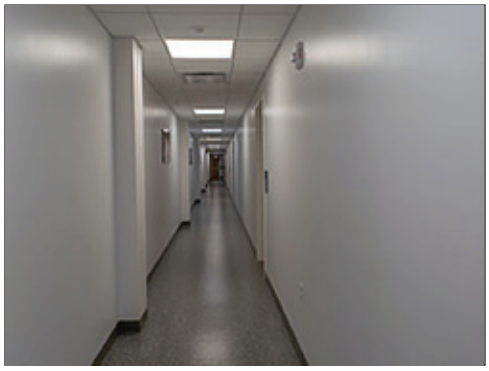


Group 3


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. 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.

3. Provide high-performance building configurations following UFC 1-200-02. Ensure passive design strategies are cost effectively incorporated before active mechanical systems are designed.

4. 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.

5. Meet security and force protection requirements in UFC 4-010-01: DoD Minimum Antiterrorism Standards for Buildings.

6. 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.

7. 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.

8. Provide open-plan configurations for office, administrative, operational and related activities and spaces for maximum flexibility using a "core and shell" approach as defined in AFCFS. Fully integrate facility interiors with overall building systems and preserve all passive and natural design strategies.

9. Design and review must be accomplished by, or in consultation with, professional interior designers or architects with significant interior design experience. For in-house design and maintenance projects that require interior design applications, the 45th CES Architect and/or Interior Designer is expected to work on the project.

10. Consult with the State Historic Preservation Officer (SHPO) and Advisory Council on Historic Preservation 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. This is done through 45 CES Asset Management Flight.

11. 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. Ensure to account for HVAC systems.

4. Proportion lobbies and common spaces based on type of function, activity and facility group and flexibility to support multiple missions over time. Provide distinct boundaries for waiting areas with a variety of comfortable and moveable furniture arranged in small flexible groupings to accommodate the widest range of persons and families.

5. Design common areas to accommodate and manage a sudden influx of people that rapidly reaches the maximum occupant load.

6. Allow no direct sight lines into restrooms.

7. Situate utility and core areas to minimize impact on daylighting and to maximize use as thermal buffers.

8. Ensure electrical, lighting and communications systems can be adaptable to configuration changes.

9. Avoid power poles to the maximum extent; when poles are necessary minimize the number and coordinate locations with furniture placement and other elements.

10. Avoid sloping floors to maintain flexibility and eliminate future structural changes.

11. Special consideration may apply to Sensitive Compartmented Information Facilities (SCIFs). See Appendix G17.

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 AFMAN 32-1084. Identify special requirements if any, such as privacy separation, VIP areas, gathering spaces and storage. Note: The occupant's rank and position will influence the square footage and selection of materials.

5. Provide clear circulation and pathway finding for both horizontal and vertical directions that accommodate the number of personnel in the facility.

6. Maximize efficiencies in the space plan for functional relationships and adjacencies for all facility users. Efficiently create and situate rooms and support rooms such as conference/meeting rooms and break rooms.

7. Provide interior design building-related illustrations, drawings, schedules, materials selections, specifications and cost estimates as listed in UFC 3-120-10. Refer to Furnishings in this IFS also.

8. SID Format will follow UFC 3-120-10. Additionally, provide the following minimum requirements:

a. Final order data sheets must be provided in an electronic format that is readily used such as Word or Excel.

b. Information and samples are to be submitted in separate binders: 8 ½" x 11" format; white 3" D-ring binders, only; pockets on the inside of the covers; more than one binder may be used; limit fold-out items to 25 ½".

c. Label the SID outside spine, outside cover and inside title page with the following information:
- Phase %
- SID
- Project Title and Number
- Location of Project
- Submittal Date
- A&E or Project firm
- Volume Number (ex: Vol. 1 of 3)

d. Each sheet within the SID binder is to be labeled:
- Project title

• Location
• A&E or Project firm name
• Sheet number

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 will 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 specifications must state that all contractors will be a licensed general contractor and all sub-contractors licensed trades in the state of Florida or have an equivalent out of state license recognized by the state of Florida or determined by the BCE. This will be enforced by the Contracting Officer.

E01.2. Quality and Comfort

Comply with Air Force Corporate Standards for Quality and Comfort:
http://afcfs.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.

10. Investigate customs or cultural influences that might become protocol issues and comply with Federal Government policy regarding protection and enhancement of the cultural environment. For example, no symbol of any kind (that could relate to any religion) is allowed in the chapel.

E02. Floors

Comply with Air Force Corporate Standards for Floors:
http://afcfs.wbdg.org/facilities-interiors/floors/index.html

E02.1. Floor Materials

Facility Group 1 floor materials will be as follows.

Primary:	Terrazzo and Prepared Slabs (Polished)/BCE
Secondary:	Porcelain tile
Tertiary:	Carpet, Tile StairTreads

Facility Group 2 floor materials will be as follows.

Primary:	Prepared Slabs (Ground, Polished, Stained) /BCE
Secondary:	Porcelain tile, Waterproof Vinyl Planks
Tertiary:	Carpet, Rubber Stair Treads

Facility Group 3 floor materials will be as follows.

Primary:	Prepared Slabs (Ground, Stained)
Secondary:	Waterproof Vinyl Planks
Tertiary:	Carpet (admin only)

Facility Group 4 floor materials will be as follows.

Primary:	Carpet (Commercial Grade)
Secondary:	Porcelain tile, Waterproof Vinyl Planks
Tertiary:	N/A

1. Select floor materials in response to the amount of foot traffic a floor receives and to local conditions to provide the greatest long-term value.

2. Floor treatments (patterns and layouts) should convey the designation of the Facility Groups (Group 1, 2, 3 or 4), type of use, and type of space while considering a life cycle cost analysis. Facility Group 1 may receive higher quality treatments than Facility Groups 2 through 4, but should not convey an excessive use of resources.

3. Lower the initial cost of flooring in new construction while providing durability appropriate for the facility type.

4. Carpet must comply with requirements for performance, aesthetics, functional use and maintenance; refer to UFGS 09680 Carpet II Program ordering Guide & Air Force Carpet Standard. Coordinate carpet selections and specifications with installation design standards.

Carpet Waiver Control Number 2023Q0201: Waiver is located in appendix G04

5. Natural stone and terrazzo flooring will be used in high traffic areas of Group 1.

6. Resilient and rapidly renewable flooring to include waterproof vinyl planks may be used in low traffic areas in Group 1, 2 and 4.

7. Acceptable resilient floor includes rubber, VCT. Resilient flooring may be used for stairs, office break rooms, dining areas, fitness areas, and (rubber) floor base.

8. Use carpet tiles under system furniture installations. See appendix G04. Refer to TARR Rating for carpets following AF criteria. Refer to AFCFS.

9. Manufacturers listed in sections E02.1.1. - E02.1.8. are provided only to establish a level of quality for use when designers write the salient characteristics of the brand-name item in project specifications following Federal Acquisition Regulations (FAR).

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

E02.1.1. Prepared Slabs

◉ Applicable ○ N/A Number of base standards 1

Type: **Ground and Polished Slabs**

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, sealed

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 1

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 aggregrates

Finish: Fine to medium polished texture, slip resistant

Model #: Medium to small aggregate

Other: N/A

UFGS: Section 09 63 40 Stone Flooring
(Not Available on UFGS)
Section 09 66 13 Portland Cement Terrazzo Flooring
http://www.wbdg.org/FFC/DOD/UFGS/UFGS 09 66 13.pdf

E02.1.3. Quarry Tile

○ Applicable ◉ N/A

E02.1.4. Ceramic Tile

◉ Applicable ○ N/A Number of base standards 5

Type: **Porcelain Ceramic Style 1**

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

Mfr: American Olean

Color: Stone Claire: EL91 Ashen, Bordeaux: BD02 Chameau or BCE approved

Finish: Glazed, slip resistant

Model #: Porcelain tile

Other: Urethane grout required to match tile. Sizes 13x13, 20x20, 13x20, or 6.5 x 6.5

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

Type: **Porcelain Ceramic Style 2**

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

Mfr: Daltile

Color: Porcealto Color: Pepi Grigio

Finish: Glazed, slip resistant

Model #: Porcelain tile

Other: Urethane grout required to match tile. Sizes 12 x 12 or similar

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

Type: **Porcelain Ceramic Tile Style 3**

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

Mfr: Crossville

Color: Empire Color: Black Swan VS86-UP, General's Gray VS85-UP or as approv

Finish: Thru-body

Model #: Porcelain tile

Other: Urethane grout required to match tile, Size 12x12

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

Type: **Porcelain Ceramic Tile Style 4**

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

Mfr: Daltile

Color: Saddle Brook XT Gravel Road XT SD86

Finish: Color-body

Model #: Porcelain Tile

Other: Urethane grout required to match tile, Size 6 x 36 with matching 3 x 18 base and matching trim

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

Type: **Porcelain Ceramic Tile Style 5**

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

Mfr: American Olean Historic Bridge Collection

Color: #03 Banks Bridge

Finish: Glazed, slip resistant

Model #: Porcelain Tile

Other: Urethane grout required to match tile, Size 6 x 36 with matching 3 x 18 base and matching trim

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 3

Type: **Waterproof Vinyl plank**

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

Mfr: Mohawk

Color: Living Local Collection #949 Gorgeous Gray with acoustical underlay, act

Finish: Factory

Model #: TBD

Other: 4.5mm, 20mil wear layer, 6 x 38" planks. Must have rubber backing built-in. Do not glue down. click type. Floating; Use min 4mils plastic underlayment

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

Type: **Rubber Base Style 1**

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

Mfr: Roppe Pinnacle

Color: Neutral to match flooring

Finish: Matte

Model #: Roll goods

Other: Straight and cove base, 4" rolled goods

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

Type: **Rubber Base Style 2**

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

Mfr: Burke

Color: Neutral to match flooring

Finish: Matte

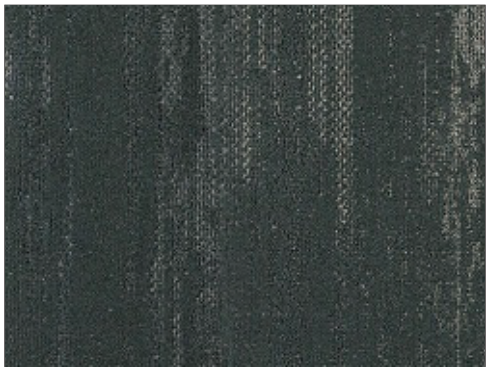
Model #: Roll goods

Other: Straight and cove base, 4" rolled goods

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

E02.1.6. Carpet

◉ Applicable ○ N/A Number of base standards 4



Type: **Carpet Tile Style 1 - High End Office/Conference**

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

Mfr: Milliken with Tractionback - GLUELESS

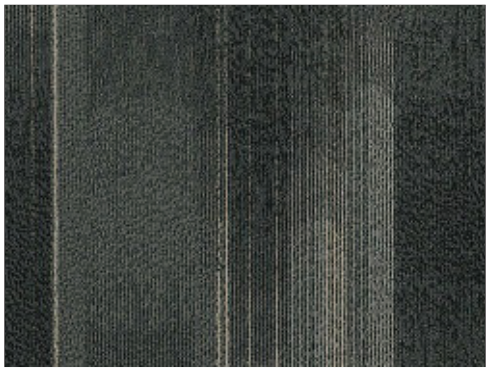
Color: TBD at time of Design

Finish: Square

Model #: Textured Sky

Other: Carpet tiles 18 x 18 or 36 x 36
Patterns to select from: Rainmaker (Offices and Hallways) and Horizon Line (Exec Offices and Conference Rooms)

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



Type: **Carpet Tile Style 2 - Basic Office/Conference**

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

Mfr: Milliken with Tractionback - GLUELESS

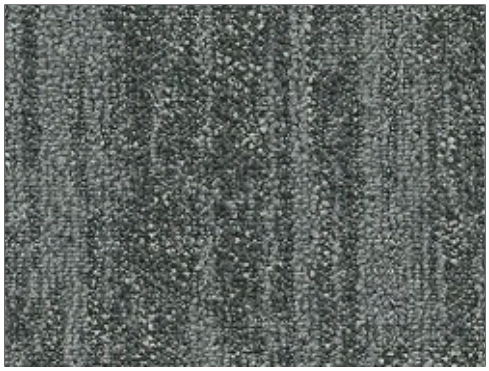
Color: TBD at time of Design

Finish: Square

Model #: Southern Analog

Other: Carpet tiles 18 x 18 or 36 x 36
Patterns to select from: Viewfinder, Pinhole, Voltage (Offices and Hallways) and Panoramic (Exec Offices and Conference Rooms)

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



Type: **Carpet Tile Style 3 - Shop Support**

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

Mfr: Milliken with Tractionback; GLUELESS

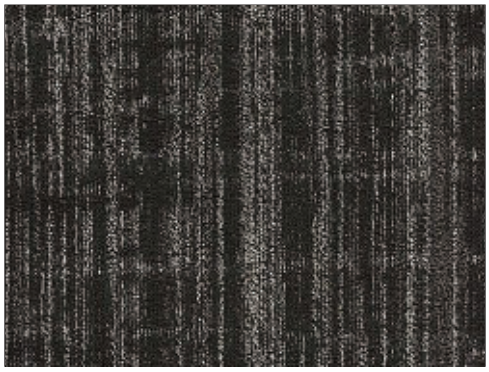
Color: TBD at time of Design

Finish: Square

Model #: Major Frequency One

Other: Carpet tiles 18 x 18 or 36 x 36
Patterns to select from: Vibration (Offices and Hallways) and Distortion (Exec Offices and Conference Rooms)

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



Type: **Carpet Tile Style 4 - Shop Support**

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

Mfr: Milliken with Tractionback - GLUELESS

Color: TBD at time of Design

Finish: Square

Model #: Major Frequency Three

Other: Carpet tiles 18 x 18 or 36 x 36
Patterns to select from: Unison and Impromptu

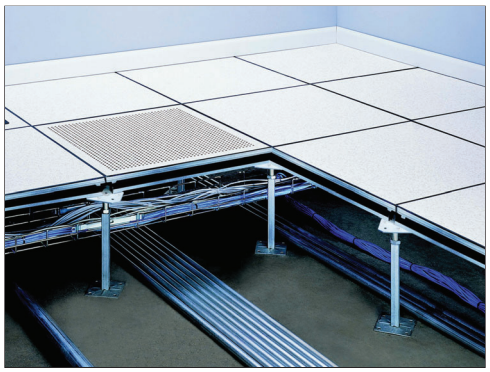
UFGS: UFGS 09 68 00 Carpeting
http://www.wbdg.org/FFC/DOD/UFGS/UFGS 09 68 00.pdf

E02.1.7. Rapidly-Renewable Products

○ Applicable ◉ N/A

E02.1.8. Other

◉ Applicable ○ N/A Number of base standards 5



Type: **Raised Computer Flooring**

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

Mfr: Nevamar

Color: as approved by the BCE

Finish: Factory Matte Finish

Model #: Static Dissipative Laminate

Other: N/A

UFGS:

Type: **Walk-off Mat**

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

Mfr: CS Group

Color: Gridline 2 with Slip-knot

Finish: Stainless Steel

Model #: Type 316 SS

Other:

UFGS: Section 12 48 13 Entrance Floor Mats And Frames
http://www.wbdg.org/ffc/dod/unified-facilities-guide-specifications-ufgs/ufgs-12-48-13

Type: **Grout**

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

Mfr: Bostik

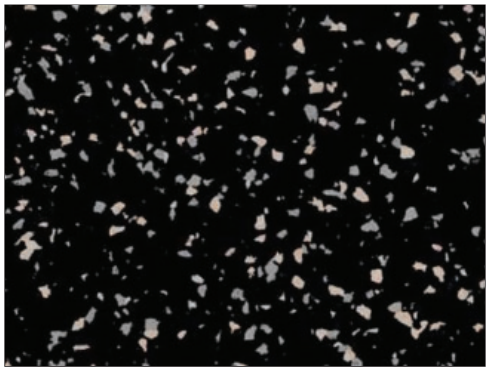
Color: Trucolor

Finish: Rapid Cure Urethane

Model #: N/A

Other: N/A

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



Type: **Fitness Flooring**

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

Mfr: Johnsonite

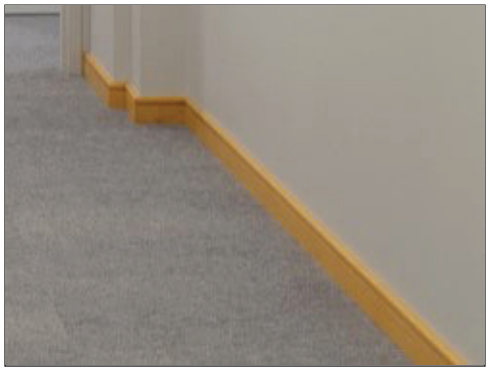
Color: Replay Interlocking Tile

Finish: Jeans #527

Model #:

Other: 24x24 or use rolled goods for Fitness Center

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



Type: **Wood baseboard**

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

Mfr: Local

Color: Stained wood as approved by the BCE (generally Maple)

Finish: Satin (aqueous)

Model #: N/A

Other: Use of oak is not permitted unless approved by the BCE.

UFGS: 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 will be as follows.

Primary:	Cement Plaster over CMU
Secondary:	Gypsum board (painted)
Tertiary:	Ceramic/ porcelain tile (restrooms)

Facility Group 2 wall materials will be as follows.

Primary:	Cement Plaster over CMU
Secondary:	Gypsum board (painted)
Tertiary:	Ceramic/ porcelain tile (restrooms)

Facility Group 3 wall materials will be as follows.

Primary:	CMU block, sealed & painted
Secondary:	gypsum board (painted)
Tertiary:	Ceramic/ porcelain tile (restrooms)

Facility Group 4 wall materials will be as follows.

Primary:	Gypsum board (painted)
Secondary:	N/A
Tertiary:	Ceramic/ porcelain tile (restrooms)

1. Provide durable low-maintenance wall materials and finishes for a long life span with the possibility of one or more uses of spaces during that time. Apply wall finishes assuming a 10-year lifespan. Color will be cohesive and of consistent quality throughout a facility.

2. Comply with Unified Facilities Criteria for Sound Transmission Loss (TL), Noise Reduction (NR) and Sound Transmission Class (STC) ratings.

3. Follow UFC 3-450-01 (Vibration and Noise Control) for acoustic design issues including speech privacy, sound isolation or sound masking.

4. Provide a level of finish following UFGS Section 09 29 00 Gypsum Board. level 5.

5. Select and apply paint with sheens (gloss levels) appropriate for the application following UFGS Section 09 90 00 Paints and Coatings.

6. Provide ceramic tile on wet walls of kitchens, toilet rooms, bathrooms, locker rooms, etc., in all facility groups. Tile will be from floor to ceiling in areas with toilets, sinks, showers are located. Use solid surface HDPE material for toilet/urinal partition systems.

7. Neutral split-face or ground-face integrally colored block with a clear sealer may be used in Group 3. Do not paint block.

8. Provide stained wood base on drywall partitions in Groups 1 and 2.

9. Hardwood chair rails / bumper rails other than oak may be used in high-use areas of Groups 1 and 2; aqueous clear finishes are preferred to reduce maintenance; plastic chair rails are permitted only in medical applications.

10. Corner guards are normally not permitted with the exception of the Medical Clinic facilities as required in all high traffic areas such as corridors, lobbies, elevator areas, large open offices, service areas. Use 2" solid color vinyl in office areas; use satin stainless steel angle in service areas and other areas of heavy use.

11. Decorative wainscots and moldings may be used only in Group 1 when approved on a case by case basis for executive level areas.

12. Corner guards are permitted 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 satin finish or appropriate equivalent may be judiciously used in Group 3.

13. Group 4 may use painted composite wood base.

14. Bathroom partitions will be HDPE solid surface material. Do not use laminate/formica or hollow core stainless steel or any wood product..

15. See appendix G04 for further directives.

16. Manufacturers listed in sections E03.1.1. - E03.1.8. are provided only to establish a level of quality for use when designers write the salient characteristics of the brand-name item in project specifications following Federal Acquisition Regulations (FAR).

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

E03.1.1. Concrete

◉ Applicable ○ N/A Number of base standards 1

Type: **Concrete**

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

Mfr: Exposed Concrete

Color: cement gray

Finish: polished smooth

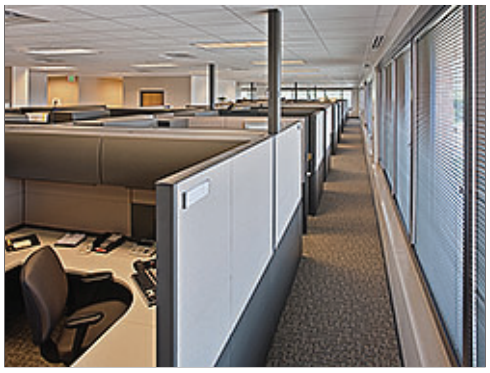
Model #: N/A

Other: N/A

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

E03.1.2. Masonry

◉ Applicable ○ N/A Number of base standards 1



Type: **CMU Back-up with Cement Plaster Finish**

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

Mfr: N/A

Color: Sherwin Williams SW7029 Agreeable Gray

Finish: Sand

Model #: 2-coat cementitious system

Other: Interior plaster will be painted or have integral color.

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

E03.1.3. Ceramic Tile

◉ Applicable ○ N/A Number of base standards 1

Type: **Bathroom wall tile**

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

Mfr: Daltile or approved by BCE

Color: Colour Scheme Glazed Porcelain

Finish: Gloss, Semi-gloss

Model #: Ceramic/porcelain wall tile with Bostic urethane grout to match

Other: Located on wet walls in kitchens, restrooms, etc. Tile in restrooms will be installed from floor to ceiling (full wall) on all walls.

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

Type: **Style 1**

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

Mfr: US Gypsum

Color: Sherwin Williams Agreeable Gray SW7029

Finish: Eggshell finish or as approved by BCE (Sheen per UFGS)

Model #: Tapered edge

Other: Mold resistant Type to use in wet/moist areas. Drywall will not be used in areas that have direct exterior access such as rollup door entrance areas.

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

E03.1.5. Metal Panels

○ Applicable ◉ N/A

E03.1.6. Wood Paneling

◉ Applicable ○ N/A Number of base standards 1

Type: **Style 1, Executive Areas**

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

Mfr: Custom

Color: Dark wood Stained

Finish: TBD at time of design

Model #: N/A

Other: N/A

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

E03.1.7. Rapidly-Renewable Products

○ Applicable ◉ N/A

E03.1.8. Other

◉ Applicable ○ N/A Number of base standards 1

Type: **Toilet Partition**

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

Mfr: N/A

Color: Per Design

Finish: HDPE solid surface

Model #: N/A

Other: N/A

UFGS: N/A

E04. Ceilings

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

E04.1. Ceiling Materials

Facility Group 1 ceiling materials will be as follows.

Primary:	Exposed Framing Coated Black.
Secondary:	Grid and Acoustical Tile
Tertiary:	Gypsum board (painted)

Facility Group 2 ceiling materials will be as follows.

Primary:	Exposed Framing (Roof / Floor Structure Above)
Secondary:	Grid and Acoustical Tile
Tertiary:	Gypsum board (painted)

Facility Group 3 ceiling materials will 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 will be as follows.

Primary:	Grid and Acoustical Tile
Secondary:	Gypsum board (painted)
Tertiary:	N/A

1. Provide durable low-maintenance ceiling materials for a long facility life span with flexibility for two or more uses during that time.

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 will be fully coordinated and have an ordered appearance. Ceiling types, layouts and materials should be cohesive and consistent throughout a facility.

5. Limit the transmittance of sound through building components and the reflectance of sound within interior spaces following UFC 3-450-01. Comply with Unified Facilities Criteria for Sound Transmission Loss (TL), Noise Reduction (NR) and Sound Transmission Class (STC) ratings.

6. Accent ceiling materials such as metal, wood, and rapidly renewable may be used in Group 1 as approved on a case basis.

7. Follow UFC 3-450-01 (Vibration and Noise Control) for acoustic design issues including speech privacy, sound isolation or sound masking.

8. Manufacturers listed below are only provided to establish a baseline of equivalency among all applicable manufacturers.

9. Manufacturers listed in sections E04.1.1. - E04.1.8. are provided only to establish a level of quality for use when designers write the salient characteristics of the brand-name item in project specifications following Federal Acquisition Regulations (FAR).

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

Type: **Style 1**

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

Mfr: N/A

Color: Neutral colors reviewed on a case basis

Finish: Field painted (Sheen per UFGS)

Model #: N/A

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 Number of base standards 1

Type: **Stucco Finished Ceiling at Exterior Loggia**

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

Mfr: Sto

Color: Patrick SFB Conch Shell

Finish: Very Light Texture

Model #: StoQuik Silver Drain Sto Emerald Coat

Other: Refer to D05.1.2.
UFGS: Section 09 24 23 Cement Stucco:
http://www.wbdg.org/FFC/DOD/UFGS/UFGS 09 24 23.pdf

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

E04.1.3. Grid and Acoustical Tile

◉ Applicable ○ N/A Number of base standards 2

Type: **Style 1**

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

Mfr: Armstrong

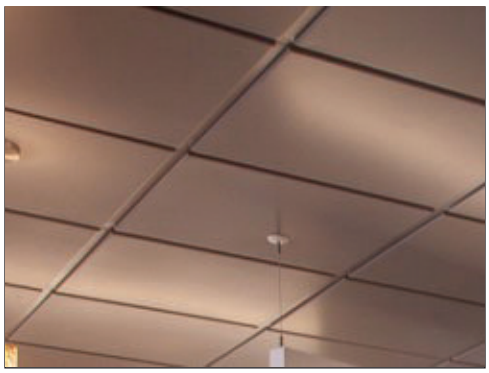
Color: White as approved by the BCE

Finish: DuraBrite with factory-applied latex paint

Model #: 2'x2' Sq lay in, Tegular w/ reveal edge and fine texture, 15/16"

Other: Performance characteristics: sag resistance in high humidity; ASTM E1246; Type iV, Form 2, Pattern E, Fire Class A.
GRID: Prelude XL 15/16" Exposed T System, White.

UFGS: Section 09 51 00 Acoustical Ceilings
http://www.wbdg.org/FFC/DOD/UFGS/UFGS 09 51 00.pdf



Type: **Style 2**

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

Mfr: Armstrong

Color: bronze

Finish: metal smooth

Model #: N/A

Other: N/A

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

Type: **Style 1**

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

Mfr: US Gypsum

Color: Solid neutral colors

Finish: Prime and Paint (sheen per UFGS)

Model #: Tapered edge

Other: Moisture resistant.

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 Number of base standards 3

Type: **Recreational Ceiling Fans**

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

Mfr: Hampton Bay Altura Indoor/Outdoor Ceiling Fan

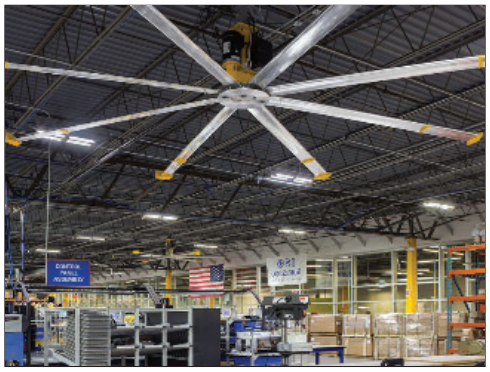
Color: Oil Rubbed Bronze

Finish: Factory

Model #: Model 2660, 5 all-weather blades, 22 degree pitch to blades

Other: UL Listed, CSA listed, Energy Star Rated, 3 speed with remote control, air flow rate 6,886 CFM, 67.2 watts, 102 cu. ft./minute/watt, lifetime motor warranty. Provide downrod. Must be approved for wet locations.

UFGS: N/A



Type: **Industrial Ceiling Fans**

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

Mfr: Big Ass Fans

Color: Silver or as approved by the BCE.

Finish: Factory

Model #: Powerfoil X3.0

Other: Features include a patented system of aerospace-designed airfoils and winglets, and the NitroSeal Drive gearbox requires no maintenance – ever. Backed by a thorough, non-prorated 15-year warranty.

UFGS: N/A

Type: **Exposed Structure - Painted**

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

Mfr: To be determined (TBD)

Color: Black

Finish: Flat

Model #: TBD

Other: N/A

UFGS: N/A

E05. Doors and Windows

Comply with Air Force Corporate Standards for Doors and Windows:
http://afcfs.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 will be as follows.

Primary:	Black Anodized Aluminum for glass storefront
Secondary:	Clear Anodized Aluminum
Tertiary:	Hollow metal (match wall, satin finish paint)

Facility Group 1
door (leaf) materials will be as follows.

Primary:	Glass with Black anodized Aluminum
Secondary:	Wood solid core, hardwood veneer
Tertiary:	N/A

Facility Group 2
door (frame) and window frame materials will be as follows.

Primary:	Black Anodized Aluminum for glass storefront
Secondary:	Hollow metal (paint to match wall, satin finish)
Tertiary:	N/A

Facility Group 2
door (leaf) materials will be as follows.

Primary:	Wood solid core, hardwood veneer
Secondary:	N/A
Tertiary:	N/A

Facility Group 3
door (frame) and window frame materials will be as follows.

Primary:	Hollow metal (match wall, satin finish paint)
Secondary:	Black anodized Alluminum for open bays
Tertiary:	N/A

Facility Group 3
door (leaf) materials will be as follows.

Primary:	Wood solid core, hardwood veneer
Secondary:	Black anodized Alluminum for open bays
Tertiary:	N/A

Facility Group 4
door (frame) and window frame materials will be as follows.

Primary:	Wood
Secondary:	Hollow metal (paint to match wall, satin finish)
Tertiary:	N/A

Facility Group 4
door (leaf) materials will be as follows.

Primary:	Wood solid core, Birch
Secondary:	Composite solid core
Tertiary:	N/A

1. Provide doors and windows for a long facility life span and for maximum flexibility under adaptive use. Install durable doors, windows and frames made of low-maintenance materials. Hardware types and finishes will not degrade or show excessive wear over their lifespan.

2. 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.

3. Visually integrate doors and windows with the overall facility design to create an organized appearance. These elements must convey an image of lasting quality and efficiency without extravagance. Ensure systems and materials are appropriate for the Facility Group.

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

5. Paneled textured doors are preferred in Group 4.

6. Do not use hollow-core wood doors. Only solid core will be used.

7. Generally match original hardware in renovations but consider ABA/ADA requirements.

8. All door locks will be keyed to meet SLD45 keying requirements (BEST COREMAX) commercial/heavy duty locks. See Appendix G04 for further details.

9. Provide satin finish stainless steel door hardware, US32D, for all commercial applications.

10. Manufacturers listed below are only provided to establish a baseline of equivalency among all applicable manufacturers.

11. Manufacturers listed in sections E05.1.1. - E05.1.4. are provided only to establish a level of quality for use when designers write the salient characteristics of the brand-name item in project specifications following Federal Acquisition Regulations (FAR).

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 2

Type: **Style 1**

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

Mfr: Kawneer

Color: black or clear anodized as approved by the BCE

Finish: Factory Alluminum Anodized

Model #: Interior Framing

Other: Satin stainless steel hardware; Frosted for privacy.

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

Type: **Style 2**

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

Mfr: Kawneer

Color: Black or clear anodized as approved by the BCE

Finish: Factory Alluminum Anodized

Model #: Interior Framing

Other: Satin stainless steel hardware; Clear glass.

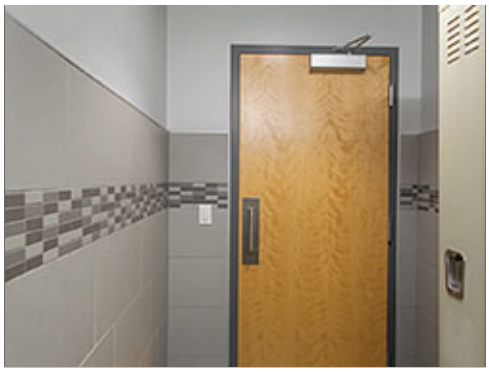
UFGS: Section 08 41 13 Aluminum-Framed Entrances and Storefronts
http://www.wbdg.org/FFC/DOD/UFGS/UFGS 08 41 13.pdf
Section 08 71 00 Door Hardware
https://www.wbdg.org/FFC/DOD/UFGS/UFGS 08 71 00.pdf

E05.1.2. Hollow Metal

○ Applicable ◉ N/A

E05.1.3. Wood

◉ Applicable ○ N/A Number of base standards 2



Type: **Style 1, Administrative Wood Doors**

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

Mfr: Simpson

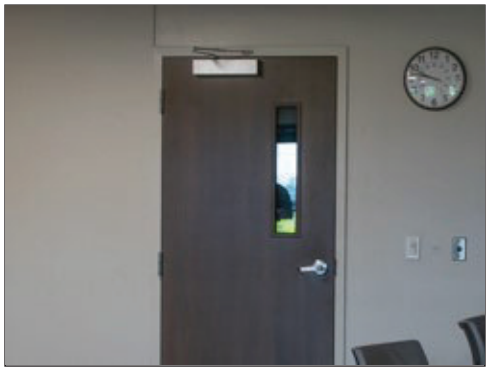
Color: Natural hardwood veneer solid core - maple/birch

Finish: Clear Sealer, satin (aqueous)

Model #: 3'x7'x 1 ¾", solid core

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

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



Type: **Style 2, Residential Wood Doors**

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

Mfr: Simpson

Color: Natural hardwood veneer, factory finish or paint-grade

Finish: Satin (aqueous)

Model #: Full slab or panels

Other: Satin stainless steel hardware, Glass lites may be used. Fiberglass doors may be used in VQ or TLF areas with BCE approval, Provide satin nickel hardware.

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

E05.1.4. Other

◉ Applicable ○ N/A Number of base standards 2

Type: **Window Ledge**

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

Mfr: Corian (or equivalent)

Color: Pearl

Finish: Smooth

Model #: N/A

Other: Solid surface material with rounded edges.

UFGS: N/A

Type: **Interior Lockset**

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

Mfr: BEST

Color: Stainless Steel

Finish: Satin 626

Model #: 9K Series

Other: Heavy duty Stainless Steel lockset 2-3/4" backset

UFGS: Section 08 71 00 Door Hardware

E06. Casework Systems

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

E06.1. Casework Materials

1. Cabinets, countertops and hardware will 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. Kitchen type cabinetry will have soft close feature on all drawers and doors.

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. Provide countertops/backsplashes in restrooms, kitchenettes and break rooms will be fabricated of a minimum ½" solid surface material.

6. Natural stone and cast stone countertops may only be used in Group 1 with approval on a case by case basis. No soapstone products may be used.

7. Metal cabinets and countertops will be provided in heavy-use operations and in Group 3.

8. Refer to AFCFS for approved materials.

9. Manufacturers listed in sections E06.1.1. - E06.1.5. and E06.2.1. - E06.2.6. are provided only to establish a level of quality for use when designers write the salient characteristics of the brand-name item in project specifications following Federal Acquisition Regulations (FAR).

E06.1.1. Plastic Laminate

◉ Applicable ○ N/A Number of base standards 2

Type: **Style 1, Low Use Areas Only**

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

Mfr: Formica

Color: Medium earth tones and neutral tones

Finish: Light textured

Model #: High pressure laminate

Other: Combine with matching solid-surface banding on casework edges. Only for use as approved by the BCE in an Facility Group.

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

Type: **Style 2, Low Use Areas Only**

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

Mfr: Wilsonart

Color: Pewter Mesh #487838

Finish: Light texture

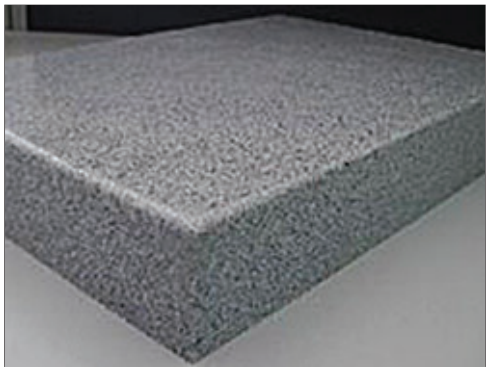
Model #: High Pressure Laminate

Other: Combine with matching solid-surface banding on casework edges. Only for use as approved by the BCE in an Facility Group.

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 2



Type: **Style 1, High Use Areas**

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

Mfr: Corian (or equivalent)

Color: Cameo white or as approved by BCE

Finish: Smooth

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

Type: **Style 2, High Use Areas**

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

Mfr: LG

Color: Poplar

Finish: Light Texture

Model #: Eden Plus

Other: Faces and edge banding.

UFGS: Section 12 36 00 Countertops
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

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

E06.1.4. Metal

◉ Applicable ○ N/A Number of base standards 1

Type: **Style 1**

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

Mfr: Steel Sentry

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

E06.2.2. Solid Polymer Surface

◉ Applicable ◯ N/A Number of base standards 1

Type: **Style 1, High Use Areas**

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

Mfr: Corian or HI-MACS

Color: Medium Earth tomes and neutral tones

Finish: Light textured

Model #: Solid Surface

Other: Faces and edges, maintenance free.

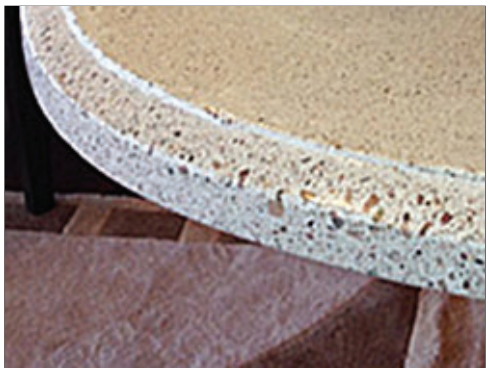
UFGS: Section 12 36 00 Countertops
http://www.wbdg.org/FFC/DOD/UFGS/UFGS 12 36 00.pdf

E06.2.3. Natural Stone

◯ Applicable ◉ N/A

E06.2.4. Cast Stone

◉ Applicable ○ N/A Number of base standards 1



Type: **Style 1, 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

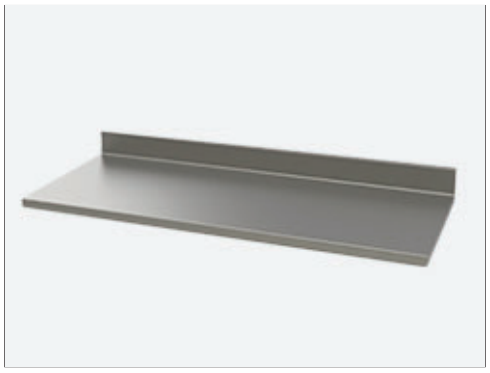
Model #: Custom cast or cut slabs

Other: N/A

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

E06.2.5. Metal

◉ Applicable ○ N/A Number of base standards 1



Type: **Stainless Steel Countertops**

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

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

1. All bathroom accessories will be stainless steel.

E08. Interior Signs

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

E08.1 Types and Color

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

E08.2. Interior Signs Materials

1. Interior signage must meet SLD45 and UFC standards and receive approval by the BCE.

E09. Lighting, Power and Communication

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

E09.1. Functionality and Efficiency

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

E09.2. Types and Color

1. Interior administrative lighting will be Lithonia Breez Series Recessed LED Model 2B2L4, Architectural Recessed LED Lighting 2x2 or 2x4 or similar as approved by the BCE.

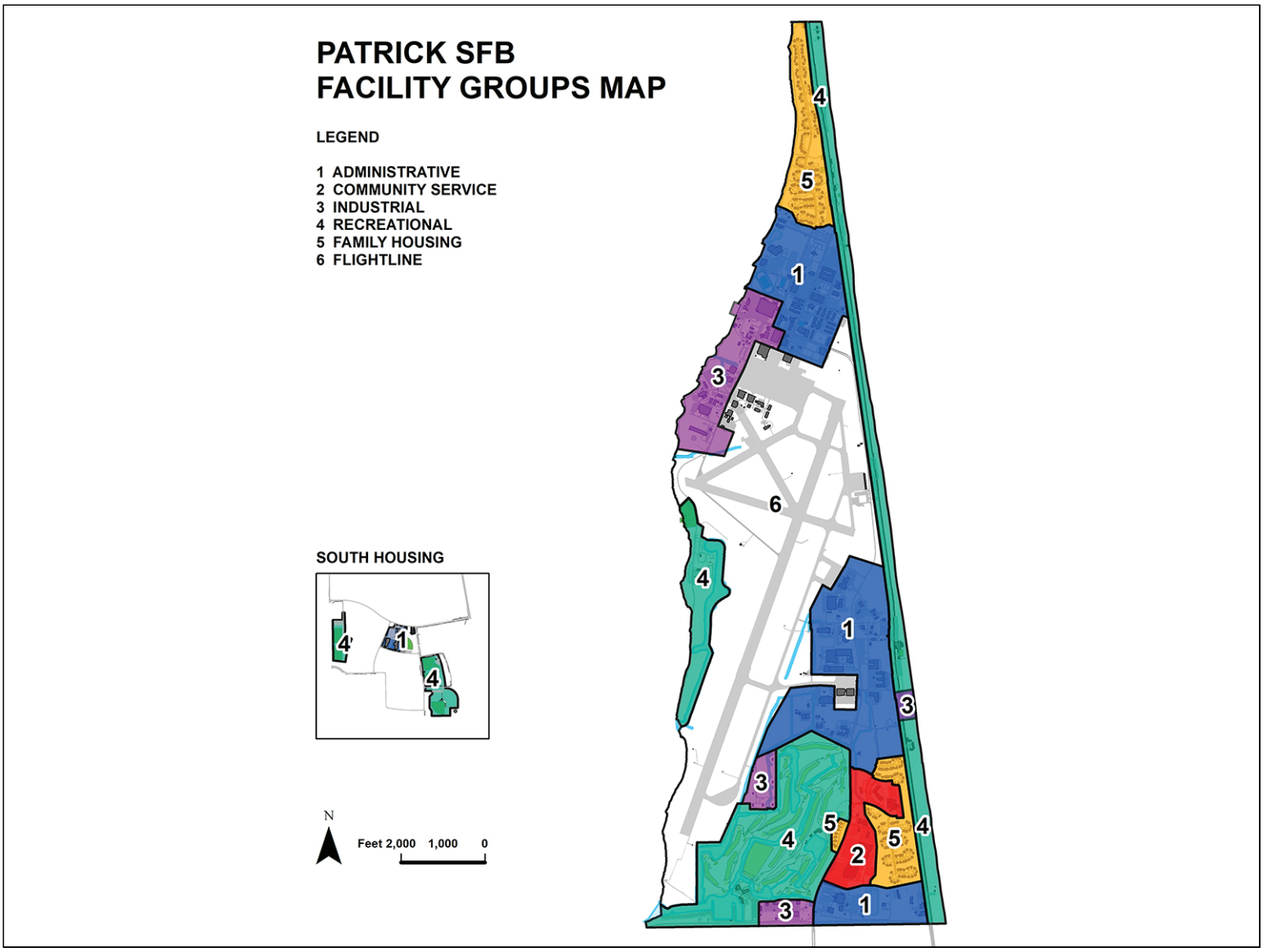
End of Section

F. APPENDIX - Facility Districts

- (●) Applicable
- ( ) N/A

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

Facilities Districts Overview Map:



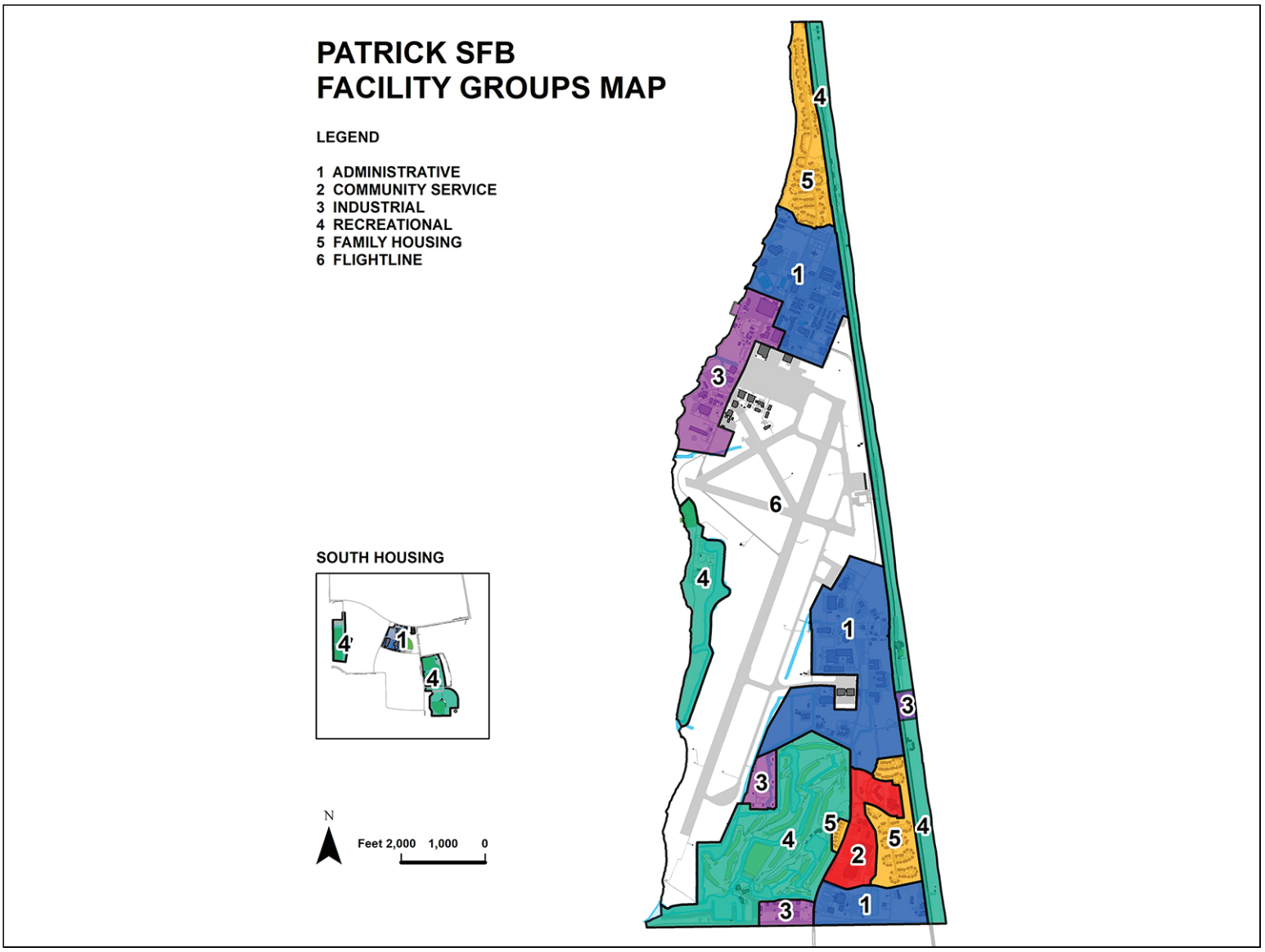
Note: *Apply the base-wide standards in this IFS for Installation Elements, Site Development, Facilities Exteriors and Facilities Interiors (products, materials, color, etc.). Following application of the base-wide standards, refer to the Appendix and apply any additional requirements specifically related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

Enter No. of Facility Districts 3

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.

Name of District: F01. Patrick SFB Main Base

Map of District



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

Group 1 ◉ Applicable ○ N/A

Group 2 ◉ Applicable ○ N/A



Group 3 ◉ Applicable ○ N/A



Group 4 ◉ Applicable ○ N/A



Other ◉ Applicable ○ N/A



Note: Images used in Group 4 above are to be considered part of the "Other" category.

FACILITY DISTRICTS

Patrick Space Force Base is divided into districts that align with land use zones as defined by the installation's General Plan. Each district has designated uses that help to define facility 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 of the districts follows.

1. Administrative
Facilities in the Administrative District should continue to be pedestrian in scale. Application of the installation prevailing architectural style, Florida Mediterranean, should be implemented during major renovations or new construction as appropriate. Florida Coastal architecture is reserved for use primarily in areas adjacent to the Banana River.

2. Community Services
The Community Services District should be pedestrian in scale. Application of the installation prevailing architectural style, Florida Mediterranean, should be implemented during major renovations or new construction as appropriate.

3. Industrial
The Industrial District includes facilities that are industrial in nature. These facilities may support flightline operations. Other facilities include warehouses for various base activities including 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. Facilities in this district are industrial in nature, should generally match adjacent buildings to ensure architectural compatibility and will follow standards for Facility Group 3 as defined in this IFS.

4. Recreation
The Recreation District includes outdoor areas that are very important to the quality of life at Patrick SFB. Uses included are parks, picnic areas, jogging paths, golf courses, swimming pools, athletic fields and baseball, basketball, and tennis courts. Facilities in this district are pedestrian in scale and, in many areas, are directly adjacent to open spaces further enhancing the aesthetic qualities of this district. Application of the installation prevailing architectural style, Florida Mediterranean, should be implemented during major renovations or new construction as appropriate. Florida Coastal architecture is reserved for use in areas adjacent to the Banana River and along the Atlantic coast beaches.

5. Family Housing
The Family Housing District consists of detached single family residential units occupied by enlisted and officer families. This area is currently under a housing privatization contract, but will follow standards for Facility Group 4 as defined in this IFS.

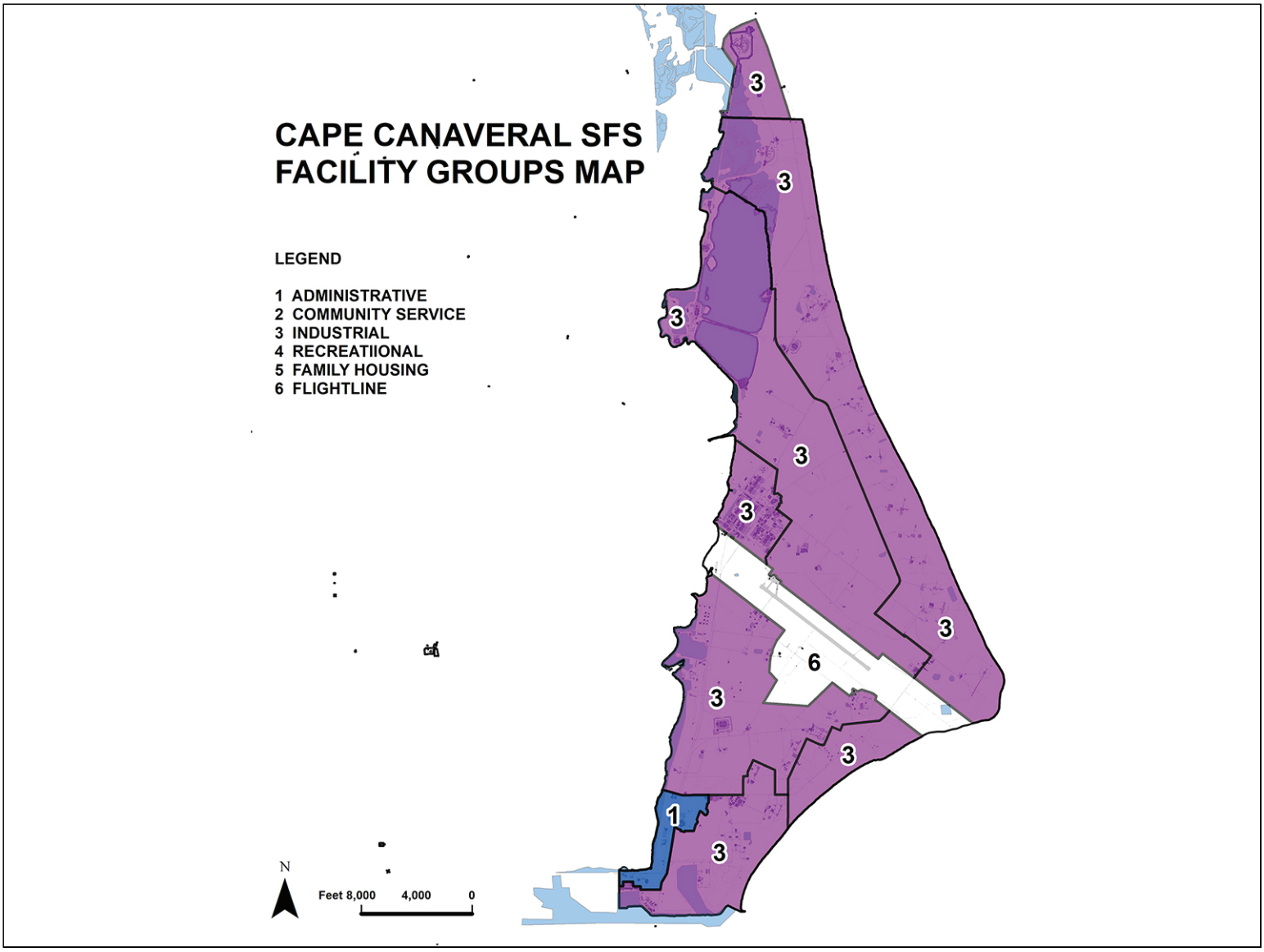
6. Flightline
The Flightline District includes the entire airfield pavement system (runway, taxiway and apron), related open space, navigational aids, and aircraft operations and maintenance facilities. Buildings in this district are mostly comprised of aircraft support facilities such as hangars, shops, and terminals and are industrial in nature and should remain so. Facilities should generally match adjacent buildings to ensure architectural compatibility and will follow standards for Facility Group 3 as defined in this IFS.

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

End of Section

Name of District: F.02 Cape Canaveral SFS

Map of District



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

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
Cape Canaveral Space Force Station is divided into districts that align with land use zones as defined by the installation's General Plan. Each district has designated uses that help to define facility 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 of the districts follows.

1. Administrative UPDATE
Facilities in the CCSFS Administrative District is not the same as Patrick SFB. Application of the installation prevailing architectural style, Florida Mediterranean, should be implemented during major renovations or new construction as appropriate. Florida Coastal architecture is reserved for use primarily in areas adjacent to the Banana River.

2. Community Services
NONE.

3. Industrial
The Industrial District includes facilities that are industrial in nature. These facilities may support flightline operations. Other facilities include warehouses for various base activities including 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. Facilities in this district are industrial in nature, should generally match adjacent buildings to ensure architectural compatibility and will follow standards for Facility Group 3 as defined in this IFS.

5. Family Housing
NONE.

6. Recreation
NONE.

4. Flightline

The Flightline District includes the entire airfield pavement system (runway, taxiway and apron), related open space, navigational aids, and aircraft operations and maintenance facilities. Buildings in this district are mostly comprised of aircraft support facilities such as hangars, shops, and terminals and are industrial in nature and should remain so. Facilities should generally match adjacent buildings to ensure architectural compatibility and will follow standards for Facility Group 3 as defined in this IFS.

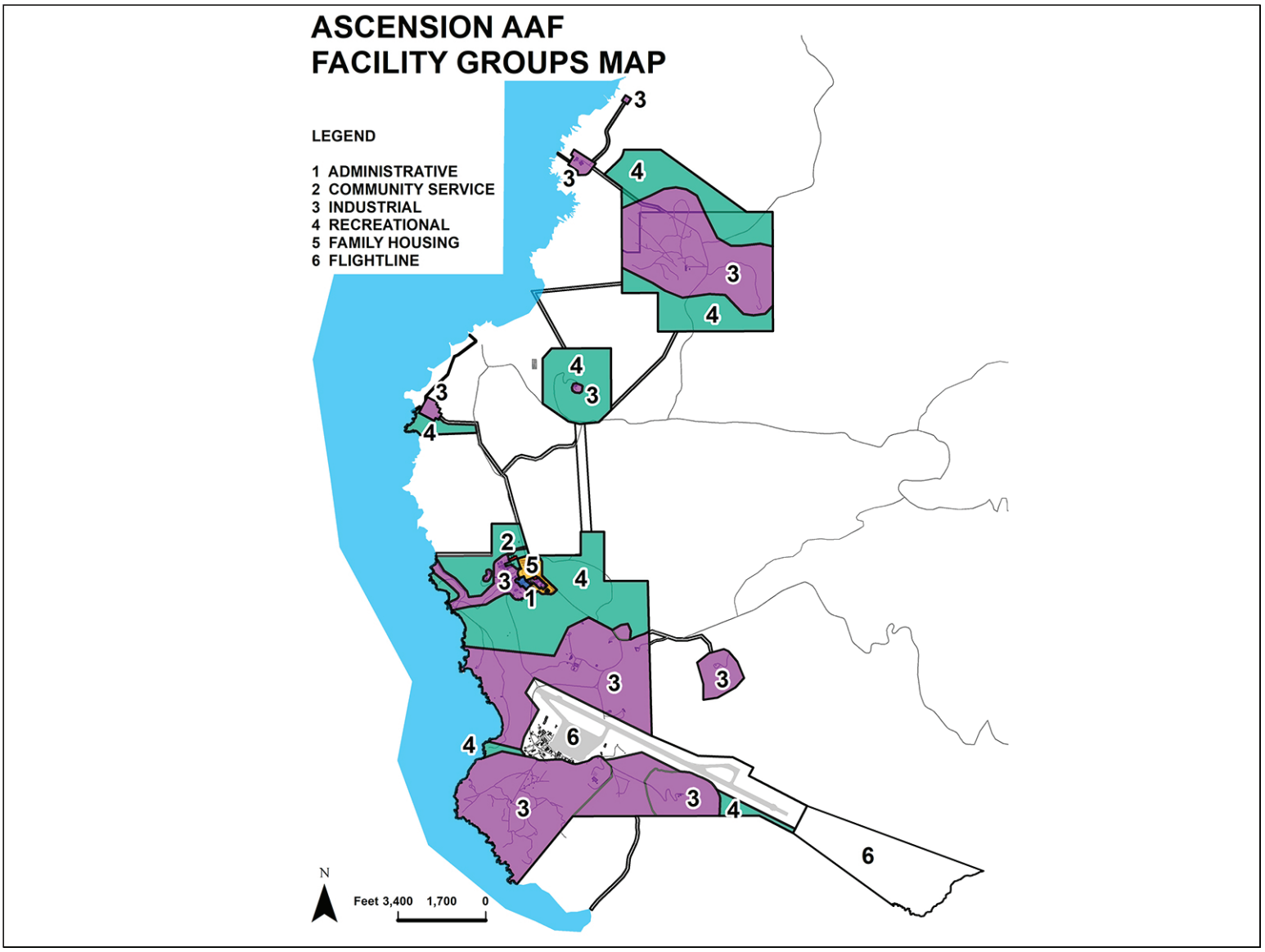
Open Space and Preserves

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

End of Section

Name of District: F.03 Ascension Auxiliary Airfield

Map of District



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

Group 1 ◉ Applicable ○ N/A

Group 2 ◉ Applicable ○ N/A



Group 3 ◉ Applicable ○ N/A



Group 4 ◉ Applicable ○ N/A



Other ◉ Applicable ○ N/A



Note: Images used in Group 4 above are to be considered part of the "Other" category.

FACILITY DISTRICTS

Ascension Auxillary Airfield is divided into districts that align with land use zones as defined by the installation's General Plan. Each district has designated uses that help to define facility 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 of the districts follows.

1. Administrative UPDATE
Facilities in the Administrative District should continue to be pedestrian in scale. Application of the installation prevailing architectural style, and should be implemented during major renovations or new construction as appropriate.

2. Community Services UPDATE
The Community Services District should be pedestrian in scale. Application of the installation prevailing architectural style should be implemented during major renovations or new construction as appropriate.

3. Industrial UPDATE
The Industrial District includes facilities that are industrial in nature. These facilities may support flightline operations. Other facilities include warehouses for various base activities including 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. Facilities in this district are industrial in nature, should generally match adjacent buildings to ensure architectural compatibility and will follow standards for Facility Group 3 as defined in this IFS.

4. Recreation UPDATE
The Recreation District includes outdoor areas that are very important to the quality of life at Ascenstion AAF. Uses included are parks, picnic areas, jogging paths, golf courses, swimming pools, athletic fields and baseball, basketball, and tennis courts. Facilities in this district are pedestrian in scale and, in many areas, are directly adjacent to open spaces further enhancing the aesthetic qualities of this district. Application of the installation prevailing architectural style, and should be implemented during major renovations or new construction as appropriate.

5. Family Housing UPDATE
The Family Housing District consists of detached single family residential units occupied by enlisted and officer families. This area is currently under a housing privatization contract, but will follow standards for Facility Group 5 as defined in this IFS.

6. Flightline UPDATE
The Flightline District includes the entire airfield pavement system (runway, taxiway and apron), related open space, navigational aids, and aircraft operations and maintenance facilities. Buildings in this district are mostly comprised of aircraft support facilities such as hangars, shops, and terminals and are industrial in nature and should remain so. Facilities should generally match adjacent buildings to ensure architectural compatibility and will follow standards for Facility Group 6 as defined in this IFS.

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

End of Section

G. APPENDIX - References

Comply with Air Force Corporate Standards:
http://afcfs.wbdg.org/index.html

G01 Reserved for SLD45 Cape Canaveral Standards

G02 SLD45 Ascension Auxiliary Airfield Standards
https://www.wbdg.org/FFC/AF/AFIFS/G02_SLD45_Ascension_Auxiliary_Airfield_Standards.pdf

G03 Reserved SLD45 Environmental Standards

G04 SLD45 Structures Standards
https://www.wbdg.org/FFC/AF/AFIFS/G04_SLD45_Structures_Standards.pdf

G05 Reserved for SLD45 Airfields

G06 SLD45 As-Built & Surveying Standards
https://www.wbdg.org/FFC/AF/AFIFS/G06_SLD45_As_Built_Survey_Standards.pdf

G07 SLD45 Master Plant Management Standards
https://www.wbdg.org/FFC/AF/AFIFS/G07_SLD45_Plant_Standards.pdf

G08 SLD45 Exterior lighting Management Standards
https://www.wbdg.org/FFC/AF/AFIFS/G08_SLD45_Ext_Lighting_Mgt_Standards.pdf

G09 Reserved for SLD45 Corrosion Standards

G10 SLD45 Heating Ventilation & Air Conditioning (HVAC) Standards
https://www.wbdg.org/FFC/AF/AFIFS/G10_SLD45_HVAC_Standards.pdf

G11 SLD45 Plumbing Standards
https://www.wbdg.org/FFC/AF/AFIFS/G11_SLD45_Plumbing_Standards.pdf

G12 SLD45 Fire Alarms & Mass Notification Standards
https://www.wbdg.org/FFC/AF/AFIFS/G12_SLD45_FA_MNS_Standards.pdf

G13 SLD45 Energy Management Controls Systems (EMCS) Standards
https://www.wbdg.org/FFC/AF/AFIFS/G13_SLD45_EMCS_Standards.pdf

G14 SLD45 Electrical Standards
https://www.wbdg.org/FFC/AF/AFIFS/G14_SLD45_Electrical_Standards.pdf

G15 Reserved for SLD45 Communication Standards

G16 SLD45 Fire Protection Standards
https://www.wbdg.org/FFC/AF/AFIFS/G16_SLD45_Fire_Protection_Standards.pdf

G17 Reserved for SLD45 Security Standards

End of Section