# **STANDARD DESIGN**

# AIR FORCE RPA GENERAL MAINTENANCE HANGAR FACILITY



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## CHAPTER 1 INTRODUCTION

#### 1-1 GENERAL INFORMATION

This Standard Design criteria was developed to assist AF planners in preparing and validating the 1391 requirements and to assist A-E Design Professionals with the approved project specific design requirements. It is a source of basic programming and functional information for a *RPA General Maintenance Hangar Facility*. This standard is consistent with Air Force Corporate Facility Standards (AFCFS), Unified Facilities Criteria Documents (UFC's). This standard in conjunction with the AFCFS is intended to define Air Force expectations for project programming and A-E design decisions.

The Standard Design program defines consistent facility requirements across the AF enterprise to expedite delivery of a facility. This Standard was designed in compliance with AFMAN 32-1084, "Facility Requirements". The objective is to deliver appropriately sized, flexible, cost optimized, durable, quality designed facilities on a life cycle basis to support the AF mission.

This Standard Design represents a shift in AF facility design philosophy toward maximizing the use of open office space and systems furniture. This design approach allows maximum flexibility to reconfigure the building space as mission needs change. Where offices require sound attenuation, physical, or visual separation, evaluate the use of systems furniture or demountable partition walls in lieu of full height hard wall construction. Maximizing open office space may require more systems furniture and funding must be listed on the 1391 as a FF&E cost. Comply with the latest AF policy on the centralized procurement of systems and other furniture.

#### 1-2 GENERAL BUILDING REQUIREMENTS

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 (comprehensive requirements are detailed in UFC 1-200-02, High Performance and Sustainable Building Requirements), and safety. Use this DC in addition to UFC 1-200-01 and the UFCs and government criteria referenced therein.

Meet the requirements of UFC 1-200-02 and achieve green building certification in accordance with the current AF Sustainable Design and Development memo.

#### 1-3 REFERENCES

Appendix A contains a list of Related Documents and references to be used in conjunction with this document. The publication date of the code or standard is not included. In general, use the latest available issuance of the reference.

#### 1-4 INSTRUCTIONS

The Standard Design was developed by determining personnel counts, allowable/authorized space/room sizes, adjacency diagrams between the functional spaces and the overall facility space requirements. It establishes AF criteria for the facility type. Use these criteria in conjunction with other AF policy and regulations such as ETL's, AFI's, and UFC's when programming and designing this facility type. Supplement this DC with thorough review by individual Program Managers and Operations Staff.

#### 1-4.1 Standard Design Tools

This Standard Design consists of four parts to be used by programmers and designers:

- 1. Design Criteria for Standard Prototype (this DC document)
- 2. Interactive Programming Sheet
- 3. Facility Building Information Modeling (BIM) Drawings
- 4. Draft Design-Build Request for Proposal Template

# 1-4.2 Design Criteria

The design criteria consist of three primary components:

- Notional Site Plan
- Composite Facility Adjacency Diagram(s)/Composite Floor Plan(s)
- Modules with associated Room Data Sheets

# 1-4.2.1 Notional Site Plan

The notional site plan diagram demonstrates key site development criteria. It is not a site specific solution. The information represents the land requirements to construct this facility and includes associated ATFP standoff and parking. Utilization of existing or shared parking is allowable and may reduce the total acreage required for the facility. Adapt the requirements to the specific site and location and comply with the applicable Installation Development Plan (IDP) and Area Development Plan (ADP) for facility siting.

# 1-4.2.2 Composite Facility Adjacency Diagram(s)/Composite Floor Plan(s)

The Composite Facility Adjacency Diagram(s) represent ways to conceptually assemble the functional areas (modules) into a cohesive whole. They demonstrate how the various functional components of the facility type can be successfully placed together into layout diagrams. Individual modules are represented by different colors. Composite diagrams demonstrate acceptable ways the fixed modules can be placed together into conceptual building plans. They are not intended to be definitive building designs.

Composite Floor Plans indicate definitive floor plans and represent the approved plan solutions that fully satisfy all functional requirements. Effectively the plan becomes a "super module" and demonstrates a standard/ approved building floor plan and must be used in total. Plan variation other than rotating, flipping, or reversing to fit the actual site must be coordinated with/approved by HQ AFCEC.

# 1-4.2.3 Modules

Spaces and rooms that are integrally related with a specific functional connection or operational flow are grouped into a module. Modules and the associated room data sheets identify specific criteria and additional detail for each functional area of the facility as outlined in the space program sheets located in the appendix. Information is provided in a standard presentation and data sheet format. The required space adjacencies and modules are illustrated in figures.

The modules are a grouping of functional spaces and represent "lego blocks" to be used in a "kit-of-parts" design approach. Use the fixed modules as pre-assembled pieces of the facility "puzzle". Assemble them to comply with the required adjacencies indicated in the diagrams and module plans. Arrange modules and create a configuration/composite building layout/plan responding to the constraints and opportunities of the specific site.

The resulting shape of the facility assembled from the Standard Design modules must provide construction efficiencies obtained from building proportions and overall configuration. The building footprint shall be organized and well composed. The building design must comply with the Installation Facility Standards (Architectural Compatibility Plan) and the AFCFS.

# 1-4.2.4 Module Flexibility/Adjustments

Modules must be used as designed to the greatest extent possible and shall not be deconstructed or altered except as indicated herein. The intent of the Standard Design criteria is to avoid manipulation of the composition, functional relationships, adjacencies, and module sizes. Modules contain fixed attributes and must not be changed arbitrarily. However, modules may be rotated, flipped, and reversed to accommodate an overall composition or site issue. When the fixed modules cannot be arranged to produce a constructible floor plan due to site constraints, it is permissible to slightly adjust a module proportion to create a constructible plan. Manipulating the module shape must not result in an overall increase in square feet or reduce the functionality of any module or the composite plan.

Some Modules are linked to space requirements that increase or decrease in size based on the personnel count and equipment for a particular mission. In these cases, increase or decrease the size of the module to match the revised scope calculation. This may sometimes require minor adjustments in other adjacent modules so that they properly fit together to create a constructible facility floor plan. Spaces must comply with any critical dimensions indicated on module plans. Manipulate as few modules as possible to create a constructible facility. The resulting composite plan must respect the established modules adjacencies and must not exceed the authorized project scope.

# 1-4.2.5 Room Data Sheets

Specific requirements for each room, space, or area are provided on room data sheets that are located following their respective module. Information contained on the data

sheets defines the functional and physical requirements for each of the spaces within the facility type.

# 1-4.3 Programming Sheet(s)

This tool is provided in two formats. A pdf programming sheet is provided in the appendix primarily as a reference and reflects the baseline standard facility program. The additional interactive programming sheet provides a tool for planners and programmers. It allows the input of authorized personnel positions and special purpose spaces. Updated inputs are automatically calculated and provide new required square footage for each space and the estimated overall facility size. A link is provided in the appendix to provide direct access to the interactive tool.

# 1-4.4 Facility Drawings – BIM

This component of the Standard Design tool includes both a Portable Document Format (PDF) version and Revit version of the modules and rooms. The spaces, rooms and modules shown reflect the baseline standard facility program located in the appendix. The drawings contained in the facility criteria document are exact copies of the larger BIM drawings and comply with the program scope. The BIM drawings provide a starting point for the digitization of building data and a starting point in the design/construction of a facility. BIM and PDF documents are found at the link provided in the appendix.

# 1-4.5 Request for Proposal Template

The Supplemental Request for Proposal (RFP) data is a Standard Design tool to assist the A-E design professionals to quickly proceed from establishment of an approved floor plan to development of a Design-Build RFP. The text in the RFP is color coded to identify the following:

- Black: Standard requirements; DO NOT edit/change
- **Blue**: Edited to reflect specific facility type elements
- **Red**: Must be edited by the RFP preparer to reflect site specific or locational requirements

Retain color coding during RFP development thru acceptance of the 100% Submittal. Use Track Changes to edit the draft RFP. Remove all color coding and resolve Track Changes prior to advertisement of the solicitation. A link is provided in the appendix.

# 1-4.6 Additional and Alterations

For additions and alterations to existing facilities, use the adjacencies, sizing/scope and detailed requirements contained in the site diagrams, module drawings, and room data sheets to the maximum extent possible. The functionality and adjacency of the modules are still valid, but may require some manipulation to fit into existing spaces. This standard may be modified slightly to accommodate the existing structure. Move non-structural walls to the greatest extent possible to open up space in the existing facilities to make them more receptive to the placement of the modules. The planner and designer shall determine the most efficient means to balance the placement of modules within existing spaces or as a facility addition.

## CHAPTER 2 SITE & OVERALL ADJACENCY

#### 2-1 GENERAL FACILITY OVERVIEW

The RPA (Remotely Piloted Aircraft) General Maintenance Hangar Facility is a one story structure and will serve as a standalone facility located with direct access to the flight line. This Hangar houses MQ-1, MQ-9 and/or RQ-4 Global Hawk remotely piloted aircraft and their associated maintenance crews, administration, and officers. This Hangar houses increments of eight MQ-1/MQ-9 Remotely Piloted Aircraft or four Global Hawk Remotely Piloted Aircraft. The new facility for the RPA General Maintenance Hangar Facility will consist of but not limited to a list of grouped rooms called modules. Modules needed for a RPA General Maintenance Hangar Facility are as follows: Hangar Bay Module, Tool & Parts Support Module, Ready Room Module, RPA Technical Support Module, RPA Administration Support Module, Squadron Conference Module, Toilet/Shower/Locker Module, Aircraft Maintenance Support Module, and Building Support Module.

**AFCFS:** Consult the AF Corporate Facilities Design Standards (AFCFS) to determine the facility requirements quality standards for this facility group. This Standard Design is in Group 3 hierarchy.

**FACILITY USERS/OCCUPANTS:** This facility is operated by active duty, guard, and reserve military personnel as well as contractor representatives from the aircraft types.

**OPERATIONAL ASPECTS:** Hours of operation for this facility type are user driven and vary up to two shifts, approximately 100-140 personnel per shift (50-70 per four RPA's).

#### 2-2 NOTIONAL SITE PLAN

The site diagram represents a notional layout to reflect site development requirements/criteria only. It is not an actual site design. Siting must comply with the Installation (IDP) and Area Development Plans (ADP).

#### 2-2.1 Site Location and Orientation

Emphasis shall be placed on operation, function, and safety when siting the facility. The preferred location for this facility is immediately adjacent to the flight line or in close proximity. Other facility functions placed in close proximity may include the RPA MCE Squadron Operations Facility and Aircraft Sunshades. Analyze and comply with airfield clearances, building setback restrictions, and line of sight restrictions from the adjacent flight-line.

The preferred orientation for this facility is such that the aircraft maintenance bays and associated hangar access aprons are provided direct access to the flight-line operations area for ease of access to the facility for aircraft, flight line vehicles, and equipment.

The approximate project area required for the *RPA General Maintenance Hangar Facility is 7.00 acres,* which includes antiterrorism/force protection standoff and parking.

#### 2-2.2 Vehicular and Pedestrian Circulation

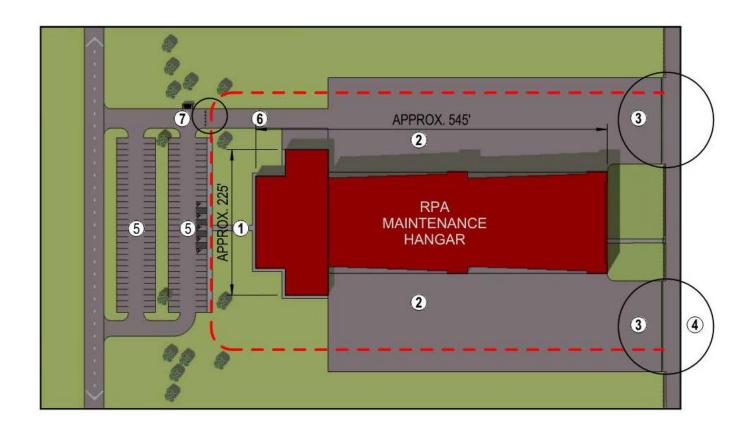
Convenient and safe vehicular access and circulation shall be provided for personal vehicles and essential services, including operations, maintenance, deliveries, trash and garbage collection, and emergency services.

Parking shall be provided to accommodate the largest shift size plus an additional 40 percent for shift overlap.

Separate service drives to the facility from parking circulation areas.

Locate sidewalk networks to provide convenient and safe pedestrian circulation from existing circulation elements of the project site to the new parking areas and doors of the facility.





## NOTES:

- 1234567 PRIMARY BUILDING ENTRY
- HANGAR ACCESS APRON
- HANGAR ACCESS TOWWAY
- FLIGHT LINE ACCESS
- POV PARKING LOT
- SERVICE DRIVE
- DUMPSTER / SCREENED ENCLOSURE

#### LEGEND:

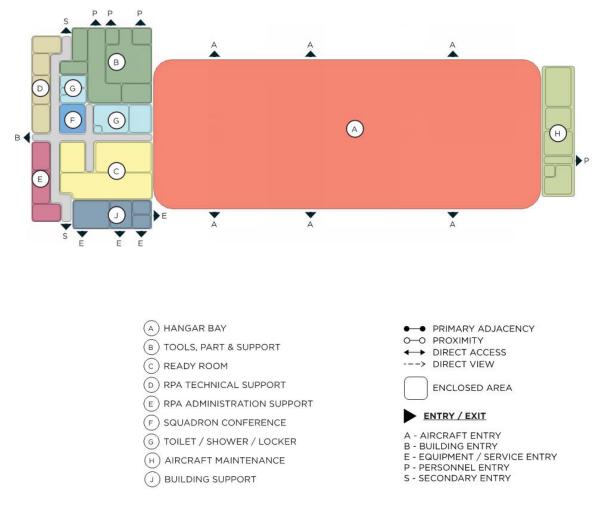
- CONCEPTUAL AT SETBACK (REFERENCE UFC 4-010-01)



CONTROLLED VEHICLE ACCESS

## 2-3 COMPOSITE FACILITY ADJACENCY DIAGRAMS

The Functional Adjacency Diagram below is of a prototypical RPA General Maintenance Hangar Facility for eight MQ-1 Predator/MQ-9 Reaper RPA's or four RQ-4 Global Hawk RPA's. The Facility is programed around the Hangar Bay Module (designed for increments of 4 MQ-1/MQ-9 or 2 RQ-4 RPA's) which is centrally located in the facility with direct access to the flight line with Tools, Parts & Storage Module, Ready Room Module, RPA Technical Support Module, Training Module, RPA Administration Support Module, Squadron Conference Module, Toilet/Shower/Locker Module, and Building Support Module located at one end of the Hangar Bay near Land Side and the Aircraft Maintenance Support Module at the other end of the Hangar Bay with direct access (and visual access) of the Flight Line . The Land Side of the Facility will have access to POV and Visitor parking. There are multiple points of entry to facility on Flight Line to accommodate mission of the modules and a single point of entry to the on the Land Side area for the facility.



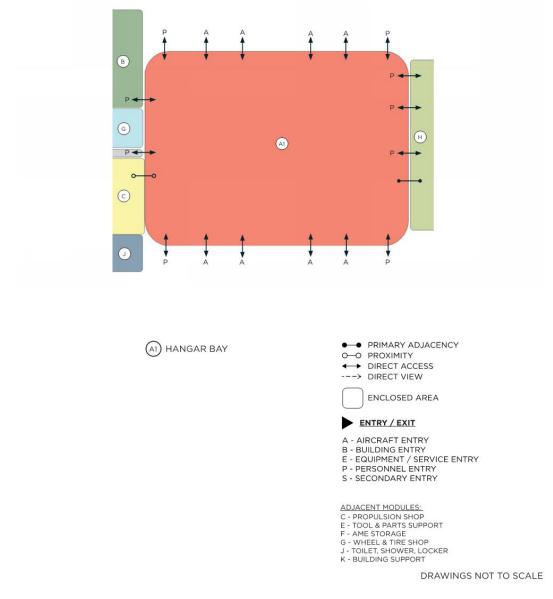
#### Figure 2-3 Functional Adjacency Diagram

## CHAPTER 3 FACILITY REQUIREMENTS & CRITERIA

## 3-1 MODULE A – HANGAR BAY MODULE

#### 3-1.1 Function and Adjacency

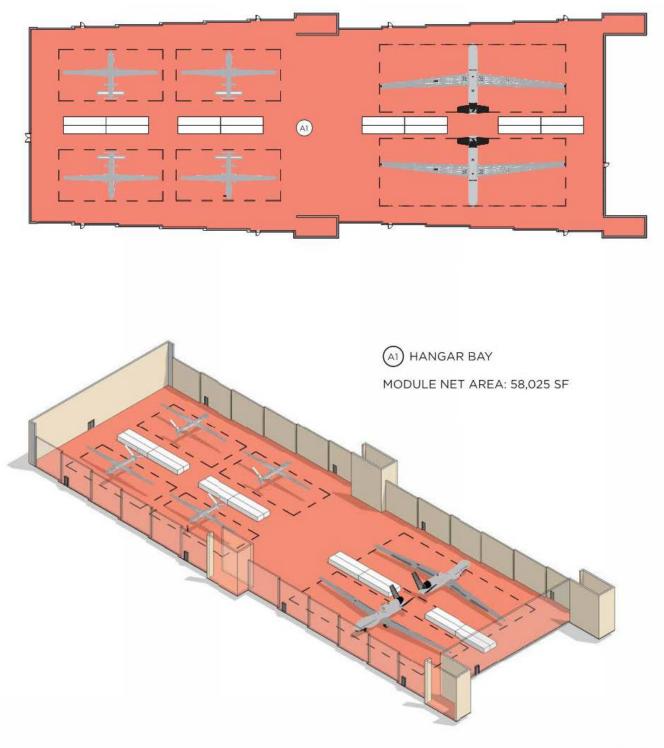
The Hangar Bay Module provides a high bay space to accommodate increments of four MQ-1/MQ-9 or two RQ-4 Global Hawk RPA's with enough clearance between wingtips and tails to accommodate storage requirement identified by RPA maintenance crews. The standard number of RPA's is eight aircraft and which will require two hangar bays. The hangar bay is designed to fit the RPA's tail-to-tail with the nose of the aircraft facing the hangar doors. Steel Sliding Hangar Doors (floating groups) and Vertical Lift Fabric Doors are the two acceptable hangar door options. The Bay is built to have hangar doors on both sides allowing for direct access to flight line. The space between the two hangar bays is used as a transition area for general maintenance of the RPA's.



#### Figure 3-1.1 Module A Adjacency Diagram

# 3-1.2 Hangar Bay

# Figure 3-1.2 Module A Floor Plan & Axonometric



# 3-1.3 Data Sheets

Figure 3-1.3 A HANGAR BAY ROOM DATA SHEET		
Description/Usage		Maintenance Hangar bay is sized for increments of four MQ-1, MQ-9 and/or two RQ-4 remote piloted aircraft inspections, tests, repairs, training, etc. Hangar bay also has Staging area in center of hangar bays. The standard number of RPA's is eight aircraft requiring two hangar bays. A transition space will be located between the two hangar bays.
Ceiling Height		Minimum 27'-0" unobstructed clearances and as required to meet AF Standard UFC 3-260-01 clearances
Windows		Translucent wall panels for daylighting
	Туре	Horizontal Sliding Hangar Doors or Vertical Lift fabric Doors, 24'-0" tall Hollow metal personnel doors - 3'x7'
Doors	Security/ Hardware	Keyed lock set
	View Panels/ Kick Plates	View Panels, 5" x 20" at all exterior doors Kick Plates on both sides of doors
	Walls	CMU – Painted wainscot 8' above floor, Pre-finished Metal Wall or Liner Panels above to roof deck
Finishes	Floor	Epoxy-Non-slip (fuel resistant) or Dry Shake hardener
	Base	No base
	Ceiling	Exposed Structure –Painted
Plumbing		No Floor drains. Wall mounted hose stations and hose reels for cold water. Compressed air drops with hose reels-coordinate with user on quantity and location. Emergency shower and eyewash per UFC 3-420-01. Heating and ventilation. Exhaust directly outdoors. May require overhead
HVAC		radiant heating. May require snow-melting system at hangar door tracks in colder climates. Aircraft may require preconditioned air.
Fire Protection / Life Safety		Provide draft curtains. Low-level high expansion foam system. Fire separation between office and shop areas. Wet pipe or dry pipe sprinkler system as required by UFC 3-600-01.
Power		3PHASE 480V 200A outlets in addition to UFC required devices
Lighting		Per UFC
	Tele.	Per UFC
	Data	Per UFC
Communication	ССТV	Per Program Security Requirements
	CATV	N/A
	Security	Per Program Security Requirements
Acoustical		Per UFC 3-450-01 for Noise Control
Furnishings / Equipment / Casework		5-ton bridge cranes full coverage of hangar bays, 2 per bay; Overhead fall protection railing is required over fuselage and wings.
Special Requirements		

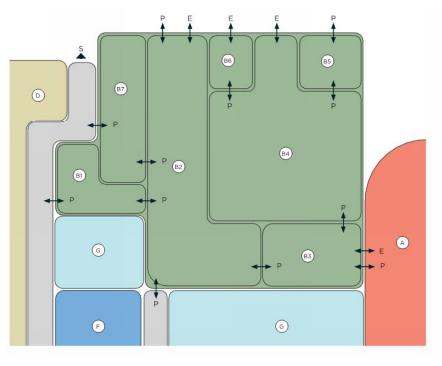
	Bird intrusion system at hangar bay trusses, i.e. bird netting, sonic devices, anti-roosting spikes, etc. Staging area will be provided in center of hangar bays.
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#### 3-2 **MODULE B – TOOLS, PARTS & SUPPORT MODULE**

#### 3-2.1 **Function and Adjacency**

The Tools, Parts & Support Module includes Support (Tool Crib) area with a Support Office for 4 personnel and a HAZMAT room, a Supply TNB/FOM area with a Supply Office for 3 personnel, a Tool/Parts Issue area and a Storage area. The main function of this module is to store aircraft tools and parts for distribution to the maintenance crews. The Supply TNB/FOM area will contain sensitive aircraft parts. The HAZMAT room is positioned with access from Support area and with exterior access to pick-up hazardous materials without re-entering Support area to remove.

Figure 3-2.1 Module B Adjacency Diagram



- (B1) SUPPLY OFFICE
- (B2) SUPPLY (TNB/FOM)
- (B3) TRANSACTION
- (B4) SUPPORT (TOOL CRIB)
- (B5) SUPPORT OFFICE
- COVERED HAZMAT (B6)
- (B7) STORAGE

- PRIMARY ADJACENCY 0-0 PROXIMITY DIRECT ACCESS
- -> DIRECT VIEW



#### ENTRY / EXIT

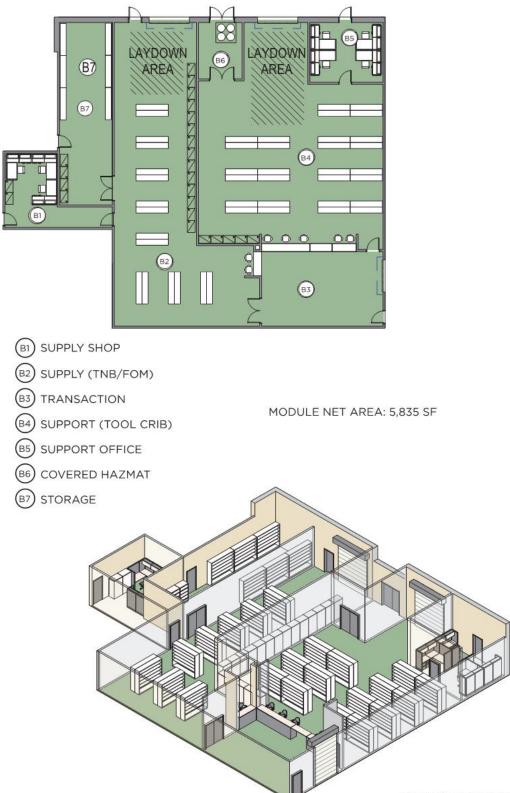
- **B** BUILDING ENTRY E - EQUIPMENT / SERVICE ENTRY
- P PERSONNEL ENTRY
- S SECONDARY ENTRY

ADJACENT MODULES:

A - HANGAR BAY

- D RPA TECHNICAL SUPPORT
- F SQUADRON CONFERENCE G TOILET / SHOWER / LOCKER

# 3-2.2 Tools, Parts & Support



# 3-2.3 Data Sheets

	Figure 3-2.3	B1 SUPPLY OFFICE ROOM DATA SHEET
		Supply office with three workstations.
Description/Usage		
<b>Ceiling Height</b>		9'-0" minimum
Windows		Exterior insulated ATFP if on exterior wall
	Туре	Hollow metal, 3'x7'
Doors	Security/	Keyed lock set
DOOLS	Hardware	
	View Panels/	View Panels, 5" x 20"
	<b>Kick Plates</b>	Kick plates both sides of door
	Walls	CMU or Gypsum Board - Painted
Finishes	Floor	Sealed concrete, Stained concrete or Tile
Finishes	Base	Resilient , tile, or No base if CMU walls
	Ceiling	Acoustical Ceiling Tile or Exposed Structure - Painted
Plumbing		N/A
HVAC		Heating, ventilation, air conditioning
Fire Protection / Life Safety		Wet pipe sprinkler
Power		Per UFC
Lighting		Per UFC
	Tele.	Per UFC, One per workstation
	Data	Per UFC
Communication	ССТV	N/A
	CATV	N/A
	Security	N/A
Acoustical		N/A
Furnishings / Equipment / Casework		Three workstation desks and chairs.
Special Requirements		

Figure 3-2.4 B2 SUPPLY (TNB/FOM) ROOM DATA SHEET		
		Large supply storage room.
Description/Usage		
<b>Ceiling Height</b>		12'-0" minimum
Windows		N/A
	Туре	Hollow metal, pair 3'-7'; 10' x 12' overhead, powered operated to exterior
Doors	Security/ Hardware	Keyed lock set
	View Panels/ Kick Plates	View Panels, 5" x 20" Kick plates on both sides of doors
	Walls	CMU - Painted
Finishes	Floor	Sealed concrete
FINISNES	Base	No base
	Ceiling	Exposed Structure-Painted
Plumbing		Hot and cold water to washer, floor drain
HVAC		Heating, ventilation, air conditioning
Fire Protection / Life Safety		Wet pipe sprinkler system
Power		Per UFC in addition to power for washers and dryers
Lighting		Per UFC
	Tele.	Per UFC One per counter position
	Data	Per UFC
Communication	ССТV	N/A
	CATV	N/A
	Security	N/A
Acoustical		Per UFC 3-450-01 for Noise Control
Furnishings / Equipment / Casework		Storage shelving and bins for supplies. Work counter to Transaction area for 2 persons.
Special Requirements		

	Figure 3-2.5	B3 TRANSACTION ROOM DATA SHEET
Description/Usage		Area with direct access to Supply (TNB/FOM) and Support (Tool Crib) and direct access to hangar bays for supplies, tools and parts transfers.
Ceiling Height		10'-0" minimum
Windows		N/A
	Туре	Hollow metal, 3'x7'; 8'x8" overhead, power operated to hangar bay; 4' high x full length counter shutter, power operated.
Doors	Security/ Hardware	Keyed lock set
	View Panels/ Kick Plates	View Panels, 5" x 20" Kick Plates on both sides of door
	Walls	CMU - Painted
	Floor	Sealed concrete
Finishes	Base	No base
	Ceiling	Exposed Structure - Painted
Plumbing		N/A
HVAC		Heating, ventilation, air conditioning
Fire Protection / L	ife Safety	Wet pipe sprinkler system
Power		Per UFC
Lighting		Per UFC
	Tele.	N/A
	Data	N/A
Communication	ССТV	N/A
	CATV	N/A
	Security	N/A
Acoustical		Per UFC 3-450-01 for Noise Control
Furnishings / Equipment / Casework		
Special Requirements		

Figure 3-2.6 B4 SUPPORT (TOOL CRIB) ROOM DATA SHEET		
		Large Tools and Parts storage area. Direct access to flight line.
Description/Usage		
<b>Ceiling Height</b>		12'-0" minimum
Windows		N/A
	Туре	Hollow metal, 3'x7', overhead coiling door, 10'x12' power operated to exterior
Doors	Security/ Hardware	Keyed lock set
	View Panels/ Kick Plates	View Panels, 5" x 20" Kick Plates on both sides of door
	Walls	CMU - Painted
Finishas	Floor	Sealed concrete
Finishes	Base	No base
	Ceiling	Exposed Structure - Painted
Plumbing		N/A
HVAC		Heating, ventilation, air conditioning
Fire Protection / Life Safety		Wet pipe sprinkler system
Power		Per UFC
Lighting		Per UFC
	Tele.	Per UFC
	Data	Per UFC
Communication	ССТV	N/A
	CATV	N/A
	Security	Intrusion Detection System
Acoustical		Per UFC 3-450-01 for Noise Control
Furnishings / Equipment / Casework		Storage shelving and bins for supplies. Work counter to Transaction area for 5 persons.
Special Requirements		

Figure 3-2.7 B5 SUPPORT OFFICE ROOM DATA SHEET		
		Support office with four workstations.
Description/Usage		
Ceiling Height		9'-0" minimum
Windows		Exterior insulated ATFP if on exterior wall
	Туре	Hollow metal, 3'x7'
Doors	Security/ Hardware	Keyed lock set
	View Panels/	View Panels, 5" x 20"
	Kick Plates	Kick Plates on both sides of door
	Walls	CMU or gypsum Board- Painted
Finishes	Floor	Sealed concrete, Stained concrete or Tile
FILISHES	Base	Resilient ,tile, or No base with CMU walls
	Ceiling	Acoustical Ceiling Tile or Exposed Structure - Painted
Plumbing		N/A
HVAC		Air Conditioned, ventilation, heating
Fire Protection / Life Safety		Wet pipe sprinkler system
Power		Per UFC in addition to charger unit power for floor cleaner
Lighting		Per UFC
	Tele.	Per UFC, One per workstation
	Data	Per UFC
Communication	ССТУ	N/A
	CATV	N/A
	Security	N/A
Acoustical		N/A
Furnishings / Equipment / Casework		Four workstation desks and chairs.
Special Requirements		

Figure 3-2.8 B6 HAZMAT ROOM DATA SHEET		
Description/Usage		Hazardous material storage with access to Supply and exterior for overflow of hazardous materials from Supply and Support areas.
<b>Ceiling Height</b>		9'-0" minimum
Windows		N/A
	Туре	Hollow metal, pair 3'x7' from Support and to Exterior
Doors	Security/ Hardware	Keyed lock set
	View Panels/ Kick Plates	No view panels Kick Plates on both sides of door
	Walls	CMU - Painted
	Floor	Sealed concrete
Finishes	Base	No base
	Ceiling	Exposed Structure - Painted
Plumbing		N/A
HVAC		Heating, ventilation, air conditioning
Fire Protection / L	ife Safety	Wet pipe sprinkler system
Power		Per UFC
Lighting		Per UFC
	Tele.	N/A
	Data	N/A
Communication	ССТV	N/A
	CATV	N/A
	Security	N/A
Acoustical		Per UFC 3-450-01 for Noise Control
Furnishings / Equipment / Casework		Need space for four 55 gallon barrels.
Special Requirements		Provide containment structure/recessed slab for barrels, ramp from structure/recessed slab to exterior door.

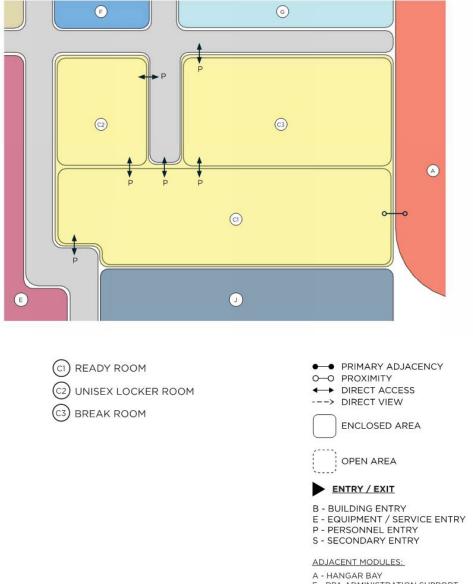
Figure 3-2.9 B7 STORAGE ROOM DATA SHEET		
Description/Usage		Large general storage room for facility.
Ceiling Height		10'-0" minimum
Windows		N/A
	Туре	Hollow metal, pair 3'x7' to Support and single 3'x7' to corridor.
Doors	Security/ Hardware	Keyed lock set
	View Panels/ Kick Plates	View panels, 5" x 20" Kick Plates on both sides of door
	Walls	CMU - Painted
	Floor	Sealed concrete
Finishes	Base	No base
	Ceiling	Exposed Structure - Painted
Plumbing		N/A
HVAC		Heating, ventilation, air conditioning
Fire Protection / Life Safety		Wet pipe sprinkler system
Power		Per UFC
Lighting		Per UFC
	Tele.	Per UFC
	Data	Per UFC
Communication	ССТУ	N/A
	CATV	N/A
	Security	N/A
Acoustical		Per UFC 3-450-01 for Noise Control
Furnishings / Equipment / Casework		Storage shelving and cabinets.
Special Requirements		

#### MODULE C - READY ROOM MODULE 3-3

#### 3-3.1 **Function and Adjacency**

The Ready Room Module includes a Ready Room with space for 36 computer docks and an 8 person conference table, a Break Room with a counter with sink, microwaves, refrigerators, ice maker, vending, and a Unisex Locker area with 144 lockers for accommodate two 72 personnel shifts

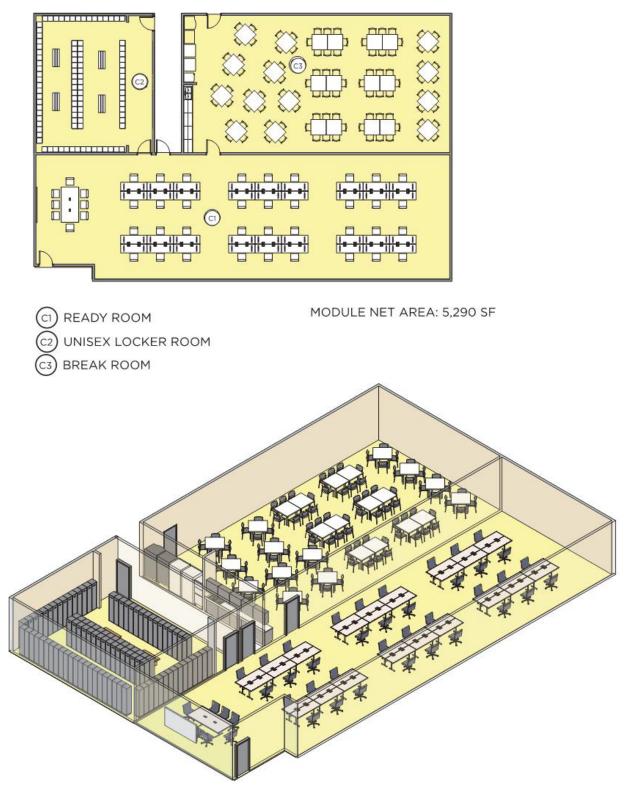
Figure 3-3.1 Module C Adjacency Diagram



- E RPA ADMINISTRATION SUPPORT
- F SQUADRON CONFERENCE
- G TOILET / SHOWER / LOCKER J BUILDING SUPPORT

# 3-3.2 Ready Room





# 3-3.3 Data Sheets

Figure 3-3.3 C1 READY ROOM DATA SHEET			
Description/Usage		Ready Room for aircraft/flight maintenance with 36 computer carousels and an 8 person conference table, flat screen tv monitor.	
Ceiling Height		9'-0" minimum	
Windows		Exterior insulated ATFP if on exterior wall	
Doors	Туре	Hollow metal, 3'x7'	
	Security/ Hardware	Keyed lock set	
	View Panels/ Kick Plates	View panels, 5" x 20" Kick Plates on both sides of doors	
	Walls	Gypsum Board - Painted	
Finishes	Floor	Sealed concrete, stained concrete, Tile, Terrazzo or Resinous Epoxy	
T IIII SIICS	Base	Resilient, Tile, Terrazzo or Resinous Epoxy	
	Ceiling	Acoustical Ceiling Tile or Exposed Structure - Painted	
Plumbing		N/A	
HVAC		Heating, ventilation, air conditioning	
Fire Protection / Life Safety		Wet pipe sprinkler system	
Power		Per UFC	
Lighting		Per UFC	
	Tele.	Per UFC	
	Data	Per UFC	
Communication	ссту	N/A	
	CATV	N/A	
	Security	N/A	
Acoustical	-	Per UFC 3-450-01 for Noise Control	
Furnishings / Equipment / Casework		Tables, Chairs, Computer carousels.	
Special Requirements		Flat Screen tv monitors (2 minimum).	

Figure 3-3.4 C2 UNISEX LOCKER ROOM DATA SHEET		
Description/Usage		Locker Room for aircraft maintenance personnel, Male and Female combined with 200 (15"x18"x60") half height metal lockers and benches (100 half height lockers per four aircraft).
Ceiling Height		9'-0" minimum
Windows		No windows
Doors	Туре	Hollow metal, 3'x7'
	Security/ Hardware	Keyed lock set
	View Panels/ Kick Plates	View Panels, 5" x 20" Kick Plates on both sides of door
	Walls	Gypsum Board - Painted
Finishes	Floor	Sealed concrete, stained concrete, Tile, Terrazzo or Resinous Epoxy
FILISHES	Base	Resilient, Tile, Terrazzo or Resinous Epoxy
	Ceiling	Acoustical Ceiling Tile or Exposed Structure - Painted
Plumbing		N/A
HVAC		Heating, ventilation, air conditioning
Fire Protection / Life Safety		Wet pipe sprinkler system
Power		Per UFC
Lighting		Per UFC
	Tele.	Per UFC
	Data	Per UFC
Communication	ССТV	N/A
	CATV	N/A
	Security	N/A
Acoustical		Per UFC 3-450-01 for Noise Control
Furnishings / Equipment / Casework		200 half height metal lockers and benches.
Special Requirements		

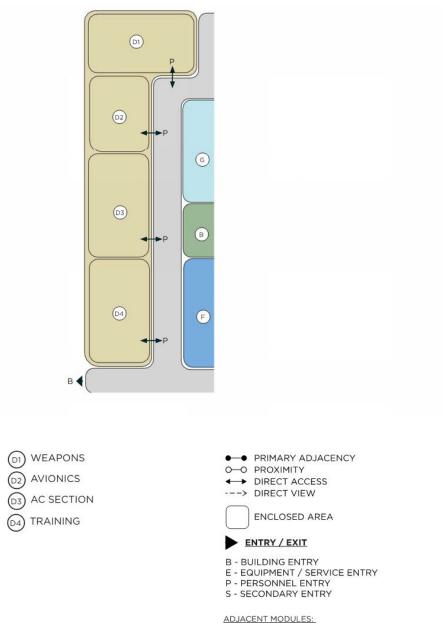
Figure 3-3.5 C3 BREAK ROOM DATA SHEET			
Description/Usage		Break Room to accommodate 100 personnel, 50 per four aircraft. Break Room to have counter with sink, microwaves (3-4), refrigerators (3-4), ice maker and vending	
Ceiling Height		9'-0" minimum	
Windows		Exterior insulated ATFP if on exterior wall	
Doors	Туре	Hollow metal, 3'-7'	
	Security/ Hardware	Keyed lock sets	
	View Panels/	View Panels, 5" x 20"	
	Kick Plates	Kick Plates on both sides of doors	
	Walls	Gypsum Board - Painted	
<b>Finish</b> as	Floor	Sealed concrete, Stained concrete, Tile, Terrazzo or Resinous Epoxy	
Finishes	Base	Resilient, Tile, Terrazzo or Resinous Epoxy	
	Ceiling	Acoustical Ceiling Tile or Exposed Structure - Painted	
Plumbing		Hot/cold water for sink, water for refrigerators and ice machine	
HVAC		Heating, ventilation, air conditioning	
Fire Protection / Life Safety		Wet pipe sprinkler system	
Power		Per UFC	
Lighting		Per UFC	
	Tele.	Per UFC	
	Data	Per UFC	
Communication	ССТУ	N/A	
	CATV	Per User Requirement	
	Security	N/A	
Acoustical		Per UFC 3-450-01 for Noise Control	
Furnishings / Equipment / Casework		Tables and chairs, kitchenette counter with sink, cabinets, microwave alcoves.	
Special Requirements			

#### 3-4 MODULE D – RPA TECHNICAL SUPPORT MODULE

#### 3-4.1 Function and Adjacency

The RPA Technical Support Module is an open office area that includes sections for a Weapons group, an Avionics group, an AC Section group and a Training group.

#### Figure 3-4.1 Module D Adjacency Diagram

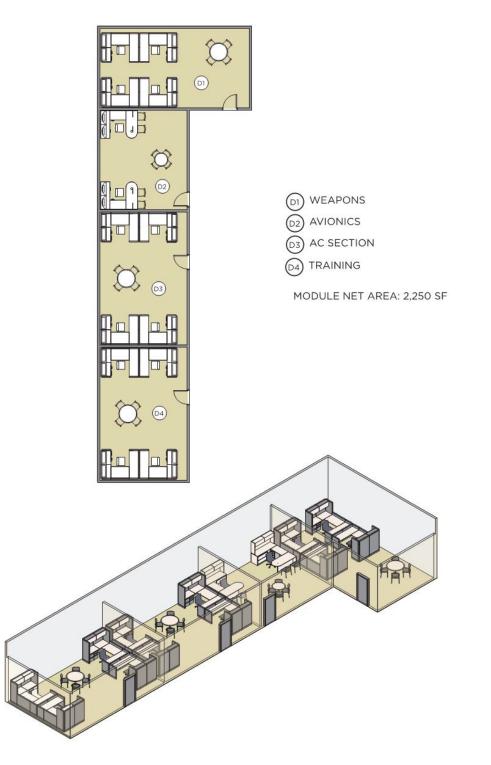


B - ADMINISTRATION

- J TOILET, SHOWER, LOCKER
- K BUILDING SUPPORT

# 3-4.2 RPA Technical Support

# Figure 3-4.2 Module D Floor Plan & Axonometric



# 3-4.3 Data Sheets

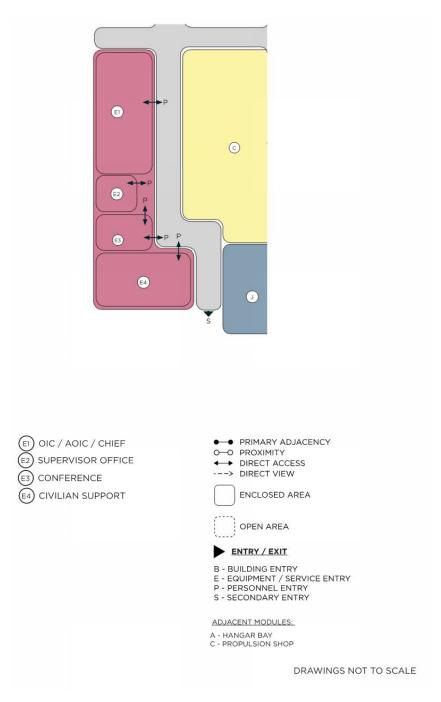
Figure 3-4.3 D RPA TECHNICAL SUPPORT ROOM DATA SHEET		
Description/Usage		Open Office with workstations divided into 4 sections: Weapons Group; Avionics Group; AC Section Group; & a Training Group
Ceiling Height		9'-0" minimum
Windows		Exterior insulated ATFP
Doors	Туре	Hollow metal, 3'x7'
	Security/ Hardware	Keyed lock set
	View Panels/ Kick Plates	View Panels, 5" x 20" and side lite, 12" wide Kick Plates on both sides of door
	Walls	Systems furniture, Demountable partitions or Gypsum Board - Painted
Finish se	Floor	Carpet Tile
Finishes	Base	Resilient
	Ceiling	Acoustical Ceiling Tile or Exposed Structure - Painted
Plumbing		N/A
HVAC		Heating, ventilation, air conditioning
Fire Protection / Life Safety		Wet pipe sprinkler system
Power		Per UFC
Lighting		Per UFC
	Tele.	Per UFC, One per workstation
	Data	Per UFC
Communication	ССТУ	N/A
	CATV	N/A
	Security	N/A
Acoustical		Per UFC 3-450-01 for Noise Control
Furnishings / Equipment / Casework		Weapons Group - four workstations; Avionics Group - two workstations; AC Section Group- four workstations; Training Group- four workstations
Special Requirements		Flat screen tv monitor in Training Group Area

#### 3-5 MODULE E – RPA ADMINISTRATION SUPPORT MODULE

#### 3-5.1 Function and Adjacency

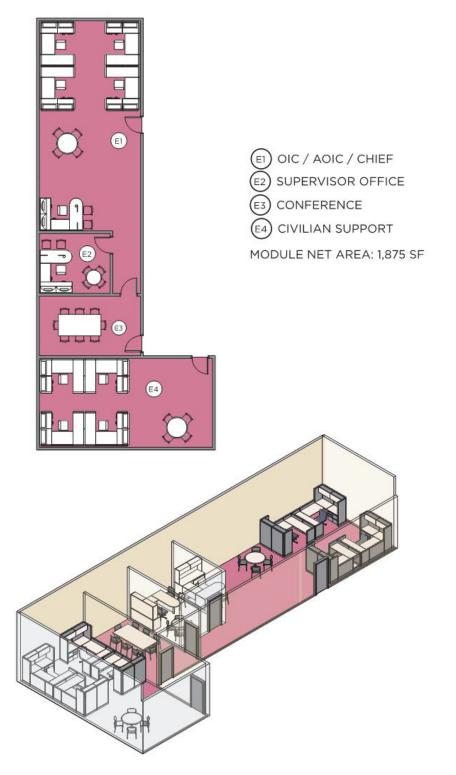
The RPA Administration Support Module consists of a Supervisor's Office and an Open Office area for sections of the Supervisor group, an OIC/AOIC/Chief group and a Civilian Support Group and a Conference area.

#### Figure 3-5.1 Module E Adjacency Diagram



# 3-5.2 RPA Administration Support

# Figure 3-5.2 Module E Floor Plan & Axonometric



# 3-5.3 Data Sheets

	Figure 3-5.3	E1 OIC/AOIC/CHIEF ROOM DATA SHEET
		Office with four workstations. And one supervisor desk
Description/Usage		
Ceiling Height		9'-0" minimum
Windows		Exterior insulated ATFP
	Туре	Hollow metal, 3'x7'
Doors	Security/	Keyed lock set
Doors	Hardware	
	View Panels/	View Panels, 5" x 20" and side lite, 12" wide
	<b>Kick Plates</b>	Kick Plates on both sides of door
	Walls	Systems furniture, Demountable partitions or Gypsum Board - Painted
Finishes	Floor	Carpet Tile
Finishes	Base	Resilient
	Ceiling	Acoustical Ceiling Tile or Exposed Structure - Painted
Plumbing		N/A
HVAC		Heating, ventilation, air conditioning
Fire Protection / I	Life Safety	Wet pipe sprinkler system
Power		Per UFC
Lighting		Per UFC
	Tele.	Per UFC, One per workstation
	Data	Per UFC
Communication	ССТУ	N/A
	CATV	N/A
	Security	N/A
Acoustical		Per UFC 3-450-01 for Noise Control
Furnishings / Equipment / Casework		OIC/ AOIC/ CHIEF Group - four workstations, one supervisor desk
Special Requirements		

Figure 3-5.3 E2 SUPERVISOR OFFICE ROOM DATA SHEET		
		Private office for administration supervisor
Description/Usage		
Ceiling Height		9'-0" minimum
Windows	r	Exterior insulated ATFP
	Туре	Hollow metal, 3'x7'
Doors	Security/ Hardware	Keyed lock set
	View Panels/	View Panels, 5" x 20" and side lite, 12" wide
	Kick Plates	Kick Plates on both sides of door
	Walls	Systems furniture, Demountable partitions or Gypsum Board - Painted
<b>F</b> <sup>1</sup> - <sup>1</sup>	Floor	Carpet Tile
Finishes	Base	Resilient
	Ceiling	Acoustical Ceiling Tile or Exposed Structure - Painted
Plumbing		N/A
HVAC		Heating, ventilation, air conditioning
		Wet pipe sprinkler system
Fire Protection / L	ife Safety	
Power		Per UFC
Lighting		Per UFC
0 0	Tele.	Per UFC, One per workstation
	Data	Per UFC
Communication	ссту	N/A
	CATV	N/A
	Security	N/A
Acoustical		Per UFC 3-450-01 for Noise Control
Furnishings / Equipment / Casework		Supervisor Group - one desk and a small breakout conference table
Special Requirements		

	Figure 3-5.3	E3 CONFERENCE ROOM DATA SHEET
Description/Usage		Small conference/briefing room for Administration Support with conference table for 8
Ceiling Height		9'-0" minimum
Windows		Exterior insulated ATFP
	Туре	Hollow metal, 3'x7'
Doors	Security/ Hardware	Keyed lock set
	View Panels/	View Panels, 5" x 20" and side lite, 12" wide
	Kick Plates	Kick Plates on both sides of door
	Walls	Systems furniture, Demountable partitions or Gypsum Board - Painted
Finishes	Floor	Carpet Tile
Finishes	Base	Resilient
	Ceiling	Acoustical Ceiling Tile or Exposed Structure - Painted
Plumbing		N/A
HVAC		Heating, ventilation, air conditioning
Fire Protection / L	ife Safety	Wet pipe sprinkler system
Power		Per UFC
Lighting		Per UFC
	Tele.	Per UFC, One per workstation
	Data	Per UFC
Communication	ССТV	N/A
	CATV	N/A
	Security	N/A
Acoustical		Per UFC 3-450-01 for Noise Control
Furnishings / Equipment / Casework		Small conference table with eight chairs, audio-visual equipment and monitor (1)
Special Requirements		

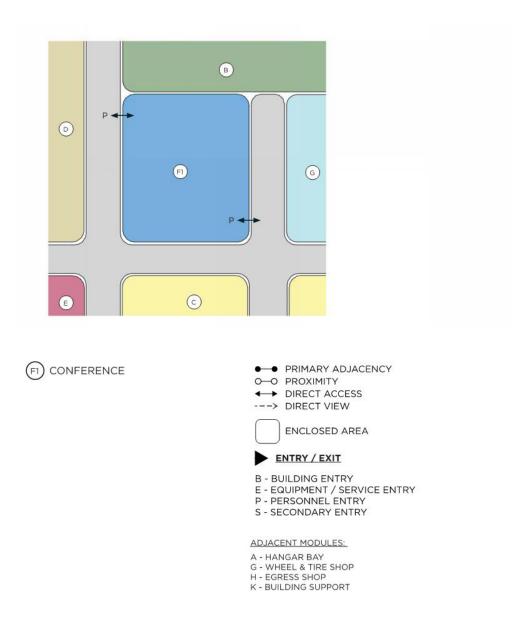
Figure 3-5.3 E4 (		E4 CIVILIAN SUPPORT ROOM DATA SHEET
		Open Office with workstations divided into 4 sections
Description/Usage		
<b>Ceiling Height</b>		9'-0" minimum
Windows		Exterior insulated ATFP
	Туре	Hollow metal, 3'x7'
Doors	Security/ Hardware	Keyed lock set
	View Panels/	View Panels, 5" x 20" and side lite, 12" wide
	Kick Plates	Kick Plates on both sides of door
	Walls	Systems furniture, Demountable partitions or Gypsum Board - Painted
	Floor	Carpet Tile
Finishes	Base	Resilient
	Ceiling	Acoustical Ceiling Tile or Exposed Structure - Painted
Plumbing		N/A
HVAC		Heating, ventilation, air conditioning
Fire Protection / L	ife Safety	Wet pipe sprinkler system
Power		Per UFC
Lighting		Per UFC
	Tele.	Per UFC, One per workstation
	Data	Per UFC
Communication	ССТV	N/A
	CATV	N/A
	Security	N/A
Acoustical		Per UFC 3-450-01 for Noise Control
Furnishings / Equipment / Casework		Civilian Support Group- four workstations
Special Requirements		

### 3-6 MODULE F – SQUADRON CONFERENCE MODULE

#### 3-6.1 Function and Adjacency

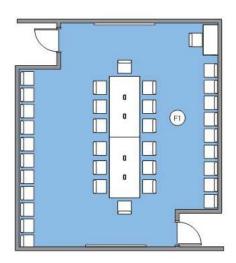
The Squadron Conference Module is a large conference/briefing room with large conference table for 14 -16 and additional space for 18 - 20 additional chairs along walls. Audio-visual monitors (2) are required.

#### Figure 3-6.1 Module F Adjacency Diagram



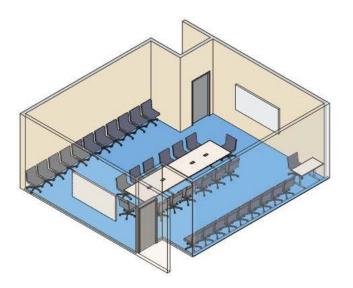
# 3-6.2 Squadron Conference

# Figure 3-6.2 Module F Floor Plan & Axonometric





MODULE NET AREA: 715 SF



# 3-6.3 Data Sheets

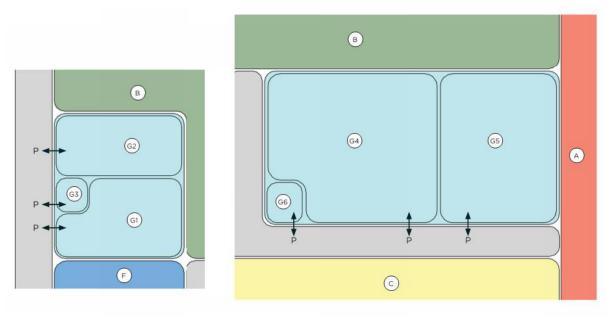
Figure 3-6.3 F SQUADRON CONFERENCE ROOM DATA SHEET		
Description/Usage		Large conference/briefing room for Squadron with large conference table for 14-16 and 18-20 additional chairs.
Ceiling Height		9'-0" minimum
Windows		Exterior insulated ATFP
	Туре	Hollow metal, 3'x7'
Doors	Security/ Hardware	Keyed lock set
	View Panels/ Kick Plates	View Panels, 5" x 20" and side lite, 12" wide Kick Plates on both sides of door
	Walls	Systems furniture, Demountable partitions or Gypsum Board - Painted
et at a la cas	Floor	Carpet Tile
Finishes	Base	Resilient
	Ceiling	Acoustical Ceiling Tile or Exposed Structure - Painted
Plumbing		N/A
HVAC		Heating, ventilation, air conditioning
Fire Protection / L	ife Safety	Wet pipe sprinkler system
Power		Per UFC
Lighting	1	Per UFC
	Tele.	Per UFC
	Data	Per UFC
Communication	ССТV	N/A
	CATV	N/A
	Security	N/A
Acoustical		Per UFC 3-450-01 for Noise Control
Furnishings / Equipment / Casework		Conference table for 16, 16-18 extra chairs at wall; audio-visual equipment and monitors (2).
Special Requirements		

#### 3-7 MODULE G - TOILET / SHOWER / LOCKER MODULE

#### 3-7.1 **Function and Adjacency**

The Toilet/Shower/Locker Module is comprised of two areas; a Male and Female Administration Toilet for the Administration and Technical Modules and a Male and Female Toilet/Shower/Locker area for the line personnel. The Male/Female ratio is 60/40. Areas required to be ABA compliant. Also included within these modules are janitor closets.

## Figure 3-7.1 Module G Adjacency Diagram

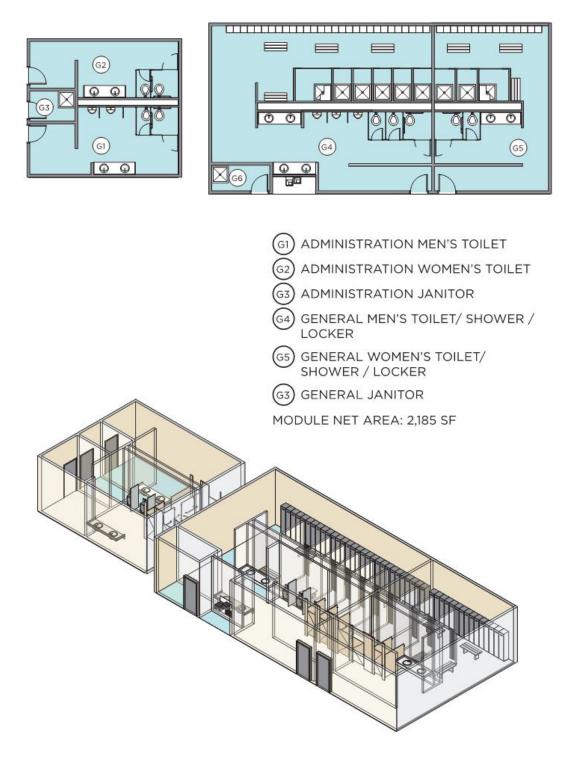


#### 3-7.2 Toilet / Shower / Locker



ADJACENT MODULES:

- A HANGAR BAY
- **B TOOLS, PART & SUPPORT** C - READY ROOM
- F SQUADRON CONFERENCE



# Figure 3-7.2 Module G Floor Plan & Axonometric

# 3-7.3 Data Sheets

Figure 3-7.3 G1 ADMINISTRATION MEN'S TOILET ROOM DATA SHEET		
Description/Usage		Men's Toilet with two water closets, two urinals and two lavatories. Toilet Room to be ABA compliant.
Ceiling Height		9'-0" minimum
Windows		N/A
	Туре	Hollow metal, 3'x7'
Doors	Security/ Hardware	Push-pull
	View Panels/ Kick Plates	No view panels Kick Plates on both sides of doors
	Walls	Ceramic Tile or Resinous Epoxy full height at wet walls, showers, Gypsum Board - Painted
Finishes	Floor	Tile or Resinous Epoxy
	Base	Tile or Resinous Epoxy
	Ceiling	Gypsum Board - Painted
Plumbing		Water closets, urinals (Men's), lavatories, showers. Hot and cold water for fixtures. Floor drains in restroom and locker areas.
HVAC		Heating, ventilation, air conditioning. Exhaust directly outdoors.
Fire Protection / L	ife Safety	Wet pipe sprinkler system
Power		Per UFC
Lighting		Per UFC
	Tele.	N/A
	Data	N/A
Communication	ссти	N/A
	CATV	N/A
	Security	N/A
Acoustical		Per UFC 3-450-01 for Noise Control
Furnishings / Equipment / Casework		
Special Requirements		Water resistant gypsum board throughout. See RFP for accessories requirements.

Figure 3-7.5 G3 ADMINISTRATION JANITOR ROOM DATA SHEET		
		Custodial room for general maintenance for the Administration/technical modules.
Description/Usage		
Ceiling Height		9'-0" minimum
Windows		N/A
	Туре	Hollow metal, 3'x7'
Doors	Security/ Hardware	Keyed lock set
	View Panels/	No view panels
	Kick Plates	Kick Plates both sides of door
	Walls	Gypsum Board - Painted, Ceramic Tile at mop sink
Finishes	Floor	Tile or Resinous Epoxy
1 mones	Base	Tile or Resinous Epoxy
	Ceiling	Gypsum Board - Painted
Plumbing		Mop sink, floor drain
HVAC		Heating, ventilation, air conditioning. Exhaust directly outdoors
		Wet pipe sprinkler system
Fire Protection / L	ife Safety	
Power		Per UFC
Lighting		Per UFC
	Tele.	N/A
	Data	N/A
Communication	ССТУ	N/A
	CATV	N/A
	Security	N/A
Acoustical		Per UFC 3-450-01 for Noise Control
Furnishings / Equipment / Casework		Mop Shelf
Special Requirements		Water resistant gypsum board throughout. See RFP for accessories requirements.

Figure 3-7.6 G4 GENERAL MEN'S TOILET/SHOWER/LOCKER DATA SHEET		
Description/Usage		Men's Toilet/Shower/Locker area with three water closets, three urinals, four lavatories, six showers. Locker area will have approximately 30 half height 15"x15" lockers (total 60) and benches. Toilet/Shower/Locker Room to be ABA compliant.
<b>Ceiling Height</b>		9'-0" minimum
Windows		N/A
	Туре	Hollow metal, 3'x7'
Doors	Security/ Hardware	Push-pull
	View Panels/ Kick Plates	No view panels Kick Plates on both sides of doors
	Walls	Ceramic Tile or Resinous Epoxy full height at wet walls, showers, Gypsum Board - Painted
Finishes	Floor	Tile or Resinous Epoxy
	Base	Tile or Resinous Epoxy
	Ceiling	Gypsum Board - Painted
Plumbing		Water closets, urinals (Men's), lavatories, showers. Hot and cold water for fixtures. Floor drains in restroom and locker areas.
HVAC		Heating, ventilation, air conditioning. Exhaust directly outdoors.
Fire Protection / Life Safety		Wet pipe sprinkler system
Power		Per UFC
Lighting		Per UFC
	Tele.	N/A
	Data	N/A
Communication	ССТV	N/A
	CATV	N/A
	Security	N/A
Acoustical		Per UFC 3-450-01 for Noise Control
Furnishings / Equipment / Casework		Lockers and benches.
Special Requirements		Water resistant gypsum board throughout. See RFP for accessories requirements.

Figure 3-7.7	G5 GENERA	L WOMEN'S TOILET/SHOWER/LOCKER ROOM SHEET
Description/Usage		Men's Toilet/Shower/Locker area with two water closets, two lavatories, three showers. Locker area will have approximately 15 half height 15"x15" lockers (total 30) and benches. Toilet/Shower/Locker Room to be ABA compliant.
Ceiling Height		9'-0" minimum
Windows	1	N/A
	Туре	Hollow metal, 3'x7'
Doors	Security/ Hardware	Push-pull
	View Panels/ Kick Plates	No view panels Kick Plates on both sides of doors
	Walls	Ceramic Tile or Resinous Epoxy full height at wet walls, showers, Gypsum Board - Painted
Finishes	Floor	Tile or Resinous Epoxy
	Base	Tile or Resinous Epoxy
	Ceiling	Gypsum Board - Painted
Plumbing		Water closets, urinals (Men's), lavatories, showers. Hot and cold water for fixtures. Floor drains in restroom and locker areas.
HVAC		Heating, ventilation, air conditioning. Exhaust directly outdoors.
Fire Protection / L	ife Safety	Wet pipe sprinkler system
Power		Per UFC
Lighting		Per UFC
	Tele.	N/A
	Data	N/A
Communication	ссти	N/A
	CATV	N/A
	Security	N/A
Acoustical		Per UFC 3-450-01 for Noise Control
Furnishings / Equipment / Casework		Lockers and benches.
Special Requirements		Water resistant gypsum board throughout. See RFP for accessories requirements.

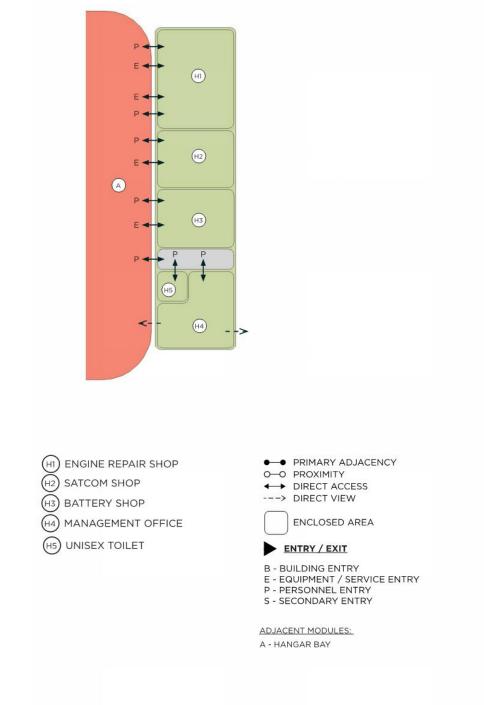
Figure 3-7.8 G6 GENERAL JANITOR ROOM DATA SHEET		
Description/Usage		Custodial room for general maintenance for the Flight Line side of the facility.
Ceiling Height		9'-0" minimum
Windows		N/A
	Туре	Hollow metal, 3'x7'
Doors	Security/ Hardware	Keyed lock set
	View Panels/ Kick Plates	No view panels Kick Plates both sides of door
	Walls	Gypsum Board - Painted, Ceramic Tile at mop sink
Finishes	Floor	Tile or Resinous Epoxy
FINISNES	Base	Tile or Resinous Epoxy
	Ceiling	Gypsum Board - Painted
Plumbing		Mop sink, floor drain
HVAC		Heating, ventilation, air conditioning. Exhaust directly outdoors
Fire Protection / L	ife Safety	Wet pipe sprinkler system
Power		Per UFC
Lighting		Per UFC
	Tele.	N/A
	Data	N/A
Communication	ССТУ	N/A
	CATV	N/A
	Security	N/A
Acoustical	-	Per UFC 3-450-01 for Noise Control
Furnishings / Equipment / Casework		Mop Shelf
Special Requirements		Water resistant gypsum board throughout.

#### 3-8 MODULE H – AIRCRAFT MAINTENANCE SUPPORT MODULE

#### 3-8.1 Function and Adjacency

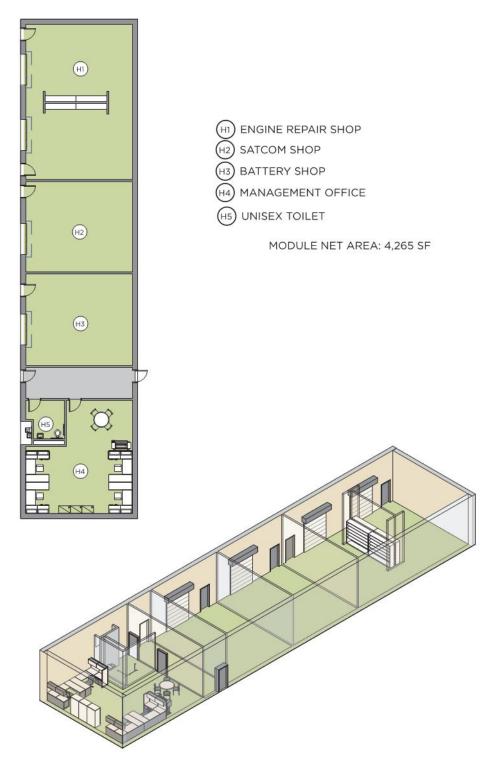
The Aircraft Maintenance Support Module includes an Engine repair Shop (for MQ-1 RPA's only), a SATCOM Room, a Battery Shop and a.

### Figure 3-8.1 Module H Adjacency Diagram



# 3-8.2 Aircraft Maintenance Support

# Figure 3-8.2 Module H Floor Plan & Axonometric



# 3-8.3 Data Sheets

Fig	gure 3-8.3 H1	ENGINE REPAIR SHOP ROOM DATA SHEET
		Engine shop with two work bays, for MQ-1 RPA only.
Description/Usage		
<b>Ceiling Height</b>		10'-0" minimum
Windows		N/A
	Туре	Hollow metal, 3'x7'
Doors	Security/ Hardware	Keyed lock set
	View Panels/	View Panels, 5" x 20"
	Kick Plates	Kick Plates on both sides of door
	Walls	CMU - Painted
<b>F</b> inish se	Floor	Sealed concrete
Finishes	Base	No base
	Ceiling	Exposed Structure - Painted
Plumbing		Compressed air drops with hose reels.
HVAC		Heating, ventilation, air conditioning
Fire Protection / L	ife Safety	Wet pipe sprinkler system
Power		Per UFC
Lighting		Per UFC
	Tele.	Per UFC
	Data	Per UFC
Communication	ссти	N/A
	CATV	N/A
	Security	N/A
Acoustical		Per UFC 3-450-01 for Noise Control
Furnishings / Equipment / Casework		One (1) workstation
Special Requirements		1/2 ton monorail crane per work bay.

	Figure 3-	8.4 H2 SATCOM ROOM DATA SHEET
		SATCOM equipment repair.
Description/Usage		
Ceiling Height		9'-0" minimum
Windows	1	N/A
	Туре	Hollow metal, 3'x7'
	Security/	keyed lock set
Doors	Hardware	
	View Panels/	View Panels, 5" x 20"
	Kick Plates	Kick plates on both sides of door
	Walls	CMU - Painted
Finishes	Floor	Sealed concrete
1 mones	Base	No base
	Ceiling	Exposed Structure - Painted
Plumbing		Water closets, urinals (Men's), lavatories. Floor drain in restroom area.
HVAC		Heating, ventilation, air conditioning. Exhaust directly outdoors.
Fire Protection / L	ife Safety	Wet pipe sprinkler system
Power		Per UFC
Lighting		Per UFC
0 0	Tele.	N/A
	Data	N/A
Communication	ссту	N/A
	CATV	N/A
	Security	N/A
Acoustical		Per UFC 3-450-01 for Noise Control
Furnishings / Equipment / Casework		Work benches.
Special Requirements		

Fig	jure 3-8.5 H3 E	BATTERY SHOP ROOM DATA SHEET
		Battery storage and charging area
Description/Usage		
Ceiling Height		9'-0" minimum
Windows		N/A
	Туре	Hollow metal, 3'x7'
Doors	Security/ Hardware	Keyed lock set
	View Panels/	View Panels, 5" x 20"
	Kick Plates	Kick Plates on both sides of doors
	Walls	CMU - Painted
Finishes	Floor	Sealed concrete
FIIIISIIES	Base	No base
	Ceiling	Exposed Structure - Painted
Plumbing		N/A
НVАС		Heating, ventilation, air conditioning. Exhaust directly outdoors
Fire Protection / Life S	afety	Wet pipe sprinkler system
Power		Per UFC
Lighting		Per UFC
	Tele.	N/A
	Data	N/A
Communication	ССТУ	N/A
	CATV	Per User Requirement
	Security	N/A
Acoustical	• <del>-</del>	Per UFC 3-450-01 for Noise Control
Furnishings / Equipment / Casework		
Special Requirements		Refer to UFC requirements for battery charging areas

Figure 3-8.	6 H4 HANGAR	R MANAGEMENT OFFICE ROOM DATA SHEET			
Description/Usage		Office with four workstations.			
Ceiling Height		9'-0" minimum			
Windows		Exterior insulated ATFP, interior window to Hangar Bay, 36"x40"			
Туре		Hollow metal, 3'x7'			
Doors	Security/ Hardware	Keyed lock set			
	View Panels/	View panels, 5" x 20"			
	Kick Plates	Kick Plates on both sides of doors			
	Walls	CMU - Painted			
Finishes	Floor	Sealed concrete, Stained concrete, or Tile			
111131123	Base	Resilient			
	Ceiling	Acoustical Ceiling Tile or Exposed Structure - Painted			
Plumbing		Hot and Cold water, small janitor sink, floor drain			
		Air Conditioned, ventilation, heating			
HVAC					
		Wet pipe sprinkler system			
Fire Protection / Life S	Safety				
Power		Per UFC in addition to charger unit power for floor cleaner			
Lighting		Per UFC			
	Tele.	Per UFC, One per workstation			
	Data	Per UFC			
Communication	ССТУ	N/A			
	CATV	N/A			
	Security	N/A			
Acoustical	-	N/A			
Furnishings / Equipment / Casework					
Special Requirements		Four workstations and small conference table.			

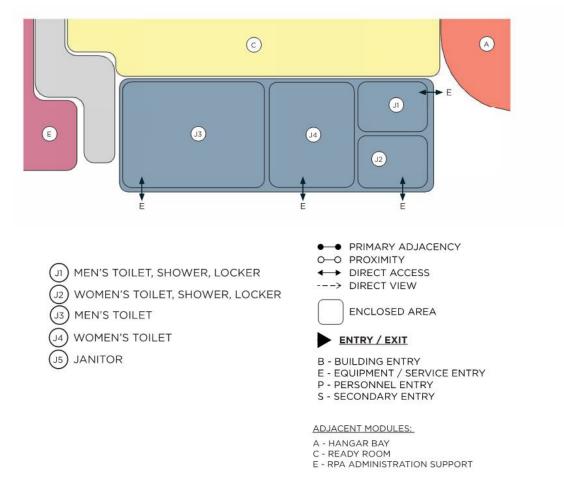
	Figure 3-8.7	H5 UNISEX TOILET ROOM DATA SHEET
Description/Usage		Unisex ABA compliant toilet room with access to Hangar Bays an Flight Line.
Ceiling Height		9'-0" minimum
Windows		N/A
	Туре	Hollow metal, 3'x7'
	Security/	Push-pull
Doors	Hardware	
	View Panels/	No view panels
	Kick Plates	Kick Plates on both sides of doors
	Walls	Ceramic Tile or Resinous Epoxy full height at wet walls, showers, Gypsum Board - Painted
Finishes	Floor	Tile or Resinous Epoxy
	Base	Tile or Resinous Epoxy
	Ceiling	Gypsum Board - Painted
Plumbing		Water closets, urinals (Men's), lavatories, showers. Hot and cold water
		for fixtures. Floor drains in restroom and locker areas.
HVAC		Heating, ventilation, air conditioning. Exhaust directly outdoors.
Fire Protection / L	ife Safety	Wet pipe sprinkler system
Power		Per UFC
Lighting		Per UFC
	Tele.	N/A
	Data	N/A
Communication	ссти	N/A
	CATV	N/A
	Security	N/A
Acoustical		Per UFC 3-450-01 for Noise Control
Furnishings / Equipment / Casework		
Special Requirements		Water resistant gypsum board throughout. See RFP for accessories requirements.

## 3-9 MODULE J – BUILDING SUPPORT MODULE

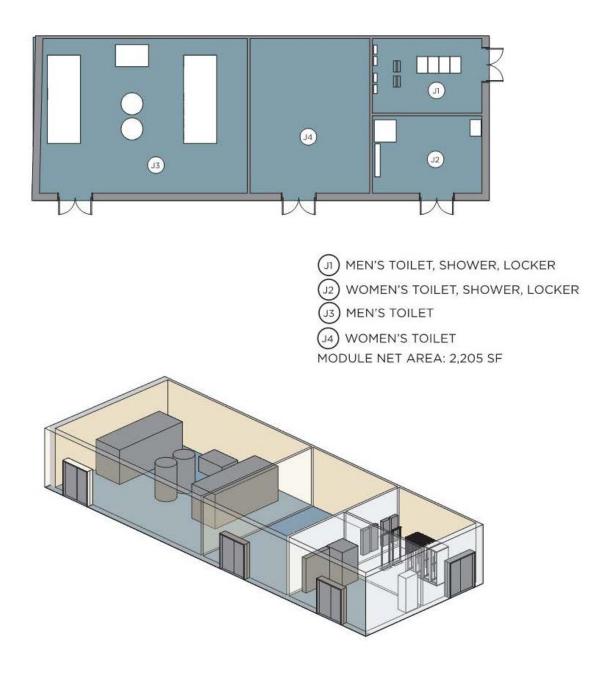
### 3-9.1 Function and Adjacency

The Building Support Module consists of Mechanical, Electrical, Fire Pump and Communications equipment for the facility. All rooms to have exterior access (an exception for Communications Room which may have interior access). These modules are to be located on an exterior wall adjacent to a Utility Courtyard and accessible for maintenance.

#### Figure 3-9.1 Module J Adjacency Diagram 3-9.2 Building Support



## Figure 3-9.2 Module J Floor Plan & Axonometric



# 3-9.3 Data Sheets

Figure 3-9.3 J1 TELECOMMUNICATIONS ROOM DATA SHEET			
Description/Usage		Communications Equipment.	
Ceiling Height		No ceiling, 9'-0 minimum clearance	
Windows		N/A	
	Туре	Hollow metal, Single 3'x7'	
Doors	Security/ Hardware	Keyed lock set	
	View Panels/ Kick Plates	No view panels Kick Plates on both sides of door	
	Walls	CMU - Painted	
	Floor	Sealed concrete	
Finishes	Base	No base	
	Ceiling	Exposed Structure - Painted	
Plumbing		N/A	
HVAC		Heating, ventilation and air conditioning. Dedicated unit required.	
Fire Protection / I	ife Safety	Wet pipe sprinkler system	
Power		Per UFC	
Lighting		Per UFC	
	Tele.	Per UFC	
	Data	Per UFC	
Communication	ССТУ	N/A	
	CATV	N/A	
	Security	Per BCE Requirements	
Acoustical		N/A	
Furnishings / Equipment / Casework			
Special Requirements			

Figure 3-9.4 J2 ELECTRICAL ROOM DATA SHEET			
		Electrical Equipment.	
Description/Usage			
Ceiling Height		No ceiling, 9'-0 minimum clearance	
Windows		N/A	
Туре		Hollow metal, Single or Pair 3'x7' to exterior	
Doors	Security/ Hardware	Keyed lock set	
	View Panels/	No view panels	
	Kick Plates	Kick Plates on both sides of doors	
	Walls	CMU - Painted	
Finishes	Floor	Sealed concrete	
	Base	No base	
	Ceiling	Exposed Structure - Painted	
Plumbing		N/A	
HVAC		Heating and ventilation	
Fire Protection / L	ife Safety	Wet pipe sprinkler system	
Power		Per UFC	
Lighting		Per UFC	
	Tele.	N/A	
	Data	Per UFC	
Communication	ССТУ	N/A	
	CATV	N/A	
	Security	N/A	
Acoustical		N/A	
Furnishings / Equipment / Casework			
Special Requirements			

	Figure 3-9.5	J3 MECHANICAL ROOM DATA SHEET
		Mechanical Equipment.
Description/Usage		
Ceiling Height		No ceiling, 9'-0" minimum clearance
Windows		N/A
Туре		Hollow metal, Pair 3'x7' to exterior
Doors	Security/ Hardware	Keyed lock set
	View Panels/	No view panels
	<b>Kick Plates</b>	Kick Plates on both sides of doors
	Walls	CMU - Painted
Finishes	Floor	Sealed concrete
FINISNES	Base	No base
	Ceiling	Exposed Structure - Painted
Plumbing		Floor drains as required
HVAC		Heating and ventilation.
Fire Protection / I	Life Safety	Wet pipe sprinkler system
Power		Per UFC
Lighting	T	Per UFC
	Tele.	N/A
	Data	Per UFC
Communication	CCTV	N/A
	CATV	N/A
	Security	N/A
Acoustical		N/A
Furnishings / Equipment / Casework		
Special Requirements		

	Figure 3-9.6 J4 FIRE PUMP ROOM DATA SHEET				
		Fire Suppression Equipment.			
Description/Usage					
Ceiling Height		No ceiling, 9'-0" minimum clearance			
Windows		N/A			
	Туре	Hollow metal, Pair 3'x7' to exterior			
Doors	Security/ Hardware	Keyed lock set			
	View Panels/ Kick Plates	No view panels Kick Plates on both sides of doors			
	Walls	CMU - Painted			
Finishes	Floor	Sealed concrete			
FILISHES	Base	No base			
	Ceiling	Exposed Structure - Painted			
Plumbing		Floor drains as required			
HVAC		Heating and ventilation Air conditioning required in foam equipment room with releasing panel per UFC 3-600-01.			
Fire Protection / L	ife Safety	Wet pipe sprinkler system			
Power		Per UFC			
Lighting		Per UFC			
	Tele.	N/A			
	Data	Per UFC			
Communication	ССТУ	N/A			
	CATV	N/A			
	Security	N/A			
Acoustical		STC 45 assembly minimum between adjacent spaces			
Furnishings / Equipment / Casework					
Special Requirements					

	Figure 3-10 CIRCULATION ROOM DATA SHEET					
Description/Usage		This data sheet is for general circulation or corridor spaces not associated with individual modules.				
<b>Ceiling Height</b>		9'-0" minimum				
Windows		N/A				
	Туре	Hollow metal, 3'x7' (egress)				
Doors	Security/ Hardware	Keyed lock set				
	View Panels/ Kick Plates	N/A Kick Plates both sides of door				
	Walls	CMU – Painted or Gypsum Board - Painted				
Finishes	Floor	Sealed concrete, stained concrete, Tile, Terrazzo or Resinous Epoxy				
Finisnes	Base	Resilient, Tile, Terrazzo or Resinous Epoxy				
	Ceiling	Acoustical Ceiling Tile or Exposed structure - Painted				
Plumbing		N/A				
HVAC		Heated & Air Conditioned				
<b>Fire Protection</b>		Wet pipe sprinkler system				
Power		Per UFC 3-520-01				
Lighting		Per UFC 3-530-01				
	Tele.	N/A				
	Data	N/A				
Communication	ССТV	N/A				
	CATV	N/A				
	Security	N/A				
Acoustical Requi	rements	N/A				
Furnishings, Equipment and Casework						
Special Requirements						

# **CHAPTER 4 ENGINEERING/TECHNICAL CRITERIA**

4-1 NOT USED.

# **APPENDIX A – REFERENCES**

ABA	Architectural Barriers Act Accessibility Standard for Department of Defense Facilities
ACI 301	American Concrete Institute "Specifications for Structural Concrete"
ACI 318/318R	American Concrete Institute "Building Code Requirements for Reinforced Concrete and Commentary"
ACI 530/530.1	American Concrete Institute "Building Code Requirements for Masonry Structures" and "Specifications for Masonry Structures"
AFCFS	Air Force Corporate Facility Standards
AFH 32-1084	Air Force Handbook 32-1084, Civil Engineering, Facility Requirements
AFI 31-101	Air Force Physical Security Program
AFI 32-1063	Electric Power Systems
AFI 32-1065	Grounding Systems
AFMAN 32-1084	Facility Requirements
AISC	American Institute of Steel Construction "Specification for
	Structural Steel Buildings"
AISI	American Iron and Steel Institute "North American Specification
	for the Design of Cold-Formed Steel Structural Members"
ASCE 7	American Society of Civil Engineers "Minimum Design Loads for
	Buildings and Other Structures"
ASHRAE 15	Safety Standard for Refrigeration Systems
ASHRAE 62.1	Ventilation for Acceptable Indoor Air Quality
ASHRAE 90.1	Energy Standard for Buildings Except Low-Rise Residential Buildings
ASHRAE 189.1	Standard for the Design of High Performance Green Buildings
ASTM Codes and	American Society of Testing and Materials
Standards	
AWS D1.1-00	American Welding Society "Structural Welding Code – Steel"
EISA Section 438	Stormwater Management for Federal Facilities under Section 438
	of the Energy Independence and Security Act
EM 200-1-3	Requirements for the Preparation of Sampling and Analysis Plans
ER-1110-1-263	Chemical Data Quality Management for Hazardous, Toxic,
	Radioactive Waste Remedial Activities
EPACT 2005	Energy Policy Act of 2005
ETL 04-3	Design Criteria for Prevention of Mold in Air Force Facilities
ETL 07-4	Air Force Carpet Standard
ETL 12-15	LED Fixture Design and Installation Criteria for Interior and
-	Exterior Lighting Applications, w/Change 1

ETL 13-4	Engineering Technical Letter (ETL) 13-4: Standby Generator
	Design, Maintenance, and Testing Criteria
FAA AC 70/7460-	Federal Aviation Administration Advisory Circular: Obstruction
1K	Marking and Lighting
FAA AC	Federal Aviation Administration Advisory Circular: Airport
150/5320-5D	Drainage Design
FAA AC	Federal Aviation Administration Advisory Circular: Specification
150/5345-43F	for Obstruction Lighting Equipment
FAA AC	Federal Aviation Administration Advisory Circular: Operational
150/5370-2E	Safety On Airports During Construction
IBC	International Building Code
IEEE C2	National Electrical Safety Code
IENSA	10 <sup>th</sup> Ed of the Handbook
IFC	International Fuel Gas code
IMC	International Mechanical Code
IPC	International Plumbing Code
MIL-HDBK	Lightning Protection
1004/6	
MIL-HDBK	Design Guidelines for Physical Security of Facilities
1013/1A	
MIL-HDBK-1190	Facility Planning and Design Guide
MUTCD	Manual on Uniform Traffic Control Devices
NFPA 10	Standard for Portable Fire Extinguishers
NFPA 70	National Electrical Code
NFPA 70E	Electric Safety in the Work Place
NFPA 72	National Fire Alarm and Signaling Code
NFPA 101	National Fire Protection Association
NFPA 220	Standard on Types of Building Construction
NFPA 780	Standard for the Installation of Lightning Protection System
NPDES	National Pollutant Discharge Elimination System (NPDES) for
	Construction Activities (Varies by State)
OSHA	Occupational Safety and Health Administration Regulations
TI-800-01	Design Criteria
UFC 1-200-01	General Building Requirements
UFC 1-200-02	High Performance and Sustainability Building Requirements
UFC 1-300-07A	Design Build Technical Requirements
UFC 3-101-01	Architecture
UFC 3-110-03	Roofing
UFC 3-120-01	Design: Sign Standards
UFC 3-120-10	Interior Design
UFC 3-190-06	Protective Coatings and Paints

UFC 3-201-01	Civil Engineering
UFC 3-201-02	Landscape Architecture
UFC 3-210-10	Low Impact Development
UFC 3-220-01	Geotechnical Engineering
UFC 3-220-04FA	Backfill for Subsurface Structures
UFC 3-220-08FA	Engineering Use of Geotextiles
UFC 3-230-01	Water Storage, Distribution, and Transmission
UFC 3-240-01	Wastewater Collection
UFC 3-250-01FA	Pavement Design for Roads, Streets, Walks and Open Storage Areas
UFC 3-250-04	Standard Practice for Concrete Pavements
UFC 3-250-08FA	Standard Practice for Sealing Joints and Cracks in Rigid and Flexible Pavements
UFC 3-250-11	Soil Stabilization for Pavements
UFC 3-260-01	Airfield and Heliport Planning and Design
UFC 3-260-02	Pavement Design for Airfields
UFC 3-260-17	Dust Control for Roads, Airfields, and Adjacent Areas
UFC 3-301-01	Design: Structural Engineering
UFC 3-400-02	Design: Engineering Weather Data
UFC 3-410-04N	Industrial Ventilation
UFC 3-420-01	Plumbing Systems
UFC 3-450-01	Noise and Vibration Control
UFC 3-501-01	Electrical Engineering
UFC 3-520-01	Interior Electrical Systems,
UFC 3-530-01	Design: Interior and Exterior Lighting and Controls,
UFC 3-550-01	Exterior Electrical Power Distribution
UFC 3-570-02A	Cathodic Protection
UFC 3-575-01	Lightning and Static Electricity Protection Systems
UFC 3-580-01	Telecommunications Building Cabling Systems Planning and Design
UFC 4-021-01	Design and O&M: Mass Notification Systems
UFC 4-022-03	Security Fences and Gates
UFC 4-023-03	Design of Buildings to Resist Progressive Collapse
UFC 4-211-01	Aircraft Maintenance Hangars
USGBC LEED- NC	LEED for New Construction and Major Renovations Rating System (U.S. Green Building Council)

# **APPENDIX B – PROGRAMMING SHEET**

MODULE NO.	AREA	NO. OCCUP	SF PER USER	NO. OF ROOMS REQUIRED	INDIVIDUAL ROOM RQRMNTS SF	NET US REQUIREM SF	AND AND ADDRESS OF	COMMENTS
A	Hangar Bay Hangar Bay			2	29,015	58,030	5,390.99	1
	SUBTOTAL HANGAR BAY AREA					58,030	5,390.99	
B.1	Tools, Parts & Support Supply Office	3		1	305	305	28.33	3,7
B.2 B.3	Supply (TNB/FOM) Transaction	2		1	1,735 515	1,735 515	161.18 47.84	110
B.4	Support (Tool Crib)	5		1	2,090	2,090	194.16	
B.5 B.6	Support Office Hazmat	4		1	325 150	325 150	30.19 13.94	3,7
B.7	SUBTOTAL TOOL AND PARTS SUPPORT AREA			1	545	545 5,665	50.63 526.28	
С	Ready Room		2	1. T				2
C.1 C.2	Ready Room Unisex Locker Room	44		1	2,620 885	2,620 885	243.40 82.22	
C.3	Break Room SUBTOTAL BULLPEN/READY ROOM AREA	104		1	2,160	2,160 5,665	200.66 526.28	2
D.1	RPA Technical Support Weapons	4		1	310	310	28.80	3,7
D.2 D.3	Avionics AC Section	2 4		1	310 310	310 310	28.80 28.80	3,7 3,7
D.4	Training Circulation	4		1	310 10%	310 125	28.80 11.61	3,7
	SUBTOTAL RPA TECHNICAL SUPPORT AREA		<u> </u>	-	10 /6	1,365	126.81	
E	RPA Administration Support			5		1000		5
E.1 E.2	OIC/AOIC/Chief Supervisor Office	5 1		1	310 265	310 265	28.80 24.62	3,7 3,7
E.3	Conference	8		i	265	265	24.62	10
E.4	Civilian Support Circulation	4		1	310 10%	310 170	28.80	3,7
	SUBTOTAL RPA ADMINISTRATION SUPPORT AREA					1,320	122.63	ļ
F	Squadron Conference	34		4	455	455	42.27	10
F	Squadron Conference SUBTOTAL SQUADRON CONFERENCE ROOM AREA	34			400	455	42.27	10
G	Toilet/Shower/Locker							
G.1 G.2	Administration Men's Toilet Administration Women's Toilet			1	225 170	295 250	27.41 23.23	8
G.3	Administration Janitor			i i	60	60	5.57	47.3
G.4 G.5	General Men's Toilet/Shower/Locker General Women's Toilet/Showe/Locker			1	990 645	990 645	91.97 59.92	8 8
G.6	General Janitor SUBTOTAL TOILETS/ SHOWERS/ LOCKERS AREA			1	45	45 2,285	4.18 212.28	
н	Aircraft Maintenance Support							
H.1	Engine Repair Shop			2	1,095	2,190	203.45	
H.2 H.3	SATCOM Shop Battery Shop			1	645 655	645 655	59.92 60.85	
H.4 H.5	Management Office Unisex Toilet	4	5	1	685 90	685 90	63.64 8.36	3 9
-	SUBTOTAL AIRCRAFT MAINTENANCE SUPPORT AREA					4,265	396.22	
J	Building Support				0.00		00.00	0
J.1 J.2	Telecommunications Electrical			1	250 205	250 205	23.23 19.04	6
J.3 J.4	Mechanical Fire Pump Room			1	795 180	795 180	73.86 16.72	6 6
	SUBTOTAL BUILDING SUPPORT AREA					1,430	132.85	
	Facility Corridor Covered Entry (1/2 Scope)	0		1	2,125 80	2,125 80	7.43	12
	TOTAL FACILITY NET FLOOR AREA NET TO GROSS	10%	8			79,050	7,343.75	4,11
	TOTAL FACILITY GROSS AREA	10%	9			86,955	8,078	4,11
COMMENTS	Programming Worksheet is based upon 6 aircraft positions - typical for Squadron, ta	ail-to-tail conf	iguration					
2	Break Room also serves as Classroom, sized per Table 6.3 Break Rooms and Table	le 6.4 Classro	oom of Air Fo					
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Break Room 16% of 120 occupants multiplied by 18 sf per occupant plus Classroom Reference Tables in Chapter 6 of Air Force Manual 32-1084 for additional information		rsons multipl	ied by 20 sf per p	erson)			
4	Includes all areas listed in Air Force Manual 32-1084, Chapter 1 and Chapter 6							
6	Per AFM 32-1084 Chapter 1, paragraph 1.10.2 Circulation Multiplier of up to 10%. Building Support areas are estimates only and actual size is dependent on requirements for climate zone, location, system, etc.							
	(Sq. FL not included in Total Facility Net Floor Area as this area is included in Net to Gross Multiplier)							
8	Male/Female ratio of 60/40							
	Single Unisex Toilet for Hangar Management Team/Meeting/Mini-Conference Roon; Conference Room per Table 6.4							
	Per AFM 32-1084 Chapter 1, net-to-gross multiplier of up to 25%, used 10% as larg		and the second second second					

# **APPENDIX C – BIM DRAWING LINK**

See the link below for the BIM & PDF versions of the drawings: <u>http://www.wbdg.org/references/afbim\_tools.php</u>

### APPENDIX D – RFP LINK

See the link below for the Supplement RFP data: <u>http://www.wbdg.org/references/afbim\_tools.php</u>

#### APPENDIX E – AIR FORCE MILCON SUSTAINABILITY REQUIREMENTS SCORESHEET

version LEED®	2009 (Update	d September 2013)		required entry
General Informatio				
		XXXX123456	Project ID (e.g. ABCD12345)	
		XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	Real Property Unique ID (RPUID)	- 1
		RPA General Maintenance Hangar		-1 1
		Facility (Prototype Design)	Building Name	
		New Building Construction	Project Type	
		Other	Installation	
		Other	City	
		Other	State	
		Other	CONUS	- I
		Air Combat Command	MAJCOM	
		TBD	PM Name	
Fede	ral	\$0.00	PA (\$k)	<b>-</b> 1
		88,480	Building Size (SF)	
Require	ments	2014	Program Year (FY///////)	- 1
		RFP/35% Design	Project Phase	
Comp	lete	2014 10/9/2017	Design Started (FY####) ROD (MM/IDDAX)	-
		In Progress	BOD (MWDD/YY) Burnalian formal LEED® Continentian	-
		in Plogress	Pursuing formal LEED® Certification	- 1
			Date Project Registered (MM/DD/YY)	
			Date Project Certified by GBCI (MM/DD/YY)	
			LEED Points Awarded by GBCI (e.g. 42)	
			LEED Energy and Water Points Awarded by GBCI	
			[Select]  LEED Certification Level Awarded by GBCI	
			Registration Cartification	
			Peers (4) 900 3400	
		LEED@ 2009	LEED® Rating System	- I
		58	LEED® Points Status	- 1
		Silver	LEED® Certification Level Status	- 1
		28 100%	LEED® Energy and Water Points Status HPSB Compliant	-
		30%	Energy Efficiency Achieved (% below ANSI/ASHRAE/IESNA	-
		2010 C	Standard 90.1-2010)	
		2/4/2015	Date Scoresheet Completed or Revised	<b>-</b>
		2013 V0	Scoresheet version	
Color Codina: See li	nstructions Tab 1			
Drop-Down Box		Recommended (not required)		
No Entry Required		Yes or N/A		I
LED Prereguisite		Maybe		I
LED FIGURIN				
				* required e
		erformance and Sustainable Build	dings (HPSB) & UFC 1-200-02	
IPSB I: Employ Inte	egrated Design P	rinciples (UFC 1-200-02 para 2-2)		
fotal Points	2		Possible Poir	nts 2
Yes	HPSB I.1	Integrated Design		1
Yes	HPSB I.2	Commissioning		1
JFC 1-200-02 para 2	-3. Promote Sust	tainable Location and Site Developm	ient	
otal Points	1		Possible Points (HPS8 on	iy) 1
Yes	UFC para 2-3.1	Site selection		1
Yes	UFC para 2-3.2	Mitigation of Heat Island Effect		1
Yes	UFC para 2-3.3			1
Yes	HPSB III.3-4	Stormwater Management		1

	4	ance (UFC 1-200-02 para 2-4)		
Yes	HPSB II.1	Energy Efficiency	r uosauto r van	1
			Reduce energy use 30% below ANSI/ASHRAE/IESNA Standard	
		Yes	90.1-2010 or if not - achieve maximum energy efficiency that is	
			lifecycle cost effective	
		30.0%	Insert percentage below ANSI/ASHRAE/IESNA Standard 90.1-2010	)
		00.016	in terms of energy use (e.g. 32)	-
		0	Insert building energy intensity (kBtu/yr-sqft) calculated IAW 10 CFF	२
Vee	HPSB II.2	On-site Renewable Energy - Solar	433 Het Water Heater Suntem	<b>_</b> .
105	FIP-3D II.2		Installed solar hot water heater system or found installation not	- '
		Yes	ifecycle cost effective	
		0.0	Insert generation capacity (MMBtu/yr)	-
		0.0%	Insert percentage of demand	-
Yes	HPSB II.3	On-site Renewable Energy		1
			Installed renewable energy elements or projects were not lifecycle	
		Yes	cost effective	
		0	Renewable energy types (check below)	
				-
			Solar PV Geothermal Hydro Waste to Energy	
			Solar CP GSHP Wind ✓ Renemables were	not
			Solar Thermal Bectric	
		0.0	Insert generation capacity (kW)	-
		0.0%	Insert percentage of total building	-
Vez	HPSB II.4	Measurement and Verification	insent percentage of total building	<b>.</b> .
105	HESD 1.4	Yes	Water Metering: Select N/A if no service	п (
		Yes	Electric Metering: Select N/A if no service	-
		Yes	Natural Gas Metering: Select N/A if no service	-
		N/A	Steam Metering: Select N/A if no service	-
III: Protect a	and Conserve Wa	ter (UFC 1-200-02 para 2-5)	oteon meternal, oerost rerranto oerrice	
oints	3		Possible Point	nts 3
Yes	HPSB III.1	Indoor Water		1
	111 000 111.1			
Yes	HPSB III.2	Outdoor Water		1
Yes Yes		Outdoor Water Water used for heating and coolin		1
Yes Yes	HPSB III.2	Water used for heating and coolin	Water efficient measures were implemented with heating and coolin	1
Yes	HPSB III.2 HPSB III.4	Water used for heating and coolin Yes	Water efficient measures were implemented with heating and coolin equipment when life cycle effective	1
Yes	HPSB III.2 HPSB III.4	Water used for heating and coolin	Water efficient measures were implemented with heating and coolin equipment when life cycle effective	1
Yes IV: Enhanc oints	HPSB III.2 HPSB III.4 e Indeer Environ	Water used for heating and coolin Yes	Water efficient measures were implemented with heating and coolin equipment when life cycle effective	1
Yes IV: Enhanc oints Yes	HPSB III.2 HPSB III.4 e Indeor Environ 6 HPSB IV.1	Water used for heating and coolin Yes mental Quality (UFC 1-200-02 para 2-6	Water efficient measures were implemented with heating and coolin equipment when life cycle effective	1
Yes IV: Enhanc cints Yes Yes	HPSB III.2 HPSB III.4 e Indeor Environ 6 HPSB IV.1 HPSB IV.2	Water used for heating and coolin Yes montal Quality (UFC 1-200-02 para 2-6 Thermal Comfort Ventilation	Water efficient measures were implemented with heating and coolin equipment when life cycle effective	1
Yes IV: Enhanc oins Yes Yes Yes	HPSB III.2 HPSB III.4 6 HPSB IV.1 HPSB IV.2 HPSB IV.3	Water used for heating and coolin Yes montal Quality (UFC 1-200-02 para 2-6 Thermal Comfort Ventilation Moisture Control	Water efficient measures were implemented with heating and coolin equipment when life cycle effective	1
Yes IV: Enhanc oins Yes Yes Yes Yes	HPSB III.2 HPSB III.4 6 HPSB IV.1 HPSB IV.2 HPSB IV.3 HPSB IV.4	Water used for heating and coolin Yes mental Quality (UFC 1-200-02 para 2-6 Thermal Comfort Ventilation Moisture Control Daylighting	Water efficient measures were implemented with heating and coolin equipment when life cycle effective	1
Yes IV: Enhanc ons Yes Yes Yes Yes Yes Yes	HPSB III.2 HPSB III.4 6 HPSB IV.1 HPSB IV.2 HPSB IV.3 HPSB IV.4 HPSB IV.5	Water used for heating and coolin Yes montal Quality (UFC 1-200-02 para 2-6 Thermal Comfort Ventilation Moisture Control Daylighting Low Emitting Materials	Water efficient measures were implemented with heating and coolin equipment when life cycle effective 5) Possible Poin	1
Yes IV: Enhanc cins Yes Yes Yes Yes Yes Yes	HPSB III.2 HPSB III.4 6 HPSB IV.1 HPSB IV.2 HPSB IV.2 HPSB IV.4 HPSB IV.5 HPSB IV.6	Water used for heating and coolin Yes montal Quality (UFC 1-200-02 para 2-5 Thermal Comfort Ventilation Moisture Control Daylighting Low Emitting Materials Protect Indeor Air Quality during 6	Water efficient measures were implemented with heating and coolin equipment when life cycle effective 5) Possible Poin	1
Yes IV: Enhanc oins Yes Yes Yes Yes Yes Yes Yes	HPSB III.2 HPSB III.4 HPSB IV.1 HPSB IV.2 HPSB IV.3 HPSB IV.4 HPSB IV.5 HPSB IV.6 HPSB IV.7	Water used for heating and coolin Yes mental Quality (UFC 1-200-02 para 2-5 Thermal Comfort Ventilation Moisture Control Daylighting Low Emitting Materials Protect Indeor Air Quality during 6 Environmental Tobacco Smoke	Water efficient measures were implemented with heating and coolin equipment when life cycle effective	1
Yes IV: Enhanc oins Yes Yes Yes Yes Yes Yes Yes	HPSB III.2 HPSB III.4 HPSB IV.1 HPSB IV.2 HPSB IV.3 HPSB IV.4 HPSB IV.5 HPSB IV.6 HPSB IV.7	Water used for heating and coolin Yes montal Quality (UFC 1-200-02 para 2-5 Thermal Comfort Ventilation Moisture Control Daylighting Low Emitting Materials Protect Indeor Air Quality during 6	Water efficient measures were implemented with heating and coolin equipment when life cycle effective	1 15 1 1 1 1 1 1 1 1 1
Yes IV: Enhanc oins Yes Yes Yes Yes Yes Yes Yes	HPSB III.2 HPSB III.4 HPSB IV.1 HPSB IV.2 HPSB IV.3 HPSB IV.4 HPSB IV.5 HPSB IV.6 HPSB IV.7	Water used for heating and coolin Yes montal Quality (UFC 1-200-02 para 2-6 Thermal Comfort Ventilation Moisture Control Daylighting Low Emitting Materials Protect Indoor Air Quality during ( Environmental Tobacco Smoke pact of Materials (UFC 1-200-02 para	Water efficient measures were implemented with heating and coolin equipment when life cycle effective Possible Point Construction 2-6)	1 15 1 1 1 1 1 1 1 1 1
Yes IV: Enhanc ons Yes Yes Yes Yes Yes Yes Yes V: Reduce l ons Yes	HPSB III.2 HPSB III.4 e Indoor Environ 6 HPSB IV.1 HPSB IV.2 HPSB IV.3 HPSB IV.3 HPSB IV.5 HPSB IV.6 HPSB IV.6 HPSB IV.7 Environmental Im 6 HPSB V.1	Water used for heating and coolin Yes montal Quality (UFC 1-200-02 para 2-6 Thermal Comfort Ventilation Moisture Control Daylighting Low Emitting Materials Protect Indoor Air Quality during ( Environmental Tobacco Smoke pact of Materials (UFC 1-200-02 para Recycled Content	Water efficient measures were implemented with heating and coolin equipment when life cycle effective Possible Point Construction 2-6)	1 13 15 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Yes Ves Ves Yes Yes Yes Yes Yes Yes Yes Yes Yes Y	HPSB III.2 HPSB III.4 HPSB III.4 HPSB IV.1 HPSB IV.2 HPSB IV.3 HPSB IV.4 HPSB IV.5 HPSB IV.6 HPSB IV.7 Environmental In 6 HPSB V.1 HPSB V.1	Water used for heating and coolin Yes montal Quality (UFC 1-200-02 para 2-6 Thermal Comfort Ventilation Moisture Control Daylighting Low Emitting Materials Protect Indoor Air Quality during 6 Environmental Tobacco Smoke rpact of Materials (UFC 1-200-02 para Recycled Content Biologically-based Products	Water efficient measures were implemented with heating and coolin equipment when life cycle effective Possible Poin Construction 2-6) Possible Poin	19 15 6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Yes IV: Enhanco olms Yes Yes Yes Yes Yes Yes Yes Yes Yes Ye	HPSB III.2 HPSB III.4 B HPSB IV.1 HPSB IV.2 HPSB IV.3 HPSB IV.3 HPSB IV.5 HPSB IV.6 HPSB IV.7 Environmental In 6 HPSB V.1 HPSB V.2 HPSB V.2 HPSB V.3	Water used for heating and coolin Yes montal Quality (UFC 1-200-02 para 2-6 Thermal Comfort Ventilation Moisture Control Daylighting Low Emitting Materials Protect Indoor Air Quality during 6 Environmental Tobacco Smoke pact of Materials (UFC 1-200-02 para Recycled Content Biologically-based Products Environmentally Preferable Produ	Water efficient measures were implemented with heating and coolin equipment when life cycle effective Possible Poin Construction 2-6) Possible Poin ints	1 19 10 10 11 11 11 11 11 11 11 11
Yes Ves Ves Yes Yes Yes Yes Yes Yes Yes Yes Yes Y	HPSB III.2 HPSB III.4 HPSB III.4 HPSB IV.1 HPSB IV.2 HPSB IV.3 HPSB IV.4 HPSB IV.5 HPSB IV.6 HPSB IV.7 Environmental In 6 HPSB V.1 HPSB V.1	Water used for heating and coolin Yes montal Quality (UFC 1-200-02 para 2-6 Thermal Comfort Ventilation Moisture Control Daylighting Low Emitting Materials Protect Indoor Air Quality during ( Environmental Tobacco Smoke pact of Materials (UFC 1-200-02 para Recycled Content Biologically-based Products Environmentally Preferable Produ Waste and Materials Management	Water efficient measures were implemented with heating and coolin equipment when life cycle effective Possible Poin Construction 2-6) Possible Poin Ints :- Recycling	1 19 10 10 11 11 11 11 11 11 11 11
Yes IV: Enhanco oins Yes Yes Yes Yes Yes Yes Yes Yes Yes Ye	HPSB III.2 HPSB III.4 G HPSB IV.1 HPSB IV.2 HPSB IV.3 HPSB IV.4 HPSB IV.5 HPSB IV.6 HPSB IV.7 Environmental In 6 HPSB V.1 HPSB V.1 HPSB V.2 HPSB V.3 HPSB V.4	Water used for heating and coolin Yes montal Quality (UFC 1-200-02 para 2-6 Thermal Comfort Ventilation Moisture Control Daylighting Low Emitting Materials Protect Indoor Air Quality during 6 Environmental Tobacco Smoke pact of Materials (UFC 1-200-02 para Recycled Content Biologically-based Products Environmentally Preferable Produ	Water efficient measures were implemented with heating and coolin equipment when life cycle effective Possible Poin Construction 2-6) Possible Poin Ints :- Recycling	1 19 10 10 11 11 11 11 11 11 11 11
Yes IV: Enhanco oins Yes Yes Yes Yes Yes Yes Yes Yes Yes Ye	HPSB III.2 HPSB III.4 G HPSB IV.1 HPSB IV.2 HPSB IV.3 HPSB IV.4 HPSB IV.5 HPSB IV.6 HPSB IV.7 Environmental In 6 HPSB V.1 HPSB V.1 HPSB V.2 HPSB V.3 HPSB V.4	Water used for heating and coolin Yes montal Quality (UFC 1-200-02 para 2-6 Thermal Comfort Ventilation Moisture Control Daylighting Low Emitting Materials Protect Indoor Air Quality during ( Environmental Tobacco Smoke pact of Materials (UFC 1-200-02 para Recycled Content Biologically-based Products Environmentally Preferable Produ Waste and Materials Management Waste and Materials Management	Water efficient measures were implemented with heating and coolin equipment when life cycle effective Possible Poin Construction 2-6) Possible Poin ects :- Recycling - Divert 50% from Disposal Insert percentage diverted from landfil	1 19 10 10 11 11 11 11 11 11 11 11
Yes IV: Enhanco oins Yes Yes Yes Yes Yes Yes Yes Yes Yes Ye	HPSB III.2 HPSB III.4 HPSB IV.4 HPSB IV.2 HPSB IV.3 HPSB IV.3 HPSB IV.5 HPSB IV.5 HPSB IV.6 HPSB IV.7 Environmental Im 6 HPSB V.1 HPSB V.2 HPSB V.3 HPSB V.4 HPSB V.4 HPSB V.4	Water used for heating and coolin Yes montal Quality (UFC 1-200-02 para 2-6 Thermal Comfort Ventilation Moisture Control Daylighting Low Emitting Materials Protect Indoor Air Quality during ( Environmental Tobacco Smoke pact of Materials (UFC 1-200-02 para Recycled Content Biologically-based Products Environmentally Preferable Produ Waste and Materials Management Waste and Materials Management S0.0%	Water efficient measures were implemented with heating and coolin equipment when life cycle effective Possible Poin Construction (2-6) Possible Poin tots : Recycling - Divert 50% from Disposal	1 19 10 10 11 11 11 11 11 11 11 11
Yes W: Enhanc Dims Yes Yes Yes Yes Yes Yes Yes Yes Yes Ye	HPSB III.2 HPSB III.4 G HPSB IV.1 HPSB IV.2 HPSB IV.3 HPSB IV.4 HPSB IV.5 HPSB IV.6 HPSB IV.7 Environmental In 6 HPSB V.1 HPSB V.1 HPSB V.2 HPSB V.3 HPSB V.4	Water used for heating and coolin Yes montal Quality (UFC 1-200-02 para 2-6 Thermal Comfort Ventilation Moisture Control Daylighting Low Emitting Materials Protect Indoor Air Quality during ( Environmental Tobacco Smoke pact of Materials (UFC 1-200-02 para Recycled Content Biologically-based Products Environmentally Preferable Produ Waste and Materials Management Waste and Materials Management	Water efficient measures were implemented with heating and coolin equipment when life cycle effective Possible Poin Construction 2-6) Possible Poin ects :- Recycling - Divert 50% from Disposal Insert percentage diverted from landfil	
Yes W: Enhanc Dims Yes Yes Yes Yes Yes Yes Yes Yes Yes Ye	HPSB III.2 HPSB III.4 G HPSB IV.1 HPSB IV.2 HPSB IV.2 HPSB IV.3 HPSB IV.4 HPSB IV.5 HPSB IV.7 Environmental In 5 HPSB V.1 HPSB V.1 HPSB V.2 HPSB V.3 HPSB V.4 HPSB V.4 HPSB V.5	Water used for heating and coolin Yes montal Quality (UFC 1-200-02 para 2-6 Thermal Comfort Ventilation Moisture Control Daylighting Low Emitting Materials Protect Indoor Air Quality during ( Environmental Tobacco Smoke pact of Materials (UFC 1-200-02 para Recycled Content Biologically-based Products Environmentally Preferable Produ Waste and Materials Management Waste and Materials Management S0.0%	Water efficient measures were implemented with heating and coolin equipment when life cycle effective Possible Poin Construction 2-6) Possible Poin inter Recycling - Divert 50% from Disposal Insert percentage diverted from landfill Data element is not applicable	
Yes IV: Enhanco oins Yes Yes Yes Yes Yes Yes Yes Yes Yes Ye	HPSB III.2 HPSB III.4 IPSB III.4 HPSB IV.1 HPSB IV.2 HPSB IV.3 HPSB IV.3 HPSB IV.5 HPSB IV.6 HPSB IV.7 Environmental In 6 HPSB V.1 HPSB V.2 HPSB V.3 HPSB V.3 HPSB V.4 HPSB V.5 IPSB V.6 Federal Requ	Water used for heating and coolin Yes montal Quality (UFC 1-200-02 para 2-6 Thermal Comfort Ventilation Moisture Control Daylighting Low Emitting Materials Protect Indoor Air Quality during ( Environmental Tobacco Smoke pact of Materials (UFC 1-200-02 para Recycled Content Biologically-based Products Environmentally Preferable Produ Waste and Materials Management Waste and Materials Management S0.0% Ozone Depleting Substances	Water efficient measures were implemented with heating and coolin equipment when life cycle effective Possible Poin Construction 2-6) Possible Poin inter Recycling - Divert 50% from Disposal Insert percentage diverted from landfill Data element is not applicable	

		its and/or Prerequisites that meet		
_	LEED® Cred	its and/or Prerequisites that align	closely with HPSB/UFC Requirements	
Justile Cites	LEED® Cred	its that meet USAF Energy & Wate	r Criteria (may depend on technologies & strategies)	
ainable Sites	11	Sustainable Sites		
	Prereq 1	Construction Activity Pollution		Rec
Yes	Credit 1	Site Selection		
	Credit 2	Development Density & Comm	unity Connectivity	
	Credit 3 Credit 4.1	Brownfield Redevelopment Alternative Transportation - Public Transportation Access		
	Credit 4.1 Credit 4.2		cycle Storage & Changing Rooms	
	Credit 4.3		w-Emitting & Fuel Efficient Vehicles	
	Credit 4.4	Alternative Transportation - Pa		
-	Credit 5.1	Site Development - Protect or Restore Habitat		
Maybe	Credit 5.2 Credit 6.1	Site Development - Maximize O		
Yes	Credit 6.1 Credit 6.2	Stormwater Design - Quantity Stormwater Design - Quality C		
	Credit 7.1	Heat Island Effect - Non-Roof (		
	Credit 7.2	Heat Island Effect - Roof (UFC)		
Yes	Credit 8	Light Pollution Reduction		
- E40 -1		Option 1	Select which LEED® Interior Lighting Option was used	
r Efficiency rable Points			Possible Poir	
Yes	Prereg 1	Water Use Reduction - 20% Re		Rec
	Credit 1	Water Efficient Landscaping (H	IPSB GP3)	2
		2	Reduce Potable Water Use by 50% (HPSB GP3)	
Marchae	6	4	No Potable Use or Irrigation (HPSB GP3)	
	Credit 2 Credit 3	Innovative Wastewater Techno Water Use Reduction (HPSB G		2
3	credit a	2	30% Reduction (HPSB GP3)	ר <sup>*</sup>
		3	35% Reduction (HPSB GP3)	-
		4	40% Reduction (HPSB GP3)	
gy & Atmosphere				
rable Points Yes	17 Prereg 1	Fundamental Commissioning	Possible Point of the Building Energy Systems (HPSB GP1)	nts Req
Yes	Prereq 2	Minimum Energy Performance		Req
	Prereq 3	Fundamental Refrigerant Mana	agement (HPSB GP5)	Rec
15	Credit 1	Optimize Energy Performance		11
		1	12% for New Buildings/8% for Existing Building Renovations	-
		2 3	14% for New Buildings/10% for Existing Building Renovations 16% for New Buildings/12% for Existing Building Renovations	-
		4	18% for New Buildings/14% for Existing Building Renovations	-
		5	20% for New Buildings/16% for Existing Building Renovations	
		6	22% for New Buildings/18% for Existing Building Renovations	
		7	24% for New Buildings/20% for Existing Building Renovations	-
		8	26% for New Buildings/22% for Existing Building Renovations	-
		10	28% for New Buildings/24% for Existing Building Renovations 30% for New Buildings/26% for Existing Building Renovations	-
		10		
			32% for New Buildings/38% for Existing Building Renovations 34% for New Buildings/30% for Existing Building Renovations	Ξ
		11 12 13	32% for New Buildings/28% for Existing Building Renovations 34% for New Buildings/30% for Existing Building Renovations 36% for New Buildings/32% for Existing Building Renovations	
		11 12 13 14	32% for New Buildings/28% for Existing Building Renovations 34% for New Buildings/30% for Existing Building Renovations 36% for New Buildings/32% for Existing Building Renovations 38% for New Buildings/34% for Existing Building Renovations	
		11 12 13 14 15	32% for New Buildings/28% for Existing Building Renovations 34% for New Buildings/30% for Existing Building Renovations 36% for New Buildings/32% for Existing Building Renovations 38% for New Buildings/36% for Existing Building Renovations 40% for New Buildings/36% for Existing Building Renovations	
		11 12 13 14 15 16	32% for New Buildings/28% for Existing Building Renovations 34% for New Buildings/30% for Existing Building Renovations 36% for New Buildings/32% for Existing Building Renovations 38% for New Buildings/34% for Existing Building Renovations 40% for New Buildings/38% for Existing Building Renovations 42% for New Buildings/38% for Existing Building Renovations	1
		11 12 13 14 15	32% for New Buildings/28% for Existing Building Renovations 34% for New Buildings/30% for Existing Building Renovations 36% for New Buildings/32% for Existing Building Renovations 38% for New Buildings/36% for Existing Building Renovations 40% for New Buildings/36% for Existing Building Renovations	
		11 12 13 14 15 16 17	32% for New Buildings/28% for Existing Building Renovations 34% for New Buildings/30% for Existing Building Renovations 36% for New Buildings/34% for Existing Building Renovations 38% for New Buildings/34% for Existing Building Renovations 40% for New Buildings/36% for Existing Building Renovations 42% for New Buildings/36% for Existing Building Renovations 44% for New Buildings/40% for Existing Building Renovations	
0	Credit 2	11 12 13 14 15 16 17 18	32% for New Buildings/28% for Existing Building Renovations 34% for New Buildings/30% for Existing Building Renovations 36% for New Buildings/34% for Existing Building Renovations 38% for New Buildings/34% for Existing Building Renovations 40% for New Buildings/36% for Existing Building Renovations 42% for New Buildings/36% for Existing Building Renovations 44% for New Buildings/40% for Existing Building Renovations 46% for New Buildings/42% for Existing Building Renovations 46% for New Buildings/42% for Existing Building Renovations 48% for New Buildings/44% for Existing Building Renovations 48% for New Buildings/44% for Existing Building Renovations	Ξ
0	Credit 2	11 12 13 14 15 15 17 17 18 19 On-Site Renewable Energy (HF	32% for New Buildings/28% for Existing Building Renovations 34% for New Buildings/30% for Existing Building Renovations 36% for New Buildings/34% for Existing Building Renovations 40% for New Buildings/36% for Existing Building Renovations 42% for New Buildings/36% for Existing Building Renovations 44% for New Buildings/36% for Existing Building Renovations 44% for New Buildings/46% for Existing Building Renovations 46% for New Buildings/42% for Existing Building Renovations 48% for New Buildings/44% for Existing Building Renovations	Ξ
0	Credit 2	11 12 13 14 15 16 17 18 19 On-Site Renewable Energy (HF 2	32% for New Buildings/28% for Existing Building Renovations 34% for New Buildings/30% for Existing Building Renovations 36% for New Buildings/32% for Existing Building Renovations 38% for New Buildings/38% for Existing Building Renovations 40% for New Buildings/38% for Existing Building Renovations 42% for New Buildings/38% for Existing Building Renovations 44% for New Buildings/38% for Existing Building Renovations 46% for New Buildings/40% for Existing Building Renovations 48% + for New Buildings/44% + for Existing Building Renovations 98B GP2) On-site 1% On-site 3%	Ξ
0	Credit 2	11 12 13 14 15 15 17 18 19 On-Site Renewable Energy (HF 1 2 3	32% for New Buildings/28% for Existing Building Renovations 34% for New Buildings/30% for Existing Building Renovations 36% for New Buildings/32% for Existing Building Renovations 38% for New Buildings/36% for Existing Building Renovations 40% for New Buildings/36% for Existing Building Renovations 42% for New Buildings/36% for Existing Building Renovations 44% for New Buildings/36% for Existing Building Renovations 46% for New Buildings/40% for Existing Building Renovations 46% for New Buildings/44% for Existing Building Renovations 48% for New Buildings/44% for Existing Building Renovations 98B GP2) On-site 1% On-site 3%	Ξ
0	Credit 2	11 12 13 14 15 16 17 18 19 On-Site Renewable Energy (HF 2	32% for New Buildings/28% for Existing Building Renovations 34% for New Buildings/30% for Existing Building Renovations 36% for New Buildings/36% for Existing Building Renovations 38% for New Buildings/36% for Existing Building Renovations 40% for New Buildings/36% for Existing Building Renovations 42% for New Buildings/36% for Existing Building Renovations 44% for New Buildings/46% for Existing Building Renovations 46% for New Buildings/42% for Existing Building Renovations 46% for New Buildings/44% for Existing Building Renovations 48% to New Buildings/44% for Existing Building Renovations 48% for New Buildings/44% for Existing Building Renovations 48% for New Buildings/44% for Existing Building Renovations 98B GP2) On-site 1% On-site 1% On-site 5% On-site 7%	1
0	Credit 2	11 12 13 14 15 16 17 17 18 9 On-Site Renewable Energy (HF 2 3 3 4	32% for New Buildings/28% for Existing Building Renovations 34% for New Buildings/30% for Existing Building Renovations 36% for New Buildings/32% for Existing Building Renovations 38% for New Buildings/36% for Existing Building Renovations 40% for New Buildings/36% for Existing Building Renovations 42% for New Buildings/36% for Existing Building Renovations 44% for New Buildings/46% for Existing Building Renovations 46% for New Buildings/42% for Existing Building Renovations 48% + for New Buildings/44% + for Existing Building Renovations 48% + for New Buildings/44% + for Existing Building Renovations 95B GP2) On-site 1% On-site 1% On-site 5% On-site 7% On-site 9%	
		11 12 13 14 15 16 17 17 18 0n-Site Renewable Energy (HF 0n-Site Renewable Energy (HF 2 3 4 5 6 7	32% for New Buildings/28% for Existing Building Renovations 34% for New Buildings/30% for Existing Building Renovations 36% for New Buildings/34% for Existing Building Renovations 38% for New Buildings/36% for Existing Building Renovations 40% for New Buildings/36% for Existing Building Renovations 42% for New Buildings/36% for Existing Building Renovations 44% for New Buildings/46% for Existing Building Renovations 46% for New Buildings/42% for Existing Building Renovations 48% for New Buildings/44% for Existing Building Renovations 48% for Renovations 48% fo	
Yes	Credit 3	11 12 13 14 15 16 17 18 19 On-Site Renewable Energy (HP 2 3 4 4 5 6 7 Enhanced Commissioning (HP	32% for New Buildings/28% for Existing Building Renovations 34% for New Buildings/30% for Existing Building Renovations 36% for New Buildings/34% for Existing Building Renovations 38% for New Buildings/36% for Existing Building Renovations 40% for New Buildings/36% for Existing Building Renovations 44% for New Buildings/36% for Existing Building Renovations 44% for New Buildings/42% for Existing Building Renovations 46% for New Buildings/42% for Existing Building Renovations 48% + for New Buildings/44% + for Existing Building Renovations 48% + for New Buildings/44% + for Existing Building Renovations 95B GP2) On-site 1% On-site 1% On-site 3% On-site 3% On-site 3% On-site 13% On-site 13%	
Yes Maybe		11 12 13 14 15 16 17 17 18 0n-Site Renewable Energy (HF 0n-Site Renewable Energy (HF 2 3 4 5 6 7	32% for New Buildings/28% for Existing Building Renovations 34% for New Buildings/30% for Existing Building Renovations 38% for New Buildings/32% for Existing Building Renovations 38% for New Buildings/32% for Existing Building Renovations 40% for New Buildings/38% for Existing Building Renovations 44% for New Buildings/38% for Existing Building Renovations 44% for New Buildings/42% for Existing Building Renovations 48% for New Buildings/42% for Existing Building Renovations 48% for New Buildings/44% + for Existing Building Renovations 48% + for New Buildings/44% + for Existing Building Renovations 98B GP2) On-site 1% On-site 5% On-site 5% On-site 7% On-site 7% On-site 11% On-site 11%	11

rials & Resor vable Points	7			Possible Points
Yes	Prereq 1	Storage & Collection of Recyclables (HF		Re
0	Credit 1.1	Building Reuse - Maintain Existing Walls		'
			aintain 55% of Existing Walls Floors & Roof	
			aintain 75% of Existing Walls Floors & Roof	
Maybe	Credit 1.2	Building Reuse - Maintain 50% of Interior	aintain 95% of Existing Walls Floors & Roof	
2	Credit 2	Construction Waste Management (HPSI		1
4	Credit 2		% Recycled or Salvaged	
			% Recycled or Salvaged	
0	Credit 3	Materials Reuse		
		1 59	6 of value of material reused content	
			% of value of material reused content	
2	Credit 4	Recycled Content (HPSB GP5)		1
			% of value of material recycled content	
2	0.000	2 20 Regional Materials	% of value of material reused content	
2	Credit 5		% Extracted, Processed & Manufactured	1
			% Extracted, Processed & Manufactured	
Maybe	Credit 6	Rapidly Renewable Materials (HPSB GP		
Yes	Credit 7	Certified Wood (HPSB GP5)	.,	
or Environme	ental Quality			
vable Points	10			Possible Points
Yes	Prereq 1	Minimum IAQ Performance (HPSB GP4)		Re
Yes	Prereq 2	Environmental Tobacco Smoke (ETS) C	ontrol (HPSB GP4)	Re
Yes	Credit 1	Outside Air Delivery Monitoring		
Maybe	Credit 2	Increased Ventilation	vine Construction (UDOD CD4)	
Yes Yes	Credit 3.1 Credit 3.2	Construction IAQ Management Plan, Du Construction IAQ Management Plan, Be		
Yes	Credit 4.1	Low Emitting Materials, Adhesives & Se		
Yes	Credit 4.1	Low Emitting Materials, Paints & Coatin		
Yes	Credit 4.3	Low Emitting Materials, Flooring Syster		
Yes	Credit 4.4	Low Emitting Materials, Composite Woo		
Yes	Credit 5	Indoor Chemical & Pollutant Source Co		
Yes	Credit 6.1	Controllability of Systems, Lighting (HP	SB GP4)	
Maybe	Credit 6.2	Controllability of Systems, Thermal Com	fort	
Yes	Credit 7.1	Thermal Comfort, Design (HPSB GP4)		
Maybe	Credit 7.2	Thermal Comfort, Verification		
Maybe	Credit 8.1	Daylight & Views - Daylight 75% of Space		
Maybe	Credit 8.2 ign Process	Daylight & Views - Views for 90% of Space	/85	
vable Points				Possible Points
Yes	Credit 1.1	Innovation in Design 1.1		
			lect if ID 1.1 was for energy and/or water	
Yes	Credit 1.2	Innovation in Design 1.2		
	_		elect if ID 1.2 was for energy and/or water	
Yes	Credit 1.3	Innovation in Design 1.3		
			ect if ID 1.3 was for energy and/or water	
Maybe	Credit 1.4	Innovation in Design 1.4		
Harden	Country 4 D		elect if ID 1.4 was for energy and/or water	
Maybe	Credit 1.5	Innovation in Design 1.5	elect if ID 1.5 was for energy and/or water	
Yes	Credit 2	LEED® Accredited Professional	security in the was for energy and/or water	
onal Priority				
vable Points	2			Possible Points
Yes	Credit 1.1	Regional Priority 1.1		
			elect if RP 1.1 was for energy and/or water	
Yes	Credit 1.2	Regional Priority 1.2		
		Se	ect if RP 1.2 was for energy and/or water	
Maybe	Credit 1.3	Regional Priority 1.3		
Maybe	Credit 1.4	Regional Priority 1.4	elect if RP 1.3 was for energy and/or water	
mayoe	Greek 174		ect if RP 1.4 was for energy and/or water	
Project Tot	als (pre-certifica		reet in the maxim energy encer meter	Possible Points
58	Total LEED®			
19	Total LEED®	Maybe Points		
2	Total LEED®			
	Total LEED®	Energy and Water Related Points		
28	LEED® Certi	ication Status		
28 Silver	-			
	LEED® Horiz	ontal Benchmark Level		
Silver N/A	-			
Silver	-	ontal Benchmark Level y Benchmark Level		
Silver N/A	LEED® Utilit			