**PART 6**

# ARCHITECTURAL AND INTERIOR DESIGN

6.1 **design goal**. The overall architectural design goal for the facility is to provide a functional, visually appealing facility that is a source of pride for facility users, [and the Installation]. The RFP conceptual building drawings present a building design scheme which considers the Army Reserve program and which has been accepted by the Government. This does not preclude the Contractor from making improvements to the design so long as such improvements are consistent with the requirements of the RFP and acceptable to the Government. The building designs are conceptual; the Contractor shall finalize all elements of the design, including exact dimensions. In completing the design, the Contractor will be allowed some latitude in manipulating the plans and elevations to improve functional layout, to accommodate structural, mechanical, electrical and other systems, and to allow flexibility for design/esthetic expression. The spatial relationships and adjacencies, however, must be maintained, unless the Contractor recommends changes to the Government, and the Government approves such changes.

6.1.1 **Site Planning Objectives**. Provide a functional layout of building and site elements. The site plan should place emphasis on creating a safe work environment. Arrange vehicular circulation to minimize conflict with pedestrian circulation. Pavement marking and signage shall clearly delineate traffic patterns, even to first time visitors to the site. Integrate sustainable design principles by retaining and using existing topography to advantage; preserve environmentally sensitive areas and reduce overall project impact on the site.

6.1.1.1 Provide a site development plan that incorporates the spatial and functional arrangement of all facility requirements. The plan should ensure an economical, compatible and functional land use development that utilizes the advantages of the site, allows convenient access to the units which the facility supports, and fosters visual order**.** The site development plan shall show consideration for the site opportunities and constraints, program requirements, and specific site design criteria and guidance provided.

6.1.2 **Exterior Design Objectives**. Design buildings to enhance the visual environment of the [installation]. Exterior materials, roof forms, and detailing shall comply with the provisions of this RFP, and shall be compatible with the immediate local context. Use durable, low-maintenance materials. Configure building massing and use exterior elements such as entry elements and material detailing to provide human scale, especially at core areas.

6.1.2.1 The Army Reserve has accepted the conceptual building plan and exterior designs, including the color scheme as discussed herein. Any appreciable change to the building footprint requires Army Reserve acceptance.

6.1.2.2 The Reserve Center [and other buildings if appropriate] should be the primary visual focus of the project. The vehicle maintenance shop and Unheated Storage Building [or other buildings] color should be complementary to the Reserve Center color palette.

6.1.2.2 [Use this paragraph and delete paragraph above if project circumstances warrant. Edit and tailor as appropriate.] This project consists of [number] buildings with varying functions. Due to their function and visibility, there may be a hierarchy of importance in their exterior images, with regard to materials, appearance, and aesthetics. The most design emphasis shall be placed on [list of buildings or facades]. The next level of design emphasis shall be on the [list of buildings or facades]. The remaining buildings may be designed as more functional in nature.

6.1.3 **Interior Design Objectives**. Arrange spaces in an efficient, functional manner. Provide simple circulation schemes that allow easy wayfinding within buildings. Use durable materials and furnishings that can be easily maintained and replaced. Maximize use of daylighting and operable windows. [Verify whether RSC and users desire operable windows; delete requirement if not.] Use interior surfaces that are easy to clean and light in color; avoid trendy or bright color schemes. Where feasible, arrange spaces to allow rearrangement of furniture layout. Structure interior spaces to allow maximum flexibility for future modifications.

6.1.3.1 The RFP provides basic finishes and a color palette for most spaces. Contractor’s designers are encouraged to develop a more comprehensive finish and color palette for acceptance by the Government, including accent colors and finishes, especially for common-use areas of the building. Such finish and color palette shall include doors, door frames and window frames.

6.1.3.2 Functional space requirements are noted in Part 1 of this Statement of Work; Contractor’s designer is to coordinate the layout with the Government. The Contractor shall develop restroom and locker room plan layouts in conformance with the requirements of this RFP and the Design Guide, for the acceptance of the Government. Training Center building fixture counts shall be based on Design Guide requirements, and shall also comply with code and accessibility requirements. The Training Building male/female ratio is [ ]. For other buildings, provide 40% of the code-required total fixture count requirements for women, and 80% of the total requirement for men. Exclusive-use toilet fixtures in Kitchen or General Officer suite may not be counted toward satisfying Design Guide, accessibility or code requirements.

6.1.3.2.1 In Training Center locker rooms, provide a total of [ ] full height lockers for full-time personnel, and the remainder half height. The number of half-height lockers shall be based on the largest drill weekend consisting of approximately [ ] reservists.

6.1.3.2.2 [In vehicle maintenance shop locker rooms, provide [ ] lockers for men and [ ] for women. Provide [ ] showers for men, and [ ] for women.]

6.1.3.3 Where Contractor provides schedules, labeling or key plans (for signage, lockset keying, electrical panel schedules, communications/data wiring, etc.), Contractor shall use final room numbers if different from construction document room numbers. Refer to UFC 4-171-05 for guidance on room numbering.

6.1.3.4 Special design emphasis should be given to the lobby [and other selected] area(s).

6.1.3.4.1 The lobby area will serve as the formal entry to the facility. Finishes in this area shall be of higher quality and esthetics than in the other spaces, but durability and maintainability remains important. Ceramic or porcelain tile is the minimum requirement for flooring, and walls will be of abuse-resistant gypsum board, as a minimum. Designers should consider brick, tile, or specialty CMU (high-quality finish CMU such as glazed or burnished) products for walls. Corner guards shall be provided, and protective wainscoting or trim shall be provided for the walls. Bulletin boards and/or whiteboards shall be provided; confirm number and location with Users. Provide ample glazing for natural lighting and exterior views. Minimum ceiling height of 9 feet.

6.1.3.4.2 [ other areas for special design emphasis ]

6.1.4 **Material and Product Selection Criteria**. Materials shall meet the requirements of this RFP, which establish a minimum quality level. Higher quality materials will be evaluated more favorably.

6.1.5 **Installation Design Guide Applicability.** [ Describe any limits of applicability. ]

6.2 **GENERAL CONSTRUCTION REQUIREMENTS**.

6.2.1 The major elements for the Training Center and vehicle maintenance shop buildings [or other list of buildings – or vehicle maintenance shop building may differ from the Training Center and need to be described in its own section below] shall include foundations to support building construction, grade level floors of placed concrete, and exterior wall and roof systems as described below. Exterior openings shall receive steel or aluminum frame door systems, steel or aluminum windows, or aluminum curtainwall. All typically occupied spaces (offices, unit commons, classrooms, family support, break room, library, learning center, conference room, etc.) shall be provided with windows or glazing if located on exterior walls; maximize use of daylighting and operable windows.

6.2.1.1 The exterior walls of the Training Center and vehicle maintenance shop building [or other list of buildings] shall be one of the following systems, which are listed in Army Reserve order of preference:

6.2.1.1.1 Exterior cavity wall of masonry veneer and either CMU, insulated concrete forms, tilt-up or pre-cast backup. Brick veneer is preferable to other masonry. Highly preferred.

6.2.1.1.2 Tilt-up or pre-cast concrete panel exterior wall, without separate wythe of masonry veneer. Preferred. Exterior face of concrete panels may be cast-in thin brick (highly preferred), [other treatment approved by Project Officer (preferred)], or plain concrete with decorative grid patterning at no more than twelve feet on center each direction.

6.2.1.1.3 Exterior wall of masonry veneer and steel stud backup. Brick veneer is preferable to other masonry.

6.2.1.1.4 [Pre-engineered metal building, masonry veneer walls or masonry wainscot preferred.] [Pre-engineered buildings are typically used only for UHS and similar storage buildings. If steel skin is allowed, provide liner panels or similar wainscoting on interior face of exterior wall to protect skin from damage from inside building. If pre-engineered buildings are to be allowed for buildings other than UHS, it will be necessary to review the outline spec and determine what additional requirements should be added here; the outline spec is written for UHS buildings only.]

6.2.1.1.5 [For BV acquisitions: Alternative exterior wall systems of equivalent quality and performance, which meet the requirements of this RFP, will be considered. The Army Reserve prefers to avoid Exterior Insulation Finish System (EIFS) cladding of their facilities.]

6.2.1.2 The roofing system of the Training Center and vehicle maintenance shop building [or other list of buildings – or vehicle maintenance shop building may differ from the Training Center and be described in its own section below] shall be one of the following systems, in Army Reserve order of preference:

6.2.1.2.1 Sloped, standing seam metal roofing– highly preferred. The Army Reserve prefers that sloped roofs include an overhang of at least three feet.

6.2.1.2.2 Sloped, 50-year shingle system – preferred. The Army Reserve prefers that sloped roofs include an overhang of at least three feet.

6.2.1.2.3. Low-slope, single-ply EPDM membrane. The Army Reserve prefers roof drainage at the perimeter of the building to interior roof drains.

6.2.1.2.4 Low-slope, modified bitumen. The Army Reserve strongly prefers roof drainage at the perimeter of the building, rather than interior roof drains.

6.2.1.2.5 The roof over the Kitchen area may be either of the low-slope systems noted above.

6.2.2 **UHS Building**. [Edit as appropriate for project, for exterior wall and roof systems, similar to 6.2.1 editing selections above. Pre-engineered metal building is not unusual.]

6.2.3 [See Paragraph 1.9 of this Section 01 02 00.00 48 for other Options which may affect the buildings.]

6.3 **Occupancy and Building Type Classifications**. Occupancy classifications, construction types, allowable areas, maximum building heights, smoke and fire separation requirements shall comply with the requirements of the International Building Code.

6.4 **Exterior Design**.

6.4.1 **Acceptable Materials and Colors**. The exterior building materials are prescribed below. The RFP also provides a basic color palette; the Contractor shall develop an exterior design using this palette as the basis for color selections. [ Exterior elements of the facilities shall comply with the Installation Design Guide (IDG) unless required otherwise by applicable codes or this RFP. ]

6.4.1.1 The following exterior materials and colors are provided as a basis for completion of the exterior design:

[Brick 1

Brick 2

NSSSMR

Door and Window Frames

Miscellaneous Trim]

6.4.2 **Exterior Walls**. The major materials for the exterior of the Training Center and vehicle maintenance shop building are [brick for the walls, and standing seam metal for the roofing]. The Contractor is encouraged to develop an attractive exterior design, and will be permitted to use accents of varying brick, precast concrete, stone, tile, metal or translucent panels for exterior expression. [ Comply with IDG. ] Brick veneer exterior walls shall have a minimum of 2” of rigid insulation in the wall cavity to resist condensation within the wall section. Air gap between veneer and insulation shall be a minimum of 1 ½”.

6.4.3 **Roofs**. Sloped roofs shall have a minimum pitch of 3:12 for standing seam metal roofs and 4:12 for shingle roofs, except for pre-engineered buildings. Low slope roofs shall have a minimum slope of 1/2” inch per foot. [Roofing material and color shall comply with IDG.] Roofing system shall have a minimum of Underwriters Laboratory (UL) Class A rating for fire resistance, UL 90 wind resistance rating, and Factory Mutual (FM) [ l-90 or l-120 ] fire and wind resistance rating. Roof system assembly for this project shall be a complete system, tested and approved in accordance with FM [ l-90 or I-120 ], UL 580 and local building code requirements.

6.4.3.1 All roof systems shall have 20-year material, finish, and weathertightness warranties. See Outline Technical Specifications for required warranty language. Five year bond is not required. [Verify appropriate requirements for project.]

6.4.3.2 For single ply membrane roofing, if used, provide rooftop walkways to and around any rooftop equipment requiring maintenance.

6.4.3.3 Metal roof systems shall be tested and approved in accordance with ASTM E 1592. Metal roof ribs shall be mechanically seamed, and shall have vented ridges to vent the air space below the panels and above the roof insulation. For locations where average snowfall is more than 4” per year, metal roofs shall have aluminum mechanically fastened snow guards with continuous connectors at all eave locations where pedestrian or vehicle traffic passes below; extend a minimum of 10 feet beyond circulation paths.

6.4.3.4 Sloped roofs shall extend over exterior walls, with eaves a minimum of twelve inches in depth. Flat (dead) valleys and interior gutters are not permitted.

6.4.3.5 Provide roof access, a roof hatch as a minimum, for all roofs three or more stories above grade.

6.4.4 **Trim and Flashing**. [ Materials and colors shall comply with IDG ] Gutters, downspouts, and fascias shall be prefinished metal; comply with SMACNA Architectural Sheet Metal Manual. For metal roofs, provide metal roof manufacturer’s 20-year system watertightness, material and finish warranty. For other roof systems, provide manufacturer's 20-year material and finish warranty.

6.4.4.1 Provide gutters, downspouts, splash blocks and other roof drainage elements as appropriate to direct runoff away from the building without damage or erosion to landscaping or paving. [Gutters and downspouts shall be provided with heat tape.]

6.4.5 **Miscellaneous Exterior Elements**. [ Comply with IDG or describe requirements or preferences below. ]

6.4.5.1 Trash Enclosure.

6.4.5.2 Loading ramp. See RFP drawings.

6.4.5.3 Wash rack.

6.4.5.4 [ Other ]

6.4.5.5 Antiterrorism Gate. Provide a powered lift or swing gate [at the POV parking area to restrict vehicular entry beyond the POV area]. Provide gate operation capability to two offices in the Training Center; verify appropriate offices with Users. Provide telephone in covered enclosure to allow vehicles to call into the building for entry.

6.4.6 **Exterior Signage**. [ Comply with IDG. ] Facility monument sign and building mounted signage with the Army Reserve Minuteman plaque are minimum requirements. Exterior signage should read [“United States Army Reserve Center.”] [Facility monument sign shall consist of a masonry monument with aluminum letters and cast aluminum unit insignia.]

6.4.7 **Exterior Personnel Doors and Frames**.

6.4.7.1 Main Entrance Doors and Hardware. Main entrance doors shall be an aluminum storefront system; other exterior doors at corridors and lobbies shall be an aluminum storefront system or full-glazed hollow metal.

6.4.7.1.1 Hardware.Provide electrified entrance doors at locations noted below, consisting of the following minimum hardware: Double doors shall have a removable mullion, each leaf shall have a closer, hinges (1/2 pair electric), overhead stops, offset pulls and full weather strip. Locking devices shall consist of one leaf with Electric Latch Retraction Rim Exit Device and one leaf with Night Latch Function. Single doors shall consist of a closer, hinges, overhead stops, offset pulls and full weather strip. Locking devices shall consist of Night Latch Function Rim Exit Device and electric strike. Exit devices shall comply with Life Safety requirements of NFPA 101 and UL listed modern rim style device and shall be fail secure. The exit device shall have a dogging feature or have the ability to lock the latch in a retracted position for unrestricted building entry at times of the User’s choosing. Main doors shall be equipped with CAC Compatible Physical Access Control Card Readers and shall include entry control software and hardware to control passage. Communications protocol shall be compatible with the local processor and Facility Security System. All wiring shall be concealed. CAC readers are to be located at [identify primary doors]. Coordinate appropriate lockable office or other location for access control with Users, and assure space is sufficient to accommodate them.

6.4.7.2 Other Exterior Non-entrance Doors and Hardware. Exterior doors and frames opening to spaces other than corridors or lobbies shall be hollow metal; comply with ANSI A250.8/SDI 100. Doors shall be Level 3, physical performance Level A, Model 2; insulated; top edge closed flush. Frames shall be Level 3, 14 gauge, with continuously welded corners and seamless face joints. Doors and frames shall be constructed of hot dipped zinc coated steel sheet, complying with ASTM A653, Commercial Steel, Type B, minimum A40 coating weight; factory primed. Anchors and accessories shall be zinc coated. Frames in masonry shall have bituminous back-coating, plaster guards, and shall be grouted solid. Fire-rated openings shall comply with NFPA 80, and the requirements of the labeling authority. [The following doors shall be electrified, with hardware similar to that noted in 6.4.7.1.1 above, and card readers: doors [ ]].

6.4.7.2.1 Hinges. ANSI/BHMA A156.1; template, full mortise, heavy duty, ball bearing, minimum size 4 ½ inch x 4 ½ inch, non-ferrous base metal, non-removable pins.

6.4.7.2.2. Locksets. ANSI/BHMA A156.13; series 1000, Grade 1 mortise locksets, non-ferrous base metal, removable core.

6.4.7.2.3 Exit (Panic) Devices. ANSI/BHMA 156.3; heavy-duty touch-pad type, through-bolted mounting. Listed and labeled for panic protection based on UL 305.

6.4.7.2.4 Closers. ANSI/BHMA A156.4; series C02000, Grade 1, hydraulic, factory-sized, adjustable to meet field conditions. Provide for all exterior doors, all doors opening to corridors, and as otherwise required by codes. At all exterior doors provide overhead holders or closers with hold-open capability. [ Also coordinate additional closer locations with Users. ]

6.4.7.2.5 Auxiliary Hardware. ANSI/BHMA A156.16. Provide wall or floor stops for all exterior doors that do not have overhead holder/stops. Provide other hardware as necessary for a complete installation.

6.4.7.2.6 Thresholds. ANSI/BHMA A156.21; non-ferrous metal. Provide at all exterior doors.

6.4.7.2.7 Weatherstripping. ANSI/BHMA A156.22. Provide at all exterior doors.

6.4.7.2.8 Kick Plates. ANSI/BHMA A156.6; non-ferrous metal. Provide at all doors with closers.

6.4.8 **Overhead Doors**. Doors to be electric motor-driven coiling or track, insulated, except at Unheated Storage building, which may be manually-operated.

6.4.9 **Exterior Windows**. Provide aluminum windows complying with American Architectural Manufacturers Association AAMA/NWWDA 101 / I.S. 2. Minimum performance class shall be Heavy Commercial (HC). Minimum wind load, and resulting design pressure and performance grade shall be determined in accordance with the International Building Code (IBC). Provide windows with insulating glass and thermal break necessary to achieve a minimum Condensation Resistance Factor (CRF) of 45. Finish shall be Architectural Class I anodic coating or AAMA 2605 organic coating. Operable windows shall have locks; provide fiberglass or aluminum insect screens removable from the inside. Design of glass, glazing, frames, connections and structure shall comply with antiterrorism minimum standards, and other code requirements. Antiterrorism standards are likely to have the most stringent requirements.

6.4.9.1 Storefront systems. Provide swing-type aluminum doors and storefront frames of size and design sufficient to withstand design minimum wind load, and with resulting design pressure determined in accordance with the International Building Code (IBC). Deflection shall be limited to not more than 1/175 times the length of the member, with a safety factor of not less than 1.65. Provide glazing beads, moldings, and trim of not less than 0.050 inch nominal thickness. Provide doors complete with frames, framing members, subframes, transoms, adjoining sidelights, adjoining window wall, trim, and accessories. Provide windows with insulating glass and thermal break to achieve no water penetration at a pressure of 8 pounds per square foot of fixed area, and air infiltration not to exceed 0.06 cubic feet per minute per square foot of fixed area at a test pressure of 6.24 pounds per square foot. Finish shall be Architectural Class I anodic coating or AAMA 2605 organic coating. Design of glass, glazing, frames, connections and structure shall comply with antiterrorism minimum standards, and other code requirements. Antiterrorism standards are likely to have the most stringent requirements.

6.4.10 **Thermal Insulation**. Provide exterior wall, floor, and roof/ceiling assemblies with thermal transmittance (U-values) required to comply with the energy calculations for the facilities. Loose or blanket insulation shall be continuously supported and restrained from movement by a continuous layer of gypsum board or other code-compliant sheathing. Insulation shall not be installed directly on top of suspended acoustical panel ceilings. The building envelope shall comply with ASHRAE Standard 90.1. Minimum insulation value for exterior walls is R-15; for roofs R-30 [verify for climate ]. For UHS building, provide roof and wall insulation, minimum R-value of 20 for roof and 15 for walls [verify for climate].

6.5 **INTERIOR DESIGN**.

6.5.1 **General Guidance**. Interior design guidelines are addressed in UFC 4-171-05, Section 3.6. In the UFC, where finishes are indicated as “preferred” or are listed first, with alternative finishes noted, the preferred or first-listed finishes are the minimum requirement of this RFP. The UFC STC ratings for spaces include sound transmission above space ceiling. Additional project specific requirements are listed below and in the table in Part 1 of this Section 01 02 00.00 48.

6.5.1.1 The Army Reserve has selected four basic color palettes for interior design of AR facilities; for this project the [ ] color palette has been selected. The following interior colors and materials are provided as the basis for the completion of the interior design:

Carpet 1

Carpet 2

VCT 1

VCT 2

Paint 1

Paint 2

Paint 3

Paint 4

Ceramic Tile

6.5.1.2 Carpet shall meet AATCC 174 test method for anti-microbial properties. A passing carpet must pass either Part I or Part II and Part III. The face and the back of the carpet must show no growth.

6.5.2 **Floors**. Non-combustible construction is preferable, even where combustible materials are allowed by code. Floor finish materials shall be as specified in the Design Guide; where multiple flooring materials are listed in the DG, the first flooring material listed shall be the minimum requirement for this project, unless noted elsewhere in this RFP.

6.5.2.1 Athletic flooring for the Physical Training room shall be a manufacturer's product designed specifically for the purpose, cushioned, and have a waterproof finish suitable to be wet mopped. Provide a product equal to Nora Norament 992 Grano (0.36” thick speckle) or Pawling Corporation Hid-N-Lok (9/16” thick solid color) interlocking tiles. Center tiles shall be equal to Model # HL-100, 24” by 24”.

6.5.2.2 The Unit currently has [ ] safes. Coordinate desired locations with Users and ensure floor design accommodates the weight of the safes.

6.5.3 **Ceramic Floor Tile**. Comply with ANSI A 137.1 and the recommendations of Tile Council of America (TCA) Handbook For Ceramic Tile Installation. Provide marble threshold under doors where a ceramic tile floor meets a different floor finish.

6.5.4 **Interior Walls and Partitions**. Non-combustible construction is preferable, even where combustible materials are allowed by code. All stud partitions shall be steel stud. Provide access panels where required for access to equipment, controls, valves, boxes, etc.

6.5.5 **Metal Support Systems**. Non-load bearing metal studs and furring shall comply with ASTM C 645; stud gauge shall be as required by height and loading, but shall not be less than 25 gauge. Maximum stud spacing: 16 inches on center. Provide galvanized finish.

6.5.6 **Gypsum Board**. Comply with ASTM C 1396. Minimum panel thickness shall be 5/8 inch. Provide Type X panels in fire-rated assemblies. Provide moisture resistant panels at locations subject to moisture. Provide abuse-resistant panels for corridors and other areas of likely high circulation use. Joint treatment: ASTM C 475. Screws ASTM C 646. Drywall installation: ASTM C 840.

6.5.6.1 Tack surface applied to walls shall be a manufactured product designed for the purpose approximately three sixteenths (3/16) inch thick, rubberized and shall be self healing. Tack surface shall have a finish edge trim.

6.5.7 **Ceramic Wall Tile**. Comply with ANSI A 137.1 and the recommendations of Tile Council of America (TCA) Handbook For Ceramic Tile Installation. Substrate for wall tile shall be mortar setting bed or cement backer board (gypsum board is not acceptable).

6.5.8 **Ceilings**. Non-combustible construction is preferable, even where combustible materials are allowed by code. Provide access panels where required for access to equipment, controls, valves, boxes, etc. Acoustical ceiling tile shall have factory applied mold prevention treatment.

6.5.9 **Interior Doors and Frames**. Provide hollow metal frames, and wood or hollow metal doors. Doors to offices, unit commons, classrooms, toilets, and other typically occupied spaces shall be wood; doors to more utilitarian spaces shall be hollow metal. Provide lights in doors where reasonable based on space usage and borrowing of daylight. Refer to UFC 4-171-05, Section 3.5.5 for additional guidance on interior doors.

6.5.9.1 Hollow Metal Doors. Comply with ANSI A250.8/SDI 100. Doors shall be Level 2, physical performance Level B, Model 2; factory primed. Anchors and accessories shall be zinc coated. Frames in masonry shall have bituminous back-coating, plaster guards, and shall be grouted solid.

6.5.9.2 Wood Doors. Solid core flush wood door with staved lumber or particleboard core, Type II flush doors for interior use conforming to WWDA I.S.1-A with faces of premium grade hardwood veneer. Fire Rated Wood Doors shall conform to the requirements of UL 10B, ASTM E 152, or NFPA 252 for the class of door indicated and shall be provided with hardware reinforcement blocking in compliance with the manufacturer's labeling requirements and shall not be mineral material similar to the core. Affix a permanent metal label with raised or incised markings indicating testing agency's name and approved hourly fire rating to hinge edge of each door.

6.5.9.3 Hollow Metal Frames. Comply with ANSI A250.8/SDI 100. Frames shall be Level 2, 16 gauge, with continuously welded corners and seamless face joints; factory primed. Anchors and accessories shall be zinc coated. Frames in masonry shall have bituminous back-coating, plaster guards, and shall be grouted solid.

6.5.9.4 Fire-rated and Smoke Control Doors and Frames. Comply with International Building Code (IBC), NFPA 80, and requirements of labeling authority. Doors and frames shall bear labels from IBC approved testing laboratory. Comply with positive pressure testing requirements of IBC.

6.5.10 **Interior Door Finish Hardware**. Refer to UFC 4-171-05, Section 3.5.3 for guidance on door hardware and lockset guidance.

6.5.10.1 Hinges. ANSI/BHMA A156.1; template, full mortise; heavy duty, ball bearing on doors with closers; standard duty anti-friction bearing on doors without closers. Minimum size: 4 ½” by 4 ½”.

6.5.10.2 High Security Locksets. [ Consult User for hardware type for secure areas ]

6.5.10.3 Locksets on Interior Doors. ANSI/BHMA A156.13; series 1000, Grade 1 mortise locksets, non-ferrous base metal, removable core. [Provide cipher locks for doors for Rooms [ ]. Locks shall be compatible with Best cores.]

6.5.10.4 Exit (Panic) Devices. ANSI/BHMA 156.3; heavy-duty touch-pad type, through-bolted mounting. Listed and labeled for panic protection based on UL 305.

6.5.10.5 Closers. ANSI/BHMA A156.4; series C02000, Grade 1, hydraulic, factory-sized, adjustable to meet field conditions. Provide for all doors opening to corridors and as required by codes.

6.5.10.6 Auxiliary Hardware. ANSI/BHMA A156.16. Provide wall stops for all doors that do not have overhead holder/stops. Provide other hardware as necessary for a complete installation.

6.5.10.7 Kick Plates. ANSI/BHMA A156.6; non-ferrous metal. Provide at all doors with closers.

* + 1. **Casework**.

6.5.11.1 Vanity Countertop at Toilets. Countertops shall be solid surfacing material, with integral coved backsplash and integral bowls. Substrate shall be two layers of 3/4 inch thick exterior grade plywood. Reinforce countertop with concealed steel angles so that top will not deflect more than 1/4 inch when a 250 pound load is applied at mid-span. Comply with AWI Section 400 Custom Grade requirements.

6.5.11.2 Other Casework. Provide architectural casework complying with AWI Section 400, Custom Grade cabinets with high pressure decorative laminate finish meeting NEMA LD3 standards. Horizontal laminate: nominal 0.05 inch thick; vertical laminate: nominal 0.03 inch thick. Door and drawer edges shall be heavy duty 1/8 inch extruded polyvinyl chloride with self-locking serrated tongue. Worksurfaces and counter shall be high pressure decorative laminate, or solid surfacing material.

6.5.12 **Window Treatments**. Provide horizontal aluminum mini-blinds or light-limiting blinds at all interior and exterior windows in core areas, except windows and storefront in corridors. Blinds shall have 1 inch wide x 0.1 inch thick slats with anti-static, anti-microbial polyester baked enamel finish. Provide heavy duty 1 inch x 1 ½ inch steel headrail, and tubular steel bottom rail finished to match slats. Provide window blinds at all exterior windows, except in Lobby and at door sidelights. Color shall be coordinated with building color palette, and provide a uniform appearance from the exterior of the building..

6.5.13 **Interior Signage**. Comply with requirements of UFC 3-120-01, ADAAG and UFAS. Provide interior room identification signage for all rooms, directional signage, Army Reserve Minuteman plaque, and building directory in corridor at main entry. Coordinate locations with User. List all rooms which require room identification signage; coordinate with the installation interior signage standard, if one exists.

6.5.13.1 Provide the following visual communication boards: [verify number and approximate locations of visual communications boards/bulletin boards with Users.]

6.5.14 **Column Enclosures**. If not required by code, provide gypsum board column enclosures, finished and painted, for all exposed columns in offices, classrooms, open office areas, simulation suites, break room, lobby, corridors, toilets, mail room, physical training, locker room, and similar finished or normally occupied spaces. Columns in building service spaces and other utilitarian spaces may be painted and left exposed, unless enclosure is required by code.

6.5.15 **Fire Extinguishers**. Provide fire extinguishers in accordance with generally accepted practices. Provide recessed or semi-recessed fire extinguisher cabinets in occupied areas. Provide surface-mounted fire extinguisher cabinets in storage and mechanical/electrical spaces.

6.5.16 **GFGI Office Equipment**. Provide power and data connections as required for at least the following GFGI office equipment. Coordinate desired locations with Users.

6.5.16.1 [ ] network printers.

6.5.16.2 [ ] fax machines.

6.5.16.3 [ ] copiers.

6.5.16.4 [ ] videoconference system. Provide power and data to accommodate its operation.

6.5.16.5 [ ] digital projectors. Provide power and data provisions, plus ceiling-mounted projector mounting.

6.5.17 **AGCCS Room**. This space will require review and approval by Government security personnel during both design and construction phases. Coordinate review and approval process with Government, and support Government preparation of any documentation required.

6.5.18 Shelving for Training Center Rooms [ ] and [ ], and for Unheated Storage Room [ ].

6.5.18.1 Typical storage shelving shall be metal storage shelving, and nominal 24 inches in depth – see Outline Technical Specifications.

6.5.18.2 Storage racks for the duffle bag cages in Training Center Room [ ] shall be as detailed in Attachment N.

* 1. **FURNITURE AND EQUIPMENT**.

6.6.1 The Contractor shall provide design and design documents (Comprehensive Interior Design or CID), as described in this RFP, for the furniture and some equipment that is to be purchased and installed by the Government (Government-furnished, Government-installed or GFGI). The following items are the GFGI furniture and equipment in this project (see also Paragraph 1.3.3):

Items shown with identifying notes, or detailed, on the “I” series sheets in this RFP

Physical training equipment

Workbenches

6.6.1.1 Provide design and other required documentation for furniture in all spaces as indicated on floor plans, furniture plans, in Part 1 of this Section, and in Section 01 03 00.00 48.

6.6.1.2 The Government will purchase and install the furniture and physical training equipment, using the Contractor’s design documents and information. See Section 01 03 00.00 48 and its attachments for requirements for design documents and information (CID). Furniture and physical training equipment is shown and called out on the “I” series drawings. The Contractor is responsible for coordinating its work with the furniture and physical training equipment installation, and for connection of power, voice and data cabling and devices to the workbenches and system furniture once it is installed. Contractor shall base the design of the office and unit common workstation furniture on [ commercial furniture manufacturer ] products – see Section 01 03 00.00 48. The Government has already performed a study establishing [ commercial furniture manufacturer ] as the provider for this project.