SECTION 01 00 00

STATEMENT OF WORK

PART 1 - GENERAL

1.1 SUMMARY

A. The Design-Build Contractor shall provide the full range of architectural and engineering services associated with the production of Construction Documents. Services include design analysis, product selection, construction cost estimating, Leadership in Environmental and Energy Design (LEED) services and other additional architectural, engineering and construction services identified in this Request for Proposal (RFP).

1. The Contractor shall provide all design, supervision, management, quality control, labor, tools, equipment, appliances and materials and perform all work necessary to provide Design-Build (D-B) construction services to accomplish the new Work.
2. This Project shall be performed in strict accordance with the specifications and drawings forming parts thereof, subject to the terms and conditions of the Contract.
3. Unless otherwise indicated in the Contract Documents, provide design services, materials, systems and equipment in accordance with design and construction criteria specified and /or noted herein.
4. Where performance criteria differ from each other within the contract documents, the more stringent performance criteria shall govern in accordance with the Contracting Officer's interpretation.

B. Project consists of a new construction project which includes:

1. Commissary:

a. This portion of the Project consists of a 69,613.00 gross square foot replacement Commissary. The design shall conform to the program of requirements in the approved planning documents.

2. Site Improvements:

a. The Project includes site development and utilities. Site development includes earthwork, grading, drainage (surface and storm), parking lot(s), service areas and drives, sidewalks, exterior lighting, on-site hard surface streets with curb and gutter, and minimum regional landscaping. Utilities include wastewater (sewer), lagoon disposal collection and disposal system(s), water distribution system for drinking and fire fighting, electrical phase distribution system with transformers, generator, telephone system and Information Technology Systems inside and outside of the buildings. The design shall conform to the program of requirements in the approved planning documents.

C. The site and new building shall be designed to follow green building guidelines, and to the greatest extent possible will conserve water and energy resources. The design shall conform to the design requirements and LEED planning goals identified in the approved preliminary design documents.

1.2 PROJECT DOCUMENTS

A. The final project documents shall be prepared by the Design-Build Contractor and approved by DeCA before construction starts. The Design-Build Contractor shall be responsible for complete Construction Documents subject to review and approval.

B. Preliminary drawings consist of the number sheets as shown in the Project Reference Drawings listing in Division 01 Specification Section Design Requirements. The Design-Build Contractor will be responsible for the development of these Drawings to 100 percent final completion stage.

C. Preliminary Technical Specifications consist of the Sections shown on the Project Reference Specification Matrix within Appendix B. The Design-Build Contractor will be responsible for developing these technical specifications to 100 percent final completion stage, along with the government's standard Division 01 Section General Requirements and referenced Installation specification guidelines and requirements.

D. The Design-Build Contractor shall review Division 01 Sections, General Requirements and Design After Award regarding the development of the Project Documents and specific design submittal requirements.

1.3 DESIGN AND CONSTRUCTION PERIOD OF PERFORMANCE

A. The Period of Performance is 720 calendar days from the date of the Notice to Proceed. In establishing this performance period, phased design review submittals and the potential for a hurricane construction phase weather delay or shut-down has been taken into consideration.

1.4 PRE-BID CONFERENCE

A. A pre-bid conference be held at the construction site on _____ at ____ p.m. CST or as otherwise determined by the Contracting Officer. The POC is as follows:

John S. Bandy, Contracting Officer
HQ DeCA/LEAAF
2250 Foulois Street, Ste 3
Lackland AFB TX 78236-1046
john.bandy@deca.mil
Commercial: (210) 671-5283

1.5 BASE REGULATIONS

A. The Contractor shall conform to all Base regulations and directives, as identified specifically herein or at the pre-construction conference, that pertain to security, safety, traffic, fire, environmental requirements, and personnel clearances insofar as they apply to the Contractor's activities or as directed by the Contracting Officer.

1.6 CONTRACTOR'S PARKING

A. The Contractor's employees shall park in the areas assigned by the Directorate of Emergency Services, Physical Security Division or as directed by the CO.

1.7 CONTRACTOR'S EMPLOYEE RESTRICTIONS

A. The Contractor's employees shall be restricted to areas within this scope of work plus direct routes to and from the site as may be approved in the pre-construction conference with regard to work scheduling and material handling.

1.8 ACCESS CONTROL AND PASS IDENTIFICATION

A. The Contractor shall obtain the necessary passes and/or identification for entry into Fort Polk for himself, all employees and subcontractors prior to commencement of work. Procedures and limitations for entry control shall be coordinated fully with the Installation. The Government reserves the right to refuse to issue a pass to any and all employees of the Contractor for any reason deemed appropriate by the Government and in doing so shall not be entitled to equitable adjustment or relief under the Contract Disputes Act. The Entry Screening Facility is located at the Visitor Center on Entrance Road next to Access Control Point (ACP) 1 and may be contacted at (337) 531-4978. The Government will issue passes depending on the type of work to be completed and the length of the Contract. The maximum length of these passes is a 1-year "Rapid Gate" registration. The Contractor shall be responsible for obtaining additional passes upon the expiration of each pass issued. The Government may inspect at its discretion all vehicles including those with vehicle passes.

B. Prior to entering Fort Polk, commercial/over-sized vehicles shall be inspected at Checkpoint Gates ACP 4 and ACP 7 located on the vicinity map provided on sheet G1.1 of the Project Reference Drawings. The Contractor shall anticipate delays during the inspection process as well as delays due to vehicle queues.

C. Conditions caused by Force Majeure (acts of war, terrorism, nature, etc.) shall be addressed via contract time extension, where warranted, at no cost only. The Contractor shall anticipate that in the event of heightened alert, access to Fort Polk may be denied for approximately three to five days. The Contractor shall also anticipate that during periods of heightened alert, time required to access Fort Polk may increase.

D. Whenever the government takes action, in its sovereign capacity under these conditions, the Contractor shall not be entitled to any additional monies or damages.

1.9 SCHEDULE OF CONSTRUCTION WORK

A. Work shall normally be accomplished during the standard 8-hour day, 5-day week, 7:30 AM to 4:30 PM, Monday through Friday excluding Federal holidays. The CO must approve work outside these hours at least five (5) workdays prior to proposed work.

B. The Contractor shall notify the CO or his representatives ten (10) working days prior to moving to the work site to commence work and one working day prior to resumption of work at the site after an interruption of more than two (2) working days.

1.10 EMERGENCIES

A. In case of an emergency, the CO, Security Forces personnel, Base Fire Chief, and Base Operations Officer, or their representatives, shall have the authority to order the Contractor to stop work and clear the area of personnel and equipment. The Contractor shall comply with such an order with all possible speed. After clearing the work site as instructed, the Contractor shall immediately inform

the CO of all verbal or written stop work orders. In the case of being halted by Security Forces personnel, the Fire Chief or Base Operations Officer, the Contractor shall notify the CO in writing and provide explanation for the stoppage. For reference refer to DeCA Division 01 Specification Section Government Safety Requirements.

1.11 AUTHORITY

A. The term "Contracting Officer" as used in this Specification includes the authorized representative of the CO acting within the limits of his/her authority. With respect to all paragraphs of the Specifications citing "approval by the Contracting Officer" and all paragraphs cited in Material Approval Submittals, of the solicitation, the term "Contracting Officer" means only those individuals properly appointed as a CO within the Contracting Squadron; no other Government personnel has the authority to grant such approval.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

SECTION 01 01 10

DESIGN REQUIREMENTS

PART 1 - PROJECT DESCRIPTION

1.1 GENERAL

A. This request for proposal (RFP) provides for the design and construction of the New Commissary at Fort Polk, Louisiana.

1.2 SCOPE

A. The building design and building systems shall be accordance with the DeCA Design Criteria and Guide Specifications referenced within these documents.

B. The scope of the Project includes a replacement Commissary building. The Project shall be certified by the United States Green Building Council (USGBC) at the Silver level using the LEED 2009 for Retail and New Construction and Major Renovations Rating System criteria. The facility shall include all spaces required in the Program of Requirements (POR), included in this RFP. The Project is expected to include general and specialized sales, storage and support areas, an administrative area, and utilities and site development consisting of access road(s), parking, sewage lagoon, curb and gutter, exterior lighting and sidewalks. The project siting must allow for an additional building expansion area.

C. The existing Commissary facilities at Fort Polk, Louisiana have deteriorated and become substandard. Due to the extensive renovations which would be required to meet current codes and DeCA Criteria, a new Commissary is the most economical solution. The new Commissary will be built on land approximately one (1) mile east of the existing facility. This will allow the existing Commissary to continue to operate during the construction of the new Commissary.

D. Additional requirements are as follows:

1. Fort Polk installation compatibility design aspects shall be accounted for in the design.
2. Leadership in Energy and Environmental Design (LEED 2009 for Retail and New Construction and Major Renovations Rating System) Silver Certification is required for this Project.
3. The successful offeror must be fully aware of and the design must comply with the requirements of the DeCA Design Criteria and Guide Specifications available online at http://www.decafacilities.com/DeCADesign.

1.3 LOCATION

A. The site is located along LA Highway 467 within the Fort Polk Installation, south of the city of Alexandria, LA. See Paragraph, CIVIL DESIGN, for further description of site location.

1.4 DESIGN GOALS

A. The overall design goal for the facility is to provide a functional, visually appealing Commissary that is a source of pride for DeCA, staff, patrons and the Fort Polk community. The conceptual Project Reference Drawings provided in Appendix A present a building design scheme which considers the program, and has been developed with input from the DeCA and the Fort Polk Installation. 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, the Fort Polk Installation requirements, and are acceptable to the Government. The building design presented here is 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 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 described in this RFP are to convey intent for design. Final design approval shall be by the Government.

1.5 SITE DESIGN GOALS

A. The site layout goal is to provide a functional arrangement of building and site elements. The conceptual Site Plan Drawings in Appendix A present a site scheme which considers the program, and has been developed with input from DeCA and the Fort Polk Installation. This does not preclude the Contractor from making improvements to the site design as long as such improvements are consistent with the requirements of this RFP, the Fort Polk Installation requirements, and are acceptable to the Government. 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 site design to improve functional layout, and to allow flexibility for design/esthetic expression. However, any proposed changes are subject to approval by the Government. Contractor shall 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. The site design must allow space and utility configuration for future building expansion.

1.6 GENERAL DESCRIPTION OF PROJECT

A. The primary function of the facility is to provide a new building and site development for sales and processing of miscellaneous commodities and grocery items for the military community of the installation. The paragraphs below depict the general nature of the work. The work includes, but is not limited to, the items listed in the following paragraphs. Additional detailed information follows this Section.

1. New Store: A new single-story commissary facility.
2. Building Construction Includes: Structural-steel frame on cast-in-place concrete foundations.
3. Building Exterior Consists Of: Tilt-up precast concrete with aluminum windows and single-ply roof.
4. The Work Also Includes: Loading-dock equipment, refrigeration system, fire-protection system, plumbing, mechanical, and electrical work.
5. Interior Finishing and Related Construction Includes: Interior partitions, wall and floor finishes, suspended ceilings, architectural woodwork, doors, door frames, wall and case protection systems and decor.
6. The Sales Area Includes: Meat, dairy, frozen, produce, deli, bakery, grocery departments, and their refrigerated display cases.

7. Food preparation and storage areas including prefabricated coolers and freezers and miscellaneous equipment.
8. The Front End Includes: checkout counters and space for bagging and cart storage. Administrative offices, service counters, patron toilets and cart storage areas are also included.

B. Site Work:

1. Site construction includes earthwork, site access, roads and drives, parking areas, sidewalks retaining walls and site furnishings and features and landscape and drainage improvements around the facility.
2. Benches, recycling and trash receptacles, cart returns and a bicycle rack are required.

PART 2 - GENERAL DESIGN REQUIREMENTS

2.1 DESIGN SUBMITTAL REQUIREMENTS

A. See Section 01 01 20 DESIGN AFTER AWARD for design submittal requirements.

2.2 STANDARDS, DOCUMENTS, AND CRITERIA

A. The design requirements within Division 01 Section Design Requirements represent the minimum quality and quantity acceptable for the proposals and project submittals. The standards, documents, and criteria referenced within this RFP, although not all attached within this RFP document, are modified to the extent indicated within this Section, and shall be the most current version unless otherwise noted. Each Offeror shall be responsible for obtaining any documents not attached as part of this RFP but referenced as criteria for the Project. Requirements of this Section may delete, revise, add to or substitute for criteria contained in the referenced documents and this section shall be deemed the controlling authority of any changes to the other referenced documents and criteria.

2.3 CODES

A. The design, materials, equipment, and installation shall be in accordance with the requirements of the listed codes, DeCA design guidelines, with the requirements of this Section, and with the listed specifications.

B. Commissary facilities are Department of Defense (DoD) projects, and as such must be constructed in accordance with the following criteria, codes, and standards.

C. Project design shall conform to Department of Defense (DoD) criteria and other applicable DoD regulations, manuals, and pamphlets; (latest edition shall be used) including but not limited to the following:

1. Unified Facilities Criteria - Design: General Building Requirements (UFC 1-200-01).
2. Unified Facilities Criteria - Design: Fire Protection Engineering for Facilities (UFC 3-600-01).
3. Unified Facilities Criteria - DoD Minimum Anti-Terrorism Standards for Buildings (UFC 4-010-01).

4. Project location "Installation Design Guide" (IDG), "Base Exterior Architectural Plan" (BEAP), "Architectural Compatibility Guidelines" (ACG), or other general design guidelines at the project location.

D. Project design shall conform to national codes and regulations for building construction and safety, including but not limited to the following:

1. International Building Code.
2. International Plumbing Code.
3. International Mechanical Code.
4. International Fuel Gas Code.
5. National Electric Code.
6. National Fire Protection Association.
7. OSHA Regulations.
8. ASHRAE Standards.
9. All applicable Federal, State, and Local Environmental Regulations.
10. ABA Accessibility Standard for Department of Defense Facilities as adopted by the Deputy Secretary of Defense memorandum dated October 31, 2008.

2.4 INSTALLATION DESIGN DATA AND REQUIREMENTS

A. The following summary is a selected listing of data applicable to planning, design and construction at Fort Polk, LA to be incorporated in the Contract by reference. The listed documents available from the Fort Polk Base Installation agencies are current as of the date of this report. This listing is for reference only. Installation agencies shall be contacted to acquire current subject data for project planning.

1. Fort Polk, LA, Real Property Master Plan Digest, November 10, 2010.
2. JRTC & Fort Polk Installation Design Guide, Final, March 2006.
3. Fort Polk Warrior Plaza, Area Development Plan Draft Report, March 2010.
4. DD1391 Planning Charrette for PN 75479 Unaccompanied Enlisted Personnel Housing Out-Brief Presentation, USACE, August 2010.
5. Joint Readiness Training Center and Fort Polk Multi-Use Trail Design Guide. Booz/ Allen/Hamilton, January 2010.
6. Department of the Army, AR420-70, Buildings and Structures, May 29, 1992.
7. PAL Initial Development Period Development Plan. Magnolia Suites, Candlewood Suites, Exhibit F-4, Survey documents.
8. Recommended Planting Species Listing, Dr. Charles M. Allen, December 10, 2009.
9. LEED Project Credit Guidance Document, Army, October 2009.
10. Annual Water Quality Report, South, North, Fort Polk Water Systems, 2006.
11. Water Flow Test Data, FH #6-4, 600 Block, February 23, 2007.
12. Department of the Army Metering Implementation Program. General Specifications for Electrical Meters, October 1, 2008.
13. Contractor Requirement for Metering Job Trailers for Electricity and Water. HQ JRTC
14. & Fort Polk Directorate of Public Works.
15. Pride Industries, FT Polk, Fort Polk Utility Location & Dig Permit Request form. Issue Date March 2009.

2.5 FIELD INFORMATION

A. The utility information provided in the Civil design narratives and Project Drawings is the best information available. It is provided to assist the Contractor during the design of this Project.

The Contractor is responsible for field verifying all information given. The Contractor is also responsible for obtaining all information necessary to properly design and install all work. Gathering information during design shall be coordinated through the Contracting Officer. Any survey required to provide utility locations, manhole inverts, verification of existing features, etc., shall be the responsibility of the Contractor and shall tie into the project datum.

2.6 DESIGN DETAILS AND STANDARDS

A. The Contractor shall provide a design and construction package which uses the design details given or referenced in this RFP. DeCA has particular design details and standards contained in the DeCA Design Criteria and Guide Specifications noted below in Article 2.10 Project Reference Specifications. Additional details shall be created by the Contractor as required, but shall conform to the requirements of this RFP and are subject to approval by the Government.

2.7 COMMISSARY DECOR

A. The new DeCA Adaptive Uniform Decor Package is applicable to this Project. These documents can be found at http://www.decafacilities.com/DeCaDesign/AppendixD.aspx. The new design shall be in accordance with the guidelines and criteria contained in this package document.

2.8 BUILDING SUSTAINABILITY

A. The Commissary shall consider building sustainability, or "green building" design. Building systems, materials, orientation, etc., must be selected with consideration to the LEED certification requirements for these buildings. The LEED 2009 for Retail New Construction and Major Renovations Rating System™ is a priority program of the US Green Building Council, and is required for this facility. This project is to be LEED Silver Certified; project registration and all related fees are the Contractor's responsibility.

B. The Contractor will hire a commissioning agent to pursue the enhanced commissioning point. The Contractor is responsible for the Commissioning Plan, appropriate personnel attending meetings and providing documentation required by the commissioning plan. The Contractor is responsible for providing technicians, tools and instruments as required by the commissioning agent to perform duties required by the commissioning plan. For additional information regarding the commissioning intent, refer to the DeCA Design Criteria and Guide Division 01 Section General Commissioning Requirements.

2.9 FORCE PROTECTION

A. Guidelines for Force Protection have played a large role in overall site design and building placement. The setback distances have aided LEED goals by providing the necessary open space adjacent to the building and green space for the overall site. On the other hand, it has made a large site challenging for achieving the required parking counts, provision of an area for store expansion and for accommodating the future barrack housing also planned for this site.

B. The future store expansion area indicated in the plans is consistent with DeCA planning goals for establishing an area footprint representing 25 percent of the proposed store gross floor plan area. The standoff distance between the outer wall of the future expansion area and the proposed edge of the future housing area parking boundary is less than the distance stated in

the force protection guidelines. A 22 meter standoff distance is indicated which is slightly less than the 25 meter standoff requirement. This difference represents a 27 percent change in the reflected pressures, however the pressures at the smaller standoff would still be considered achievable by a moderately hardened structure which can easily be programmed into the building design.

C. A drop off area is required for DeCA new store planning. The drop off area indicated functions as a widening of the drive lane to allow cars to pull over and stop temporarily. The drop-off area is limited in size and set off from the main entrance. The location increases protection by adding distance between the vehicles and the primary arrival/gathering location for the building. Permanent bollards will be located along this lane to prevent vehicular travel from getting closer to the building yet will allow for patron pedestrian use functions. It is expected that this lane will be signed for no parking with the use of the lane monitored by store administration.

D. The building façade has been designed in response to guidelines balancing the need for glazing and a welcoming appearance with the provision of a safe environment for a gathering place. All glass on the lower level, besides being blast resistant, will be sub-divided into small size units. The spaces receiving windows are backed up by secondary interior walls which would prevent shattered glass from directly reaching high occupancy spaces in the event of a blast. The upper wall clerestory at the front elevation is proposed to have translucent day-lighting panels complying with blast resistant construction guidelines providing general day-lighting for the front of the store and LEED points contribution.

2.10 PROJECT REFERENCE DRAWINGS

A. The reference drawings are provided and intended only to show proposed new construction requirements on an existing site at approximately 35 percent construction documentation stage. The Store layout is based on standard a DeCA prototypical, conceptual layout that has had a formal preliminary design and Agency review process. It is an approved preliminary development. Drawings are the property of the Government and shall not be used for any purpose other than that intended by the contract. The Government does not guarantee that these Drawings reflect present conditions and the Contractor is responsible for verifying actual conditions. The Drawings are provided in electronic format on compact disk.

B. Contract Drawings are as follows:

GENERAL

G1.1 COVER SHEET

CIVIL

C0.1 EXISTING SITE SURVEY
C0.2 DEMOLITION PLAN
C0.3 POST DEMOLITION PRE-DEVELOPMENT SITE PLAN
C1.1 OVERALL SITE PLAN
C1.2 AUTO-TURN SERVICE DRIVE
C2.1 GRADING & DRAINAGE PLAN
C3.1 UTILITY PLAN

LANDSCAPE

L1.0 LANDSCAPE PLAN

ARCHITECTURAL

A0.1 CODE PLAN
A1.1 OVERALL FLOOR PLAN
A1.2 COMPOSITE EQUIPMENT PLAN & LEGEND
A1.3 AREA 'A' FLOOR PLAN
A1.4 AREA 'B' FLOOR PLAN
A1.5 ROOF PLAN
A2.1 EXTERIOR ELEVATIONS
A3.1 BUILDING SECTIONS
A5.1 AREA 'A' FINISH FLOOR PLAN
A5.2 AREA 'B' FINISH FLOOR PLAN
A5.3 DECOR PLAN
A6.1 DOOR AND WINDOW SCHEDULE
A8.1 INTERIOR ELEVATIONS
A9.1 REFLECTED CEILING PLAN

STRUCTURAL

S0.1 GENERAL NOTES
S1.1 DRILLED PIER PLAN AREA 'A'
S1.2 DRILLED PIER PLAN AREA 'B'
S1.3 ROOF FRAMING PLAN AREA 'A'
S1.4 ROOF FRAMING PLAN AREA 'B'

REFRIGERATION

R1.1 ENLARGED REFRIGERATION PLAN AREA ‘A’
R1.2 ENLARGED REFRIGERATION PLAN AREA ‘B’
R1.3 REFRIGERATION PARTIAL ROOF PLAN
R2.1 REFRIGERATION SCHEDULE

PLUMBING

P1.1 D-W-V PLUMBING PLAN AREA 'A'
P1.2 D-W-V PLUMBING PLAN AREA 'B'
P1.3 DOMESTIC WATER PLUMBING PLAN AREA 'A'
P1.4 DOMESTIC WATER PLUMBING PLAN AREA 'B'
P1.5 OVERALL ROOF PLAN, LEGEND & SCHEDULES

FIRE PROTECTION

FP1.1 FIRE PROTECTION FLOOR PLAN

MECHANICAL

M1.1 HVAC PLAN AREA ‘A’
M1.2 HVAC PLAN AREA ‘B’
M2.1 MECHANICAL DETAILS AND SCHEDULES

ELECTRICAL

E1.1 ELECTRICAL POWER PLAN AREA 'A'
E1.2 ELECTRICAL POWER PLAN AREA 'B'

E1.3 ENLARGED ELECTRICAL PLANS OF MEAT PREP & BAKERY/DELI
E3.1 ELECTRICAL SYSTEMS PLAN AREA 'A'
E3.2 ELECTRICAL SYSTEMS PLAN AREA 'B'
E4.1 LEGEND AND ELECTRICAL DETAILS
E4.2 ELECTRICAL DETAILS
E4.3 ELECTRICAL DETAILS

2.11 PROJECT REFERENCE SPECIFICATIONS

A. The Contractor shall provide phase design and construction packages for review which uses the specifications referenced in this RFP. The Contractor shall edit the Guide Specifications, but edits shall conform to the specific minimum standard requirements of this RFP and are subject to approval by the Government.

1. DeCA Design Criteria and Guide Specifications:

a. DeCA Design Criteria and Guide Specifications are the governing design specifications for the work associated with this project. These documents can be accessed/obtained at www.decafacilities.com/decadesign.

2. Technical Specification Matrix:

a. A Technical Specification Matrix is attached within Appendix B for reference of standard applicable technical specification sections for use in this Project. Technical specifications include both DeCA and Fort Polk Installation Guide Specifications.
b. The Specifications bound herein add to, clarify, expand upon, and further explain, etc., requirements for the Project. These sections do not address all requirements, issues, elements, or specifications that may be encountered and required in the design and construction process. These specifications are intended to serve as additional guidance and basis for the Design-Build (D-B) Contractor's, (including the D-B Contractors A-E) documents.

PART 3 - GEOTECHNICAL REQUIREMENTS

3.1 GENERAL

A. Geotechnical Site Data:

1. The Government has conducted a subsurface geotechnical investigation for this Project. A copy of this investigation is included in Appendix C. The Contractor shall retain the services of a geotechnical consultant registered as a Professional Engineer. The geotechnical consultant shall be experienced with soil conditions in the local region. The Contractor's geotechnical consultant shall review the site investigation, soil borings, and laboratory testing for completeness of the design. Any additional geotechnical investigation deemed necessary by the consultant shall be obtained by the consultant and paid for by the Contractor. Additional geotechnical investigations shall be coordinated with the Contracting Officer and shall not interfere with normal installation operations. The cost of additional required geotechnical work shall be included in the Contract Sum.

a. The Government does not guarantee that borings indicate actual conditions, except for the exact locations and the time that they were made. A copy of the geotechnical borings and report will be provided to the Contractor in electronic form on the CD furnished by the Government.

2. Assumed Foundation Type:

a. For bidding purposes, assume the following regarding foundation design:

1) One story commissary will be supported on shallow foundations.

3. Actual Foundation Type:

a. The actual foundation type, capacity, etc. will be determined after Contract Award by the Contractor's geotechnical consultant based on the actual loads and geotechnical data. The Contractor shall bear all costs of the actual foundation required, except under circumstances where adjustments in Contract Award price may be made under the provisions of Contract Clause FAR 52.236-2, "Differing Site Conditions."

B. Refer to PART 6 STRUCTURAL DESIGN for additional narrative regarding the Geotechnical Investigation results and recommendations.

PART 4 - CIVIL DESIGN

4.1 GENERAL

A. The Project consists of the design and construction of the new Fort Polk Commissary (see Article 1.2 for general scope) and associated support facilities and site development. See the Project Location Map (Sheet G-1.1 of Project Reference Drawings in Appendix A) for the location of the facility. The civil portion of the Project includes site demolition and pre-development tasks, grading, access roads, access deterrent and force protection features, patron and employee parking lots, retaining walls, sidewalks, rigid and flexible pavement, landscape features, storm water drainage systems, gas distribution and utility service lines, storm drain systems, lighting, traffic and building signage, waste bin enclosures, trail development, cart storage, bicycle storage and customer benches.

4.2 SITE LAYOUT AND PARKING

A. The site layout makes accommodations for future development on the east side of the development in compliance with Fort Polk Master plan documents. Unaccompanied Enlisted Personnel Housing (UEPH) and supporting parking is shown as future development on the design documents. Contractor shall review requirements with the Installation during design.

B. Site Demolition Activities: Fort Polk Directorate of Public Works will not facilitate removal and relocation of conflicting existing buried and overhead infrastructure. Buried and overhead infrastructures conflicting with the proposed improvements are to be Contractor's responsibility as indicated on the Project Reference Drawings and RFP Electrical Design requirements. Site tree removal is discussed within the Landscape section noted below.

C. There are 326 parking spaces proposed for the new commissary. Parking space dimensions are 9 feet-0 inches wide and 18 feet-0 inches in depth. The breakdown is as follows, 8 accessible parking stalls, 237 patron parking stall, and 81 employee parking stalls. Shopping cart return areas are designated at hatched locations indicated on the Project Reference Drawings interior to the parking lot.

D. A drop off lane was incorporated into the site layout and located within the 25 meter stand-off distance. It will be necessary for personnel to restrict access to the drop off lane with Jersey Barrier if the threat level increases and requires additional security.

E. The standoff distance has been observed on the east and west sides of the commissary. The east side of the commissary is targeted for future expansion. The west side of the commissary allows for fire lane access and restricts parking adjacent to the building.

F. On the north end of the commissary, a 47-1/2 inch loading dock is proposed. A distance of 140 feet in depth was provided at the dock to allow for adequate truck maneuvering. Given the loading dock is located within required 25 meter standoff limits, removable bollards have been proposed on the access road enabling personnel to restrict access. This loading dock area and potential for light trespass will be screened from the Magnolia House (Holiday Inn Express) with landscaping.

4.3 ACCESS AND CIRCULATION

A. The main access to the parking lot is located at the southwest corner of the development. This drive approach is a full access design and proposes a new northbound right turn lane and a new south bound left turn lane onto LA Highway 467.

B. The main site access extends through the development from LA Highway 467 and intersects with Utah Avenue. A secondary access designed as a right in/right out drive approach is proposed central to the development and intersects with LA Highway 467. In addition, a truck drive approach is located at the northwest corner of the development and provides for right access in and right access out only, requiring a northbound service truck access to the site.

C. A Traffic Impact Study was completed by Neel-Schaffer of Baton Rouge, LA and is included in Appendix G.

4.4 GRADING AND DRAINAGE

A. The finished floor was set at elevation 338. A site grading volume analysis was conducted and indicates the required volume of fill, or import, to the site is approximately 10,600 cubic yards. Top soil is to be stockpiled and either redistributed onsite in landscape areas or hauled off and utilized elsewhere on base.

B. A Preliminary Storm Drainage report accompanies this Specification and provides additional storm drainage analysis. Refer to Appendix E. Proposed storm piping was sized to accommodate the 10 year storm event while the main storm line that drains the roof was sized for the 100 year event. Storm water detention facilities were also incorporated into the design and evaluated for the 1 year, 2 year, 10 year, and 100 year storm events.

1. LEED credits SS 6.1 and 6.2 LEED were addressed by incorporating underground infiltration chambers (StormTech) that focus on treatment and restrict post-development runoff for the 2 year storm to historic discharge rates.

C. The storm water detention facility location at the southwest corner of the development conflicts with Fort Polk master planning efforts for a future Theater planned in a similar location. However, storm water detention is instrumental in a properly functioning site and this particular detention facility is responsible for attenuating a large volume of the post-development site runoff.

4.5 UTILITIES

A. All proposed water and sewer systems will need to be designed to the American Water Military Services Group Design Guideline for Water and Wastewater Facilities and need to meet American Water Standards and Specifications. Louisiana Department of Health and Hospital permits and approvals must be in hand prior to construction. American Water must approve plans prior to submittal to Louisiana Department of Health and Hospital.

B. To properly address fire flow requirements an 8 inch water main loop will be constructed around the proposed Commissary building.

C. Domestic service will be located on the north end of the facility and will extend north to existing infrastructure. A backflow preventer will be installed on the water service and located in an underground vault in accordance with American Water criteria. New hydrants will also be installed to satisfy UFC requirements and guidelines.

D. Sanitary sewer service will rely on gravity flow. Survey information indicates the ideal location for a sanitary sewer outfall is across Utah Avenue at the northeast corner of the surveyed limits.

E. Existing buried utilities such as buried power, gas, and communications will be relocated by the Contractor. Specifically, an existing electrical vault and 15 kv power lines on the north side of the development will need to be relocated as they conflict with proposed grading efforts. Refer to PART 8 - ELECTRICAL DESIGN.

4.6 LANDSCAPE

A. Marketable trees will need to be removed as shown on the design documents. Coordinate with the Fort Polk Directorate of Public Works and Fort Polk representatives Bruce Martin and Brad Tilly for tree removal.

B. The main entrances to the building have been served by the addition of a hardscape plaza space. A limited amount of landscaping is being proposed in the plaza as a way of softening the expanse of concrete/paving. Benches are being provided, however, the furnishings selected should maintain a clear line of sight under and around the objects.

C. Additional landscaping is being proposed throughout the site. Trees and shrubs have been implemented in such a way to provide a buffer for cars parked in the parking lot, or adjacent parking lots. Several species of trees and shrubs are being proposed, with the exception of various pine trees.

D. The storm water detention ponds will be designed with native and adapted species tolerant of occasional inundation, as well as times of drought. Boulders and rocks will be incorporated to naturalize the appearance of the drainage swale in the ponds. Selected wildflowers and grasses will be incorporated into the swale design in an effort to both soften the appearance as well as provide biological filtering of the storm water runoff.

E. Warm season grasses will be seeded throughout the remainder of open spaces in the development. The selected grass species will be adaptive to changing site conditions, both in drought conditions as well as heat and high moisture tolerant. Per LEED criteria, no permanent irrigation will be used throughout the site. However, depending on weather conditions at time of planting, temporary irrigation may be required to provide a consistent germination of the grass seeds as well as a healthy tree and shrub establishment.

F. Treat soil below the building and to a point no less than one foot beyond the exterior wall for subterranean termites. Use products approved by the EPA, and apply in accordance with manufacturer's recommendations. Provide a five year warranty by the applicator.

PART 5 - ARCHITECTURAL DESIGN

5.1 GENERAL

A. Refer to Article 1.2 for general scope of this Project. The Project is expected to include sales, service, preparation, storage, administration, and support areas, equipment, furnishings and décor for a typical new DeCA Commissary. The building design approach and building equipment furnishings and systems shall be in accordance with the requirements of this RFP. The Design-Build New Commissary at Fort Polk, Louisiana Project Reference Drawings, dated December 1, 2011, are included in Appendix A. Approved programming and room requirements are contained in these documents.

1. Building Image:

a. The main entry image of the building has been designed to make it a recognizable and inviting focus point imparting a classical French/ Louisiana marketplace feel. The need for daylighting at the front of the Store is an appropriate response for retail developments. An upper clerestory of light transmitting panels is intended to provide diffuse light across the front of the store including the checkout area for general daylighting, while standard glazed windows into the street level introduce daylight and views for individual office and front end spaces. A link to the outdoor plaza will be established from the checkout area as well indirectly through the glazing. The sloped metal roof accents and building color selections are based on current Base design guidelines consistent with proposed master planning and existing built environment in the vicinity making a connection to the nearby Post Exchange as well as the other buildings on Base. Column styles, window treatment and other façade element detailing are intended to convey a classic marketplace feel.

2. Space Requirements Planning:

a. The plan for the New Commissary has been developed based on a modification of the Class III Prototype developed by the Defense Commissary Agency. The modified prototype has been enlarged from the Class III model to match the sizing model required for FT Polk and the specific equipment needs for this store. The plan layout design has been developed with the help of the charrette and review process. The current plan incorporates all design suggestions received by DeCA and Base Installation team associates. The plan elements are intended to be consistent with the most current edition of the DeCA design Criteria Handbook Requirements including the 2010 Uniform Decor Package.

3. Fixture Plan Summary:

a. The fixture plan is based on DeCA prototype planning models. Comments from DeCA as part of the Center of Excellence meeting resulted in alterations for the basic plan. It is noted that the store was originally proposed as a left-hand shop pattern to allow the Produce area and future building expansion to occur on the western edge of the site allowing a greater set back. During the COE meeting DeCA opted to switch back to a typical right-hand shop pattern, per DeCA prototype models. This action takes into consideration Base Commander review comments as well. The frozen foods cases were switched from back-to-back to unitized cases which prevent sweating between the units and require a fewer number of units, which improve refrigeration efficiency. The Bakery walk-in coolers were moved to the opposite side in the back of house to improve operations keeping the coolers adjacent to the appropriate work areas. In the front of the store, three typical checkouts were converted to two speed lanes and one regular register which is contained in a wrap around cigarette counter island. This island also has a patron service register for returns. The counter will be monitored by one person, who would also service returns/exchanges. The cart return vestibule has had much comment and study and ultimately functions patterned after the prototype plan arrangement of having a cart return vestibule adjacent to an exit vestibule. At one time we considered a large overhead type door on the exterior wall allowing direct return of carts into the store however this raised some concerns about humidity and store climate control. Currently the interior cart storage area occurs within a larger combined function vestibule which solves the humidity problem enabling cart return and pickup functions.

5.2 ARCHITECTURAL BUILDING COMPONENT SUMMARY

A. Division 3 - Concrete:

1. Concrete work is proposed for this Project. Concrete work will be required for floor systems and tilt-up wall systems as well as other component work. Concrete work will be required for equipment pads and protective floor curbs along selected wall systems at the back of the house. Exterior concrete flatwork is described in the Civil portion of the documents. Specifications shall examine use and availability of fly ash products. LEED and sustainability benefits for its inclusion in this project may be significant due to the amount of concrete materials being specified. Credit for regional materials shall be examined for this Division.

B. Division 4 - Masonry:

1. Masonry is proposed for this Project. CMU is proposed for selected interior partitions. Although not indicated for use in these documents, masonry may be an option for exterior walls based on the evaluations performed during the design-build process. Brick veneer is shown limited to exterior building wall accents as part of the tilt-up concrete walls. The veneer masonry may be integral with the casting or applied to the panels conventionally. The use of masonry is appropriate to harmonize with the existing buildings located on the Base in the vicinity of the new Commissary. LEED credit for regional materials shall be examined for this Division.

C. Division 5 - Metals:

1. Metal fabrications will include certain accessories such as lintels, wall and roof deck opening supports, steel roof strengthening members, steel door frames and trim and miscellaneous steel equipment and support and anchorage systems. Steel pan stairs with steel hand and guard rails are required for roof access. Structural steel framing and components form a part of this Division. Reference PART 6 - STRUCTURAL DESIGN for additional information. LEED credit for regional materials shall be examined for this Division.

D. Division 6 - Wood and Plastics:

1. Interior architectural woodwork is limited and will be specified for millwork doors and cabinetry. Limited miscellaneous carpentry will be specified for trim accessories, protective wall protection guards and miscellaneous blocking. LEED planning goals for recycled content and certified wood apply to these products.

E. Division 7 - Thermal and Moisture Protection:

1. Two roof systems are proposed for the building. The main building roof is proposed to be a tapered insulation, single-ply system installed on level metal deck substrate. Barrier boards, vapor retarder, and cover boards may be required for the specific assembly chosen. A class A or B roof system is required. The layout of the roof assumes a minimum slope of 1/4-inch per foot over the entire surface area. Crickets may be 1/2-inch per foot. The roof membrane shall be an Energy Star rated thermoplastic membrane (TPO or equal) with high solar reflectance. The insulation value proposed for the roof is to be an R-30 to achieve energy target goals. This exceeds ASHRAE 90.1,2007 Edition for Zone 3.
2. The exterior wall system proposed is of tilt-up concrete panels with extruded insulation sandwiched between an outer concrete face panel and an inner concrete bearing panel. The insulation value proposed for the wall is an R-19.5 to achieve energy target goals. This exceeds ASHRAE 90.1,2007 Edition for Zone 3. A membrane type vapor barrier is proposed to be located at the backside of the concrete face panel on the exterior face of the rigid insulation. Attention to detailing and maintaining thermal breaks and vapor envelope continuity is paramount.
3. An energy model shall be developed consistent with LEED planning goals to confirm and measure the exact needs for these wall enclosure elements.

F. Division 8 - Doors and Windows:

1. Doors, frames and window systems are proposed for this facility throughout the building. Standard DeCA specialty doors of aluminum, stainless steel and polymer are proposed for the work and service areas. Sliding and swinging cooler box doors, sliding glass door covers for wide island refrigerated cases, vinyl strip doors, double acting traffic doors and overhead rolling doors, are representative of these types. All exterior automatic entrance/exit doors will be proposed to be consistent with force protection and energy standards and requirements based on site parameters established. The automatic doors proposed are consistent with DeCA criteria for aluminum thermally broken frames with insulated glazing. The doors will be sliding units with sidelights all having breakaway feature panels. Doors for offices are proposed to be solid core wood with hollow metal frames. Doors are scheduled by number and type for reference within the Drawings. Standard service type doors are proposed to be metal. All exterior emergency exit and service doors shall be insulated. All door hardware shall align with DeCA standard hardware groups as identified in the current edition of the specification manual.
2. The window systems identified at the front of the building are of two types. The upper windows are based on a light transmitting panel product for daylighting purposes. This is

an insulated sandwich panel. The use of these openings shall be coordinated with a horizontal or otherwise shaped light shelf feature to help reflect daylight deeper into the Checkout area and to provide a ceiling element to help break up the entry area volume. The design shall be integrated with the décor features and function with lighting controls. The lower windows are based around a fixed, thermally broken, aluminum framing system with tinted, low-e, 1 inch insulated glazing with a shading coefficient of 0.27. The upper and lower windows shall comply with force protection requirements.

3. Skylights are proposed for general building daylighting. Skylight types are expected to be high quality insulated glass units that are roof curb mounted. Skylights shall be used in combination with lighting controls for dimming features. The skylights shall comply with force protection requirements and be spaced for uniform diffused light.
4. LEED planning goals apply to the specific selection and incorporation of the design elements in this division in combination with energy modeling.

G. Division 9 - Finishes:

1. Painted gypsum board, metal stud assemblies will be used as the primary interior partition system for new construction. Painted gypsum board equipment bulkheads and soffit systems will also be required at the Sales floor perimeter walls and the Bakery/ Deli island location. Concrete masonry walls are proposed and will be painted.
2. Ceramic floor and wall tile will be used in specific Sales floor feature areas as well as for restrooms and locker rooms as described in the décor and finish schedule standards. Floor finishes will be polished concrete for the Sales area with vinyl composition tile used in offices and other selected employee rooms. Sealed concrete will be specified for service rooms. The cold storage rooms and the Bakery/ Deli will have resinous floor finishes per DeCA standards.
3. The main Sales floor ceilings are scheduled as being open to exposed structure and metal decking. All decking and structure will be painted. The Receiving and Staging areas will have exposed ceilings. Ceilings scheduled for other rooms and spaces are typical suspended gypsum board or suspended acoustical tile ceiling systems. The cold storage rooms will have prefabricated cold storage panel ceilings.
4. All painting is intended to match the current 2010 DeCA Uniform Decor Package colors and features. All paint, flooring, ceiling products will comply with low emitting material standards relative to LEED planning goals.

H. Division 10 - Specialties:

1. A complete signage package will be required for the building and the site. Specialized décor items consistent with current DeCA 2010 Uniform Decor Package will be required. The decor is represented to a limited extent in the drawings. Decor takes the form of banners, aisle markers, signage, lighting elements as well as painted trims and specific color palettes. Wall and equipment guards are proposed for the building interiors matching DeCA criteria under this Division.
2. LEED planning goals shall be addressed for this division. Lockers, storage racks, toilet accessories, toilet partitions, wire mesh partitions, queuing systems and visual display surfaces are required under this division. Refer to the Specification Matrix for a complete listing of required products. LEED planning goals establish requirements for selection and source.

I. Division 11 - Equipment:

1. All refrigerated and non-refrigerated equipment is proposed to be per the most current DeCA criteria as represented in the final approved issued documents. Design-Build Contractor is advised to review on the DeCA Design Criteria website for updates.

2. Specific Commissary equipment is described on the Drawings with reference numbering consistent with the standard DeCA equipment numbering system. Source of supply and installation responsibility for all equipment is also described therein. Equipment is categorized as either Government furnished/ Government installed (GFGI), Government furnished/ Contractor installed (GFCI), or Contractor furnished/ Contractor installed (CFCI). Equipment is scheduled on the drawings with a DeCA defined number. A master equipment list is provided for reference with corresponding numbers indicated on the floor plan. The master list of equipment was approved by DeCA associates at the DOE Meeting. Minor changes to several equipment numbers were done after that meeting in coordination with DeCA associates as part of a 10 percent submittal review. All equipment number changes have been documented on the drawings and are current in these documents.
3. Loading Dock Equipment is indicated on the elevations. Typical dock bumpers, seals, door hoods and truck restraints are proposed. Door signage is related to these divisional requirements.
4. The equipment is described in two locations in this submittal: Specification Division 23 contains information and criteria with regards to the refrigeration equipment and Division 11 contains the non-refrigerated equipment data.

J. Division 12 - Furnishings:

1. Furnishings are required for this Project consisting of recessed vestibule entry walk-off type mats, window blinds and furniture. LEED planning goals establish requirements for selection and source.

PART 6 - STRUCTURAL DESIGN

6.1 DESIGN CRITERIA

A. Design criteria for the new commissary building are as set forth in the Unified Facilities Criteria UFC 3-301-01; International Building Code, IBC 2006 and Minimum Design Loads for Buildings and Other Structures, ASCE 7-05.

Occupancy Category II

Roof Live Load: 20 psf

Wind Criteria: 95 mph 3-second gust
Importance Factor I_W=1.0
Exposure Category C

Seismic Criteria: S_s=0.12G, S_1=0.05G mapped values
for site class B
Site Class D (assumed)
S_{ds}=0.13G, S_{d1}=0.08G
Importance Factor I_E=1.0
Seismic Design Category B

Snow Criteria: Ground snow load 5 psf
Importance Factor I_S=1.0
Exposure Factor C_e=1.0
Temperature Factor C_t=1.0

Frost Penetration: 0 inches

6.2 GEOTECHNICAL/SITE/FOUNDATION SYSTEM

A. A geotechnical investigation was completed by GeoConsultants, LLC of Louisiana. The findings of this report are summarized in part in the following section as it relates to structural design. This information and any interpretation of the report should be verified by the design build team for accuracy and applicability to the project. The soil on the site generally consists of silty sands over clayey sands over clay soils. Soils were determined to be only slightly expansive.

B. GeoConsultants' analysis indicated that the maximum settlement of a conventional spread footing would be significant, and more than what can typically be accommodated without detriment to the building structure. Based on this, they have recommended that the building structure be supported by a drilled pier foundation system. Allowable capacities for various depths and diameters of drilled piers are listed in the geotechnical investigation. Based on the observed level of groundwater on the site, it is anticipated the excavations for the drilled piers may require temporary casing.

C. The commissary's slab on grade is expected to be supported on select fill. The finished floor elevation and site grading will likely require extensive fills and some cuts as well. The geotechnical investigation cautions against constructing slabs partially on cuts and fills, so significant over-excavation should be anticipated. The minimum thickness of the fills should be no less than half the thickness of the deepest section of fill. The intent of this requirement is to provide a consistent bearing material for the slab on grade to reduce the potential for differential settlement.

D. The majority of the on-site soils appear to be suitable for use as select fill, provided it is compacted and moisture-conditioned appropriately. Clay soils may not be suitable for use as fill in some locations. Site grading and the building's function will also require retaining walls at the loading dock area. Design recommendations for lateral earth pressures and footing bearing pressures are included in the geotechnical investigation. If the retaining walls are incorporated into the building system, the design build team should consider the pros and cons of supporting the retaining walls on a similar deep foundation system.

6.3 GRAVITY FRAMING SYSTEM

A. The basis of design for the gravity framing system is metal roof deck spanning between open-web steel joists supported by joist girders and steel wide flange beams. Joists were estimated to be between 24 and 36 inches deep. The building's décor and clear height requirements and volume allow up to 60 inches of depth for the joist girders. Wide flange beams may be used under the mechanical equipment zone of the roof to allow more flexibility in placing roof top equipment. The primary roof framing members will be supported by steel columns on the stores interior and bearing walls along the east and west walls of the store. The bearing walls may be site-cast tilt-up concrete, however, the design build team may consider CMU or another system that it considers appropriate. Tilt-up wall walls are anticipated to be sandwich panels with a layer of insulation as well as a finish or veneer panel. Architectural drawings show a sloped upper and lower roof at the south elevation of the store. The sloped upper roof is an over-build on top of the flat roof deck. This could be framed with cold-formed steel trusses. Cold-formed steel trusses are judged to be a cost-effective way to create the sloped lower roof form, but are not the only solution. Another option would be to fabricate the trusses from structural steel shapes. This may be more appropriate if the pitched section of the roof is exposed to view from below. The entry and exit at the front of the store have large arches, which may be constructed

6.4 LATERAL FRAMING SYSTEM

A. The site-cast tilt-up concrete wall panels may be designed as lateral-force resisting elements to transfer wind and seismic forces from the roof diaphragm to the foundation elements. The steel roof deck on the flat roof will create the diaphragm. Since the raised, sloped roof at the front of the store is strictly overbuild, it need only transfer its own lateral load into the main diaphragm below. Due to the number and size of openings on the front on the building, careful consideration must be given to locating adequate shear panels. The panels on either side of the arches could be used to resist lateral forces from the low sloped roof at the front of the store. Alternately, a steel moment frame could be created utilizing columns on either side of each arch. Based on the site planning and features, the commissary does not need to be designed for blast pressures. A proposed expansion on the east side of the building will encroach on the required set-back distance, so the east wall of the expansion would need to be hardened.

PART 7 - MECHANICAL DESIGN

7.1 BUILDING SYSTEMS - HVAC

A. The HVAC system and building will have the air handler system on the roof per previous discussions. A roof mounted dual path type air handling system will be used to insure proper dehumidification of the air to the sales floor and checkout areas. Heating for the store will utilize heat reclaim from the product refrigeration system as first stage heat. The second stage heat, if necessary, will be a gas-fired heat exchanger within the dual path air handling unit. The outside air portion will also have controls such that during unoccupied times that it can be reduced to a minimum to save energy and during biological attack.

B. Properly sized sheet metal duct work (oval, round or rectangular, per ceiling and space requirements) will be used to transfer the air from the air handler, outside air or split system equipment. Roof-mounted heat pumps (HP) will be used to meet the cooling and heating needs of areas that are in different HVAC zones of the building than the main sales area. Split system air conditioning units will serve the computer room, communications room, electrical room and manager's office. These heat pumps will be 100 percent return.

C. The front and back of the store will have dedicated outside air rooftop units providing the required outside air flow quantities. This will allow the heat pumps serving these areas to be sized for the occupancy loads and the humidity and outside air loads to be handled with the proper equipment. This will also work with adding CO2 sensors in these general areas and modulating the outside air from a minimum to maximum setting for energy savings during occupied and unoccupied store hours. This will also reduce the need for the heat pumps to be required to have motorized dampers on their outside air to shut them during biological attack. These two units will be required to run when exhaust is running.

D. Exhaust fans will be used in the restrooms in the front and back of the store. The Deli and Bakery will each have a kitchen exhaust fan and kitchen hood where they are required. The Warehouse will have multiple large ceiling fans for air circulation. This is a change from DeCA criteria because pulling humid air through the warehouse causes problems that just having air movement and outside air injected will solve.

7.2 BUILDING SYSTEMS - PLUMBING

A. All plumbing systems are intended to meet DeCA New Store design specifications and criteria standards and applicable codes.

B. The waste system will be broken into three separate systems. A grease waste system will run through the store and then out to an exterior 1500 gallon grease interceptor located off the northeast corner of the store. The grease waste will serve the fixtures and drains located in the meat processing / wrapping and deli/bakery rooms. A combination waste and vent line will serve the condensate drains from the cases located on the sales floor. A sanitary sewer will serve the bathroom groups and the remaining floor drains and plumbing fixtures. The combination waste and vent line will combine with the sanitary sewer line and exit the building in the northeast corner. There will be two waste lines exiting the building, a sanitary and a grease waste. The domestic water system will be broken into two separate hot water temperature systems. There will be a 140 deg F hot water system serving the prep areas, wash sinks and hose stations used for washdown purposes (Meat Processing, Meat Wrapping and Deli/Bakery rooms) as per DeCA design standards. A 115 deg F hot water system will be used to serve the hand sinks, bathroom sinks and the rest of the plumbing fixtures requiring hot water in the building. Domestic water will be primarily heated by reclaim off the product refrigeration system. Two hot water storage tanks will store the heat reclaim water. A secondary water heating system will be provided by a commercial gas fired water heater. A hot water recirculation pump and piping loop will be utilized to maintain hot water temperatures throughout the store, both for the 140 deg F and 115 deg F hot water lines. Equip the hot water system with an adjustable, but automatic (thermostatically controlled) water mixing valve(s) that will meter water to supply 115 deg F hot water.

C. The domestic water entrance will be located in the Fire Riser room located at the rear of the store. The required backflow prevention and water meters shall be installed here a per DeCA new store design criteria. This room will also house the water heating and storage equipment. Coordinate equipment locations and routing with final Fire Protection layouts. The storm water system will be broken up into two different systems. A series of roof drains will collect storm water from the flat roof. These will be collected inside the store and discharged below grade to a storm sewer located on the southwest side of the store. Overflow drains will also be routed inside the store from each roof drain and discharged above grade with downspout nozzles on the west side of the store. A series of gutter drains will pick up the storm water from the sloped decorative roof and sloped canopy roof located at the front of the store. These will be collected and routed below grade through downspouts at the archway columns on the front of the store.

D. Natural gas will be utilized on site and provide gas to the water heater and various other mechanical equipment. The gas meter shall be located outside the north east corner of the store.

7.3 BUILDING SYSTEMS - FIRE PROTECTION

A. The DeCA Fort Polk Commissary Building shall be fully sprinkled according to UFC 3-600-1 (Unified Facilities Criteria) (2006), International Building Code IBC (2009), International Fire Code IFC (2009), the Uniform Fire Code NFPA 1(2009), NFPA 13 (2010), NFPA 20 (2010), and NFPA 101 (2009). UFC shall supersede all other codes, design guides, and standards. The sprinkler system shall be a wet system throughout and a dry system for combustible overhang construction. Quick response sprinklers (QRS) shall be utilized as required and applicable per NFPA. All piping shall be concealed and sloped to drain back to the riser. Additional auxiliary drains shall be required to completely gravity drain the system.

B. The sprinkler system shall be supplied by a new 8 inch underground dedicated fire service line from the site water supply. The fire service system shall be dedicated to fire sprinkler systems and not combined with domestic water. A new flow test shall be provided by the design team prior to the fire protection design and early in the design phase to verify availability of adequate fire flow and pressures. Hydraulic calculations and the low static pressure of 55 PSI indicate a fire pump will be required for this facility location. Fire hydrants and looped mains throughout the facility shall be coordinated with the Civil engineer and provided as required.

C. The storage areas shall be sprinkled per the UFC and DeCA design standards for High-piled storage based on the design densities and area of operations per NFPA 13. The receiving areas shall be sprinkled per the UFC and DeCA design standards for 12 foot-0 inch storage based on the design density of 0.30 gpm/sf over the most remote 3000 sf and a 500 hose stream allowance per the UFC and DeCA design standards. The remaining portions of the building shall be classified as Ordinary Hazard Group II with a design density of 0.20 gpm/sf over the most remote 3000 sf and a 500 hose stream allowance per the UFC and DeCA design standards.

D. Computer and other electronic sensitive areas shall be separately valved per NFPA 75.

E. Overhangs such as entry canopies require sprinkler heads, depending on the width of the overhang, if they are constructed of combustible materials per NFPA 13 (2010). A dry system shall need to be provided for these areas based on the outdoor design temperatures for this location (26 deg F).

F. The fire sprinkler system shall include the reduced pressure backflow device, riser manifolds, flow switches, sprinkler heads, supervised isolation valves, and a fir pump. The fire sprinkler flow switches and tamper switches shall be interfaced to the building fire alarm panel for notification of an alarm condition. Schedule 40 steel pipe shall be utilized for the system. Individual components of the fire sprinkler system shall be as follows:

1. Fire Riser Manifolds: The main riser shall be located in the main floor fire pump room and all valves and flow switch shall be monitored by the fire alarm system.
2. The fire pump design shall be complete with test header, bypass line, controllers jockey pump, backflow devices and a water flow meter.
3. Piping and Fittings Interior: Interior piping 2 inches and smaller shall be Schedule 40 steel with cast iron threaded fittings. Larger piping shall be Schedule 40 steel with roll grooved fittings. Lightwall or XL pipe will not be allowed due to life expectancy. No mechanical tee or fittings will be allowed. Dry systems shall use galvanized Schedule 40 pipe and galvanized fittings.
4. Sprinkler Heads: Sprinklers shall be standard coverage quick response type selected for the thermal sensitivity of the appropriate application. Pendent sprinklers shall be provided for all finished spaces and upright sprinklers shall be provided for all unfinished or open structure areas.
5. Hangers, Supports and Bracing: Hangers and supports shall be spaced as required per NFPA 13. Due to the Seismic Design Category "B", based on the Site Class and Seismic Use Group of this region and facility, seismic bracing will not be required.
6. Electrical Devices: All valves on the fire sprinkler supply lines shall be electronically supervised by valve tamper switches and monitored by the building fire alarm panel. Each floor or fire sprinkler zone (riser manifold) shall be electronically supervised from the flow switch and the zone control isolation valve and tied into the fire alarm panel. The exterior horn and strobe assembly at the front of the building near the new fire department connection shall also tie into the fire alarm panel.
7. Miscellaneous: Hydraulic placards shall give the flow and pressure requirements of each zone and be attached to the zone piping near the zone or riser manifolds. A spare stock

of sprinklers shall be provided for each type of sprinkler used in a zone. The fire department connection shall be a two-way single clapper type with polished brass wall plate and plugs. The wall plate shall indicate that the system supplied will be for automatic wet sprinkler systems.

7.4 BUILDING SYSTEMS - REFRIGERATION

A. The new product refrigeration system will consist of four multiplex compressor racks that will be located on the roof in two mechanical centers. There will be two low temperature parallel compressor racks in one mechanical center and two medium temperature parallel compressor racks in the other mechanical center. Lines will be run from the racks to cases, cooler/freezer coils, heat reclaim devices, and remote condensers. Lines entering the store will come through the roof above the meat processing area and run overhead and drop to the unit coolers/ coils/ cases for connection. The refrigerant for the new refrigeration system will be R-404A.

B. Control of the defrost, compressors, and condensers will be handled by a compressor rack controller located on each compressor rack. These four rack controllers will also connect to the building control system.

PART 8 - ELECTRICAL DESIGN

8.1 BUILDING SYSTEMS - ELECTRICAL

A. Existing Site Survey:

1. The existing site has underground and overhead 13.8 KV distribution. A 13.8 KV Primary Switchgear cabinet and Vault will need to be relocated. This vault is served from a primary switch north of the subject site on Utah Avenue. An Alternate feed to the switchgear comes from the overhead 13.8 KV distribution, which is essentially a spare. The switchgear also feeds the CDC via another vault at the west side of the property. It is possible per Pride Industries that the underground primary feeders are encased in concrete.
2. The existing site has overhead TV cabling that will be in the area that the new commissary will be located. Origination of the sources is not fully known. However, TV cabling currently runs to the apartment buildings to the north of the subject site and it is likely that the TV cables run underground to the CDC building to the west of the subject site. Additionally, TV cabling runs overhead to across Utah Avenue.
3. The existing site has underground and overhead communications, some of which is copper and some that is fiber. One fiber-run appears to all be underground and is running across the west side of the site, north-to-south. A second fiber-run crosses Utah Avenue, overhead near the Church building and runs west, underground to the CDC Facilities on LA Highway 467. There is some copper distribution overhead that enters the site on the north east side near the church and exits further to the south and across Utah Avenue.

8.2 PROPOSED ELECTRICAL SITE WORK FOR NEW COMMISSARY

A. The following description of work is based on preliminary investigations and review of the existing distribution system and the commissary site use preliminary design.

1. Work by Entergy: Entergy to provide a new Primary Distribution Switchgear cabinet with capability for two incoming primary lines and three outgoing load lines at the north east:

    a. Entergy to provide a vault next to the primary cabinet for looping of the primary cable. Provide new replacement 13.8 KV, concentric neutral -133 Mil cables in 4 inch PVC minimum 30 inches below grade from the new primary distribution to the Apartment building transformer from the new vault.
    b. Entergy to provide new replacement 13.8 KV, concentric neutral -133 Mil cables in 4 inch PVC minimum 30 inches below grade from the new primary distribution to the vault at west side of the site that serves the CDC west across Highway 467.

2. Design-Build Contractor to provide services and coordination as noted:

    a. Design-Build Contractor to provide new 13.8 KV, concentric neutral -133 Mil cables in 4 inch PVC minimum 30 inches below grade from the new primary distribution cabinet to the new proposed commissary.
    b. Entergy is acquiring the Electrical Distribution System at Fort Polk from the Government. Design-Build Contractor to provide a design for the new equipment and distribution equipment / feeders that includes construction documents and specifications, fault Analysis and load flow analysis. The new design will need to include load and design for primary distribution to the new commissary building transformer. Coordinate this work with Entergy, and gain Entergy approval before proceeding with construction. The anticipated electrical service for the new commissary is 1600 amps at 480 volt, 3-phase.

3. Once the new equipment has been installed and prepared for switchover, the existing cables will need to be removed from the vault at west side of the property and vault near Utah Avenue and the new feeders connected. Work shall be performed by Entergy.
4. Work by Entergy: Entergy to remove the existing vault and primary distribution cabinet along with feeder to the overhead power pole, feeder to the west side vault and feeder to the vault along Utah Avenue. Work performed by Entergy.
5. Design-Build Contractor to remove the telephone overhead and TV cabling from the subject site. The downstream facilities affected will need to be researched and new lines installed around the commissary site for these services to be continued. From appearances, the impact of this is moderate.

B. Commissary Power:

1. The new store Main electrical service would be an approximate size of 1600 amps, 3-phase at 277/480 volt. A 480 - 120/208volt transformer sized at 300 - 500 KVA will be installed to serve a 120/208 distribution systems. All 277/480 volt equipment 1000 amps and larger will have Ground Fault Protection and a second level of ground fault will be installed for electrical coordination purposes.
2. The electrical systems will be monitored from the RMCS system which will record demand on the main services, sales area lighting, other area lighting, exterior lighting, HVAC sales area.
3. For emergency power needs, an approximate 35KW Diesel generator and automatic transfer switch will be installed to serve cash registers, fire alarm, security, PA, display case lighting and store emergency lighting. A manual transfer switch and generator connection point will be provided for when a temporary Generator is needed to back-up the refrigeration system.
4. The refrigeration electrical equipment would be an approximate size of 1000 amps at 277/480 volt served from the main switchboard. A 300 KVA 480 - 120/208 volt

transformer will be installed to serve a 120/208 electrical system for the refrigeration systems as well.

C. Commissary Lighting:

1. Interior lighting for the new store will be primarily utilizing T5, 3500 Kelvin lamps, with exception of the meat case area that would be T5 lamps and 3000 Kelvin. Induction lighting will be used in Freezer areas per the DeCA standards. Enclosed vaporlume type fixtures will installed in the coolers. Industrial type fixtures with 10 percent uplight will be used in receiving, staging and back corridor service areas. The main sales area lighting will be a recessed linear fluorescent type with and acrylic lens. Lighting will be designed to maintain the DeCA illumination standards to the extent possible, while complying with LEED minimum watts/sf requirements of meeting ASHRAE 90.1 2007 plus 30 percent. The lighting will be controlled according to DeCA controls standards with lighting control panels and additional methods as needed to comply with ASBRAE 90.1.
2. The exterior building lighting and canopy areas will utilize the LED lamp type and fixtures with cut-off optics.
3. The exterior site lighting will utilize LED lamp types to ensure compliance with ASHRAE 90.1 2007 plus 30 percent.
4. Emergency lighting will be served by the store generator and also have emergency battery packs in individual fixtures or one central inverter. This will also include exterior emergency lighting at exits to meet latest code requirements.
5. Interior lighting controls will consist of lighting control panels that will serve control the sales area, check out area, back corridor, staging areas, receiving areas and warehouse areas. The lighting control panel will be interfaced to the RMCS system such that the RMCS will initiate control of the various groups of lighting to meet the DeCA standards.
6. Exterior lighting controls will consist of a lighting control panel with astronomical time clock, photocell and interfaced to the RMCS system for control.

D. Commissary Special Systems:

1. A combination Fire alarm / Mass Notification system will be installed in accordance with the recognized USA standards in including DeCA UFC standards, UL, NFPA 72, IBC and ADA. An IDS system will be installed to monitor position switches for the building standard door openings and overhead door openings along with motion sensing and position switch sensing at the cash office and vault. The system will also include panic buttons at the cash office and counting areas. A keypad for the system will be located in the cash office and at an employee entrance. A stand alone access control system will be installed at the cash office door with door strike and release buttons at the cash office side. This system will be monitored; as the design progresses, CTA will be consulting DeCA as to how this will be done.
2. Exterior standard doors, except the main entrance doors, will be equipped with a 120VAC local alarm that will sound at the door if anyone opens the doors or breaks through the door. A new PA system will be installed per base and DeCA standards along with NFPA 72 standards.
3. Telephone service to the new building will be served from the area. The size of the new store will only require one ADP cabinet that will be located in the administration area and serve the cash registers, administration areas, wireless access points and other miscellaneous communications outlets in services areas.

PART 9 - LEED PLANNING

9.1 LEED SILVER CERTIFICATION GOAL

A. This Section describes the LEED points that have been identified as the best opportunities for award. The total points listed on this worksheet are 62. The number of points needed to achieve LEED Silver is 50 to 59. There are six categories into which the points are divided: Sustainable Sites, Water Efficiency, Energy & Atmosphere, Materials & Resources, Indoor Environmental Quality and Innovation in Design. In addition to those sections, each project is also eligible to earn an additional four points under Regional Priority. The regional priority points are determined by the USGBC based on the zip code for the project and relates specifically to the climate and regional challenges for the specific area.

B. Currently, there is a LEED for Retail option that has been officially adopted by the USGBC, and based on the Retail scorecard it would be advantageous for this project to apply under LEED for Retail. There are currently nine points on this check list that are only available under the retail option which is a significant number of credits for this Project.

9.2 SUSTAINABLE SITES (20 / 26 POINTS)

A. SS Pre1: Construction Activity Pollution Prevention: Required to have an ESC plan.

B. SS.1 Site Selection: Site meets the requirements for SS. 1 due to being a previously developed site. (1 Point)

C. SS.2 Development Density and Community Connectivity: Achievable through option 2. (5 Points)

D. SS.3 Brownfield Redevelopment: Not Achievable.

E. SS.4 Alternative Transportation: (up to 10 points)

1. SS.4.1 Public Transportation: Site does not have adequate access to bus or rail.
2. SS.4.2 Bicycle Commuting: Must provide 10 bicycle racks and lockable changing rooms. (1 point)
3. SS.4.3 Low-Emitting and Fuel Efficient Vehicles: Possible by designating 5% preferred parking for low-emitting and fuel efficient vehicles. (1 point)
4. SS.4.4 Parking Capacity: Not pursued Under LEED for Retail.
5. SS.4.5 Delivery Service: Must be available and not cost prohibitive. (1 point)
6. SS.4.6 Incentives: Provide an incentives program for employees who carpool or use alternative transportation to work. (3 points)
7. SS.4.7 Alternative Transportation Education: Provide a board or computer that provides carpooling information, transit information, transit maps, bike routes, and transportation management plan. (1 point)

F. SS.5.1 Site Development - Protect or Restore Habitat: This site falls into Case 2 as a previously developed site. Current site plan has 20% of the site, or 112, 115 sf of adaptive vegetation. (1 point)

G. SS.5.2 Maximize Open Space: Under Case 2 site requires 67,888 SF of open space adjacent to building with a minimum of 25% being planting instead of pedestrian oriented hardscape. (1 point)

H. SS.6.1: A storm water management plan will be implemented to prevent the post-development peak discharge rate and quantity for the 1 and 2 year 24 hour design storms from exceeding predevelopment conditions. This will primarily be achieved by way of detention facilities that restrict storm water discharge by way of outlet structures. In addition, features such as pervious pavements and storm water reuse will also be explored.

I. SS.6.2: Best Management Practices will be employed to treat runoff that will aim to remove 80% of the average annual post development total suspended solids (TSS). Alternative surfaces such as pervious pavements and non structural techniques such as implementing water quality volume and settling basins within detention areas. In addition, engineered structures such as Baysaver technology will also be evaluated for removing debris and pollutants prior to discharge.

J. SS.7.1 Heat Island Effect- Non-roof: Not pursued.

K. SS.7.2 Heat Island Effect - Roof: Achievable through the use of a light colored membrane roof for the low-slope portion of the project. (1 point)

L. SS.8 Light Pollution Reduction (2 points): The exterior lighting design to minimize illuminance at and beyond the site boundary per the latest LEED requirements. This will also involve maintaining a lighting power density of 20% greater than the ASHRAE 2007 90.1 energy code, and 50% for any landscape type of lighting. To achieve this design, luminaries will be specified with cut-off type distribution at no more than 5% of lumens emitted at 90 degrees or higher.

9.3 WATER EFFICIENCY (6 / 10 POINTS)

A. WE Pre 1: Water Use Reduction: Required to use 20% less water than use baseline. The use of low flow water sense water closets, lavatories and low flow aerators for sinks could help contribute to achieve these savings.

B. WE1: Water Efficient Landscaping: Achieved by not using any potable water for landscaping Utilizing storm water reclaim could help achieve this credit. (4 Points)

C. WE2: Innovative Wastewater Technologies: Not pursued.

D. WE3: Water Use Reduction: Achievable through reducing building use by 30%. (2 points)

9.4 ENERGY & ATMOSPHERE (10 / 35 POINTS)

A. EA Pre 1: Fundamental Commissioning of Building Energy Systems: Required.

B. EA Pre 2: Minimum Energy Performance: This credit will require compliance with ASHRAE 2007 90.1 as a minimum. This may require additional energy savings methods above typical DeCA designs that include more dimming, daylighting, automatic controls.

C. EA Pre 3: Fundamental Refrigerant Management: Required to use no CFC-based refrigerants.

D. EA1: Optimize Energy Performance: Project is seeking to improve performance by 20% to earn 5 points. This credit and the prerequisite require an energy model to prove energy efficiency. The building shell, interior lighting, outside air and exhaust will contribute to the HVAC systems energy reduction as will the heat reclaim on the dual air path unit heating coil. The dual air path unit cannot have the supply fan on a variable frequency drive because it will not perform per

manufacturers recommendations. The exterior lighting being 30% more efficient with the use of LED lighting will also contribute to this credit.

E. EA2: On-Site Renewable Energy: Not pursued.

F. EA3: Enhanced Commissioning: Achievable by hiring an independent commissioning authority to oversee advanced commissioning activities. (2 points)

G. EA4: Enhanced Refrigeration Management: Not pursued.

H. EA5: Measurement and Verification (3 points): As referenced in the original narrative, *"The electrical systems will be monitored from the RMCS system which will record demand on the main services, sales area lighting, other area lighting, exterior lighting, HVAC sales area."* For compliance with the LEED measurement and verification credit, additional metering will be added to this system such that the entire lighting system, HVAC cooling, HVAC heating, and General appliance and plug-in loads will be metered. The ability of the system will be to collect data for an entire year and have ability to view historical trending of KW demand and KWH usage.

I. EA6: Green Power: Not pursued.

9.5 MATERIALS & RESOURCES (7/ 14 POINTS)

A. MR Pre 1: Storage and Collection of Recyclables: Required to provide space for collection and storage for 3 of the top 5 recyclable waste streams by weight or volume.

B. MR1 Building Reuse: Not achievable.

C. MR 2 Construction Waste Management: Achievable by diverting 75% of construction waste from the landfill. The base already has sites for the collection of top soil and useable construction waste. (2 points)

D. MR 3: Materials Reuse: Not pursued.

E. MR 4: Recycled Content: Achievable through the use of recycled building materials, currently this project is seeking 20% for 2 points.

F. MR 5: Regional Materials: Pursued based on the recently constructed Post Exchange achieving this credit. 20% regional materials is worth 2 points.

G. MR6: Rapidly Renewable Materials: Not pursued.

H. MR7: Certified Wood: Achievable by using a minimum of 50% certified wood. (1 point)

9.6 INDOOR ENVIRONMENTAL QUALITY (12 / 15 POINTS)

A. IEQ Pre 1: Minimum Indoor Air Quality Performance: Required to meet Sections 4-7 of ASHRAE 62.1-2007.

B. IEQ Pre 2: Environmental Tobacco Smoke (ETS) Control: Required to have no indoor smoking and to provide designated smoking areas.

C. IEQ1: Outdoor Air Delivery Monitoring: Achievable by installing CO2 monitoring systems. (1 point)

D. IEQ2: Increased Ventilation: Not pursued.

E. IEQ3.1: Construction Indoor Air Quality Management Plan-During Construction: Achievable by implementing SMACNA IAQ standards, protecting stored materials and using air handlers with MERV of 8 and replacing filters before occupancy. (1 point)

F. IEQ3.2 Construction Indoor Air Quality Management Plan-Before Occupancy: Not pursued.

G. IEQ4: Low Emitting Materials: All indoor sealants, paints, flooring, wood and agrifiber products must be low VOC. (4 points) Under LEED for Retail using Furniture that meets these standards and Ceiling and Wall systems that meet the product requirements of the California Department of Health Services Standard Practice for the Testing of Volatile Organic Emission from Various Sources with addenda 2004 can earn an additional 2 points.

H. IEQ5: Indoor Chemical and Pollutant Source Control: Achievable by employing walk off mats in the entry vestibules and providing adequate exhaust and containment for chemical storage. (1 point)

I. IEQ6: IEQ6: Controllability of Systems - Lighting and Thermal Comfort: Not being pursued.

J. IEQ7.1: Thermal Comfort Design: Achievable by designing the HVAC system to meet ASHRAE Standard 55-2004. (1 point)

K. IEQ 7.2 Thermal Comfort - Employee Verification: Achievable by providing a monitoring system and conducting a survey of occupants within 6 to 18 months after occupancy. (1 point)

L. IEQ 8.1: Daylight and Views - Daylight: Achievable through option 1, providing 75% of regularly occupied spaces with 25 to 500 FC. (1 point)

M. IEQ8.2: Daylight and Views - Views: Not pursued.

9.7 INNOVATION IN DESIGN (6 / 6 POINTS)

A. ID1: Innovation in Design: Achievable. (5 points)

1. Proposed methods are exemplary performance in occupant recycling.
2. Toxic Material reduction by reducing Mercury light bulbs.
3. Green Housekeeping uses only green cleaning products.
4. A food waste reduction program that donates food close to expiration to reduce waste.
5. A Green Educational Program to educate shoppers.

B. ID2: LEED Accredited Professional: Achievable by having a LEED professional on the team. (1 point)

9.8 REGIONAL PRIORITY (4 / 4 POINTS)

A. For Fort Polk our achievable regional priority credits are SS5.1, SS6.1, SS6.2, and MR2 (75%). (4 points)

9.9 LEED PROJECT SUMMARY

A. This following preliminary LEED score card summary lists the 62 points currently being pursued, which places the Project into the realm of LEED Gold. As the design proceeds however, some options may become unavailable and budget factors will likely make some credits less achievable than others. A preliminary COM Check and limited Energy Model, (which is a requirement for EAcr1); being developed will help determine that the project LEED Silver goal is achievable and measurable. This data shall be confirmed in the 50% phase of design.

LEED PROJECT SCORECARD

LEED 2009 for Retail: New Construction and Major Renovations

Project Checklist

Y	?	N	d/C			
18	2	3		**Sustainable Sites**	**Possible Points:**	**27**
Y			C	Prereq 1	Construction Activity Pollution Prevention	
1			d	Credit 1	Site Selection	1
5			d	Credit 2	Development Density and Community Connectivity	5
		1	d	Credit 3	Brownfield Redevelopment	1
5		2	d	Credit 4	Alternative Transportation	1 to 10
					Public Transportation Access	6
				1	Bicycle Commuting	1
				1	Low-Emitting and Fuel-Efficient Vehicles	1
					Parking Capacity	3
				1	Delivery Service	1
				1	Incentives	1
				1	Alternative Transportation Education	1
1			C	Credit 5.1	Site Development—Protect or Restore Habitat	1
1			d	Credit 5.2	Site Development—Maximize Open Space	1
1			d	Credit 6.1	Stormwater Design—Quantity Control	1
1			d	Credit 6.2	Stormwater Design—Quality Control	1
	2		C	Credit 7.1	Heat Island Effect—Nonroof	1 to 2
					25% Under Cover	1
					50% Under Cover	2
1			d	Credit 7.2	Heat Island Effect—Roof	1 to 2
2			d	Credit 8	Light Pollution Reduction	2

Y	?	N				
6	2	0		**Water Efficiency**	**Possible Points:**	**10**
Y			d	Prereq 1	Water Use Reduction—20% Reduction	
4			d	Credit 1	Water Efficient Landscaping	2 to 4
					Reduce by 50%	2
				4	No Potable Water Use or Irrigation	4
	2		d	Credit 2	Innovative Wastewater Technologies	2
2			d	Credit 3	Water Use Reduction	2 to 4
				2	Reduce by 30%	2
					Reduce by 35%	3
					Reduce by 40%	4

LEED 2009 for New Construction and Major Renovations Project Checklist 1 of 4

10	9	2			Energy and Atmosphere	Possible Points: 35
Y	?	N				
Y			C	Prereq 1	Fundamental Commissioning of Building Energy Systems	
Y			d	Prereq 2	Minimum Energy Performance	
Y			d	Prereq 3	Fundamental Refrigerant Management	
5			d	Credit 1	Optimize Energy Performance	1 to 19
					Improve by 12% for New Buildings or 8% for Existing Building Renovations	1
					Improve by 14% for New Buildings or 10% for Existing Building Renovations	2
					Improve by 16% for New Buildings or 12% for Existing Building Renovations	3
					Improve by 18% for New Buildings or 14% for Existing Building Renovations	4
				5	Improve by 20% for New Buildings or 16% for Existing Building Renovations	5
					Improve by 22% for New Buildings or 18% for Existing Building Renovations	6
					Improve by 24% for New Buildings or 20% for Existing Building Renovations	7
					Improve by 26% for New Buildings or 22% for Existing Building Renovations	8
					Improve by 28% for New Buildings or 24% for Existing Building Renovations	9
					Improve by 30% for New Buildings or 26% for Existing Building Renovations	10
					Improve by 32% for New Buildings or 28% for Existing Building Renovations	11
					Improve by 34% for New Buildings or 30% for Existing Building Renovations	12
					Improve by 36% for New Buildings or 32% for Existing Building Renovations	13
					Improve by 38% for New Buildings or 34% for Existing Building Renovations	14
					Improve by 40% for New Buildings or 36% for Existing Building Renovations	15
					Improve by 42% for New Buildings or 38% for Existing Building Renovations	16
					Improve by 44% for New Buildings or 40% for Existing Building Renovations	17
					Improve by 46% for New Buildings or 42% for Existing Building Renovations	18
					Improve by 48%+ for New Buildings or 44%+ for Existing Building Renovations	19
	7		d	Credit 2	On-Site Renewable Energy	1 to 7
					1% Renewable Energy	1
					3% Renewable Energy	2
					5% Renewable Energy	3
					7% Renewable Energy	4
					9% Renewable Energy	5
					11% Renewable Energy	6
					13% Renewable Energy	7
2			C	Credit 3	Enhanced Commissioning	2
		2	d	Credit 4	Enhanced Refrigerant Management	2
3			C	Credit 5	Measurement and Verification	3
	2		C	Credit 6	Green Power	2

Y	?	N				
7	3	4		**Materials and Resources**	Possible Points:	**14**
Y			d	Prereq 1	Storage and Collection of Recyclables	
		3	c	Credit 1.1	Building Reuse—Maintain Existing Walls, Floors, and Roof	1 to 3
					Reuse 55%	1
					Reuse 75%	2
					Reuse 95%	3
		1	c	Credit 1.2	Building Reuse—Maintain Interior Nonstructural Elements	1
2			c	Credit 2	Construction Waste Management	1 to 2
					50% Recycled or Salvaged	1
					75% Recycled or Salvaged	2
	2		c	Credit 3	Materials Reuse	1 to 2
					Reuse 5%	1
					Reuse 10%	2
2			c	Credit 4	Recycled Content	1 to 2
					10% of Content	1
					20% of Content	2
2			c	Credit 5	Regional Materials	1 to 2
					10% of Materials	1
					20% of Materials	2
	1		c	Credit 6	Rapidly Renewable Materials	1
1			c	Credit 7	Certified Wood	1

Y	?	N				
11	4	0		**Indoor Environmental Quality**	**Possible Points:**	**15**
Y			d	Prereq 1	Minimum Indoor Air Quality Performance	
Y			d	Prereq 2	Environmental Tobacco Smoke (ETS) Control	
1			d	Credit 1	Outdoor Air Delivery Monitoring	1
	1		d	Credit 2	Increased Ventilation	1
1			c	Credit 3.1	Construction IAQ Management Plan—During Construction	1
	1		c	Credit 3.2	Construction IAQ Management Plan—Before Occupancy	1
5			c	Credit 4	Low-Emitting Materials	1 to 5
				1	Adhesives and Sealants	1
				1	Paints and Coatings	1
				1	Flooring	1
				1	Composite Wood and Agrifiber Products	1
				1	Furniture and Furnishings	1
				1	Ceiling and Wall Systems	1
1			d	Credit 5	Indoor Chemical and Pollutant Source Control	1
	1		d	Credit 6	Controllability of Systems—Lighting and Thermal Comfort	1
1			d	Credit 7.1	Thermal Comfort—Design	1
1			d	Credit 7.2	Thermal Comfort— Employee Verification	1
1			d	Credit 8.1	Daylight and Views—Daylight	1
	1		d	Credit 8.2	Daylight and Views—Views	1

Y	?	N				
6	0	0		**Innovation and Design Process**	**Possible Points:**	**6**
1			d/c	Credit 1.1	Toxic Material Reduction	1
1			d/c	Credit 1.2	Green Housekeeping	1
1			d/c	Credit 1.3	Food Waste Reduction	1
1			d/c	Credit 1.4	Green Educational Program	1
1			d/c	Credit 1.5	Exemplary performace in occupant recycling	1
1			d/c	Credit 2	LEED Accredited Professional	1

Y	?	N				
4	0	0		**Regional Priority Credits**	**Possible Points:**	**4**
1			d/c	Credit 1.1	Regional Priority: SS C5.1	1
1			d/c	Credit 1.2	Regional Priority: SS C6.1	1
1			d/c	Credit 1.3	Regional Priority: SS C6.2	1
1			d/c	Credit 1.4	Regional Priority: MR C2 (75%)	1

62	20	9	**Total**	**Possible Points:**	**111**

LEED 2009 for New Construction and Major Renovations Project Checklist 4 of 4

END OF SECTION

SECTION 01 01 20

DESIGN AFTER AWARD

PART 1 - GENERAL

1.1 INTRODUCTION

A. The information contained in this Section applies to the design required after award. After award, the Contractor will develop the accepted proposal into the completed design, as described herein.

B. Generally, acceptance of design and approval to start construction will be granted when the designs for entire building(s) are completed. Except for exceptions approved by the Contracting Officer, approval to start construction will not be granted for partial building work. See Sections DESIGN SUBMITTAL REQUIREMENTS and PROJECT SCHEDULE for requirements for identifying and scheduling the design packaging plan in the submittal register and project schedule. If early procurement of long-lead item construction materials or installed equipment (i.e. refrigeration and HVAC equipment), prior to completion of the associated design package, is necessary to facilitate the project schedule, the Contractor shall also identify those long-lead items and how it will assure design integrity of the associated design package to meet the contract requirements (The Contract consists of the Solicitation requirements and the accepted proposal). Once the Government is satisfied that the long-lead items meet the contract requirements, the Contracting Officer will allow the Contractor to procure the items at its own risk.

C. The Contractor may proceed with the construction work included in the design package after the Government has reviewed the final (100%) design submission for that package, review comments have been addressed and resolved to the Government's satisfaction and the Contracting Officer (or the Administrative Contracting Officer) has agreed that the design package may be released for construction.

1.2 DESIGNER OF RECORD

A. The Design-Build Contractor ("Design-Builder", "D-B" or simply "Contractor") shall identify, for approval, the Designer of Record ("DOR") that will be responsible for each area of design. One DOR may be responsible for more than one area. All areas of design disciplines shall be accounted for by a listed, Professional Registered, DOR. If the deliverables are not ready for release for construction, they should be identified as "preliminary" or "not for release for construction" or by using some other appropriate designation. The DOR(s) shall also be responsible for maintaining the integrity of the design and for compliance with the contract requirements through construction and documentation of the as-built condition by coordination, review and approval of extensions of design, material, equipment and other construction submittals, review and approval or disapproval of requested deviations to the accepted design or to the contract, coordination with the Government of the above activities, and by performing other typical professional designer responsibilities.

PART 2 - EXECUTION

2.1 PRE-WORK ACTIVITIES AND CONFERENCES

A. Post Award Conference:

1. The government will conduct a post award contract administration conference at the Project site, as soon as possible after Contract Award. This will be coordinated with issuance of the Contract Notice to Proceed (NTP). The Contractor and major subcontractor representatives shall participate. All designers need not attend this first meeting. Government representatives will include DeCA project delivery team members, facility users, facility command representatives, and installation representatives. The Government will provide an agenda, meeting goals, meeting place, and meeting time to participants prior to the meeting.
2. The post award conference shall include determination and introduction of contact persons, their authorities, contract administration requirements, discussion of expected project progress processes, and coordination of subsequent meetings for quality control, Partnering, and the initial design conference (see below).
3. The government will introduce DeCA project delivery team members, facility users, facility command representatives, and installation representatives. The Design Build Contractor shall introduce major subcontractors, and other needed staff. Expectations and duties of each person shall be defined for all participants. A meeting roster shall be developed and distributed by the government with complete contact information including name, office, project role, phone, mailing and physical address, and email address.

B. Partnering and Project Progress Processes:

1. The initial Partnering Conference may be scheduled and conducted at any time with or following the post award conference. The Government proposes to form a partnership with the Design Build Contractor to develop a cohesive building team. This partnership will involve the DeCA project delivery team members, facility users, facility command representatives, installation representatives, Designers of Record, major subcontractors, contractor quality control staff, and contractor construction management staff. Ensure that participation by key subcontractors and Contractor senior management are included. This partnership will strive to develop a cooperative management team drawing on the strengths of each team member in an effort to achieve a quality project within budget and on schedule. This partnership will be bilateral in membership and participation will be totally voluntary. All costs, excluding labor and travel expenses, shall be paid by the Contractor. The Contractor and Government shall be responsible for their own labor and travel costs. Normally, partnering meetings will be held at or in the vicinity of the project installation.
2. Purpose: The partnership will draw on the strength of each organization in an effort to achieve a quality project done right the first time, within budget, on schedule, and without any safety mishaps.
3. Meeting Room and Other Incidental Items: Before the partnering session, coordinate with a facilitator the requirements for incidental items (laptop, projector, two easels, flipcharts, paper, colored markers, note paper, pens/pencils, colored flash cards, etc) and have these available at the partnering session.
4. Facilitator Qualifications: Three years minimum experience and should be a person acceptable to both the contractor and the government.
5. Project Charter: At the partnering session, have all participants sign a project charter. The mutual goal and objectives of all stakeholders for this partnering charter. The charter shall be unique to the contract/project.

C. Initial Design Conference:

1. The initial design conference may be scheduled and conducted at the project installation any time after the post award conference, although it is recommended that the partnering process be initiated with or before the initial design conference. Any design work conducted after award and prior to this conference is discouraged. Any design work accomplished prior to the Initial Design conference is at the Contractor's Risk. All Designers of Record shall participate in the conference. The purpose of the meeting is to introduce everyone and to make sure any needs the Contractor has are assigned and due dates established as well as who will get the information.

D. Progress Design Conferences:

1. A design review conference will be held at the 50% and 90% design phase with DeCA, Design-Build A/E, Design-Build Contractor, and Installation Representatives. The Conferences will represent the 55% and 95% design phases of the Contract. The duration of the conference is one day. The location of the conferences will be at the Project site in a facility to be determined. Design review comments will be discussed.

E. Pre-Construction Conference:

1. Before starting construction activities, the Contractor and Government will jointly conduct a preconstruction administrative conference to discuss any outstanding requirements and to review local installation requirements for start of construction. The DOR will provide minutes of this meeting to all participants.

2.2 STAGES OF DESIGN SUBMITTALS

A. The stages of design submittals described below define Government expectations with respect to process and content. The Contractor shall determine how to best plan and execute the design and review process for this project, within the parameters listed below. As a minimum, the Government expects to see at least one interim design submittal, at least one final design submittal before construction of a design package may proceed and at least one Design Complete submittal that documents the accepted design.

B. Interim Design Submittals (50% Design):

1. This submission is the Government's primary opportunity to review the design for conformance to the solicitation and to the accepted Contract proposal and to the Building Codes at a point where required revisions may be still made, while minimizing lost design effort to keep the design on track with the contract requirements. The requirements for the interim design review submittals and review conferences are described hereinafter. This is not necessarily a hold point for the design process; the Contractor may designate the interim design submittal(s) as a snapshot and proceed with design development at its own risk.

C. Final Design Submissions (90% Design):

1. This submittal is required for each design package prior to Government acceptance of that design package for construction. The requirements for the final design submittal review conferences and the Government's acceptance for start of construction are described herein after.

D. Design Complete Submittals (100% Design):

1. After the final design submission and review conference for a design package, the Contractor shall revise the design package to incorporate the comments generated and resolved in the final review conferences, perform and document a back-check review and submit the final, design complete documents, which shall represent released for construction documents. The requirements for the design complete submittals are described hereinafter.

E. Holiday Periods for Government Review or Actions:

1. The Contractor shall not schedule meetings, Government reviews or responses during the last two weeks of December or other designated Government Holidays (including Friday after Thanksgiving) and shall exclude such dates and periods from any durations specified herein for Government actions.

F. Late Submittals and Reviews:

1. If the Contractor cannot meet its scheduled submittal date for a design package, it must revise the proposed submittal date and notify the Government in writing, at least one (1) week prior to the submittal, in order to accommodate the Government reviewers' other scheduled activities. If a design submittal is over one (1) day late in accordance with the latest revised design schedule, or if notification of a proposed design schedule change is less than seven (7) days from the anticipated design submission receipt date, the Government review period may be extended up to seven (7) days due to reviewers' schedule conflicts. If the Government is late in meeting its review commitment and the delay increases the Contractor's cost or delays completion of the project, the Suspension of Work and Defaults clauses provide the respective remedy or relief for the delay.

PART 3 - DESIGN CONFIGURATION MANAGEMENT

3.1 PROCEDURES

A. The Contractor shall develop and maintain effective, acceptable design configuration management (DCM) procedures to control and track all revisions to the design documents after the Interim Design Submission through submission of the As-Built documents. During the design process, this will facilitate and help streamline the design and review schedule. After the final design is accepted, this process provides control of and documents revisions to the accepted. The system shall include appropriate authorities and concurrences to authorize revisions, including documentation as to why the revision must be made. The DCM data shall be available to the Government reviewers at all times. The Contractor may use its own internal system with interactive Government concurrences, where necessary but must use the Governments FACTS system for communication/submittal.

3.2 TRACKING DESIGN REVIEW COMMENTS

A. Although the Contractor may use its own internal system for overall design configuration management, the Government and the Contractor shall use the FACTS System to initiate, respond to, resolve and track Government design compliance review comments. This system may be useful for other data which needs to be interactive or otherwise available for shared use and retrieval.

3.3 DESIGN AND CODE CHECKLISTS

A. The Contractor shall develop and complete various discipline-specific checklists to be used during the design and quality control of each submittal. These completed checklists shall be submitted with each design submittal, as applicable, as part of the project documentation.

PART 4 - INTERIM DESIGN REVIEWS AND CONFERENCES

4.1 GENERAL

A. A minimum of three (3) design submittals are required, 50%, 90%, and 100%. After the 50% and 90% design submittal a review conference is required. The DB Contractor may include additional interim design conferences or over-the-shoulder reviews, as needed, to assure continued government concurrence with the design work. The interim submittal review periods and conferences shall be included in the project schedule and shall indicate what part of the design work is at what percentage of completion. The required interim design conferences shall be held when interim design requirements are reached as described below.

4.2 PROCEDURES

A. After receipt of an Interim Design submission, the Contractor shall allow the Government fourteen (14) calendar days after receipt of the submission to review and comment on the design submittal. For the design review submittal, the CO will furnish, to the Contractor, a single consolidated, validated listing of all comments from the various design sections and from other concerned agencies involved in the review process using the FACTS System. The review will be for conformance with the technical requirements of the solicitation, DeCA design Criteria, and the Contractor's RFP proposal. If the Contractor disagrees technically with any comment or comments and does not intend to comply with the comment, he/she must clearly outline, with ample justification, the reasons for noncompliance within five (5) days after receipt of these comments in order that the comment can be resolved. The Contractor shall furnish disposition of all comments, in writing, through FACTS. The Contractor is cautioned that if it believes the action required by any comment exceeds the requirements of this contract, that it should take no action and notify the CO in writing immediately. The Review conference will be held for each design submittal at the installation. The Contractor shall bring the personnel that developed the design submittal to the review conference. The conference will take place the week after the receipt of the comments by the Contractor.

4.3 CONFERENCE DOCUMENTATION

A. In order to facilitate and accelerate the Government code and contract conformance reviews, the Contractor shall identify, track resolution of and maintain all comments and action items generated during the design process and make this available to the designers and reviewers prior to the Interim and subsequent design reviews.

B. The Design Build Contractor shall prepare meeting minutes and shall enter final resolution of all comments into FACTS. Copies of comments, annotated with comment action agreed on, will be made available to all parties before the conference adjourns. Unresolved problems will be resolved by immediate follow-on action at the end of conferences. Valid comments shall be incorporated. The Government reserves the right to reject design document submittals if comments are significant. Participants shall determine if any comments are critical enough to

require further design development prior to government concurrence. Participants shall also determine how to proceed in order to obtain government concurrence with the design work presented.

PART 5 - INTERIM AND FINAL DESIGN REQUIREMENTS

Interim and Final design deliverables shall include Drawings, Specifications, design narratives, and Design Analysis for the part of design that the Design Build Contractor considers ready for review.

5.1 DRAWINGS

A. Drawings shall include comments from any previous design conferences incorporated into the documents to provide an interim design for the "part" submitted.

5.2 DESIGN ANALYSES / NARRATIVE

A. The Designers of Record shall prepare and present design analyses with calculations necessary to substantiate and support all design documents submitted. Address design substantiation required by the applicable codes and references and pay particular attention to the following listed items:

B. For parts including structural work, include structural calculations.

1. Identify all loads to be used for design.
2. Describe the method of providing lateral stability for the structural system to meet seismic and wind load requirements. Include sufficient calculations to verify the adequacy of the method.
3. Provide calculations for all principal roof, floor, and foundation members and bracing and secondary members.
4. Provide complete seismic analyses for all building structural, mechanical, electrical, architectural, and building features as dictated by the seismic zone for which the facility is being constructed.

C. For parts including architectural work, include building floor area analysis.

D. For parts including mechanical work, include HVAC narrative, design analysis, and calculations. Include complete design calculations for mechanical systems. Include computations for sizing equipment, air duct design, and U-factors for ceilings, roofs and exterior walls and floors. Contractor shall employ commercially available energy analysis techniques to determine the energy performance of all passive systems and features. Use of hourly energy load computer simulation is required. Energy load computer simulation shall be "Trane Trace" design energy analysis or similar acceptable software. The design energy analysis should indicate performance based on the following:

1. New design.
2. 2007 baseline as per ASHRAE 90.1. Baseline information will be provided by DeCA to the Contractor after the award.
3. Submit entire design energy analysis (Trane Trace) output report package and input variables report to the Government. Additionally, submit "Trane Trace" analysis source files electronically.

a. Based on the results of calculations, provide a complete list of the materials and equipment proposed with the manufacturer's published cataloged product installation specifications and roughing-in data.

E. For parts including life safety, include building code analysis and sprinkler and other suppression systems. Notwithstanding the requirements of the Codes, address the following:

1. A registered fire protection engineer (FPE) must perform all fire protection analyses. Provide the fire protection engineer's qualifications. NICET certification is not sufficient to address this requirement. A registered fire protection engineer is a professional engineer who has passed the fire protection engineering written examination administered by the National Council of Examiners for Engineering and Surveys (NCEES).
2. Provide all references used in the design including Government design documents and industry standards used to generate the fire protection analysis.
3. Provide discussion and description of required fire protection requirements including extinguishing equipment, detection equipment, alarm equipment and water supply. Alarm and detection equipment shall interface to requirements of Electronic Systems.
4. Provide hydraulic calculations based on water flow test for each sprinkler system to insure that flow and pressure requirements can be met with current water supply. Include copies of contractor's water flow testing done to certify the available water source.

F. For parts including plumbing systems:

1. List all references used in the design.
2. Provide justification and brief description of the types of plumbing fixtures, piping materials and equipment proposed for use.
3. Detail calculations for systems such as sizing of domestic hot water heater and piping; natural gas piping, etc., as applicable.

G. For parts including refrigerant systems:

1. List all references used in the design.
2. Refrigerant narrative, design analysis, and calculations. Include complete design calculations for refrigerant systems. Include computations for sizing equipment and piping. Contractor shall employ commercially available energy analysis techniques to determine the energy performance of all passive systems and features.

H. For parts including electrical work, include lighting calculations to determine maintained footcandle levels, electrical load analysis and calculations, electrical short circuit and protective device coordination analysis and calculations and arc fault calculations.

I. Proposal and Implementation of Executive Order 13423; new construction and major renovation projects must comply with the High Performance and Sustainable Buildings Guidance (12/1/2008). The Guidance list details of the five major areas contained in the Guiding Principles:

I Employ Integrated Design Principles

II Optimize Energy Performance

III Protect and Conserve Water

IV Enhance Indoor Environmental Quality

V Reduce Environmental Impact of Materials

1. Designers can review these Guiding Principles at the Whole Building Design Guide web site. For a more detail review, designers should review the DeCA Design Criteria Handbook, Division 01 Section Sustainable Design Reporting.
2. Designers shall submit, as a separate section of the design analysis, a summary of all analyses and recommendations related to the High Performance and Sustainable requirements and LEED. Refer to Division 01 Section Design Requirements, Paragraph 2.6 and Part 9 - LEED.

5.3 SPECIFICATIONS

A. Specifications are to be based on the DeCA Design Criteria Handbook located on the DeCA Facilities website. The Designers of Record shall edit and expand the appropriate Specifications to insure that all project design requirements, current code requirements, and regulatory requirements are met. Specifications shall clearly identify, where appropriate, specific products chosen to meet the contract requirements (i.e., manufacturers' brand names and model numbers or similar product information).

PART 6 - DESIGN SUBMITTAL REQUIREMENTS

6.1 DESIGN DELIVERABLES

A. All design deliverables shall include drawings, specifications, design narratives, and design analysis for the part of design that the DB Contractor considers ready for review.

B. All submissions shall accompanied by an appropriate letter of transmittal from the Contractor to the Defense Commissary Agency. The DeCA Project Manager located at HQ DeCA/DOFC Office shall receive the submittal materials.

C. The number of copies (Full size/Half size/Specs/DA/CDs) to be mailed directly to the agencies listed below via Federal Express or equivalent overnight service by the A E are as follows:

Agency	**50% Intermediate**	**90% Unchecked Final**	**100% Corrected Final**	
DeCA/PMF (Design & Const.) 2250 Foulois Street, STE 2 Lackland AFB TX 78236-1039 Attn: **Manny Mendoza** (210) 671-8425 office (804) 896-0917 cell manuel.mendoza@deca.mil	**1/3/1/1/1**	**1/3/1/1/1**	**3/3/6/6/10** See par 6.2 below	
HQ DeCA/CIF (Facilities Programs) 1300 E Avenue Fort Lee, VA 23801-1800 Attn: **Tarun K. Sen, DeCA/DOFP** Tel: (804) 734-8000 ext 52978 tarun.sen@deca.mil	**0/1/0/0/1**	**0/1/0/0/1**	**1/1/0/0/1**	

Agency	50% Intermediate	90% Unchecked Final	100% Corrected Final	
HQ DeCA/LEEF (Facility Maintenance) 2250 Foulois Street, Suite 2 Lackland AFB, TX 78236-1039 Attn: **Michael Griffin** (804) 894-3267 michael.griffin@deca.mil	**1/1/0/0/1**	**1/1/0/0/0**	**1/1/0/0/0**	
DeCA Store Director 7906 Colorado Ave P.O. Box 3925 Fort Polk, LA 71459 Attn: **Charles Shropshire** (337) 531-2747 charles.shropshire@deca.mil	**0/1/0/0/1**	**0/1/0/0/1**	**1/1/0/0/1**	
Installation Engineer Directorate of Public Works, Master Planning Division 6661 Warrior Trail Bldg. 350, Suite 229 Fort Polk, LA 71459-5339 Attn: **Shane Gremillion** Tel: (337) 531-4538 shane.w.gremillion@us.army.mil	**1/3/1/1/8**	**1/3/1/1/8**	**1/3/1/1/8**	
DeCA Zone Manager 335 S. Kelly Street, Bldg. # 1085 Maxwell AFB, AL 361122-6519 Attn: **Arnielle M Fernandez** (210) 382-6163 arnielle.fernandez@deca.mil	**0/1/0/0/1**	**0/1/0/0/1**	**0/1/0/0/1**	
DeCA/CI (CARTS) Defense Commissary Agency 1300 E Avenue Fort Lee, VA 23801-1800 Attn: **Robert Comer** (804) 734-8000 ext 48504 robert.comer@deca.mil	**0/0/0/0/1**	**0/0/0/0/1**	**0/0/0/0/1**	
DeCA/CITE (Tel/Comm) Defense Commissary Agency 1300 E Avenue Fort Lee, VA 23801-1800 Attn: **Thomas Donnelly** (804) 734-8000 ext 48133 thomas.donnelly@deca.mil	**0/1/0/0/1**	**0/1/0/0/1**	**0/1/0/0/1**	
PARSONS (PMAC/Core Team) 2250 Foulois Street, STE 2 Lackland AFB TX 78236-1039 Attn: **Patrick Vance** (210) 671-5876 patrick.vance@parsons.com	**0/1/0/0/1**	**0/1/0/0/1**	**0/1/0/0/1**	

REQUEST FOR PROPOSAL

Agency	50% Intermediate	90% Unchecked Final	100% Corrected Final	
MATKIN HOOVER ENGINEERING (PMAC/Civil) 8 Spencer Road, Suite 100 Boerne, TX 78006 Attn: **Ken Kolacny** (830) 249-0600 kkolacny@matkinhoover.com	**0/1/0/0/1**	**0/1/0/0/1**	**0/1/0/0/1**	
PARSONS (PMAC/Architectural) 2250 Foulois Street, STE 2 Lackland AFB TX 78236-1039 Attn: **Suzan O'Connor** (210) 671-5636 Suzan.OConnor@parsons.com	**0/1/0/0/1**	**0/1/0/0/1**	**0/1/0/0/1**	
Ed Hale (PMAC/Electrical) 17218 Fawn Cloud Lane San Antonio, TX 78248 (210) 493-2872 ehale@sbcglobal.net	**0/1/0/0/1**	**0/1/0/0/1**	**0/1/0/0/1**	
REED FIRE PROTECTION ENGINEERING (PMAC/Fire Protection) 14135 Midway Road, Suite G260 Addison, TX 75001 Attn: **Al Reed** (214) 638-7599 areed@reedfire.com	**0/1/0/0/1**	**0/1/0/0/1**	**0/1/0/0/1**	
KJ ENGINEERING (PMAC/HVAC & Plumbing) 434 Breesport San Antonio, TX 78216 Attn: **Koojee Yeoh** (210) 490-1755 kjengineeringinc@att.net	**0/1/0/0/1**	**0/1/0/0/1**	**0/1/0/0/1**	
B.G. ROLSTON TECHNICAL CONSULTING (PMAC/Refrigeration) 12472 Monarch Circle Seminole, FL 33772 Attn: **Bruce Rolston** (727) 391-0454 Bgrolston1@aol.com	**0/1/0/0/1**	**0/1/0/0/1**	**0/1/0/0/1**	
CUTLER GALLAWAY SERVICES (PMAC/Structural) 12001 Network Boulevard San Antonio, TX 78249-3352 Attn: **Earl Cutler/Tom Gallaway** (210) 496-3326 cgspe@aol.com	**0/1/0/0/1**	**0/1/0/0/1**	**0/1/0/0/1**	

Agency	50% Intermediate	90% Unchecked Final	100% Corrected Final	
HQ DeCA/LEAAF Contracting Officer 2250 Foulois Street, Suite 3 Lackland AFB, TX 78236-1046 Attn: **John S. Bandy** Commercial: (210) 671-5283 john.bandy@deca.mil				

6.2 CORRECTED FINAL DESIGN (100%)

A. The corrected final design documents will include the unchecked final design (90%) documents with all approved review comments incorporated (95%) will be issued to HQ DeCA/PMF, Lackland AFB unless noted otherwise, and will specifically include:

1. *Six (6) sets of corrected final design drawings (ozalid blue line with all base coordination signatures and Architect Engineer professional stamp/seals).
2. *Six (6) sets of corrected specifications including boiler plate and bidding schedule with appropriate award statement. (Book bound)
3. Three (3) sets of half size drawings.
4. Two (2) sets final color/material sample boards.
5. One (1) copy of construction time estimate, including recommendation for any weather exclusion.
6. One (1) copy of final cost estimate detailed and itemized.
7. One (1) copy of framed colored Architectural rendering.
8. Six (6) copies of corrected final design analysis with all attachments.
9. Ten (10) copies of the Computer Aided Drafting (CAD) computer products. Two of these CD's should include the Design Analysis, Geotechnical/Topographical report, and other reports such as soil sampling and HAZMAT testing results, etc. These computer products are to be held and updated during construction by the A E and furnished to HQ DeCA/PMF at completion of construction unless the A E is not contracted for Title II services, in which case the computer products shall be furnished to HQ DeCA/PMF at completion of design. A schematic will be provided for all CAD drawings.
10. One table of layer names used in CAD file with sub-table or description of elements contained therein and sub-table of plot pen assignments and thicknesses.
11. One (1) schedule of drawings.
12. One (1) list of submittals.
13. One (1) list of Government furnished materials (if any).
14. One (1) list of design items A E felt should have been included but were deleted for various reasons.

    a. *Documents listed above are to be reproduced from the original Contract Documents only after all required installation agencies have approved and signed the Drawings. Completed reproductions of the Drawings and Specifications, properly bound, shall arrive at Contracting within seven calendar days after receipt of the signed documents by the A/E.

6.3 SCHEDULE

A. FY2012 - 2014 Schedule:

ACTION	WEEKS	CALENDAR DATE: 2012-2014
NTB to D-B Contractor	0 weeks	01 March 2012
50% Design Submittal Complete /Distribute	8 weeks	26 April 2012
50% Design - Review	10 weeks	10 May 2012
55% Design Review Conference - Fort Polk	11 weeks	15-16 May 2012
90% Design Submittal Complete/ Distribute	18 weeks	5 July 2012
90% Design - Review	20 weeks	19 July 2012
95% Design Review Conference - Fort Polk	21 weeks	24-25 July 2012
95% Comments Incorporated by A-E	25 weeks	30 August 2012
100% Design Submittal with all Comments Closed/Distribute	27 weeks	13 September 2012
Government Acceptance Final Documents	29 weeks	27 September 2012
Pre-Construction Submittals/Mobilization	31 weeks	11 October 2012
Commence Construction	34 weeks	1 November 2012
Project Closeout	106 weeks	1 May 2014
Final Clean Up	108 weeks	15 May 2014
Owner Occupancy	110 weeks	29 May 2014

END OF SECTION

SECTION 01 13 00

NOTICE TO PROCEED

(Edited from DeCA June 2011 Design Criteria)

PART 1 - GENERAL

1.1 SUMMARY

A. The Contracting Officer will issue a single Notice to Proceed for this Project. Issuance of the Notice to Proceed authorizes the Contractor to proceed with the following:

1. Design phase.
2. Mobilization.
3. Submittal processing.
4. Construction Phase (including site preparation, utility relocation and demolition activities) may begin only after the satisfactory submittal and government approval of item requirements listed in Paragraph 1.3.C.

B. Offerors are cautioned that approvals to proceed with construction and/or construction activities will not be issued if the Government determines the Design is not acceptable.

C. A time extension to the Contract will not be provided due to incomplete or unacceptable design submittals.

D. See Division 01 Section Design After Award for additional information related to Design Submittals.

E. Related Sections:

1. Division 01 Section Design Requirements.
2. Division 01 Section Design After Award.
3. Division 01 Section Contract Modification Procedures.
4. Division 01 Section Administrative Requirements.
5. Division 01 Section Construction Progress Documentation.
6. Division 01 Section Project Web Site.
7. Division 01 Section Quality Control.
8. Division 01 Section Temporary Facilities and Controls.
9. Division 01 Section Environmental Management.
10. Division 01 Section Government Safety Requirements.

1.2 SUBMITTALS

A. Submittal List:

Div	Section Title	Reference	Submittal Item	Quantity	Action
00	Solicitation	See Section	General Liability and other items required in this Section	X	I

Div	Section Title	Reference	Submittal Item	Quantity	Action
00	Solicitation	See Section	SF1413	X	R
01	Notice to Proceed	1.3C.2.b.	Roster of Personnel, Suppliers and Subcontractors	X	R
01	Quality Control	See Section	Quality Control Plan	X	R
01	Construction Progress Documentation	See Section	CPM schedule and Sub-schedules	X	R
01	Government Safety Requirements	See Section	Security Plan	X	R
01	Government Safety Requirements	See Section	Fire Prevention Plan	X	R
01	Government Safety Requirements	See Section	Safety Plan	X	R
01	Temporary Facilities and Controls	See Section	Temporary Utilities Plan	X	R
01	Temporary Facilities and Controls	See Section	Temporary Support Facilities Plan	X	R
01	Administrative Requirements	See Section	Record Photographs	X	R
01	Environmental Management	See Section	Spill Prevention and Response Procedure (SPRP) Plan	X	R
01	Environmental Management	See Section	Hazardous Material List	X	R
01	Environmental Management	See Section	Storm Water Pollution Prevention Plan (SWPPP)	X	R
01	Environmental Management	See Section	Notice of Intent (NOI)	X	R
01	Environmental Management	See Section	Solid Waste, Construction, and Demolition Debris Waste Management Plan	X	R

X Submit quantity specified in Division 01 Section Administrative Requirements.
R Review each submittal, mark to indicate action taken, and return.
I Submittal is for information or record purposes only. No action will be taken.

1.3 NOTICE TO PROCEED

A. The Contracting Officer will issue the Notice to Proceed only after Government receipt of Performance and Payment Bonds.

B. Contract Completion:

1. The Notice to Proceed sets the Contractor's Contract start and completion date.

C. Mobilization and Submittal Processing:

1. The activities listed are all included in the time period set forth to complete the Project.
2. Within ten (10) calendar days after receipt of Notice to Proceed, generate and submit all items listed for Government review and/or approval. Government acknowledgement of their approval of these items is a condition-precedent to the Contractor's commencement of any building construction or demolition activity. Allow for Government review time of 21 calendar days for the first submission and an additional 14 calendar days for any re-submittals, if required.

    a. SF 1413 for all trades.
    b. A Project roster of Contractor's personnel, subcontractors, and suppliers that includes the name of the firm, names, titles, mailing addresses, email addresses, business phones, and emergency phone numbers.
    c. Quality Control Plan - Reference Division 01 Section Quality Control.
    d. Security Plan - Reference Division 01 Section Government Safety Requirements.
    e. Safety Plan - Reference Division 01 Section Government Safety Requirements.
    f. Fire Prevention Plan - Reference Division 01 Section Government Safety Requirements.
    g. Site Usage Plan and submittals related to Government's Designated Inspector's office, Contractor's temporary facilities, fencing, and staging area.

        1) Applicable submittal requirements for temporary facilities. See performance and submittal requirements in Division 01 Section Temporary Facilities and Controls.

    h. The Government's Designated Inspector's and Contractor's temporary offices, utilities, other facilities, fencing, and staging are installed according to the approved submittals and operational.
    i. All of the Contractor's contractually required field staff is on site.
    j. Record photographs.
    k. Storm Water Pollution Prevention Plan and Notice of Intent.
    l. Hazardous Material List and Waste Management Plan.

D. Design Phase:

1. After receipt of the Notice to Proceed, generate and submit the Design Documents for Government review and/or approval.
2. See Division 01 Section 01 01 20 Design After Award for design phase requirements.

E. Construction/Demolition:

1. Notify the Contracting Officer upon 100 percent completion of the items listed under Mobilization and Submittal Processing and then commence construction/demolition activities.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

REQUEST FOR PROPOSAL

SECTION 01 14 00

WORK RESTRICTIONS

(Edited from DeCA June 2011 Design Criteria)

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Contractor use of premises.
2. Occupancy requirements.

B. Related Sections:

1. Division 01 Section Administrative Requirements.
2. Division 01 Section Mechanical, Refrigeration, Food Service Equipment, and Electrical Coordination.
3. Division 01 Section Construction Progress Documentation.
4. Division 01 Section Quality Control.
5. Division 01 Section Temporary Facilities and Controls.
6. Division 01 Section Environmental Management.
7. Division 01 Section Closeout Procedures.

1.2 CONTRACTOR USE OF PREMISES - NEW STORES

A. Use of the Site: Limit use of the premises to work in areas indicated in the Contract Documents. Confine operations to areas within contract limits indicated. Do not disturb portions of the site beyond the indicated work areas. Utilize lay down area(s) within the site contract area identified on the Drawings for all materials and supplies.

B. Driveways and Entrances: Unless otherwise indicated, keep driveways and entrances serving the premises clear and available to the government, government employees, store patrons, truck traffic, and emergency vehicles at all times. Do not use these areas for parking or storage of material. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on site.

C. Do not unreasonably encumber site with materials or equipment.

D. Assume full responsibility for protection and safekeeping of material, equipment, and products stored on premises.

E. Keep temporary office, yard, and material storage (staging) areas arranged in orderly manner, clean, and mowed. Repair areas damaged during construction operations.

F. Provide temporary chain link fence enclosure (gated and locked) around material storage area as indicated and as specified in Division 01 Section Temporary Facilities and Controls. The temporary

construction fence remains in place until final acceptance of the project. Provide temporary barriers around site work areas to keep pedestrians out of the construction areas.

G. Obtain and pay for use of additional storage or work areas as needed for Contractor operations.

H. Provide signage and physical barriers to control, direct, and maintain vehicular and pedestrian traffic during the construction process.

1.3 OCCUPANCY REQUIREMENTS - NEW STORES

A. Partial Government Occupancy: The government reserves the right to occupy and to place and install equipment in areas of the facility under construction prior to construction completion, provided such occupancy does not interfere with completion of the work.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

REQUEST FOR PROPOSAL

SECTION 01 35 40

ENVIRONMENTAL MANAGEMENT

(Edited from DeCA June 2011 Design Criteria)

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Special requirements for environmental management during construction operations.
2. Monitoring requirements.

B. Related Sections:

1. Division 01 Section Administrative Requirements.
2. Division 01 Section Sustainable Design Reporting.
3. Division 01 Section Quality Control.
4. Division 01 Section Environmental Procedures for Refrigerants.
5. Division 01 Section Indoor Air Quality Procedures.
6. Division 01 Section Closeout Procedures.

1.2 DEFINITIONS

A. Acronyms:

A/E	Design-Build Architecture/Engineering Firm
ACM	Asbestos Containing Material
AFJMAN	Air Force Joint Manual
AFOSH	Air Force Occupational Health and Safety
AFI	Air Force Instruction
APCD	Air Pollution Control Division
APEN	Air Pollutant Emissions Notice
AST	Above Ground Storage Tank
BMP	Best Management Practice
CEV	Civil Engineering Environmental Flight
CFR	Code of Federal Regulations
COE	United States Army Corps of Engineers
DOD	Department of Defense
DODI	Department of Defense Instruction
DOT	Department of Transportation
DPHE	Department of Public Health and Environment
DPW-ENRMD	Fort Polk Directorate of Public Works, Environmental and Natural Resources Management Division
EO	Executive Order
EPA	Environmental Protection Agency
HAZMAT	Hazardous Material

HAZWOPER	Hazardous Waste Operations and Emergency Response
HW	Hazardous Waste
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
IMO	International Maritime Organization
LBP	Lead-based Paint
MSDS	Material Safety Data Sheet
NAF	Non-Appropriated Fund
NAVFAC	Navy Facilities Engineering Command
NOI	Notice of Intent
NOT	Notice of Termination
NPDES	National Pollutant Discharge Elimination System
ODC	Ozone Depleting Chemicals
OS	Operating Support
OSHA	Occupational Safety and Health Administration
PCB	Polychlorinated Biphenyls
PLS	Pure Live Seed
POC	Point of Contact
POL	Petroleum, Oil, and Lubricants
RCRA	Resource Conservation and Recovery Act
SARA	Superfund Amendments and Reauthorization Act
SPRP	Spill Prevention and Response Plan
SPCC	Spill Prevention Control and Countermeasure
SWPPP	Stormwater Pollution Prevention Plan
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service

B. Certified Industrial Hygienist (CIH): An individual certified the American Board of Industrial Hygiene (ABIH) to have met ABIH requirements for education and experience, and through examination, has demonstrated the required level of knowledge in industrial hygiene.

C. Containment: The act of stopping the spread or propagation of hazardous substances spilled or released into the environment.

D. Contractor: Any company or individual contracted to work on the Project site.

E. Cleanup: The act of removing hazardous substances from the scene of a spill release or stabilizing or neutralizing hazardous substances to non-hazardous concentrations in accordance with established federal, state, local, and Installation procedures.

F. Construction Contractor: Any person or agency providing a material or a service to DeCA by authority of a Contract. Includes the prime Contractor and all subcontractors.

G. Contingency Plan: A document containing an organized, planned, and coordinated course of action designed to mitigate pollution incidents and limit pollution in the event of fire, explosion, or spill/release of hazardous substances.

H. Discharge: The release of hazardous waste/materials into the environment.

I. Disposal: The thermal or chemical destruction or permanent land filling of hazardous waste.

J. Environment: The natural surroundings that allow life to exist.

K. Environmental Service Provider: Environmental Consulting Firm contracted by the A/E or A/E Firm if environmental professionals are in-house.

L. Fugitive Particulates: Solid airborne particulate matter emitted from any source that channels the flow of air pollutants directly into the atmosphere by natural forces or by mechanical processes such as crushing, grinding, milling, drilling, demolishing, shoveling, conveying, covering, bagging, or sweeping.

M. Generator: Any person or agency that produces, creates, or discovers hazardous waste.

N. Hazardous Chemical: In relationship to laboratories, a chemical for which there is statistically significant evidence, based on at least one study conducted in accordance with established scientific principles, that acute or chronic health effects may occur in exposed employees (29 CFR 910.1450(b)).

O. Hazardous Material (HAZMAT):

1. Any item or chemical that is a "health hazard" or "physical hazard" as defined by OSHA in 29 CFR 1910.1200 or by the EPA at 40 CFR 370, 372, and 100-180, including the following:

    a. Chemicals which are carcinogens, toxic or highly toxic agents, reproductive toxins, irritants, corrosives, sensitizers, hepatotoxins, nephrotoxins, neurotoxins, agents which act on the hematopoietic system, and agents which damage the lungs, skin, eyes, or mucous membranes;
    b. Chemicals which are combustible liquids, compressed gases, explosives, flammable liquids, flammable solids, organic peroxides, oxidizers, pyrophorics, unstable (reactive) or water reactive;
    c. Chemicals which in the course of normal handling, use, or storage operations may produce or release dusts, gases, fumes, vapors, mists or smoke which may have any of the above characteristics;
    d. Any item or chemical which is reportable or potentially reportable as inventory under the reporting requirements of the hazardous chemical reporting section of 40 CFR (40 CFR part 370), or as an environmental release under the reporting of the toxic chemical release reporting community right-to-know (40 CFR part 372), including chemicals with special characteristics which in the opinion of the manufacturer can cause harm to people, plants, or animals when released by spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment (including the abandonment or discarding of barrels, containers, and other receptacles).
    e. Any item or chemical which, when being transported or moved, is a risk to public safety or is an environmental hazard and is regulated as such by one or more of the following:

        1) Department of Transportation HAZMAT Regulations (40 CFR 100-180).
        2) Dangerous Goods Code of the International Maritime Organization(IMO).
        3) Dangerous Goods Regulations of the International Air Transport Association (IATA).
        4) Technical Instructions of the International Civil Aviation Organization (ICAO).
        5) US Air Force Joint Manual (AFJMAN), Preparing HAZMAT for Military Shipments (AFJMAN 24-2204).

P. Hazardous Substance: A material and its mixtures or solutions that is identified by the letter "E" in column (1) of the Hazardous Materials Table, 49 CFR Sec. 172.101 or as identified herein:

1. When offered for transportation in one package, or in a transport vehicle if not packaged, and when the quantity of the material therein equals the reportable quantity;
2. Any substance designated pursuant to Section 311 (b)(2)(A) of the Federal Water Pollution Control Act, and any element, compound, mixture, solution, or substance designated pursuant to Section 102 of this Act;
3. Any hazardous waste having the characteristics identified under or listed pursuant to Section 3001 of the Solid Waste Disposal Act;
4. Any toxic pollutant listed under Section 307(a) of the Federal Water Pollution Control Act;
5. Any hazardous air pollutant listed under Section 112 of the Clean Air Act;
6. Any imminently hazardous chemical substances or mixtures which the EPA Administrator has "taken action under" section 7 Toxic Substances Control Act;
7. Any element, compound, mixture, solution, or substance designated as hazardous under section 102 or CERCLA.

Q. Hazardous Waste: Any HAZMAT or hazardous chemical that has been used, contaminated, spilled, and recovered, and is impossible to reuse, recycle or treat. This term also refers to residues generated as a result of recycling activities and empty containers whose previous contents were hazardous.

R. Incompatible: Any two materials, which create a violent reaction when combined.

S. Installation: The military base, post, depot, etc. on which the Project is located.

T. Landfill: The disposal of waste by land burial.

U. Material Safety Data Sheet: A report detailing the hazardous characteristics and dangers of a specific material.

V. NAF Work Force: NAF employees or their Contractors who perform projects on the Installation.

W. Permitted: An activity approved by an authority with official control over the activity.

X. On-site: Presence within the boundaries of the work-site.

Y. Pollution: Contamination in the environment.

Z. Reportable Quantity: The quantity of spilled or released hazardous substances requiring notification as defined by federal, state, and local regulations.

AA. Resource Conservation and Recovery Act (RCRA: The Federal Act, which gives the EPA environmental protection regulation and enforcement authority concerning hazardous waste (HW) and associated activities.

BB. Safety: Freedom from man-equipment-material-environmental interactions that result in injury or illness.

CC. Solid Waste: Any discarded material in any physical state.

DD. Spill: An unintentional release to the environment.

EE. Training: Formal instruction, in addition to existing job knowledge, designed to protect human health and the environment by increased awareness and improved job proficiency.

FF. User/Owner: Any person, organization, or agency that stores or uses a hazardous material is classified as a user/owner of such hazardous materials.

1.3 QUALITY ASSURANCE

A. DOD Instructions, Policies, Guidance Documents, Memoranda, and Regulations: Comply with the following:

1. COE document EP 1165-2-314 (Flood Proofing Regulations).
2. Section 404 and Section 10 of Clean Water Act.
3. Department of Defense, Measure of Merit, Solid Waste Management.
4. US Department of Housing and Urban Development Guidelines for Evaluation and Control of Lead-based Paint Hazards in Housing.
5. DoD Guidance Document 4715.5-G "Overseas Environmental Baseline Guidance Document."
6. DoD Directive 6050.7 "Environmental Effects Abroad of Major Department of Defense Actions."
7. AFI 32-4002, "Hazardous Material Emergency Planning and Response Program."
8. AFI 32-7042, "Solid and Hazardous Waste Compliance."
9. AFI 32-7080, "Pollution Prevention Program."
10. AFI 32-7086, "Hazardous Materials Management."
11. SECNAVINST 5090.6A "Environmental Planning for Department of the Navy Actions."
12. SECNAVINST 5090.8 "Policy for Environmental Protection, Natural Resources and Cultural Resources Programs."
13. OPNAV Instruction 5090.1B "Navy Environmental and Natural Resources Program Manual."
14. UFGS 13280A, "Asbestos Hazard Control Activities."
15. UFGS 13281N, "Engineering Control of Asbestos Containing Materials."
16. UFGS 13283N, "Removal/Control and Disposal of Paint with Lead."

B. United States Environmental Protection Agency(EPA) Regulations: Comply with the following:

1. Resource Conservation and Recovery Act (RCRA) - 40 Code of Federal Regulation (CFR) Parts 148, 260, 261, 263, 264, 265, 266, 268, 270, 271, 272, 273, 279, 280, 281, 282, and 355.
2. Clean Water Act - 40 CFR Parts 112, 122, 123, 124, 125, 129, 130, 131, and 401–471.
3. EPA Document 832-R-92-005, Stormwater Management for Construction Activities.
4. Clean Air Act - 40 CFR Parts 50, 52, 61, 63, 68, 70, 71, 86-89, 745.
5. EPCRA - SARA Title III Sections 301, 302, 303, 304, 311, 312, and 313.

C. Occupational Safety and Health Administration (OSHA) Regulations: Comply with the following:

1. Hazard Communication - 29 CFR 1910.1200.
2. Hazardous Waste Operations and Emergency Reponses (HAZWOPER) - 29 CFR 1910.120.
3. Material Handling - 29 CFR 1910.176.
4. Toxic and Hazardous Substances - 29 CFR 1910.1030.

D. Department of Transportation (DoT) Regulations: Comply with the following:

1. 49 CFR Parts 171 - 173.

E. Other Federal Regulations: Comply with the following:

1. National Historic Preservation Act.
2. Archeological and Historic Preservation Act.
3. Endangered Species Act.
4. The American Indian Religious Freedom Act.
5. Archeological Resources Protection Act.
6. The Native American Graves Protection and Repatriation Act.
7. National Environmental Policy Act.
8. Executive Order 13423, Strengthening Federal Environmental, Energy, and Transportation Management, dated 24 JAN 2007.

F. Other State, Regional, Local and Installation Plans, Policies, Regulations, and Permitting Procedures: Comply with the following:

1. Installation Plans, Policies, and Procedures:

a. Installation Asbestos Management Strategy.
b. Installation Hazardous Waste Management Plan.
c. Installation Compliance Assurance Through Pollution Prevention Plan.
d. Installation Integrated Natural Resource Management Plan.
e. Installation Endangered Species Management Plan.
f. Installation Cultural Resources Management Plan.
g. Installation Spill Prevention and Response Plan.
h. Installation Storm Water Pollution Prevention Plan.
i. Installation Stormwater Training Manual.
j. Installation Air Quality Management Plan.
k. Installation Wetlands Policy.

2. State Regulations:

a. Air Pollution Prevention and Control Act.
b. Hazardous Waste Regulations.
c. Water Quality and Wastewater Regulations.
d. Tank Regulations.
e. Oil and Petroleum Spill Prevention Regulations.
f. Solid Waste Regulations.
g. Special Pollutants.
h. Pesticides, Herbicides, and Fungicides.

3. Local and Regional Plans, Policies, and Regulations:

a. Local Policy Plan.
b. Drainage Criteria Manual.
c. Department of Health Fugitive Dust Regulations.
d. Floodplain Management.
e. Stormwater Discharge and Stormwater Pollution Prevention Regulations.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 ENVIRONMENTAL PROTECTION

A. Protection of natural resources: Comply with applicable regulations and these specifications. Preserve the natural resources within the Project boundaries and outside the limits of permanent Work performed under this Contract in their existing condition or restore to an equivalent or improved condition as approved by Owner.

B. Provide protection, operate temporary facilities, and conduct construction in ways and by methods that comply with environmental regulations, and minimize the possibility of contamination, pollution, or other undesirable effects.

C. Permitting: The Contractor shall notify Installation Environmental Representatives when a permit is required and requested as part of this Construction Contract. The Construction Contractor shall also notify the Installation Environmental Representative when the permit has been received.

3.2 AIR QUALITY

A. Contractors shall ensure all company-owned and employee owned gasoline and diesel vehicles driven on the Installation comply with the emissions inspection requirements of the Department of Public Health and Environment (DPHE) Motor Vehicle Emissions Inspection Program and Reduction of Diesel Vehicle Emissions.

B. The Contractor shall restrict emissions of all smoke and fugitive particulates, to levels less than 20 percent opacity at the point of emission, and to levels that do not visibly disperse beyond the Installation's property boundaries unless exempt.

C. The Contractor shall ensure any equipment containing ozone-depleting chemicals (ODC) are operated and maintained in accordance with State's Control of Emission of Ozone-Depleting Compounds requirements. Train and certify all contractors and subcontractor employees servicing ODC containing equipment.

D. The Contractor shall take active steps to prevent evaporation of all solid or liquid materials that have potential to become airborne including but not limited to fuels, solvents, paints, and other volatile chemicals under the Contractor's control. Close all containers holding solid or liquid materials that have potential to become airborne at all times, except when adding product to or removing product from the container.

E. The Contractor shall fully comply with the conditions of all applicable air quality permits and applicable air quality requirements. Local and State Regulations of Air Pollution Prevention and Control Act.

F. The Contractor shall comply with all requirements of Fugitive Particulate Control Plans required by and prepared for DPHE.

G. When a Fugitive Particulate Control Plan is not required, the Contractor shall perform all fugitive particulate control measures necessary to prevent emissions of over 20 percent opacity or visible emissions that cross the Installation's property boundaries.

H. The Contractor shall maintain a daily log of fugitive particulate emissions that exceed 20 percent opacity or that cause visible emissions crossing the Installation's property boundaries. The Contractor shall maintain a copy of this log on site at all times and shall make it available for review to the Installation upon request.

I. The Contractor shall not utilize cutback asphalt or any coating included in the definition of cutback asphalt during the months of March through September unless the cutback asphalt is used solely as a penetrating prime coat or if the user can demonstrate to DPHE Air Pollution Control Division that under the conditions of its intended use, there shall be no emissions of volatile organic compounds to the ambient air.

J. Contractors shall not apply sand or gravel to Installation roads without obtaining prior written approval from the Contracting Officer.

K. The Contractor shall submit copies of all fugitive particulate emission logs, and any other logs required by Fugitive Particulate Control Plans, to the Contracting Officer no later than seven working days after completion of work.

L. The Contractor shall properly re-vegetate all disturbed land to prevent fugitive particulate emissions following the completion of work.

3.3 WASTEWATER AND STORMWATER

A. Comply with regulations including but not limited to 40 CFR 122.26 (EPA NPDES Permit Regulations), state and local wastewater regulations, COE document EO 1165-2-304 (1976 Flood Plain Regulations for Flood Plain Management), EPA document 832-R-92-005 (Storm Water Management for Construction Activities), state and local Stormwater regulations, the County Drainage Plan and the City/County Drainage Criteria Manual.

B. Concerning wastewater discharges, Contractor shall:

1. Be familiar with all relevant requirements of permits held by the Installation.
2. Not discharge wastewater or water (including surface discharges and underground injection) that could impact the quality of the surface water or groundwater of the state without prior approval of the Installation Environmental Office.
3. Implement basic housekeeping provisions of the applicable wastewater discharge permit including monitoring and sampling, inspections, reporting, and record keeping.
4. Dispose of sewage through existing connections to the Installation sanitary sewage system. Where such connections are not available, use chemical toilets or comparably effective units; periodically, have these toilets serviced by a licensed contractor in accordance with all applicable regulations. Do not dispose of sanitary waste into the sewage system without approval of the Installation.

C. Concerning construction projects that shall disturb greater than or equal to one (1) acres, Contractor shall:

1. Submit a site specific Construction Storm Water Pollution Prevention Plan (SWPPP) prior to staging any facilities, equipment, or materials onsite. The SWPPP shall include

appropriate Best Management Practices (BMPs) to minimize the discharge of pollutants from the site.

2. Submit an EPA approved Notice of Intent (NOI) (EPA Form 3510-6) to the Contracting Officer prior to staging any facilities, equipment, or materials onsite. The NOI includes a certification that the activity shall not impact endangered or threatened species.
3. Install and operate all BMPs.
4. Review the Installation Storm Water Training Manual and complete and submit the associated test to the Contracting Officer or, if approved by the Contracting Officer and available, attend an annual 60-minute training class on storm water pollution prevention.
5. Maintain and post a copy of the SWPPP, NOI, and training certificates at the construction site.
6. Submit a Notice of Termination (NOT) (EPA Form 3510-7) to the Contracting Officer after:

    a. all construction debris, equipment, materials, and facilities are removed;
    b. the construction areas are inspected;
    c. all temporary storm water BMPs are removed;
    d. ground cover is at 70 percent or when final stabilization of the site has been achieved as defined by the permit, and
    e. the final inspection is performed.

7. Once approved by the Installation, the NOT shall be co-signed by the Installation and the Contractor, and the Installation shall submit it to the EPA or state permit authority.

D. Concerning construction projects that shall disturb less than one acre, the Contractor shall:

1. Comply with the Installation's SWPPP requirements.
2. As required, obtain a separate discharge permit (based upon an evaluation of Contractor proposed operations and the Installation's NPDES permit). Site activities disturbing less than 1 acre are also regulated as small construction activity if they are part of a larger common plan of development or sale with a planned disturbance of equal to or greater than 1 acre and less than 5 acres, or if the NPDES permitting authority designates them. The NPDES permitting authority may designate construction activities disturbing less than 1 acre based on the potential for contribution to a violation of a water quality standard or for significant pollutants to waters of the United States.

E. Regardless of the size of the project, storm water runoff from the Project site shall be restricted to historical flows during and after construction. The Contractor shall submit for approval devices/designs to comply with this condition to the Contracting Officer. Structural BMPs may include but are not limited to mulch, grass, stockpile covers, silt fences, inlet protection, check dams, stabilized construction entrances, and sediment traps. Non-structural BMPs may include but are not limited to minimizing disturbances, preserving natural vegetation, and good housekeeping practices.

1. Following each storm event of 0.1 inch or greater or at least weekly, the Contractor shall inspect erosion and pollution control devices and correct any deficiencies immediately. Record these inspections and records maintained onsite.
2. To ensure compliance with other Clean Water Act requirements, the Construction Contractor:

    a. Shall not discharge any domestic, construction and/or industrial waste (including any hazardous material or hazardous waste) to the sanitary sewer system without

first securing the approval of the Installation. This applies to glycol type wastes drained from heating, ventilation, and air conditioning facilities.

b. Shall not discharge any domestic, construction, and/or industrial waste (including any hazardous material or hazardous waste) to the ground, drainage areas, local bodies of water, or by underground injection.

c. Shall not use surface or underground water supplies for any Contract-related activities without approval from the Contracting Officer.

d. Shall not dispose of dredged materials in wetlands, dispose of excavated materials into waters of the U.S., use fill for road crossings, or dispose of similar dredge or fill materials in the waters of the U.S. without a permit obtained in coordination with the Contracting Officer.

e. Shall not discharge groundwater from trenches during construction without a dewatering permit from the EPA.

3.4 HAZARDOUS MATERIAL

A. All hazardous materials brought on-site by the Construction Contractor shall be subject to pre-approval by the Installation. The Installation reserves the right to prohibit the use of hazardous materials it deems to be especially hazardous to human health or the environment. The Installation also reserves the right to prohibit the use of hazardous materials due to the type and/or quantity of hazardous wastes potentially generated from the materials. In the event of disapproval of a hazardous material for use on the Installation, the Installation may provide the Construction Contractor a list of suitable substitutes; however, the Construction Contractor shall retain responsibility for finding an acceptable substitute. The Installation promotes waste minimization and pollution prevention practices and all contractors shall take appropriate actions to comply with this policy.

B. Hazardous materials requirements are designed to ensure the Installation meets and maintains compliance with:

1. State and Local Hazardous Waste Regulations for Generators.
2. State and Local Hazardous Waste Regulations for Transporters.
3. AFI 32-7032, Solid and Hazardous Waste Compliance.
4. AFI 32-7080, Compliance Assurance through Pollution Prevention Program.
5. AFI 32-7086, Hazardous Materials Management.
6. AFI 32-4002; Hazardous Material Emergency Planning and Response Program.
7. OSHA Hazard Communication Regulation – 29 CFR Part 1910.1200.
8. OSHA General Handling Material Requirements – 29 CFR Part 1910.176.
9. EPA: SARA Title III (EPRCA) – EPA Document #550-B-01-003 "List of Lists".

C. Hazardous Material Reporting Requirements:

1. A minimum of ten working days prior to commencement of work on site, submit to the Contracting Officer a listing of hazardous materials on site during the performance of the Contract. Include estimated usage and estimated quantities for each hazardous material. The Contractor shall identify any "extremely hazardous substances" (40 CFR Part 355, Appendix A and B) to be used during the execution of the Contract and indicate if the amount of the chemical exceeds the threshold planning quantity. The construction Contractor shall also supply a Material Safety Data Sheet (MSDS) for each hazardous material. The Construction Contractor shall give a brief description of use of the hazardous material. The MSDS shall be OSHA Form 174 or equivalent, as directed by OSHA Hazard Communication requirements (29 CFR 1910.1200).

2. Maintain at all times a complete written hazard communication program including labels and forms of warning for chemicals, an up-to-date hazardous material inventory with copies of MSDSs for all materials used on the job site, and employee information and training on hazardous chemicals in their work area. If the Construction Contractor transports any hazardous wastes or hazardous materials, the Contractor shall classify the hazardous materials (Class 1 through Class 9) and comply with DOT requirements. Applicable requirements may include packing and repacking, labeling, marking, and placarding, handling, vehicle routing, and the manufacturing of packaging and transportation containers. The Construction Contractor shall transport all hazardous materials in accordance with all applicable Federal, state and local regulations. Transporters of hazardous wastes that operate and have a transfer facility are required to obtain an EPA identification number and comply with additional requirements cited at 6 CCR 1007-3, Part 263.
3. The Contractor and all subcontractors shall abide by and shall have contingency plans established in accordance with SARA Title III, Emergency Planning and Community Right-to-Know Act (EPCRA), and overall CERCLA, and shall manage all wastes and spills accordingly.

D. Hazardous Materials Usage Reports:

1. Contracts with a performance period of less than or equal to ninety (90) days: Construction Contractors shall immediately report hazardous materials used at any time during the execution of the Contract to the Contracting Officer. The report shall include a listing of the total amount hazardous materials used while performing work on site and a description of the disposition of each hazardous material (e.g., fully consumed during Contract/Project execution, saved for future use, or disposed of as hazardous waste in accordance with state and local hazardous waste regulations for generators, transporters, and treatment, storage, and disposal facilities).
2. Contracts with a performance period of greater than ninety (90) days: Every 90 days from the start of work on site, the Construction Contractor shall report to the Contracting Officer hazardous materials used in the previous 90 day period. The report, submitted ten (10) working days after the end of each ninety (90) day period, shall include a listing of all hazardous materials used while performing work on site, the total amount of each hazardous material used, and a description of the disposition of each hazardous material (e.g., fully consumed during Contract/Project execution, saved for future use, or disposed of as hazardous waste in accordance with state hazardous waste regulations for generators, transporters, and treatment, storage, and disposal facilities).

E. Final Report:

1. The Construction Contractor shall submit a final inventory of all hazardous materials used since the last hazardous usage report no later than ten working days after completion of work. The final inventory shall list all hazardous materials used, total amount of each used, and a description of the disposition of any remaining hazardous materials (e.g., fully consumed during Contract/Project execution, saved for future use, or disposed of as hazardous waste in accordance with state hazardous waste regulations for generators, transporters, and treatment, storage, and disposal facilities).

F. Hazardous Material Handling:

1. Construction Contractors shall transport and store all known or potentially hazardous materials in original containers with manufacturer labels meeting the OSHA Hazard Communication requirements (29 CFR 1910.1200). Repackage or place bulk materials

and materials into different containers at the job site and clearly label in accordance with OSHA Hazard Communication requirements (29 CFR 1910.1200). Do not bring materials without proper, legible labeling to the Installation.

2. The Construction Contractor shall only use and store hazardous materials in areas that are free from obstructions or hazards such as tripping hazards, fire, standing water, or pests. All hazardous materials shall be separated in accordance with OSHA Material Handling requirements (29 CFR 1910.176[c]) and OSHA Hazard Communication requirements (1910.1200[b], and 1910.1200[f]).
3. The Construction Contractor shall store hazardous materials in containers that are in good condition, with no leaks or rust.

3.5 WASTE MANAGEMENT AND DISPOSAL

A. Construction and demolition debris consists of the materials generated during the construction, renovation, and demolition of buildings, roads, and bridges. Construction and demolition debris often contains bulky, heavy materials that include:

1. Concrete,
2. wood (from buildings),
3. asphalt (from roads and roofing shingles),
4. gypsum (the main component of drywall),
5. metals,
6. bricks,
7. glass,
8. plastics,
9. salvaged building components (i.e. doors, windows, and plumbing fixtures)
10. trees, stumps, earth, and rock from clearing sites.

B. Reducing and recycling construction and demolition debris conserves landfill space, reduces the environmental impact of producing new materials, creates jobs, and can reduce overall building Project expenses through avoided purchase/disposal costs. The overall intent of the recycling content of the Project shall be reconciled with the specific sustainable design requirements of the Project.

C. The waste requirements are designed to ensure the Installation meets and maintains compliance with:

1. OSHA's Toxic and Hazardous Substances requirements for bloodborne pathogens - 29 CFR 1910.1030.
2. State Solid Waste Regulations.

D. If the Construction Contractor generates solid wastes during the execution of a Contract, the Construction Contractor shall prepare a Solid Waste, Construction, and Demolition Debris Waste Management plan utilizing an outline provided by CEV and provide this plan to the Contracting Officer ten (10) working days before commencement of construction activities. Among other things, this plan shall document the extent to which waste materials can be recycled and identify the disposal/recycling pathway. In-house and troop forces shall comply with all the requirements contained in the Installation Solid Waste, Construction, and Demolition Debris Waste Management plan and do not need to write a separate plan. The Contractor shall:

1. Integrate generated solid waste into the Installation recycling process as appropriate. The Construction Contractor shall utilize local sources for recycling as much as possible.
2. Provide, as applicable, Installation with a plan for the disposal of medical waste.
3. Prepare and submit to the Contracting Officer a "Solid Waste Disposal Report" on a quarterly basis. This report shall itemize the type and amount of solid waste, by disposal category (e.g., recycled, land filled, reused) that was disposed of during the previous quarter.
4. Dispose of bulky wastes and demolition debris properly (e.g., automobile bodies, furniture, and appliances are required to be salvaged or crushed so as to minimum the volume of waste). Scrap tires may only be disposed of at approved solid waste disposal facilities.
5. Place all solid waste in a solid waste dumpster or roll-off provided by the Construction Contractor.
6. Place contaminated reusable sharps and other regulated wastes in puncture resistant, color coded, leak proof containers, as soon as possible after use and until properly reprocessed. Place specimens of blood or other potentially infectious materials in a container that prevents leakage during collection, handling, processing, storage, transport, or shipping. Specific labeling and handling requirements are to be followed (29 CFR 1910.1030[d]). The Construction Contractor shall also comply with the packaging, storage and labeling requirements specified in State's solid waste regulation if the Contractor generates infectious wastes.
7. To the extent practicable and as applicable, collect compost materials (organics, vegetation, grass, wood debris, etc.) and arrange with the Installation to utilize the material in its composting program. To the extent practicable and as applicable and if economically feasible, sort and recycle wood debris by three categories: painted, pressure treated, or creosote treated.
8. Dispose of sewage through existing connections to the Installation sanitary sewage system. Where such connections are not available, use chemical toilets or comparably effective units; periodically, have these toilets serviced by a licensed Contractor in accordance with all applicable regulations. Do not dispose of sanitary waste into the sewage system without approval of the Installation.
9. For projects requiring offsite disposal of solid waste, disposal shall be to land fills holding a valid State Waste Disposal Permit.
10. The Installation has the following disposal facilities available for use by the Construction Contractor: Topsoil, asphalt and concrete rubble disposal sites as indicated on Project Reference Drawing G1.1.

3.6 HISTORIC AND CULTURAL RESOURCES

A. The National Historic Preservation Act of 1966 (NHPA) Title 16 United States Code (U.S.C.) Section 470, establishes the role of the Federal government, in cooperation with other nations and in partnership with the States, local governments, Indian tribes, and private organizations and individuals regarding significant cultural resources. These specific roles are outlined in Sections 402, 110, 111, and 106. Among these are standing architectural features (districts, buildings, structures, and objects) and archaeological sites.

B. If any artifacts over 50 years old are discovered during construction activities, the Construction Contractor shall cease work and contact the Contracting Officer for further instructions.

3.7 NATURAL RESOURCES

A. General:

1. Construction activities impacting wildlife habitat shall be planned outside of the primary breeding and nesting periods whenever possible. Impacts to aquatic resources shall be planned during low flow periods and outside of primary spawning seasons.
2. Workers shall not harm or harass any wildlife species.
3. Pesticide use shall be in accordance with the Installation's Pesticide Management Plan and according to all product labels. The Pesticide Management Plan may have restrictions not found on labels that protect sensitive habitats or endangered species.
4. The Construction Contractor shall return the staging area to its original condition upon completion of the work. Returning the staging area to its original condition may require, among other things, revegetation and remediation. Perform the work at the Construction Contractor's expense.
5. Construction Contractors shall minimize, to the extent possible, the creation of new roads and trails around Project areas. Any such trails/roads shall be rehabilitated and re-vegetated by the Construction Contractor when the Project is completed.

B. Wetlands and Other Waters of the United States:

1. Section 404 and Section 10 of the Clean Water Act regulate dredge and fill operations within Waters of the United States. The United States Army Corps of Engineers (USACE) has jurisdiction over activities affecting Waters of the United States including special aquatic areas such as wetlands.
2. Contractor shall obtain USACE permit if required. The Construction Contractor will adhere to the conditions set forth in this permit.
3. All water crossings and wetland impacts shall be limited to the least amount possible.
4. Mats shall be used for large equipment working in wetlands. This will limit vegetation and soil disturbances.
5. Construction areas and staging areas near wetlands and streams shall contain ample storm water controls to avoid sediment or other pollutants from reaching these waters.
6. Construction within a designated 100-year floodplain is required to adhere to any local floodplain permits or ordinances.

C. Threatened and Endangered Species:

1. The Endangered Species Act of 1973, as amended, requires all federal actions be assessed for potential impacts to species designated as threatened or endangered by the Department of the Interior.
2. The Installation has identified that the following protected species may be present within the Project area: Species and habitat of a Red-cockaded Woodpecker (RCW) or cavity tree. Individual RCW cavity trees may be identified by the Installation, marked with two 6 inch white bands at eye level. Protective measures shall be taken to ensure that construction activities do not affect these species.

    a. All site personnel shall be instructed by the Installation as to the reason for, and importance of, limiting impacts to vegetated habitat outside the work area.
    b. The Installation familiar with the habitat needs and identification of the species of concern may supervise Work at all times. This type of monitoring is usually only necessary for new construction projects and when the species of concern are likely to enter the work zone.

c. The area of proposed impacts for any construction, maintenance, or repair actions shall be fenced with aesthetically pleasing fence or a similar visible barrier to prevent inadvertent impacts to habitat outside the construction footprint.

d. In the unlikely event that a threatened or endangered species (dead, injured, or hibernating) is located during any activities, the USFWS, and Installation Natural Resources Point of Contact (POC) shall be contacted immediately.

D. Construction Timber:

1. All projects on the Installation for which removal of trees is a requirement shall be coordinated with and approved by the Installation's Natural Resource POC. In accordance with Department of Defense Instruction (DODI) 4715.3, DODI 7310.1, and AFI 32-7064 Section 8.3, forest products shall not be given away, abandoned, destroyed, or used to offset Contract costs. Contact DPW-ENRMD at 531-6008/6007 or visit Building 2516 located at the intersection of Mississippi Avenue and 23rd Street for assistance.
2. All merchantable wood products [i.e. stems and limb wood equal to or greater than 4 (four) inches in diameter] that result from projects on the Installation proper shall have all limbs removed and be delivered to the Installation's wood yard if one exists. Such deliveries shall be coordinated with the Installation's Natural Resource POC to allow access to the wood yard. Leaving wood outside the wood yard fence is strictly prohibited.
3. All limb wood (to include stem wood) less than four inches in diameter produced in the completion of projects on Installation shall be delivered to the Installation's compost yard. Responsible parties shall contact the Installation's Natural Resource POC to coordinate delivery. Leaving limb wood outside of the compost yard fence is strictly prohibited. However, projects involving small amounts of limb wood may dispose of the wood by broadcasting it at the site if prior coordination has been made with the Natural Resource POC. In such cases, the limbs shall be lopped so as not to exceed twelve inches above ground level.
4. If no compost or wood yard exists on the Installation, the Contractor shall coordinate proposed off-site disposal methods and locations with the Installation's Natural Resource POC.
5. Any and all stumps that are to remain on site shall be cut as close to ground level as practical, not to exceed six (6) inches above ground level. Tree branches that obstruct the movement of equipment shall be cut flush to the trunk. The remaining portions of limbs broken by the passage of equipment shall be cut back flush to the trunk.
6. Any and all stumps with attached root masses shall be disposed of off Installation property to an approved landfill unless specifically authorized by the Installation's Natural Resource POS. Proper disposal of such stumps is the exclusive responsibility of the Contractor responsible for the Project.
7. In the event of a bona fide emergency outside of normal duty hours, trees may be removed if absolutely necessary without consulting the Installation's Natural Resource POC. All other provisions, however, remain in effect with regard to disposal of wood products at the earliest opportunity.
8. Removal of forest products without a permit from the Installation constitutes theft of government property.

E. Native Revegetation of Disturbed Areas:

1. Consult the Installation's Vegetation Management Plan and Integrated Natural Resource Management Plan for seed mixes for re-vegetating disturbed areas. Construction Contractors or government workers shall consult with the Installation's natural resources

staff to develop a Restoration Plan for Project areas. If such plans are not in existence and the Installation does not have a natural resource staff the local Natural Resource Conservation Commission (NRCS) shall be contacted for their recommendations. The goal of the Restoration Plan is to restore disturbed areas to their original natural condition unless otherwise stipulated by landscape designs.

2. Plant Materials: Special seed mixes may need to be developed for unique sites such as wetlands and riparian areas. Any modification of the recommended seed mixes shall be coordinated with the Contracting Officer and/or natural resource staff. All seed mixes shall use certified varieties, be free of noxious weeds, and have been tested for purity and germination within one year of the planting date. If possible, all seed shall originate from sources not more than 250 miles south, 150 miles north, and 200 miles east or west of the Installation.
3. Special consideration shall be taken on rangeland areas. For range management areas, Contractors shall use only certified weed-free hay on Installation property.
4. Site Preparation: Soil Preparation. Prior to disturbance activities every attempt shall be made to stockpile topsoil from disturbed areas for later use in restoration activities. The disturbed site shall be tilled to a minimum depth of six inches, then harrowed or raked to produce a firm seedbed for planting. Some sites may not require tillage to provide a suitable seedbed, but this determination will only be made by Installation personnel. Sites without suitable surface soils for plant growth shall be covered with 4-6 inches of weed-free native topsoil that shall be incorporated by disking. Large rocks (>6 inch diameter) and other debris shall be cleared from the site. Any necessary structures (e.g., water bars, turnouts) to reduce runoff and prevent soil erosion shall be constructed prior to seeding.
5. Seeding and Mulching:

    a. Seeding Dates: The type of seed mixtures to be used will be affected by the planting season. Normal seeding shall occur during seasons with ample rainfall and temperature to promote growth. If planting during the dry season supplemental irrigation of 0.5 inches/week shall be provided during the first growing season to promote seedling survival, unless otherwise stated by the Installation.
    b. Seeding Methods: Drill seeding or broadcast seeding shall be used depending on the slope of the disturbed site and the size of the area.

        1) Slopes less than 3:1: Seed shall be drilled using a rangeland or grass drill with a small seed/legume box and an agitator box for fluffy or bulky seed. Seed rows shall be spaced 7-10 inches apart, and planted 0.5 to 0.75 inches deep. The drill shall have double disk furrow openers with depth bands and packer wheels. Seeding shall be accomplished by following the contour of the slope. The drill shall be calibrated each day or whenever changing seed mixes to ensure even seed distribution.
        2) Slopes greater than 3:1 and areas less than 0.5 acre: Seed shall be broadcast by hand, mechanical spreader, or hydraulic equipment. Broadcast seeded areas shall be raked or harrowed to incorporate the seed into the soil at a depth not exceeding 0.75 inches. Seed shall not be mixed in a tank with hydromulch and broadcast.
        3) Mulching: Weed-free native hay, weed-free straw, virgin wood fiber hydromulch, or erosion control blankets shall be used to promote germination and seedling establishment. Native hay, straw, or hydromulch shall be applied at 2000 pounds/acre on slopes less than 3:1. Native hay or straw shall be crimped into the soil to a depth of 3-4 inches, and shall protrude above the ground 3-4 inches. Hydromulch shall be applied using the recommended rate of an organic tackifier. Erosion control blankets shall

be used whenever reclaiming slopes greater than 3:1 or along drainage areas where erosion is probable.

4) Reseeding: If a partial or total seeding failure is apparent after the second growing season, unvegetated areas shall be reseeded in the same manner described above. Appropriate site preparation practices shall be used to create a suitable seedbed for planting, but any established native vegetation shall be undisturbed. Areas that erode and lose seed before establishment can occur shall be immediately reseeded.

6. Trees and Shrubs:

a. Protection: Protect existing trees which are to remain from injury, bruise, defacing, or other damage from construction operations. Remove displaced rocks. By approved excavation, remove trees with 30 percent or more of their root systems destroyed.

b. Replacement: Remove trees and other landscape features scarred or damaged by construction operations, and replace with equivalent, undamaged trees and landscape features. Obtain Contracting Officer's approval before replacement.

c. On February 3, 1999, the President issued Executive Order 13112 to prevent the introduction of invasive species and provide for their control, and to minimize the economic, ecological, and human health impacts. All landscaping shall consist of native, non-invasive species.

3.8 POLYCHLORINATED BIPHENYLS

A. Polychlorinated Biphenyls (PCBs) are mixtures of synthetic organic chemicals with the same basic chemical structure and similar physical properties ranging from oily liquids to waxy solids. Due to their non-flammability, chemical stability, high boiling point and electrical insulating properties, PCBs were used in hundreds of industrial and commercial applications including electrical, heat transfer, and hydraulic equipment; as plasticizers in paints, plastics and rubber products; in pigments, dyes and carbonless copy paper and many other applications. More than 1.5 billion pounds of PCBs were manufactured in the United States prior to cessation of production in 1977.

B. Concern over the toxicity and persistence in the environment of PCBs led Congress in 1976 to enact §6(e) of the Toxic Substances Control Act (TSCA) that included among other things, prohibitions on the manufacture, processing, and distribution in commerce of PCBs. Thus, TSCA legislated true "cradle to grave" (i.e., from manufacture to disposal) management of PCBs in the United States.

C. Provide certification that all persons or entities under Contractor control have had awareness training to recognize the potential presence of PCBs that may be encountered during conduct of service or construction Contracts.

D. Contractor and all subcontractors shall prepare a written procedure outlining the notification process between their employees/subcontractors/agents and Contractor management and to the Contracting Officer informing of the presence of PCBs not identified beforehand. All construction workers that handle the PCBs and/or PCB wastes shall be trained of PCBs and hazards associated with PCBs and also trained in accordance with OSHA 40-hour HAZWOPER.

E. Construction Contractors shall be responsible for ensuring equipment or materials brought on the Installation do not contain PCBs. The Construction Contractor shall be required to obtain prior approval from the Contracting Officer for an exemption to this requirement.

F. Should the Contractor encounter previously unidentified or unanticipated suspect PCB items, that must be disturbed, the Contractor shall cease that work which would disturb the suspect items and shall immediately notify the Contracting Officer. The Installation shall evaluate the extent to which there are cost impacts to abatement and disposal and take steps as necessary to resolve the issue.

3.9 RADON

A. Radon (chemical symbol Rn) is a naturally occurring radioactive gas found in soils, rock, and water throughout the U.S. It has numerous different isotopes, but radon-220, and -222 are the most common. Radon causes lung cancer, and is a threat to health because it tends to collect in homes, sometimes to very high concentrations. As a result, radon is the largest source of exposure to naturally occurring radiation.

B. The Radon requirements are designed to ensure the Installation meets and maintains compliance with 40 CFR Part 61, Subpart I.

C. A Radon assessment has not been performed for the site. The Contractor shall determine if the Project site has Radon concerns. Measures shall be taken to ensure public and worker safety.

3.10 LEAD-BASED PAINT

A. A Hazardous Material Assessment has not been performed for the Project site. Notify Government's Designated Representative immediately if LBP/PWL or suspected LBP/PWL is encountered.

3.11 ASBESTOS

A. A Hazardous Material Assessment has not been performed for the Project site. Notify Government's Designated Representative immediately if ACM or suspected ACM is encountered.

3.12 SPILL PREVENTION AND RESPONSE PROCEDURE PLAN

A. General:

1. Spill prevention and response requirements are designed to ensure the Installation meets and maintains compliance with:

   a. AFI 32-4002; Hazardous Material Emergency Planning and Response Program.
   b. RCRA Contingency Planning Requirements - 40 CFR Part 264, Subpart D, 40 CFR Part 265 Subpart D, and 40 CFR 279.52.
   c. OSHA Hazardous Waste Operations and Emergency Response (HAZWOPER) Regulation - 29 CFR Part 1910.120.
   d. Spill Prevention Control and Countermeasure Plan - 40 CFR 112.7.

2. Spill response and reporting procedures and liability requirements are designed to ensure the Installation meets and maintains compliance with:

    a. AFI 32-4002; Hazardous Material Emergency Planning and Response Program.
    b. RCRA Contingency Planning Requirements - 40 CFR Part 264, Subpart D, 40 CFR Part 265 Subpart D, and 40 CFR 279.52.
    c. OSHA Hazardous Waste Operations and Emergency Response (HAZWOPER) Regulation - 29 CFR Part 1910.120.
    d. Spill Prevention Control and Countermeasure Plan - 40 CFR 112.7.
    e. Emergency Planning and Community Right-To-Know (SARA Title III) - Sections 301, 302, 303, and 304.

3. The Requirements for Petroleum, Oil, & Lubricants are designed to ensure the Installation meets and maintains compliance with:

    a. OSHA's Hazard Communication Regulation - 29 CFR 1910.1200.
    b. EPA SPCC Requirements - 40 CFR 112.
    c. Local and State Oil and Petroleum Spill Prevention Requirements.

B. Responsibility:

1. If Contractor manages, stores, or uses hazardous materials (including fuels) or produces hazardous waste, Contractor shall develop a Spill Prevention and Response Procedure (SPRP) Plan. The Construction Contractor's SPRP plan shall contain, as a minimum:

    a. General identification information including:

        1) Contractor name.
        2) Mailing address.
        3) Primary and alternate contacts.
        4) Contact's phone numbers (land line plus mobile if available).
        5) Contact's pagers.
        6) Contact's fax number.

    b. A list of spill prevention and response equipment and materials with a corresponding map showing their location on-site.
    c. A description of hazardous chemicals, HAZMAT, and their storage containers with a corresponding map showing their location on-site.
    d. Actions the Construction Contractor shall take upon discovery of an incident including a statement of emergency response actions that the Construction Contractor will take based upon its training and capabilities.
    e. Procedures for notification of the Installation after discovery of an incident.
    f. Actions the Contractors shall take to contain and clean up spills as well as dispose of spill residue.
    g. A description of how the Contractor shall coordinate and complete any required corrective actions.
    h. A description of required employee hazardous material and spill response training. (Training to be provided to employees as required by all applicable Federal, state, and local regulations and copies of employee workplace hazard training program maintained on site at all times).

2. Submit the completed SPRP plan to the Contracting Officer a minimum of ten working days prior to commencement of work for review and approval. The Installation will make

a copy of its SPRP plan available to the Construction Contractor, upon request, to use as a guide in preparing their SPRP. The Construction Contractor may not adopt the Installation's SPRP as the Construction Contractors SPRP without the addition of Construction Contractor specific information as outlined above.

C. Spill Response and Reporting Procedures and Liability:

1. The Construction Contractor shall manage, store, and use all hazardous materials (including fuels) in accordance with good engineering practices and implement best management practices in order to prevent spills and releases. The Construction Contractor shall report spills to the Installation and execute timely and appropriate actions to contain and cleanup all spills in accordance with the Contractor SPRP plan and the Installation SPRP. The Installation does not authorize the Construction Contractor employees to provide emergency response nor clean up actions beyond the level of training of their employees. Once a spill or release of a hazardous material managed, used, or stored by the Construction Contractor has been contained, the Installation shall determine if additional cleanup is required and the extent of the Contractor's responsibility. The Construction Contractor shall be liable for any direct and indirect costs incurred during spill response and clean-up, including but not limited to administrative costs, materials, labor, equipment, shipping, packaging, testing, replacement equipment and materials, and disposal.
2. Construction Contractor-owned tanks used for vehicle or equipment refueling shall only be allowed to exist at the Installation if approved by the Contracting Officer. Construction Contractors requesting permission to stage a fuel tank on the Installation shall do so in writing to the Contracting Officer. Construction Contractors shall prepare a Spill Prevention Control and Countermeasure Plan (SPCC) and submit it with their request to stage a fuel tank. The Construction Contractor shall not use aboveground tanks with an individual capacity of greater than 660 gallons.
3. During fuel transfers, the Contractor shall utilize spill containment devices and have spill containment materials available.
4. The Construction Contractor is prohibited from performing routine servicing of vehicles such as oil changes or brake fluid changes on Installation property.
5. The Construction Contractor is prohibited from using oil on roadways or other surface areas for dust suppression.
6. The Construction Contractor shall not release secondary containment water when oil sheen is present. The Contractor shall collect contaminated containment water and make arrangements with the Installation Environmental Office for its proper disposition.
7. If the Construction Contractor uses aboveground petroleum, oil, and lubricants (POL) storage tanks, they shall be Underwriters Laboratory-approved, double-walled, convolute-type tanks.
8. The Construction Contractor, if an owner or operator of an AST containing POLs, is subject to provisions of the OSHA Hazard Communication Standard cited at 29 CFR 1910.1200 and shall comply with labels and other forms of warning, MSDSs, and training.
9. The Construction Contractor, if a generator of used oil, is subject to management standards for used oil (40 CFR 279.1) and shall:

    a. Store used oil only in tanks and containers.
    b. Keep tanks and containers in good condition and free of leaks.
    c. Label tanks and containers with the words "used oil".
    d. Stop, contain and cleanup spills or releases to the environment.
    e. Use a transporter with an EPA identification number when shipping used oil off-site.

10. The Construction Contractor managing POLs at the Installation is subject to local and state oil and petroleum spill prevention requirements including but not limited to the following reporting requirements:
11. The Construction Contractor shall report a release of oil that enters or may enter "waters of the state" including surface waters, groundwater, dry gullies, or storm sewers leading to surface waters to Local and State Department of Public Health and Environment (DPHE) immediately, the Installation Environmental Office shall also be notified.
12. The Construction Contractor shall report releases of oil to land greater than 25 gallons to the state immediately and notify the Installation Environmental Office.
13. The Construction Contractor shall not mix used oil with characteristic hazardous waste (e.g. gasoline) since the mixing constitutes hazardous waste treatment and requires a permit.

END OF SECTION

REQUEST FOR PROPOSAL

APPENDIX A

CERTIFICATION OF COMPLETED ABATEMENT

As authorized representative of the contractor, I hereby certify and attest that I have completed abatement work on project _____
Description
at _____, Contract Number _____
Location Number

in accordance with the contract provisions, federal, state and local regulations and have disposed of all waste and debris associated with this work at a landfill or disposal site authorized and licensed to accept such wastes. Copies of project logs and documents, landfill receipts and waste manifests are attached. At completion of all work, the work are visually inspected and found to be free and clear of all visual signs of asbestos materials and that clearance air quality monitoring and sample analysis under aggressive air disturbance conditions was found to be within permissible levels for space re-occupancy.

The contractor's representative further accepts and acknowledges that the contractor assumes all responsibilities for latent defects attributable to his failure to follow prescribed procedures or failure to properly abate the required conditions as described in the contract.

by: _____
Signature, Contractor or Authorized Representative Date

_____
Printed Name

_____
Printed Title and Firm

GOVERNMENT INSPECTOR'S CERTIFICATION

The Government's Inspector hereby certifies that he has accompanied the Contractor's Representative on his visual inspection and reviewed the results of his final clearance air quality monitoring and verifies that, to the best of his knowledge and belief, the above representations by the Contractor's Representative are true and correct.

by: _____
Signature Date

_____
Printed Name

_____
Printed Title and Firm

APPENDIX B

ENVIRONMENTAL CERTIFICATION
ACCOMPANYING COMPLETION OF NEW CONSTRUCTION

As authorized representative of the Contractor, I hereby certify and attest, to the best of my knowledge, that the construction completed under the contract (Government Contract No._____) is free and clear of building materials and products containing regulated quantities of asbestos and/or lead-based paints. I have determined the above based on product labels, manufacturer's information, submittal documents for specified materials, and other information available to me. The Contractor's representative further acknowledges and accepts that if it is later found that the Contractor has intentionally defrauded or misrepresented these facts, then the Contractor assumes total and complete liability for fines, penalties and/or abatement and removal of these materials at the direction of the Government.

by: _____
Signature, Contractor or Authorized Representative Date

_____
Printed Name

_____
Printed Title and Firm

GOVERNMENT INSPECTOR'S CERTIFICATION

The Government's Inspector hereby certifies and attests that, to the best of knowledge and belief, the above representations by the Contractor's representative are true and correct.

by: _____
Signature Date

_____
Printed Name

_____
Printed Title and Firm