

*ATTACHMENT #1*

# ***SPECIFICATIONS***

FOR

## **RKMF 00-0021**

# **REPAIR FIRE PROTECTION SYSTEM**

## **BLDG 200**

NELLIS AIR FORCE BASE, NEVADA



OFFICE OF THE BASE CIVIL ENGINEER

29 JANUARY 2010

(29 Jan 10)

## SPECIFICATION INDEX

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## SECTION 01010 SUMMARY OF WORK

### 1. PART 1 - GENERAL

#### 1.1. SUMMARY

**1.1.1. Description:** Contractor shall furnish all design, labor, equipment, material, manufactured articles, labor, transportation, supervision, and all else necessary to perform all operations in connection with successfully completing project **RKMF 00-0021, Repair Fire Protection System Bldg 200** as specified herein, as required per attached specifications and referenced documents, and as shown on individual project drawings.

#### 1.1.2. Definitions:

1.1.2.1. **Contracting Officer:** The Contractor shall be responsible for providing complete and usable facilities upon the completion of work. Henceforth, the term *Contracting Officer* refers to the Contracting Officer or his/her designated representative, and the term *Contractor* refers to the general contractor. The general contractor is responsible for all subcontractors, suppliers, and consultants under his employ.

1.1.2.2. **Contracting Officer's Representative:** The Base Civil Engineer or his authorized representative is designated as the Contracting Officer's Representative (COR) (Construction Manager), for the purpose of technical surveillance and evaluation of the work performed under this contract. This designation in no way authorizes anyone other than the Contracting Officer to commit the Government to changes in the terms of the contract.

**1.2. LOCATION:** The project sites are located at Nellis AFB Airfield.

**1.2.1.** Nellis Air Force Base (NAFB) located approximately nine (9) miles north of downtown Las Vegas on Highway U.S-93 (Las Vegas Blvd). NAFB consists of three main areas: the Main Base, Area II, and Area III.

#### 1.3. DESCRIPTION OF WORK

**1.3.1. SCOPE OF WORK:** The scope of this project shall include, but not be limited to, one or more of the line items described in the following subparagraphs. Note the term demolition includes haul and disposal of demolished material.

#### 1.3.2. EXISTING CONDITIONS WORK (DEMOLITION)

1.3.2.1. The asbestos and lead base paint survey for the areas the construction will take place is included as Attachment #3 to the solicitation and resulting contract.

1.3.2.2. Demolish existing dedicated sprinkler riser assembly and associated valves / components which are located in the first floor mechanical room (exterior access). The penetration through the concrete floor with the 6" pipe and mechanical flange fitting shall remain in place.

1.3.2.3. Demolish existing fire suppression lateral supplying the second floor sprinkler system from the first floor riser. To include but not limited to; main and secondary piping components, sprinkler

heads, hangers and isolation valves as required bringing the head drop spacing on the second floor to current NFPA requirements.

- 1.3.2.4. Demolish all existing fire detection systems on both the first and second floors to include but not limited to: existing fire alarm and releasing panels, elevator recall circuitry and switching, heat detectors below subfloor, above ceiling and in all rooms within the facility, manual pull stations, horn strobes, Heating Ventilation and Air Conditioning (HVAC) dampers, existing and abandoned system wiring and conduit, fire alarm, trouble / reset and enunciator panels.
- 1.3.2.5. Demolish all existing components associated with the abandoned Halon suppression system. This is to include but not limited to: wiring, devices, conduit and cylinder attachment mechanisms and pull stations.
- 1.3.2.6. Demolish existing fire alarm control panel to include all components inside and outside of the first floor electrical room. Power supply, Monaco control panel and Halon fire control panel shall be removed. The government does not wish to have any of this equipment or components returned upon completion of demolition.

### **1.3.3. FINISHES WORK**

- 1.3.3.1. The contractor shall patch all exposed areas of drywall on both the first and second floor walls left open after demolition of the fire alarm suppression, detection and notification system to include but not limited to control panels, pull stations, power supply, heat detectors, strobes and horn devices. All drywall patch work shall be taped, textured and painted to match existing adjacent surfaces. All patched drywall shall be repaired to maintain current SCIF ratings.
- 1.3.3.2. The contractor shall replace all suspended acoustical ceiling tile panels and grid system affected during demolition of the existing fire suppression and detection systems (approximately 22,000 square Feet). Existing suspended ceiling grid is a standard 2' X 4' extruded panel system.
- 1.3.3.3. After replacement of secondary enunciator panel located in the guard station, the control desk shall be modified as necessary to support the difference in sizes between proposed and existing panel sizes.
- 1.3.3.4. The contractor shall provide and install signage above the newly installed PIV to indicate open / closed direction required for turn.

### **1.3.4. FIRE SUPPRESSION and DETECTION WORK**

- 1.3.4.1. The contractor shall design a fire detection and suppression system for the entire facility. The design shall include but not limited to; new wiring for the fire detection system, elevator recall, fire door magnetic hold devices, suppression devices, horn strobes, heat detectors, pull stations, flow switches and HVAC shut down and dampers. The design shall be certified by a Fire Protection Engineer and a stamped copy shall be provided to the government for review.
- 1.3.4.2. The contractor shall provide and install a new wet fire suppression system on both the first and second floors. There are three specific rooms (two main control rooms and one server room) which will have activation of the suppression system connected to an automatic shunt / activation device which will terminate power to existing CPU / battery backup system.
- 1.3.4.3. The contractor shall provide and install a new fire sprinkler riser in order to comply with both base and NFPA standards. Riser shall include a new OS&Y valve which will penetrate the exterior CMU wall for outside operation. Activation of the OS&Y shall be programmed into the fire notification system as a "Supervisory Alarm". Riser shall include a backflow prevention device complete with tamper alarms on both valves.

### **1.3.5. HVAC WORK**

- 1.3.5.1. The contractor shall provide and install mechanical dampers, and/or shut down devices as necessary on both the first and second floors to ensure mechanical system will not operated during an activated alarm.

### **1.3.6. ELECTRICAL WORK**

- 1.3.6.1. The contractor shall provide and install a new fire alarm early notification system throughout the entire facility.
- 1.3.6.2. The early notification system shall include heat detectors installed in all rooms. Heat detectors shall be located in such a manner to cover all areas of the rooms to include sub-floor areas beneath the raised computer flooring, main room space mounted to suspended ceiling grid and / or hard lid ceilings. Heat devices should be tied into the alarm control and enunciators panels, and activate secondary notification systems as required. These systems include elevator recall, audio horn alarms and visual strobes, automatic release of the fire containment doors held open with magnetic devices, as well as automatic shut down of the HVAC system.
- 1.3.6.3. The contractor shall provide and install a new 4 loop addressable Hochiki ( or government approved equivalent) fire alarm control and releasing panels including necessary power supply, enunciator panels, zoned alarm release control panels, voice notification system, and Monaco BTXM radio transceiver (or approved equivalent) system calibrated to communicate with the main base operations center. New fire alarm control panel will provide monitoring, resetting, zone specific trouble identification, as well as provide overall control of the newly proposed fire suppression system on both the first and second floors. A voice mass communication system throughout the first and second floors shall report to the main panel located at the front guard's station.
- 1.3.6.4. All conduit penetrations into the existing SCIF rooms shall be patched and / or finished as necessary to ensure that the rooms maintain original SCIF ratings.
- 1.3.6.5. The contractor shall install tamper switches on the proposed PIV's which will connect and report to the fire alarm control panels and enunciator panels. All alarmed tampers shall be programmed as "Supervisory" for the fire alarm control system when activated.
- 1.3.6.6. The contractor shall provide and install NFPA approved exit signs with battery backups for all emergency exits.
- 1.3.6.7. All fire alarm early notification as well as suppression systems shall have necessary bypass function to facilitate on site testing without generating master alarms which will be transmitted through the Monaco (or approved equivalent) system to the fire department.

### **1.3.7. ESCORTS**

- 1.3.7.1. The contractor will have to be escorted at all times during construction. This is a classified facility and the contractor cannot do any work without being escorted. The contractor will have to include in their bid the cost of the escorts. The escorts must have a minimum of a Secret clearance. The ratio of escorts to contractors has to be 1 escort for every 5 contractors.

### **1.3.8. PERFORMANCE PERIODS:**

- 1.3.8.1. The performance period for this project shall be 365 days and is inclusive of all design, demolition, installation, testing, submittals, and clean-up.

**1.3.9. SINGLE, PRIME CONTRACT:** The work will be constructed under a single, prime contract.

**1.3.10. TESTING:** Quality control testing is the responsibility of the Contractor, and shall be performed by an independent commercial testing laboratory.

**1.4. SITE VISIT:** Contractors are urged to attend the site visit that will be scheduled by Base Contracting prior to submission of a proposal. (See Contract FAR Clauses 52.236-2, *Differing Site Conditions*, and 52.236-3, *Site Investigation and Conditions Affecting the Work*).

**1.5. NOTICE TO PROCEED:** At the beginning of a project, the Contracting Officer shall initiate a Notice to Proceed (NTP) to allow design/construction work to begin. This shall not occur until after the appropriate bonds have been received by the Contracting Officer after contract award. The performance times for the project are described in paragraph "Performance Periods".

**1.6. PERFORMANCE PERIOD:** Performance period for this project will be **270 calendar days**.

**1.7. CODES:** All design and construction must be in compliance with the International Building Code (IBC-2006) (or most recent edition), Department of Defense Unified Facilities Criteria Standards (UFC), all Public Laws (P.L.), Executive Orders (E.O.), Code of Federal Regulations (CFR), Department of Defense Instructions (DODI), Department of Defense Directives (DODD), and Clark County, State of Nevada, and Federal standards, codes, and laws or other higher authority documents as applicable. Any discrepancies between code or standards provisions and the contract documents shall immediately be brought to the Contracting Officer's attention, and the more stringent requirements shall apply unless otherwise directed. All project design and construction shall meet requirements stated in the Nellis AFB Design Compatibility Guidelines. Contractors shall be responsible for obtaining any copies of all items referenced in this paragraph. Department of Defense criteria can be retrieved at: <http://cbbs.spk.usace.army.mil>.

**1.8. WORKING HOURS:** See Contract Clause F-101, Normal Hours of Work.

#### **1.9. NELLIS AIR FORCE BASE ENTRY**

**1.9.1. Contractor Access:** Reference contract clause AFFARS 5352.242-9000, *Contractor Access To Air Force Installations*, for details on obtaining base access passes for contractor personnel.

**1.9.2. Conformance with Regulations/Directives:** The Contractor shall conform to base regulations and directives pertaining to security, safety, traffic, fire and personnel clearances, insofar as they pertain to the Contractor's activities as directed by the Contracting Officer.

**1.9.3. Enhanced Security Measures:** During elevated force protection levels there may be increased security and more restricted access to Nellis AFB.

**1.9.4. Additional Information:** The following procedures and requirements for construction contractors requiring access, if followed, will assist in reducing delays in gaining access to work areas.

1.9.4.1. At Nellis AFB, construction contractors may access the base through the Main Gate, Tyndall Gate, Range Road Gate, and Area II Gate. However, all commercial vehicles and vehicles larger than pickup trucks will be required to access the base through the Area II gate only (or Range Road Gate for Area III access); the turnoff to the Area II gate is across from the racetrack on Las Vegas Blvd approximately 3 miles north of the Main Gate. At Creech, all construction contractors may access the base through the commercial gate located on the south east area of the base off of Highway 95.

1.9.4.2. Each employee and their vehicle may be subjected to search before entry. Each employee will be expected to comply with all directions provided by security personnel at the access gates. Failure to fully comply with directions provided by security personnel will result in access being denied. Before attempting access, ensure there are no weapons or other prohibited items in the vehicle as they will be confiscated if found. Further, no practical jokes or wise remarks will be tolerated. Security of Nellis AFB is treated as serious business and full cooperation is required.

1.9.4.3. Personnel cannot show up at the gate without prior notification for access and expect to gain access. Verbal access cannot be provided.

1.9.4.4. Once access to the base has been granted, each contractor employee will be expected to proceed to the work site and not go to other facilities except in the performance of their work. Access to the flightline can only be allowed through additional authorization.

1.9.4.5. Expect some delays in gaining access to the base especially between the hours of 6:30 AM to 8:00 AM due to heavy traffic volumes.

1.9.4.6. Gate Hours: Gate hours are subject to change by the Government at any time due to military activities. Contractor shall be responsible for coordinating with the Contracting Officer for base access.

**1.9.5. Unauthorized Activity:** The contractor shall inform all personnel working under his/her jurisdiction (including subcontractor and supplier personnel) that access to areas outside of the immediate work area (excluding cafeterias and restrooms near the work site, direct haul and access routes, Contracting and Civil Engineering offices, and points of supply and storage) is prohibited. Circulation of said personnel will be limited to official business only. Persons engaged in unauthorized reconnaissance of other contractor or government activity will be referred to the Contracting Officer for disposition. Infractions involving possible compromise of national security will be turned over to the FBI for disposition.

**1.9.6. BASE REGULATIONS:** Contractor employees and visitors are subject to the same restrictions as government personnel.

1.9.6.1. **Smoking:** Smoking is permitted in designated, outside smoking areas only. No smoking will be allowed within any base facility.

1.9.6.2. **Seatbelts:** The use of seatbelts by all vehicle operators and passengers is mandatory on Nellis AFB and in the state of Nevada. On Nellis AFB, vehicle operators and passengers caught not wearing their seatbelt will be issued a traffic citation and may lose their on-base driving privileges.

1.9.6.3. **Firearms/Illegal Drugs:** No firearms or illegal drugs are allowed to be brought onto Nellis AFB. By accepting a vehicle pass, each person gives their consent to a search of their vehicle while it is entering, on, or leaving Nellis AFB

1.9.6.4. **Speed Limit:** The speed limit on base is 25 MPH; in base housing areas and flightline it is 15 MPH; and in parking lots it is 5 MPH.

1.9.6.5. **Cell Phones:** Use of non-hands-free cell phones while driving on an AF installation is prohibited.

1.9.6.6. **Parking:** Contractor vehicles and equipment will be parked in common parking areas or as otherwise approved in writing by the Contracting Officer.

## **1.10. COORDINATING AND SCHEDULING**

**1.10.1. Work Coordination:** In order for the work to progress smoothly and cause minimal difficulties, it will be necessary for the contractor, construction inspector, project engineer, and Contracting Officer to maintain close and active coordination. At all times, the Contractor shall keep the Government informed of when and what work will be accomplished. All work schedules will be coordinated with the appropriate representatives of the Contracting and Technical offices.

1.10.1.1. All work shall be programmed and accomplished in such a manner that causes minimum inconvenience to the government.

1.10.1.2. At least two (2) calendar days prior to testing or closing hidden work, the Contractor shall identify such work and notify the Contracting Officer and Technical Representative when it will be accomplished. If proper inspections are not accomplished as a result of such lack of notification, the

Contractor bears the risk of possibly removing completed work and reaccomplishing such uninspected work at no cost to the government.

**1.10.2. Progress Schedule:** The schedule contemplated by contract clause FAR 52.236-15, *Schedules for Construction Contracts*, shall be accomplished on and in accordance with the instructions pertaining to AF Form 3064 (AF3064), *Contract Progress Schedule*, and as specified herein.

1.10.2.1. Work percentages shall be plotted weekly, from Saturday through Friday, beginning with the date of receipt of the Notice to Proceed (NTP) through the contract completion date. Once approved, schedules will not be changed without Contracting Officer direction and/or approval.

1.10.2.2. The Work Elements, column B on the AF3064, shall be limited to 11 items and shall begin with the appropriate Bond cost and Design price (if applicable) as item #1. Thereafter, each element shall be identified by the applicable, major element of work (e.g., Site Work, Concrete, Electrical, etc.). The last element will be titled "Close-Out" and will equal 10% of the project.

1.10.2.3. The percentage of each listed work element of the job shall be shown opposite each major work element in Column C of the *Contract Progress Schedule* and may be expressed in whole numbers or may be carried out to two (2) decimals.

1.10.2.4. In order to assist in evaluating the AF3064, as well as the progress of construction, the contractor shall supplement the AF3064 with a *Schedule of Values* worksheet which will identify each sub-element of work along with its dollar and percentage values of the project work. A "network analysis system" may be used to supplement the proposed progress schedule.

1.10.2.5. High dollar value material items may be submitted for payment prior to installation in conformance with Contract FAR Clause 52.232-5, *Payments Under Fixed-Price Construction Contracts*, and G-804, *Payment For High Value Material Items*. Such items must be clearly and separately identified in the Schedule of Values (either as a major or sub-element of work) specified in the approved AF3064.

**1.10.3. Progress Reports:** The report contemplated by contract clause FAR 52.236-15, *Schedules for Construction Contracts*, shall be accomplished on and in accordance with the instructions pertaining to AF Form 3065 (AF3065), *Contract Progress Report*, and as specified herein.

1.10.3.1. *Progress Reports* shall be submitted weekly by close of business on the Monday following completion of the previous rating period.

1.10.3.2. Whenever the cumulative percentage of the work is 5% or more below the scheduled percentage, the *Progress Report* shall be accompanied by a letter of explanation for the delay and a plan detailing how the contractor intends to get back on schedule.

1.10.3.3. Each AF3065 shall be reviewed by the COR for accuracy. Payment shall be authorized based on the Contracting Officer's determination of percentage complete as reflected on the approved AF3065.

## 1.11. SUBMITTALS

### 1.11.1. AF Form 66 (AF66), *Schedule of Material Submittals*:

1.11.1.1. If an AF66 listing required submittal items was included with the project documents: Within 10 calendar days after receipt of the Notice to Proceed (NTP) with construction, the Contractor shall identify a not later than "required submission date" for each item specified on this form. Contractor shall ensure the specified dates provide adequate time to process the requirement and allows sufficient order/receipt time prior to the projected installation date.

1.11.1.2. If an AF66 is required to be developed with the design documents for the project: The contractor shall develop and provide the AF66 within the timeframes specified. Required submission of the material items listed shall be identified as NTP + XX calendar days. Contractor shall ensure the

specified dates provide adequate time to process the requirement and allows sufficient order/receipt time prior to the projected installation date.

**1.11.2. AF Form 3000 (AF3000), *Material Approval Submittal*:**

1.11.2.1. Each submittal shall be transmitted under an AF3000 and shall be prepared in accordance with the Instructions on the reverse of the form and in Section 01300, *Submittals*.

1.11.2.2. Variance from contract requirements: Whenever materials or drawings are required to be submitted by the Contractor for approval, and the material or drawings submitted are at variance with the specifications or Government drawings, but are approved by the Contracting Officer inadvertently and without consciousness of the variance, then the approval shall not be final unless the Contractor expressly noted on the submittal that "This material or drawing varies from specifications in the following aspects."

**1.12. GOVERNMENT-FURNISHED-PROPERTY (GFP):** Government Furnished Property (GFP) includes both Government-Furnished-Material (GFM) and Government-Furnished Equipment (GFE) and is defined as material or equipment owned by the Air Force that is being furnished to the Contractor to be used in the execution of the contract. If authorized and provided under the contract:

**1.12.1. Inventory:** GFP shall be inventoried jointly by the Contracting Officer and the Contractor to document the condition, quantity, etc. prior to exchange.

**1.12.2. Responsibility:** Once the Contractor takes possession, GFP becomes the Contractor's responsibility and they will be held liable for loss, damage, destruction, or theft of GFP.

**1.12.3. Return:** GFE shall be promptly returned to the government upon completion of the activity.

**1.12.4. Excess:** All excess GFM (i.e., property that may be consumed or expended during the performance of a contract) shall be returned to the government, unless otherwise noted in the contract documents.

**1.13. HAUL ROUTE**

**1.13.1. Specified Haul Route:** The Contractor shall follow specified haul routes for this project, unless otherwise directed. The Contractor may make changes to the route only with the prior approval of the Contracting Officer at no additional cost to the Government. The Contractor shall restore the area to its original condition at the end of the contract period unless specific, written approval has been granted by the Contracting Officer.

**1.13.2. Haul Route Cleanup:** Refer to paragraph "Cleanup".

**1.14. MATERIAL STORAGE**

**1.14.1. Storage Area:** Unless otherwise indicated, no on-base storage facilities are available for contractor owned supplies, tools, materials or equipment. Buildings and structures which are part of the contract may be used for storage providing the space is not required for government occupancy and the contractor accepts full responsibility for the material stored therein. The Contractor shall be responsible from protecting all construction materials from weather damage.

**1.14.2. Storage Site:** the Contracting Officer shall designate a storage site for contractor-owned supplies, tools, materials, and/or equipment in close proximity to the jobsite. All job equipment and material not in use, but to be installed in or used on the project by the Contractor may only be stored in this area. Security for the equipment and material storage shall be by the Contractor at his risk. Contractor shall install and maintain temporary fencing around storage area. Fence shall be a minimum of 6 feet high and have tan screening material so visibility through fence is obstructed. Fence shall be of sufficient strength to withstand imposed wind loads, shall remain in place for the duration of the contract, and be removed at the end of the contract at the contractor's expense. Site shall be returned to its original condition.

## 1.15. UTILITIES SERVICES

**1.15.1. Water and Electricity:** In accordance with Contract FAR Clause 52.236-14, *Availability and Use of Utility Services*, all reasonable amounts of domestic water and electricity will be made available to the Contractor by the Government from existing system outlets and supplies. Normal quantities of electricity and water necessary to make final tests of completely installed systems will be furnished by the Government. With prior coordination with the Contracting Officer, the Contractor shall be given access to water hydrants to obtain water for construction activities. The Contractor shall provide and install a double back flow preventer with meter to all water hydrants made available to them for project use.

**1.15.2. Telephone:** Commercial telephone lines are not available to the contractor. Separate communication arrangements must be made by the Contractor as necessary.

**1.15.3. Temporary Utility Connections:** The Contractor shall, at his own expense, make all temporary connections and install distribution lines. The Contractor shall furnish to the Contracting Officer a complete system layout drawing showing type of materials to be used and method of installation for all temporary electrical systems. All temporary lines shall be maintained by the Contractor in a workmanlike manner satisfactory to the Contracting Officer and shall be removed and the area restored to its original (or better) condition by the Contractor prior to final acceptance of the construction. The point of connection shall be coordinated with the Government technical representative prior to connection. If additional outlets are needed they will be provided at the Contractor's expense.

**1.16. EMERGENCY MEDICAL TREATMENT:** The *Mike O'Callaghan Federal Hospital* (MOFH) will provide emergency medical treatment to employees of the Contractor for injuries incurred while working at Nellis AFB NV. The Contractor will be required to reimburse the Government at an established rate for non-beneficiaries in accordance with DoD Regulation 6010.15. After receiving initial emergency treatment, the Contractor will provide the hospital with the name of a physician and/or hospital to which injured personnel can be transferred for further treatment and care. Follow-on care after initial emergency treatment will not be provided. There are very limited medical services available at Creech AFB and on the NTTR.

## 1.17. SECURITY

**1.17.1. Physical Security:** The Contractor shall provide physical security for the materials and work under his control, and shall immediately notify the Contracting Officer when equipment, material or work area is damaged.

**1.17.2. Security Personnel:** If the Contractor elects to provide security personnel, Contractor security personnel will not carry weapons on base (including MACE and night sticks). It is the responsibility of the Contractor to notify security police, through the Contracting Officer, of security personnel who will be in the area.

**1.17.3. Communications:** In accordance with Air Force Instruction 33-211, all communications with DoD organizations are subject to communications security (COMSEC) review. Contractor personnel will be aware telephone communications networks are continually subject to intercept by unfriendly intelligence organizations. The DoD has authorized the military departments to conduct COMSEC monitoring and recording of telephone calls originating from, or terminating at, DoD organizations. Therefore, civilian contractor personnel are advised any time they place a call to, or receive a call from, a USAF organization, they are subject to COMSEC procedures. The contractor will assume the responsibility for ensuring wide and frequent dissemination of the above information to all employees.

## 1.18. SAFETY AND ACCIDENT PREVENTION

**1.18.1. General:** Compliance with the current U.S. Army Corps of Engineers "*Safety and Health Requirements Manual*", EM 385-1-1; *Occupational Safety and Health Act* (OSHA) Public Law 1910 and

1926; *Air Force Occupational Safety and Health* (AFOSH) standards, and current Nellis AFB safety regulations is mandatory. The prime Contractor shall be held responsible to insure that his/her workforce and any subcontractor or supplier workforce comply to the above safety requirements.

**1.18.2. Personnel Safety:** Adequate protection of all persons shall be provided at all times. Work shall proceed in a manner to prevent hazard.

**1.18.3. Temporary Barriers:** Contractor shall install and maintain temporary barriers around construction work areas to prevent unauthorized personnel from area.

**1.18.4. Safety Briefings:** Contractors operating on base will be responsible to brief and ensure their employees, subcontractors, and suppliers comply with all traffic rules and regulations as well as entry procedures.

**1.18.5. Security Police:** All instructions given by Security Police personnel will be complied with immediately. All on-base traffic rules are contained in Air Force Instruction (AFI) 31-204, *Motor Vehicle Traffic Supervision*.

**1.18.6. Equipment and Tools:** Equipment to be used on the project shall be safe and in good operating condition. The Contracting Officer reserves the right to inspect any on-base equipment and reject such equipment if he considers it unsafe, in poor operating condition, or inappropriate for work.

**1.18.7. Explosive Operated Hand Tools:** The Contractor shall comply with OSHA (Occupational Safety and Health Act) Standard 1910.215(c) when utilizing explosive operated hand tools. Storage of explosive cartridges on the installation will be in metal containers and limited to one day's supply. The contractor will provide adequate controls to prevent loss/theft of cartridges used and stored on the installation.

**1.18.8. Use of Radioactive Devices on Government Property:** Under no circumstances will an unlicensed radioactive device be used on Nellis Air Force Base. Prior to using a radioactive device (i.e., soil or asphalt density meter) on government property, the contractor shall submit an application to the Contracting Officer for approval by the Base Radiation Protection Officer (99th Medical Group/SGPB). In accordance with Nellis AFB Instruction 48-101, the application shall be submitted thirty (30) to sixty (60) calendar days prior to the anticipated use and will consist of the following:

- A copy of the appropriate NRC license or State Permit to operate/own the radioactive device.
- A copy of the operator's qualifications and/or radiation safety training.
- Radiation dosimetry results for the operator for the past calendar year.
- A statement of the expected start date and the length of the contract (task order).
- A statement of expected storage and security requirements or other peculiar needs of the contractor.
- Copies of the last two leak tests.

## **1.19. FIRE PREVENTION AND PROTECTION**

**1.19.1. Nellis AFB Fire Regulations:** The Contractor shall comply strictly with the Base fire regulations and become thoroughly familiar with and brief employees and subcontractors on the fire safety requirements applicable to this contract.

**1.19.2. Welding Permit:** No welding, cutting or open flame will be permitted without obtaining a *Welding/Cutting/Burning Permit* issued by the Base Fire Department, Bldg 277. This permit shall be requested by the Contractor a minimum of one workday prior to required need. A permit must be obtained each time any welding, cutting, or open flame is required.

**1.19.3. Clean-Up:** The Contractor shall at all times maintain good housekeeping practices to reduce the risk of fire damage. All scrap materials, rubbish, and trash shall be removed daily from, in, and about the site. No debris shall be permitted to be scattered on adjacent property.

**1.19.4. Fire Extinguishers:** The Contractor shall provide fire extinguishers in accordance with the recommendations of the base fire regulations. Proper type fire extinguisher shall be available at each location where cutting and welding is being performed. Where electric or gas welding or cutting is done, interposed shields of incombustible material shall be used to protect against fire damage due to sparks and hot metal.

**1.20. ENVIRONMENT PROTECTION:** All work and Contractor operations shall comply with the requirements imposed by all applicable Federal, State, local, and base regulations and permits concerning environmental protection. The contractor shall submit a copy of a grading and dust permit obtained from Clark County, Nevada, for landscaping, grading, and trenching. Contractor shall pay for and obtain all Federal, State, local, and Nellis AFB permits required for the successful execution of the project. The time required to process and receive such permits is included in the performance period. The project schedule shall reflect time required to acquire permits prior to work commencing any affected work.

#### **1.20.1. Hazardous Materials**

**1.20.1.1. Definitions:** Any material defined as hazardous under the latest version of Federal Standard No. 313, or any item or class of items covered in the Emergency Planning and Community Right-to-Know Act (EPCRA) tracking requirements, OSHA HAZCOM Standard, and all Class I, and Class II ODS (Ozone Depleting Substances). The following items are a few examples of type of products that may be required to be track in the Air Force Environmental Management Information System (AF-EMIS):

- Items with the flash-point of 141 degrees or below.
- All paints, Lacquer, Enamels, and Thinners (water-based, non-lead, non-polyurethane Latex paints are exempt from HAZMART tracking, however, MSDS is still required).
- Adhesive, Sealants, Glues, some types of caulking.
- Some Cleaning Supplies: Bleach, some types of glass cleaner, Drain cleaners, some floor waxes & strippers and others.
- Pesticides, Insecticides, Herbicides, Fungicides. Usages of these products are to be used only if specifically specified in the contract, otherwise usage of these materials is not permitted on Nellis AFB. Usage must be reported to 99 CES/CEOUE, Building 1037. Phone number: 652-5613.
- Compressed gases.
- Any type of material with a PH of 2 and below or 10.5 and above.

**1.20.1.2. Material Safety Data Sheets (MSDS):** Prior to use, the Contractor shall submit MSDS for chemical or hazardous materials as defined in Federal Acquisition Regulation clause 52.223.3, *Hazardous Material Identification and Material Safety Data*, as a submittal item. Each MSDS shall be submitted in 3 copies, and the Contractor shall retain a copy for on-site use. All hazardous materials must be authorized before being used or brought on to the job site.

**1.20.1.3. Hazardous Materials Authorization Procedures for Contractors:** The Contractor is responsible for the proper handling and management of all hazardous waste generated from his/her work. The contractor will be held fully liable for any contractor activity/non-activity that results in a Notice of Violation (NOV) or any other regulatory penalty. Contractors using hazardous material (HAZMAT) on NAFB must comply with the authorizations procedures described below and in conformance with AFI 32-7086, 2.5.5.

1.20.1.3.1. Contractors must provide to the Nellis AFB Contracting office, as a submittal item, a list of proposed hazardous materials (HAZMAT), including Material Safety Data Sheets (MSDS) that it plans to use on the installation during the performance of the contract. The Contracting officer/administrator will then forward this information to the Quality Assurance (QA) evaluator or Inspector.

1.20.1.3.2. This information will be forwarded to the HAZMART office (Building 811) by the Inspector. HAZMART office will review the information and determine which contractor-identified materials need to be tracked.

1.20.1.3.3. For each contractor-identified HAZMAT that does not meet the Air Force definition of a HAZMAT, these requirements do not apply.

1.20.1.3.4. For each contractor-identified HAZMAT that does meet the Air Force definition of a HAZMAT, the HAZMART office will notify the Inspector of the material requiring authorization and tracking. An AF-EMIS worksheet will be completed and submitted as a submittal item to the Contracting Officer. The following information is required to be provided for each hazardous material used on Nellis AFB: Material Name, Manufacturer, Unit of Issue, and the amount used. If requested, The HAZMART office can assist the Contractor in completing the AF-EMIS worksheet.

1.20.1.3.5. The HAZMART office will enter the contractor supplied information into the HAZMAT tracking system to generate an AF Form 3952.

1.20.1.3.6. The Contractor will be issued tracking labels (barcodes) to assist in tracking and reporting the material used during the performance of the contract. It is encouraged that the labels be affixed to the material. A Form 3952 will also be issued for the Contractors files. Copies of the AF Form 3952 must be kept on-site for the duration of the project. The contractor will be added to the authorized users list (AUL) by the HAZMART office.

1.20.1.3.7. Contractor will be required to report to the inspector on a monthly basis (by the 5th of the month) and within 10 working days after the completion of the project, the material used (see Contractor's Monthly Hazmat Usage Report).

1.20.1.3.8. Inspector will forward this information to the HAZMART by the 10th of every month.

1.20.1.3.9. HAZMART office will assist the QA, Inspector, and Contractor in any way possible and to answer any questions.

1.20.1.3.10. Material brought on the installation that was not originally identified by the contractor must be authorized. MSDS and other related information, provided by the contractor, must be given to the HAZMART office.

1.20.1.3.11. Hours of operation for the HAZMART are 0700 to 1600 hours Monday through Friday, Building 811. HAZMART phone numbers: 652-9856 or 652-4352.

1.20.1.3.12. Webpage: <https://wwwmil.nellis.af.mil/units/99CES/environmental/hazmart&cap.htm>

**1.20.1.4. Asbestos and Lead Based Paint:**

1.20.1.4.1. Prior to abating asbestos, the Contractor shall obtain and provide a copy to the contracting Officer, an asbestos demolition permit ten (10) days prior to the removal of any asbestos from any facility at Nellis AFB or any other location specified in the contract.

1.20.1.4.2. The Contractor shall not install any asbestos containing material or apply paint containing lead. If such material is detected, the Contractor shall remove it and replace it with acceptable material at no additional cost to the government.

1.20.1.5. The Contractor shall immediately notify the Contracting Officer and/or COR when encountering any material which is suspected of containing asbestos or lead-based-paint..

**1.20.2. Dust Control**

1.20.2.1. **Dust Control Permit:** The Contractor shall be held responsible for dust control as defined by Clark County, State of Nevada Ordinances. A *Dust Control Permit* is required to be obtained from the District Board of Health of Clark County and submitted to the Government for all construction activity (including but not limited to grading, clearing and grubbing operations, trenching, and any disturbance of the topsoil) involving more than one-quarter acre of land or 100 linear feet of trenching. All processing fees associated with obtaining a dust permit shall be the responsibility of the Contractor.

1.20.2.2. **Government Coordination:** The contractor shall submit to the Contracting Officer for coordination the application for the dust permit. After coordination has been completed, the contractor will proceed with obtaining the permit.

1.20.2.3. A copy of the approved permit shall be provided to the Contracting Officer who will provide a copy to the Nellis AFB Air Program Manager.

1.20.2.4. **Excessive Dust:** If in the opinion of the Contracting Officer, excessive dust is generated by the construction effort, the Contractor shall stop activity until adequate dust control measures are provided, at no cost to the Government.

**1.20.3. Authority to Construct Permit:** Before construction begins, the Contractor shall acquire an Authority to Construct (ATC) permit from Clark County for all installed equipment or units that has the potential to emit Carbon Monoxide (CO), Nitrogen Oxides (NO<sub>x</sub>), Sulfur Oxides (SO<sub>x</sub>), Volatile Organic Compounds (VOC) or Particulate Matter less than 10 microns (PM<sub>10</sub>). Contractor shall coordinate the permitting process with the Nellis Air Program Manager through the Contracting Officer. Approval process through Clark County can take an extended amount of time and should be initiated early in the project.

**1.20.4. Storm Water Construction Permit (Soil Erosion):** The Contractor shall provide protective barriers to prevent soil erosion on all required excavations. The Contractor shall provide environmental protection to prevent sediment drainage of silts into storm drains. Contractor shall minimize disturbed area, stockpile excavated soils, and protect excavated soils from wind and water erosion. If one (1) acre or more of total area is disturbed, including equipment lay down area, Contractor shall obtain a Nevada Storm Water Construction Permit by electronically submitting a Notice of Intent (NOI) to the Nevada Division of Environmental Protection (NDEP) and preparing a Storm Water Pollution Prevention Plan (SWPPP). Contractor shall coordinate the submittal with the Nellis Storm Water Manager through the Contracting Officer.

**1.20.5. Protection of Water Resources:** The Contractor shall not pollute any streams, rivers, or waterways through direct discharge or by storm water runoff. The Contractor shall comply with all applicable Federal, State and local laws.

**1.20.6. Waste and Disposal:**

1.20.6.1. There are no waste or disposal areas available on the bases; the Contractor shall make arrangements at an off-base location in accordance with local and state codes for disposal of waste generated from the site. The Contractor shall be responsible to submit all dump receipts to the Contracting Officer, and on a monthly basis, submit an estimated quantity of material that is going to be recycled.

1.20.6.2. All waste materials (i.e., solid, liquid, and gaseous) generated by any work under the contract shall be handled, transported, stored, and disposed of by the contractor and by his subcontractors at all times in accordance with all applicable Federal, state, or local laws, ordinances, regulations, court orders, or other types of rulings having the effect of the law, including, but not limited to Executive Orders 12088 as amended by E.O. 13143, 12580, 11988, and 11990; the Clean Air Act, (42 U.S.C. 7401-7671); the Clean Water Act (33 U.S.C. 1251-1387); the Endangered Species Act (16 U.S.C. Sec 1531-1544); the

Toxic Substances Control Act (15 U.S.C. Sec 2601-2671); the National Historic Resources Protection Act (16 U.S.C. Sec 740-470w-6); the Solid Waste Disposal Act (42 U.S.C. 6901-6991); the Archaeological Resources Protection Act (16 U.S.C. 470aa-470-11); the Safe Drinking Water Act (42 U.S.C. 300f - 300j); the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. 136-136y); the Sikes Act Administration Regulations (29 CFR 1910); the Environmental Protection Agency regulations (40 CFR 50-87, 110, 112, 122, 136, 141-13, 162, 165, 166, 171, 240-246, 260-271, 280, 300, 302, 355, 370, 372, 403, 405-471, and 761); the Department of Transportation regulations (49 CFR 171-177); the Nevada Revised Statutes (Title 40, Sections 445.131-445.710 and 459.400-856) and the Nevada Administrative Code provisions implementing those code sections; and environmental planning, assessment, monitoring, and regulatory compliance provisions of the county codes of Clark, Lincoln, and Nye Counties.

### **1.20.7. Spills:**

1.20.7.1. Should any hazardous substance or oil spills occur on this project, in addition to containing and removing such spill, the Contractor shall:

- During normal working hours, immediately report all spills in quantities of five (5) gallons or more to the Asset Management Office at 652-4123 or 652-6106.
- After 4:30 p.m. or on weekends, immediately contact the Nellis Command Post at 652-2446.
- Forward a written, completed spill report to the Contracting Officer within three (3) working days after the occurrence.

1.20.7.2. All contaminated material shall be removed, transported and disposed of in accordance with all applicable laws, regulations and policies. The contractor shall also submit a copy of all permits and disposal certificates to the Contracting Officer as a submittal item for review. All costs incurred for the disposal of contaminated soils, as a result of Contractor negligence or error, will be the Contractor's responsibility.

**1.20.8. Historical/Archaeological Artifacts:** The Integrated Cultural Resources Management Plan (2007, page V) provides guidance on the discovery of historical or archaeological artifacts. If artifacts, features, or structural remains are discovered during, but not exclusive to, mission actions, personnel should implement the following:

1.20.8.1. Activities at the location should immediately cease and efforts should be taken to ensure protection until arrival of the Cultural Resources Manager;

1.20.8.2. The site shall be marked to provide efficient relocation, while also taking efforts to minimize the types of signs that would attract personnel, thereby placing the location in additional danger;

1.20.8.3. It is illegal to collect or disturb archaeological materials under the Archaeological Protection Act, thus artifacts shall be left in place;

1.20.8.4. The Cultural Resources Manager shall be notified within 24 hours of discovery (99 CES/CEAN (702) 652-9365 or 4123); and

1.20.8.5. Personnel should make efforts to be available to assist in the identifying the location.

**1.20.9. Protection of Flora and Fauna:** The Contractor shall perform all work and take such steps required to minimize interference with or disturbances to flora and fauna. The Contractor shall not be allowed to alter water flows or otherwise disturb native habitat adjacent to the work area, which in the opinion of the Contracting Officer/Natural Resources Program Manager are critical to flora and fauna. The Contractor shall contact the Natural Resources Program Manager (702) 652-3173, to discuss required Natural Resources Program concerns, constraints and requirements. The Contractor will salvage, maintain and transplant all cactus and yucca plant species to remain compliant with applicable Federal and State laws as directed by the Natural Resources Program Manager prior to any project/construction earth

disturbing activities occurring on undisturbed lands or habitats. The Contractor will provide Natural Resources Biological Monitors to remain compliant with applicable Federal and State laws as required and directed by the Natural Resources Program Manager prior to project development/construction activities. The Contractor shall as directed by the Natural Resources Program Manager, (702) 652-3173, to remain compliant with applicable Federal and State laws, conduct section 404 of the Clean Water Act consultation with the United States Army Corps of Engineers (COE) on the potential of Jurisdictional Waters of the United States that may be impacted by project development/construction activities. The contractor shall conduct required delineations, obtain required permits and implement permit requirements as directed by the COE.

**1.20.10. Recycling Requirements:** Recycling efforts should take place whenever feasible.

## **1.21. WEATHER CONDITIONS**

**1.21.1. Weather Hazards:** The Contractor shall satisfy himself/herself as to the hazards likely to arise from weather conditions. Complete weather records and reports may be obtained from any U.S. Weather Bureau Office.

**1.21.2. High Winds:** When warnings of winds of gale force or stronger are issued, the Contractor shall take every practicable precaution to minimize damage to persons, work, and adjacent property. These precautions may include removing all stored materials, tools, and/or equipment from exposed locations and removing or securing any temporary structures.

**1.21.3. Time Extension:** In conformance with Federal Acquisition Regulation (FAR) Clause 52.249-10, *Default (Fixed-Price Construction)*, only unusually severe weather will be considered by the Contracting Officer in determining if the time for completing the work is excusable as a result of weather and the performance period should be extended.

## **1.22. FACILITIES DAMAGES**

**1.22.1. Responsibility:** Contractor shall be responsible for any and all damages to existing buildings, facilities, structures, pavements, curbs, walks, utilities etc. incurred by his work forces or equipment. Damaged areas shall be patched, repaired or replaced, and restored to original conditions by the Contractor to the satisfaction of the Contracting Officer and of authorities having jurisdiction there over, at no expense to the Government.

**1.22.2. New Work:** If new work is to be connected to existing work, special care shall be exercised not to disturb or damage the existing work more than necessary. All damaged work shall be replaced, repaired or restored to its original condition at no cost to the Government.

### **1.22.3. Damage to Utilities:**

1.22.3.1. Notification Requirements: In the event of any contractor-caused utility failure and/or disruption, the contractor shall first make the area safe, then immediately contact the Contracting Officer (652-9121) and Civil Engineering Base Service Call Desk (652-2652 or 652-7785). TTR Base CE Customer Service Desk (653-5000, ext. 89511).

1.22.3.2. Liability to Repair: If the damaged utilities were previously known or shown to the Contractor, or there is negligence on his part, the utilities shall be repaired by the Contractor in a timely manner at no cost to the government.

## **1.23. QUALITY CONTROL**

**1.23.1. Contractor Responsibilities:** The control of quality by the contractor may relate to, but is not limited to--

- Construction processes, to ensure that the product is produced to, and meets, the contract's technical requirements;
- Drawings, specifications, and engineering changes, to ensure that construction methods and operations meet the contract's technical requirements;
- Testing, examination, and inspection to ensure that practices and products to ensure that only conforming practices, equipment, processes, supplies, and material are provided to the Government;
- Technical documentation, including drawings, specifications, handbooks, manuals, and other technical publications, as required by the contract;
- Preservation, packaging, packing, and marking; and
- All other procedures and processes for services to ensure that services meet contract performance requirements.

**1.23.2. Quality Control Program:** The Contractor shall provide and maintain a *Quality Control (QC) Program* as required by Contract FAR Clause 52.246-12, *Inspection of Construction*, which will assure that all supplies and services provided conform to contract requirements, whether constructed or processed by the Contractor, or procured from subcontractors or vendors. Such system shall require personnel of the contractor's organization to perform, or cause to be performed, inspections of the scope and character necessary to achieve quality construction at all times. The authority and responsibility of QC personnel shall be prescribed by clear, complete, and current instructions, and will normally be provided to the Contracting Officer at the pre-performance conference, but in any case prior to commencement of construction.

**1.23.3. Quality Control Records:** The Contractor shall maintain current QC records in an appropriate format of all inspections and tests performed. These records shall provide factual evidence that the required inspections or tests have been accomplished; indicate the results, the nature of any defects and causes for rejection, the proposed remedial action, as well as what corrective action(s) have been taken. The Contractor shall not build upon or conceal any feature of the work containing uncorrected defects. Quality inspection records shall be available for review by the Government throughout the life of the contract and shall be maintained a minimum of three years after the contract has been completed.

**1.23.4. Notice of Non-Conforming Work:** The QC, or other designated, representative shall acknowledge receipt of notification of non-conforming work (for technical, safety, or other reasons) as requested by the Contracting Officer. Such non-conforming work shall be immediately replaced or corrected as necessary. Immediately bring any disagreements to the attention of the Contracting Officer, in writing, for resolution.

## **1.24. LAYING OUT WORK**

**1.24.1. Layout:** The Contractor shall verify dimensions and elevations indicated in layout of work. Discrepancies between drawings, specifications and existing conditions shall be referred to the Contracting Officer in writing before work affected is performed. Failure to make such notification shall place responsibility upon the Contractor to carry out work in satisfactory, workmanlike manner at no additional cost to the Government. Any duplication of work made necessary by failure or neglect on the Contractor's part to comply with this function shall be done at his sole expense.

**1.24.2. Field Dimensions:** The drawings accompanying these specifications indicate generally the design and arrangement of all apparatus, fixtures, accessories, etc., necessary to complete the work required. The exact location or arrangement of equipment is subject to minor changes necessitated by field conditions and shall be made as required without additional cost to the Government. Measurements shall be verified by actual observations at the construction site, and the Contractor shall be responsible for all

work fitting into place in a satisfactory and workmanlike manner meeting the approval of the Contracting Officer.

**1.25. EXCAVATION:** Not Applicable

**1.26. CLEANUP**

**1.26.1. Work Site:** The Contractor shall maintain site free from construction debris and trash. Contractor is responsible for the removal of such debris and trash daily. No trash or debris shall be disposed of on the base or any other Federal Lands, nor shall it be disposed of in violation of any Municipal, County, or State Ordinances.

**1.26.2. Final Cleanup:** All work, including final clean-up shall be completed by the contract completion date.

**1.27. FINAL INSPECTION**

**1.27.1. Pre-Final Inspection Notification:** The Contractor shall notify the Contracting Officer in writing at least five (5) calendar days in advance of the desired pre-final inspection date. Based on the inspection, the Contracting Officer shall generate a punch list of contract items needing to be corrected or completed by the Contractor. This punch list may not necessarily be the final punch list. Additional items may be identified during the Final Inspection.

**1.27.2. Final Inspection Notification:** After all punch list items identified during the pre-final inspection shall have been completed, the Contractor shall notify the Contracting Officer in writing at least three (3) calendar days in advance of the desired final inspection date. Final clean-up shall be made prior to a final inspection, and consist of cleaning the site and adjacent areas in the immediate vicinity as required by the Contracting Officer.

**1.27.3. Declination to Inspect:** The Contracting Officer reserves the right to both decline the contractor's request of a pre-final and/or a final inspection when it is evident that the project is not ready for inspection.

**1.27.4. Acceptance:** Final acceptance will not occur until all work, including clean-up, has been accomplished and no discrepancies remain. Final acceptance should be scheduled prior to or not later than the contract completion date.

**1.28. CONTRACT COMPLETION AND CLOSE-OUT:** Upon completion of the work and prior to approval of final payment, unless specified to be provided earlier, the contractor shall furnish, to the Contracting Officer:

**1.28.1. Warranties:** Prior to final inspection, the contractor shall identify all major equipment and all specifically warranted products and systems provided under this contract. A general construction warranty shall also be provided by the Contractor for one (1) year, or the industry standard (whichever is longer), from the date of final acceptance. Each such warranted item shall identify its warranty period, and point of contact/phone number to report discrepancies of a warranted item.

- Compliance with this paragraph does not relieve the Contractor of any responsibility in connection with providing specific warranties and/or guarantees as required by this contract.
- In the event the Contractor or his designated representative fails to commence and complete any warranty work required, within the designated time stated by the Contracting Officer, the Government shall have the right to have the work performed by others, and after completion make demand for reimbursement of any and all expenses incurred by the Government while performing the work, including, but not limited to, administrative expenses.

**1.28.2. Final Material Submittals:** Prior to final inspection, the Contractor shall provide all remaining submittals (e.g., test results).

**1.28.3. Final As-Builts:** Prior to final inspection, the Contractor shall submit bound hard copies and four (4) electronic copies on CDs in AutoCAD file format (\*.dwg) and in Adobe Acrobat file format (\*.pdf) as detailed in subsequent paragraph "As-Built Deliverables". Government shall review and approve drawings and may require that they be resubmitted if there are errors or omissions.

### **1.28.3.1. AS-BUILT DELIVERABLES**

#### **1.28.3.1.1. Delivery Specifications**

- All as-built drawings shall be delivered on a CD/DVD-ROM in \*.DWG and \*.PDF formats. The \*.PDF file shall be condensed into a single file with the multiple pages. The Contractor shall submit four (4) CD/DVD-ROMs.
- The \*.DWG file delivered shall be created in AutoCAD 2004 or newer version.
- The \*.PDF file delivered shall be created in Adobe Acrobat 8.0 or newer version.
- A POC.TXT file shall contain a valid POC for questions about the file and shall be included on a CD/DVD-ROM.
- Hard copies of as-built drawings shall be delivered 1 set each at full and half sizes: E (33" x 44") and C (17"x22"). Each set shall be stamped with "As-Builts". *The contractor shall provide any additional full-size drawings as required to display all the details.*
- Topographic survey data shall also be delivered in two files on a CD/DVD-ROM. File 1 should be in a \*.CSV format. (Preferably PNEZD – comma delimited format with breakline data included). File 2 will be a \*.DWG containing an AutoCAD Civil 3D surface (the \*.DWG file containing topographic data shall be in the coordinate system as defined in item 1.7). Accuracy level of data provided shall be +/- .02 foot.
- All projects shall have a Basis of Bearings statement with the control monuments used to establish the basis clearly indicated.
- All plans shall reflect mean combination ground to grid factor, be printed upon any calculation sheets anytime ground (modified) State Plane Coordinates are used, and be noted in the bearing source statement.
- The AutoCAD Civil 3D file delivered shall be created in AutoCAD Civil 3D 2009 or newer version.
- As-builts shall conform to the **A/E/C CAD Standards version 3.0 or newer version**.
- Digital media must have an **external label** listing the name of the project and contract number and the words "As-Built Record Set". The folder shall contain drawings, indexes and X-REF files related to all as-builts.
- A drawing called BINDED.DWG shall be created. This drawing shall be binded and have no external references.
- Final As-Built Preparation for \*.DWG files. The following procedures must be performed before a file is placed on the delivery media:
  - When opened, the drawing shall be seen exactly as it should be plotted.

- Include all files, both graphic and non-graphic, required for the project. Make sure all files are in the same directory, and that references to those files do not include device or directory specifications.
- Ensure all reference (external reference) files are attached and without device or directory specifications.
- Remove all extraneous graphics/text outside the project border area, and set the active parameters to a standard setting (or the setting contained in the seed or prototype file).
- Include any standards sheets (abbreviations, symbols libraries, font libraries, color tables, pen tables, plot configuration files, user command files, etc.) necessary for a complete project.
- Compress and/or reduce all files using the appropriate utilities. A digital media copy of the decompression utility should be provided with the delivered data.
- All files shall be purged and all Xrefs shall be included.
- Both the \*.CTB and \*.PC3 file shall be supplied.

#### 1.28.3.1.2. As-Built Specifications

1.28.3.1.3. The Industry Standard model file and sheet naming conventions, consisting of a Discipline/Code Designator, Drawing Type Code, Sheet Type Code/Designator, and Sheet Sequence Identifier shall used for all submissions - diagrams of this naming convention can be found in the **A/E/C CAD Standards version 3.0 or newer version**.

1.28.3.1.4. All submittals shall include any standards sheets (abbreviations, symbols, fonts, etc.) necessary for a complete project, and document any nonstandard fonts, tables, symbols, etc. that are used.

1.28.3.1.5. All drawing files, unless otherwise specified, shall use units of feet and tenths of foot.

1.28.3.1.6. Acceptable drawing scales depend on the type of drawing and the size of area the drawing encompasses - A detailed description of which drawing scale to select can be found in the **A/E/C CAD Standards version 3.0 or newer version**.

- **TITLE BLOCKS:** The contract number and the specification number (if available) shall be shown on all sheets. "RECORD DRAWING" shall be added below the title block on all sheets. All modifications to the contract shall be posted in ascending order. The top line of the revision box shall state "REVISED TO SHOW AS-BUILT CONDITIONS" and dated. All modifications to all plans, sections, or details, shall have a modification number placed in the revision box under column entitled "Symbol". The statement "GENERAL REVISIONS" may be used when applicable. The date to be added in the revision box for modifications is found in Block 3 of Form SF-30. Cover Sheet shall have Contract Award Set changed to As-Built Record Set with month & year completed. Month and year completed shall also go in the date box in the title block. There shall be no separate dates.

- **PROCEDURES FOR POSTING MODIFICATION CHANGES TO DRAWINGS:** Follow directions in the modification for posting descriptive changes. A Modification Circle shall be place at the location of each deletion. The highest modification number on the sheet should be shown in the modification circle in the "DATE" and "DRAWING CODE" boxes of the Title block. For all new details or sections that are added to a drawing, place a Modification Circle by the detail or section title. For changes to a drawing, place a Modification Circle by the title of the affected plan, section or detail titles (each location). For changes to schedules on drawings, a Modification Circle shall be placed either by the schedule heading or by the change in the schedule. The Modification Circle size shall be 1/2-inch diameter unless the area where circle is to be placed is crowded. Use smaller size circle for crowded areas.

- **WORD ABBREVIATIONS:** Abbreviations shown on the abbreviation sheet shall be used to describe all work items. Additional word abbreviations, not found on the abbreviation sheet but necessary to describe the work, shall be properly identified and incorporated with the other standard word abbreviations.
- **LEGEND SHEETS:** Symbols, which conflict with those on the original contract legend sheet, shall not be used. Additional symbols necessary to depict any additional work items shall be properly identified and added to the legend sheet or supplemental legend. Those projects that do not have legend sheets may use supplemental legends on each sheet where symbol is shown.
- **CONTRACTOR SHOP DRAWINGS:** Contractor shop drawings, which supersede data on the contract plans and/or additional drawings, prepared by the Contractor, shall be incorporated into the As-Built Drawings. Design plans prepared by Contractor shall include the designer's name on the As-Built Drawings.
- **INDEXING OF DRAWINGS:** If drawings are added to the portfolio of drawings to depict as-built conditions, the index of drawings shall be revised accordingly.

#### 1.28.3.1.7. Government Furnished Materials

- The Government shall provide the contractor with data and information concerning all necessary and pertinent functions and principal features of the identified project. These items may include:
- The installation's latest georeferenced digital planimetric data and/or base map in ESRI Arc/Info 9.x format or best format available, with associated data files.
- The installation's most current orthorectified imagery and its geospatial parameters (coordinate system, datum, projection, distance units).
- Frequency settings for the Real-Time Kinematic (RTK) GPS Base Station and the preferred GPS receiver specifications.
- Any pertinent and necessary prototype or drawing template files and standard Title Blocks.

1.28.3.1.8. Government Review: The Government shall review the submitted data and documentation upon completion of all stated work. Missing or incomplete items shall be documented and forwarded to the Contractor for completion. Upon receipt of a complete submittal, the Government shall conduct a quality review and notify the contractor within 10 days of acceptance (along with any stipulations this includes) or rejection of the deliverables described herein. Failure to adhere to any of the stated delivery specifications could result in rejection of deliverables and nonpayment. Contractors should, at a minimum, submit data and documentation samples at 35% and 95% project completion to avoid the rejection of final deliverables. Any questions regarding data collection efforts, deliverable formats or specifications should be addressed to the 99 CES/CEPT 702-652-3005 through the Contracting Officer.

**1.28.4. Operation & Maintenance Manuals:** Prior to final inspection, the Contractor shall provide three (3) complete copies of O&M manuals in bound 8 ½ inch by 11 inch booklets. Booklets shall include a brief description of all building systems including exterior and interior items that require maintenance including but not limited to coatings and finishes, doors, windows and hardware, flooring, roofing, drainage, irrigation and landscaping systems, HVAC systems, plumbing systems, fire protection systems, lighting systems, power systems, communications systems, and fire alarm systems. Information should include the manufacturer's name, model number, service manual, parts list and simplified wiring and control diagrams of the systems as installed. In addition, the booklets shall list step-by-step procedures required for system startup, operation, shutdown, routine maintenance procedures, possible breakdowns and repairs, and a trouble-shooting guide.

**1.28.5. DD Form 1354 (DD1354), Transfer and Acceptance of Military Real Property:** Not Applicable

**2. PART 2 - PRODUCTS**

**3. PART 3 – EXECUTION** ((Not Applicable))

***END OF SECTION 01010***

## **SECTION 01300**

### **SUBMITTALS AND SUBSTITUTIONS**

#### **1. PART 1 - GENERAL**

##### **1.1. DESCRIPTION.**

1.1.1. Work included: The Contractor shall provide submittals required by the Contract Documents, and revise and resubmit as necessary to establish compliance with the specified requirements.

1.1.2. Related work: Individual requirements for submittals also may be described in pertinent Sections of these Specifications and the Drawings.

##### **1.2. QUALITY ASSURANCE.**

###### **1.2.1. Coordination of submittals:**

1.2.1.1. Prior to each submittal, the Contractor shall carefully review and coordinate all aspects of each item being submitted.

1.2.1.2. The Contractor shall verify that each item and the submittal for it conform in all respects with the specified requirements.

1.2.1.3. By affixing his/her signature to the AF Form 3000, "Material Submittal Approval", the Contractor certifies that this coordination has been performed.

1.2.2. Substitutions: The Contractor shall set forth in writing the reason for any deviation from the contract requirements and annotate such deviation on the submittal. The Government reserves the right to rescind inadvertent approval of submittals containing unidentified deviations. Do not substitute materials, equipment, or methods unless such substitution has been specifically approved in writing for this Work by the Contracting Officer.

1.2.3. "Or equal": Where the phrase "or equal" occurs in the Contract Documents, do not assume that substitute materials, equipment, or methods will be approved as equal until the item has been specifically approved for this work by the Contracting Officer.

1.3. SUBMITTALS: Neither the submittal nor the Contracting Officer's approval of the submittal shall be construed as relieving the Contractor from furnishing satisfactory material.

1.3.1. Certification of Compliance: A document, required of the Contractor, or through the Contractor, from a supplier, installer, manufacturer, or other lower tier

Contractor, the purpose of which is to confirm the specified quality or orderly progression of a portion of the work by documenting procedures, acceptability of methods, qualification of personnel, or verification of material suitability, in conformance with the contract requirements. This certification shall contain the name and address of the Contractor, the project name and location, and the quantity and date or dates of shipment or delivery to which the certificates apply; shall be dated after the award of this contract; and shall be signed by an appropriate official authorized to certify on behalf of the contractor, a subcontractor, a manufacturer, or a supplier.

### 1.3.2. Shop Drawings:

1.3.2.1. Scale and measurements: The Contractor shall make Shop Drawings accurately to a scale sufficiently large to show all pertinent aspects of the item and its method of connection to the Work. These drawings shall graphically show the relationship of various components of the work, schematic diagrams of systems, details of fabrication, layouts of particular elements, connections, and other relational aspects of the work.

### 1.3.2.2. Types of prints required:

1.3.2.2.1. When reproducible shop drawings are required, submit required Shop Drawings in the form of one sepia transparency of each sheet plus three blueline or blackline prints of each sheet.

1.3.2.2.2. When reproducible shop drawings are not specified, submit the specified number of blueline or blackline prints of each sheet.

1.3.3. Samples: Provide sample(s) of both fabricated and unfabricated physical examples of materials, products, and units of work as complete units or as portions of units of work in the type and number specified. Such samples shall be identical to the precise article proposed to be provided and incorporated in the project.

### 1.3.4. Color Selection:

1.3.4.1. Unless the precise color and/or pattern is specifically called out in the Contract Documents, and whenever a choice of color or pattern is available in the specified products, submit accurate color and pattern charts to the Contracting Officer for selection.

1.3.4.2. All items requiring color and/or pattern approval shall be submitted at one time under a single submittal and shall be segregated and integrated in one package. Unless otherwise specified, the Contractor shall submit for approval, three (3) packages showing finishes of all materials visible upon completion of this contract.

- 1.3.4.3. Approval of a color or pattern does not represent approval of the item in its entirety. When required by the AF Form 66, "Schedule of Material Submittals", or by the Contracting Officer, separate submittals shall be provided to demonstrate compliance with the contract terms. If an individual item (e.g., carpet) does not meet the specified salient features (e.g., weight), it will be disapproved and cannot be used even if its color or pattern has been previously approved.
- 1.3.5. Manufacturers' Recommendations: Submit all pertinent recommendations, including but not limited to, special notices and material safety data sheets (MSDS), installation instructions, cleaning requirements, maintenance instructions, safety precautions, etc. Where contents of submitted literature from manufacturers includes data not pertinent to the submittal, clearly show which portions of the contents is being submitted for review.
- 1.3.6. Manufacturer's Warranty: In addition to all warranties specifically required by this project, the contractor shall submit all warranties normally proffered by manufacturers or suppliers, even if not specifically requested under this contract. See Special Contract Requirement entitled "Contract Closeout" for additional information.
- 1.3.7. Catalog Data: Catalog cuts shall be clearly marked to indicate the type, model, style, capacity, and all other pertinent data, including calculations, complete descriptions, and other documentation necessary to reflect full compliance with the requirements.
- 1.3.8. As-Built Drawings: The Contractor shall furnish the as-built drawings as specified in Section 01010. The as-built prints shall be a record of the construction as installed and completed by the Contractor. They shall include all the information on the contract set of drawings and a record of all deviations, modifications, or changes from those drawings, however minor, which were incorporated in the work, all additional work not appearing on the contract drawings, and all changes which were made after final inspection of the work. In the event the Contractor accomplishes additional work which changes the as-built conditions of the facility after submission of the as-built drawings, the Contractor shall furnish revised and/or additional drawings as required to depict as-built conditions. The requirements for these additional drawings will be the same as for the as-built drawings included in the original submission.

## **2. PART 2 - PRODUCTS: NO PRODUCTS ARE REQUIRED BY THIS PART.**

### **3. PART 3 - EXECUTION**

- 3.1. SUBMITTAL REGISTER: At the end of this section is one set of Air Force Forms 66 (AF66), "Schedule of Material Submittals", listing each item of equipment and material

for which submittals are required by the specifications, drawings, and/or contract terms and conditions. The contractor shall identify a "required submission date" for each item specified. This form shall be coordinated and submitted with the AF Form 3064, "Progress Schedule", within 5 calendar days from start of work. The approved submittal register will become the scheduling document and will be used to control submittals throughout the life of the contract.

### 3.2. TRANSMITTAL OF SUBMITTALS.

3.2.1. Each submittal shall be transmitted under an AF Form 3000 (AF3000), "Material Approval Submittal", and shall be prepared in accordance with the Instructions on the reverse of the form. The contractor shall provide all information required for identification and checking for compliance. Units of weights and measures used on all submittals shall be the same used in the contract drawings and specifications. Submittals shall be made in the respective number of copies to the Contracting Officer. Each submittal shall be complete and in sufficient detail to allow a ready determination of compliance with contract requirements.

3.2.2. The "Submission Number" entered on the AF3000 shall be three digits and consecutively numbered beginning with "001". The previous submission number is not used on new or initial material submittals.

3.2.3. When material is resubmitted for any reason, the Contractor shall also identify the "Previous Submission Number".

3.2.4. The "Item No." shall correspond exactly to the "Line Number" specified on the AF66, Schedule of Material Submittals". Contractor shall fully complete the reference to the specifications or drawings and shall fully complete the description block.

3.2.5. Attached submittal data/information will be clearly identified or tabbed in order to properly evaluate the materials or articles. Each attachment will be numbered to correspond with the "Item Number" shown on the face of the AF3000.

3.2.6. Improper or incomplete material submittals will be returned for re-accomplishment.

3.3. GROUPING OF SUBMITTALS. Unless otherwise specified, the Contractor shall group submittals by specification section and/or associated items and transmit a single submission to assure that information is available for checking each item when it is received. Partial submittals will be rejected as not complying with the provisions of the Contract and a re-submittal of all items/requirements for that line item number shall be provided.

### 3.4. TIMING OF SUBMITTALS.

- 3.4.1. After approval of the AF66, submittals shall be provided as scheduled. Any delay to this schedule must be requested by the Contractor in writing, prior to the scheduled submission date, and a new submission date proposed. Such requests may be approved if the proposed new submission date is far enough in advance of scheduled dates for installation to provide time required for reviews, for securing necessary approvals, for possible revisions and re-submittals, and for placing orders and securing delivery.
- 3.4.2. In scheduling, allow at least ten calendar days for review by the Contracting Officer following receipt of the submittal. More complex and/or technical submittals may require up to thirty calendar days for review.

### 3.5. CONTRACTING OFFICER'S REVIEW.

- 3.5.1. Review by the Contracting Officer does not relieve the Contractor from responsibility for errors which may exist in the submitted data.
- 3.5.2. The approval of submittals by the Contracting Officer shall not be construed as a complete check, but will indicate only that the general method of construction, materials, detailing, and other information are apparently satisfactory. Approval does not relieve the Contractor of the responsibility for any error, which may exist. The Contractor is fully responsible for the dimensions, material, and design necessary to ensure adequate connections, details, and satisfactory construction of all work.
- 3.5.3. After submittals have been approved by the Contracting Officer, no re-submittal for the purpose of substituting materials or equipment will be given consideration unless accompanied by an explanation as to why a substitution is necessary. Such reconsideration will not necessarily result in a change to the submittal previously approved.
- 3.5.4. The contractor shall make all corrections required by the Contracting Officer and promptly furnish a corrected submittal in the form and number of copies as specified for the initial submittal. If the Contractor considers any correction indicated on the submittals to constitute a change to the contract, notice as required under the Contract Clause entitled "Changes" shall be promptly provided to the Contracting Officer.
- 3.5.5. Delays occasioned by Contractor non-compliance with these requirements shall be the sole responsibility of the Contractor. No delay damages or time extensions will be allowed for time lost due to late, inaccurate, or incomplete submittals.

***Next page is 01300-6, the AF Forms 66 (Schedule of Material Submittals)***

<b>SCHEDULE OF MATERIAL SUBMITTALS</b>											PROJECT NUMBER		PROJECT TITLE				SOLICITATION/CONTRACT NO.					
											RKMf 00-0021		Repair Fire Protection System Bldg 200				Solicitation FA4861-10-B-A005 Contract					
TO BE COMPLETED BY PROJECT ENGINEER											CONTRACTOR SUBMISSION	TO BE COMPLETED BY CONTRACT ADMINISTRATOR										
LINE NUMBER	ITEM OR DESCRIPTION OF ITEM, CONTRACT REFERENCE, TYPE OF SUBMITTAL  * Indicates a recurring submittal item	NO. OF COPIES REQUIRED										REQUIRED SUBMISSION DATE	DATE RECEIVED IN CONTRACTING	DATE TO CIVIL ENGINEERING	RETURN SUSPENSE DATE	SUBMITTAL NUMBERS	DATE CONTRACTOR NOTIFIED		CONTRACTOR RESUBMITTAL NUMBER	FINAL APPROVAL	REMARKS	
		CERTIFICATION OF COMPLIANCE	SHOP DRAWINGS	SAMPLES	COLOR SELECTION	MANUFACTURER'S RECOMMENDATIONS	MANUFACTURER'S WARRANTY	CATALOG DATA	OPERATING INSTRUCTIONS	TEST RESULTS	OTHER						DISAPPROVED / APPROVED					
1	SECTION 01010 * Para 1.8.1 Progress Schedule											4										
2	SECTION 01010 Para 1.23.1. Preliminary Construction Drawings		4																			
3	SECTION 01010 Para 1.23.1. Preliminary As-Builts		4																			
4	SECTION 01010 Para 1.23.1. Final As-Builts		4																			
5	SECTION 01010 Para 1.8.1 100% Progress Report											4										
6	SECTION 01010 Para 1.21.1 Electrical											4										
7	SECTION 01010 Para 1.21.1 Plumbing											4										

<b>SCHEDULE OF MATERIAL SUBMITTALS</b>											PROJECT NUMBER <b>RKMF 00-0021</b>		PROJECT TITLE <b>Repair Fire Protection System Bldg 200</b>			SOLICITATION/CONTRACT NO. <b>Solicitation FA4861-10-B-A005 Contract</b>					
TO BE COMPLETED BY PROJECT ENGINEER											CONTRACTOR SUBMISSION	TO BE COMPLETED BY CONTRACT ADMINISTRATOR									
L I N E I T E M N O.	ITEM OR DESCRIPTION OF ITEM, CONTRACT REFERENCE, TYPE OF SUBMITTAL  * Indicates a recurring submittal item	NO. OF COPIES REQUIRED										REQUIRED SUBMISSION DATE	DATE RECEIVED IN CONTRACTING	DATE TO CIVIL ENGINEERING	RETURN SUSPENSE DATE	SUBMITTAL NUMBERS	DATE CONTRACTOR NOTIFIED		CONTRACTOR RESUBMITTAL NUMBER	FINAL APPROVAL	REMARKS
		CERTIFICATION OF COMPLIANCE	SHOP DRAWINGS	SAMPLES	COLOR SELECTION	MANUFACTURER'S RECOMMENDATIONS	MANUFACTURER'S WARRANTY	CATALOG DATA	OPERATING INSTRUCTIONS	TEST RESULTS	OTHER						DISAPPROVED / APPROVED				
8	SECTION 01010 Paral.21.1 HVAC						4														
9	SECTION 01010 Paral.21.1 Fire Suppression						4														
10	SECTION 01010 Paral.21.1 Fire Detection						4														
11	SECTION 01010 Paral.21.1 Test Results							4													