



VA Medical Center

1201 NW 16<sup>th</sup> Street

Miami, FL 33125

**Revised Date:** 07.25.2017

**Project Title:** Site Preparation for RF Angio / Hybrid OR - Vascular Interventional Room

**VA Project No.:** 546-CSI-114

**Delivery Method:** Design - Build

**Target Completion:** Not to exceed 160 days after Notice to Proceed (NTP)

### **Statement of Work (SOW)**

#### **1. GENERAL REQUIREMENTS**

- This is a Design-Build Project. The Design-Build contract will be negotiated for the completion of project to include but not limited to the Design / Demolition / Construction together with all necessary coordination with manufacturer of equipment to be installed in the Site Preparation area upon project completion as well as development of comprehensive construction documents i.e., working drawings, specifications, reports, cost estimates by phases including completion of construction phase. The contractor will be given written information; participate in project planning meetings, pre-bid meeting, and pre-construction meeting as required; communicate with VA personnel via telephone or letter; and is expected to coordinate so that the final documents and construction services include all requirements in accordance with industry standard practices, VA standards, VA design manuals, and review comments.
- The goal of this project is to complete the site preparation to accommodate the installation of RF Angio / Hybrid OR in the 3rd Floor new assigned area inside the OR Suite. Work includes but it's not limited to:

- The Design Build contractor shall work with the Planning and Analysis Section of Engineering Service and the end user, (RF Angio Procedure Room, OR Suite) to identify all the needs of this project. The project shall include but not be limited to the design and construction phases for renovation of the about 2000 square feet area surrounding the installation of the new RF Angio / Hybrid OR in the 3rd Floor inside the OR Suite. Procedure Room is currently located in Room C306. The projects proposes relocation of current Support Room located in B345 to C306; expansion of Room B345 into Rooms B343, B354, and Corridor C3 7-1A; Relocation of Procedure Room from C306 to B345; provision of all necessary equipment including but not limited to Electrical and HVAC Systems into current Electrical Room C306A from Room B351 (General OR-3) to provide Sterile Storage in new location of Support Room C306. All communications shall be channeled thru the Contracting Officer.
- This project shall address any asbestos remediation that may be exposed during the construction as well as revision and upgrade of the electrical and HVAC systems serving the area to meet all criteria required by corresponding codes, standards and The Joint Commission regulations.

### **Project Justification:**

Contractor shall furnish sufficient technical, supervisory, and administrative personnel to insure the expeditious accomplishment of the work specified in this Statement of Work (SOW). Additionally, Contractor shall furnish all services, materials, supplies, equipment, investigations, studies, and travel required in connection with this SOW.

Contractor shall adapt as necessary any Government drawings, specifications, or standards that may be provided for areas and other structures to meet the requirements of this project.

### **Project Overview:**

The goal of this project is to complete the site preparation to accommodate the newly purchase RF Angio / Hybrid OR in the 3rd Floor new assigned area inside the OR Suite. The project shall include but not be limited to the design and construction services for renovation of the approximately 2000 square feet area surrounding the installation of the new RF Angio / Hybrid OR in the 3rd Floor inside the OR Suite. Procedure Room is currently located in Room C306. The projects proposes relocation of current Support

Room located in B345 to C306; expansion of Room B345 into Rooms B343, B354, and Corridor C3 7-1A; Relocation of Procedure Room from C306 to B345; provision of all necessary equipment including but not limited to Electrical and HVAC Systems into current Electrical Room C306A from Room B351 (General OR-3) to provide Sterile Storage in new location of Support Room C306.

This project will address the removal of the existing Siemens Axiom FA vascular/interventional Room, C306-1 of Building 1, and the build-out of a new Hybrid OR/Vascular Interventional System in Room B345-1. The Design Team will include manufacturer PHILIPS MEDICAL (as selected by Biomedical Engineering Section, Engineering Service, MVAMC) proposed Hybrid OR Final Site Preparation Support Document, Drawing Number N-SOU140238D PHILIPS MEDICAL Drawings as part of the design work. Design / Demolition / Construction work will be coordinated with PHILIPS MEDICAL system dimensions to provide minimum impact to existing field conditions. This SOW includes all electrical, mechanical, and structural, floors, walls and ceiling remodel and upgrade to comply with PHILIPS MEDICAL and VA specifications. PHILIPS MEDICAL will provide the final installation with riggers of their choosing according to the Biomedical Engineering Section, Engineering Service, MVAMC, which must be coordinated between Biomedical Engineering Section and manufacturer PHILIPS MEDICAL under a separate SOW and Contract to be managed by Biomedical Engineering Section, Engineering Service, MVAMC.

The design of this project will address, but will not be limited to, the following items:

1. Design / Demolition / Construction including all necessary coordination with PHILIPS MEDICAL, manufacturer of the medical equipment to be installed in Room B345 upon project completion as well as development of comprehensive construction documents based on the Final Site Preparation Support Document, specifications and drawings provided by PHILIPS MEDICAL.

Design, demolition and room renovation required for the installation of one Hybrid OR inside room B345-1. The new design shall accommodate the Hybrid OR according to the PHILIPS MEDICAL proposed Hybrid OR Final Site Preparation Support Document, Drawing Number N-SOU140238D. Remaining adjacent facilities shall stay in operation during construction work.

2. Due to location of project inside the OR Suite, the Contractor and A/E shall take into consideration the highest life safety and infection control measures as well as hospital flow at all times during

Design / Demolition / Construction phases. A justification shall be provided in writing as part of the contractor's proposal package during bidding process.

3. Provide Design / Demolition / Construction phases cost estimates as part of the SOW to achieve new Hybrid OR/Vascular Interventional System installation upon completion of Site Preparation Phase.
4. The Contractor shall be responsible for surveying and physically identifying all existing systems connected to and existing in rooms B343, B344, B345, B351, C306, C306-1, as well as all adjacent rooms and areas impacted by the project as needed prior to demolition and provide temporary facilities to make all systems remain in operation.
5. Design shall address disposing of any existing equipment that needs to be removed.
6. Design shall comply with all Electrical, Fire Alarm, Mechanical Controls, Structural, HVAC, Architectural and Life Safety standards required by NFPA Codes and all applicable Codes during demolition and design work.
7. All existing walls or slab penetrations need to be fireproofed and shall comply with latest NFPA Codes.
8. The Demolition/Removal Phase shall include all labor, materials, testing, supervision, equipment, and transportation to complete the Scope of Work as per construction documents prepared by A/E firm. The general demolition and design drawings will be procured under one contract along with full space renovation as a negotiated contract award.
9. The Hybrid OR manufacturer (PHILIPS MEDICAL) will provide a complete set of working drawings to MVAHS showing their proposed equipment layout to fit into existing room B345-1 for the Contractor to be used as guidelines for final design: PHILIPS MEDICAL proposed Hybrid OR Final Site Preparation Support Document, Drawing Number N-SOU140238D.
10. Architectural design shall include but not limited to all floor, walls and ceiling terminations as per new Hybrid OR location. Electrical, Mechanical, Plumbing, Infection control and other necessary utilities shall be also included as part of the design portion of this package.
11. Contractors are highly encouraged to attend pre-bid site visit.

The detailed project design should begin with the above-mentioned intense on-site physical survey and collection of previous project data.

All demolition and design drawings shall incorporate all architectural and engineering disciplines necessary to provide a complete and functional design. Design/Demolition shall be in accordance with all applicable requirements of NFPA, ANSI, OSHA, National Electric Code, National Safety Code, VA Specifications, VA Demolition Standards, VA Design Handbooks, etc. and all applicable local, state, and Federal regulations and standards. Existing drawings will be made available to the Contractor; however, their accuracy shall be field verified by the Contractor and all consulting firms as part of investigative services. The room renovation shall then proceed directly upon completion of the demolition phase.

The Contractor will be required to perform all necessary site survey work such as verifying record drawings.

The following investigative work shall be included within the scope of this project:

1. Provide all Engineer investigative work for application to this project including but not limited to vibration studies, structural analysis, asbestos abatement and any other test or study required to complete this project. Verify existing conditions to ensure the accuracy of your design/demolition.
2. Field verify VA furnished drawings to insure A&E design is accurate. It is the A&E's responsibility to determine existing conditions and to base the demolition on this information.
3. Materials to be furnished to the Contractor by the VA – The following shall be

Furnished to the Contractor upon request:

- a. VA Engineering Service will provide the Contractor with all applicable drawings for the project. The accuracy of the paper copies of Drawings is not guaranteed and shall be used only for general information. Actual conditions must be field verified by the Contractor and all consulting firms. The Contractor will then make copies of these drawings at the VA using VA equipment.
- b. All VA standards, specifications, Space Planning Criteria, Equipment & Design Guides List and design submission guidelines can be obtained by accessing the World Wide Web at the following address:

<http://www.cfm.va.gov/TIL/>

## **2. SCOPE OF WORK (requests all necessary steps for the accomplishment of project completion)**

- The project shall include but not be limited to the design and construction services for renovation of the approximately 2000 square feet area surrounding the installation of the new RF Angio / Hybrid OR in the 3rd Floor inside the OR Suite. Procedure Room is currently located in Room C306. The projects proposes relocation of current Support Room located in B345 to C306; expansion of Room B345 into Rooms B343, B354, and Corridor C3 7-1A; Relocation of Procedure Room from C306 to B345; provision of all necessary equipment including but not limited to Electrical and HVAC Systems into current Electrical Room C306A from Room B351 (General OR-3) to provide Sterile Storage in new location of Support Room C306. The requested services for this project include but are not limited to: asbestos removal as needed; replacement of flooring and ceiling tiles in the hallways and inside patient rooms; painting and patching of walls; installation of adequate lighting fixtures and outlets as needed; revision and upgrade of the electrical and HVAC systems as required by current codes and standards including but not limited to those of the VA, and the Joint Commission regulations for a total renovation of the Procedure Room inside the OR Suite.
- The scope of this project is to accommodate the newly purchase RF Angio / Hybrid OR in the 3rd Floor assigned area inside the OR Suite. Work includes but it's not limited to:
- Construction activities must be conducted according to the Final 100% construction documents developed by AE upon approval of P&A Section. Including Site preparation and utilities, demolition and new construction of Architectural, Mechanical, Piping and Electrical disciplines.
- Contractor must: coordinate all work with project COR; provide a cost loaded schedule to COR after issuance of NTP and before commencement of work; secure area before commencement of work according to MVAMC Infection Control and Construction Policy requirements. All coordination must be communicated through the Contracting Officer.
- The Contractor shall have a minimum of FIVE (5) years of HTHC/OR continuous experience as required by this Statement of Work (SOW).
- The Contractor should provide the Miami VAHS a detailed proposal (no lump sum line items) and construction completion schedule for review and approval.
- The Contractor shall furnish sufficient technical, supervisory, and administrative personnel to assure the expeditious accomplishment of the work specified in this entire SOW document.

- Contractor shall adapt as necessary any Government drawings, specifications, or standards that may be provided for areas and other structures to meet the requirements of the project.
- Contractor shall be responsible for providing all labor, materials, equipment and manpower necessary.
- All work performed shall be fully documented by the Contractor and/or the subcontractors hired by the primary general contractor. All project work and material installations performed shall be in compliance with manufacturers' recommendations and all applicable national codes, manuals and standards including but not limited to: NEMA, NEC, ANSI, ASA, VA Standards and The Joint Commission Standards.
- All work shall be performed at the Miami VA Medical Center and shall conform with current codes and standards as they relate to the facility.
- All required licenses and permits shall be the responsibility of the Contractor.
- The employees working on the project site under the primary general contractor and all subcontractors will have the 10 hours OSHA safety course; the project supervisor shall have the 30 hours course. General Contractor shall provide copies of certification to the contracting officer for every employee who works on the job site.
- In carrying out this project the Contractor shall follow all applicable VA Directives and Specifications, including but not limited to GEMS, Safety, Fire Protection and Infection Control.
- Contractor shall visually validate the area for all site conditions prior to starting work, to clarify any questions regarding space or any special requirements. The Contractor is responsible for the professional quality, technical accuracy and coordination required of all equipment, work, and materials utilized to perform work herein. Any corrections and changes resulting from review by the Government of the Contractor work will be at the Contractor own expense.
- Contractor responsibilities include but are not limited to: provide full certification that work performed meets all applicable codes and regulations; perform work in a way that minimizes day to day operational delays to the Medical facility; cleanup work areas upon completion of work in each individual area; ensure all work performed is in accordance with manufacturer recommendations for products to be used and is executed by certified personnel; prepare As-Built drawings and details for project completion.

- Contractor must:
  - Coordinate all work with project COR.
  - Secure area before commencement of work according to MVAMC Infection Control and Construction Policy requirements inside OR Suite due to the location of project.
  - Contractor shall coordinate work with MVAMC COR in order to maintain at all times all services in operation at the OR Suite and all areas surrounding construction work during demolition and construction.
  - Contractor shall be responsible for providing all labor, materials, and manpower.
  - Demolition of walls, floors, and ceilings as needed
  - Repairs of demolished walls, floors and ceilings
  - ICRA Partitions
  - Most work will be performed during nights and weekends due to location of project within OR Suite
  - Debris removal and recycling final site clean-up
  - Perform design calculation as needed
  - All deficiencies discovered will be reported along with a proposed solution to correct the deficiencies during the design phase.
  - The CONTRACTOR shall take into consideration all necessary life safety measures and infection control as well as hospital flow when designing the construction phases. A justification shall be provided.
  - Provide a construction estimate of all design work.
  - All walls or slab penetrations for new work shall comply with latest NFPA Codes.
  - Contractor design team shall include temporary solutions to support continuity of service in the building as part of the construction estimate.

- Some of this activities will require shut downs. Shut down will be coordinated with the MVAHS Engineering Department.

### **3. SPECIAL REQUIREMENTS**

- VA Police will issue identification badges to contractors, employees and subcontractors which must be worn at all times when on VA Property.
- Contractor shall provide a list of all personnel who will participate on the project. Personnel shall be subjected to a background investigation previous to commencement. After background check has been completed identification badges will be issued.
- Contractor shall keep the area cleaned daily and haul away all construction debris. All materials and construction debris must be in covered cart when entering and exiting the building.

### **4. QUALIFICATION / CERTIFICATION**

- The Contractor shall be a Certified General Contractor.
- The Electrical Subcontractor shall be a Certified Electrical Contractor.
- The contractor and all contractor employees must have taken the OSHA Certified 30/ 10 hour construction safety course and show documented proof. The contractor shall designate a “competent person” in accordance with 29 CFR 1926. 32(f) which states, “One who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous or dangerous to employees and who has authorization to take prompt corrective measures to eliminate them”. The contractor shall instruct each of his employees in the recognition and avoidance of unsafe conditions and the regulations applicable to this work environment to control or eliminate any hazards or other exposure to illness or injury.

Additionally, the contractor shall comply with the following requirements:

- Develop a plan detailing project specific fire-safety measures.
- Maintain site and building access free and unobstructed to facility emergency services.

- Separate temporary facilities from existing buildings and new construction by appropriate distances.
- All temporary construction partitions must meet fire-safety requirements.
- Temporary heating and electrical installations must comply with OSHA 1926, NFPA 241 and NFPA 70.
- Means of egress shall not be blocked.
- Egress routes for construction workers must be maintained free and unobstructed.
- Contractor furnished fire extinguishers must be provided and maintained in construction areas and in temporary storage areas.
- Flammable and combustible liquids must be stored, disposed and used in accordance with OSHA 1926, NFPA 241 and NFPA 30.
- Existing fire protection must not be impaired. Provide fire watch for impairments more than four (4) hours in a 24 hour period.
- Prevent accidental smoke detector operation.
- Perform Hot Work in accordance with NFPA 241 and NFPA 51B.
- Maintain all construction permits visible and updated as required by the MVAMC Safety Office and Infection Control Department.
- Prohibit smoking in and adjacent to construction areas.
- Dispose of waste and debris from buildings DAILY.
- Follow all additional requirements as specified in the MVAMC Construction Policy.
- Project includes 20% deduct alternates.

## 5. EQUIPMENT

- All Equipment, tools, etc., shall be maintained while on the project and shall be adequate, in quality and capacity for proper execution of work.
- Under no circumstances tools or equipment shall be left unattended.

## 6. SCHEDULING AND HOURS OF WORK

- All work in areas involved shall be scheduled with the VA Engineering COR. Work shall be scheduled for proper execution to complete work in accordance with completion date of this contract.
- Hours of Work:

Due to the construction site location inside the OR Suite, all work is to be performed during hours that do not interrupt the normal flow of work typical of the OR setting. Consequently, Hours of Work include nights and weekends shifts which will be requested in writing thru the CO and approved three (3) weeks in advance. All communications shall go thru the Contracting Officer. Contractor shall supply a work schedule and phasing plan to the facility for approval. No work shall be performed during U.S. Federal Holidays.

The US Government has a total of 10 Holidays per year. (SEE OPM TABLE BELOW):

2017 Holiday Schedule	
Date	Holiday
Monday, January 2*	New Year's Day
Monday, January 16	Birthday of Martin Luther King, Jr.
Monday, February 20**	Washington's Birthday
Monday, May 29	Memorial Day
Tuesday, July 4	Independence Day
Monday, September 4	Labor Day
Monday, October 9	Columbus Day
Friday, November 10***	Veterans Day
Thursday, November 23	Thanksgiving Day
Monday, December 25	Christmas Day

\*January 1, 2017 (the legal public holiday for New Year's Day), falls on a Sunday. For most Federal employees, Monday, January 2, will be treated as a holiday for pay and leave purposes. (See section 3(a) of Executive order 11582, February 11, 1971.)

- All shutdowns involving temporary impairment of utilities shall be scheduled with the MVAMC COTR three (3) weeks in advance.
- The period of performance for this project is not to exceed 120 days after Notice to Proceed (NTP).
- All work in areas involved shall be scheduled with the CO and P&A Section of the VA. Work shall be scheduled for proper execution to completion of this contract.
- All shutdowns involving temporary impairment of utilities shall be requested in writing to the MVAMC COR three (3) weeks in advance. Shutdowns shall be considered as an activity in the contractor schedule. The following list addresses the kind of shutdowns or service interruptions that shall require advanced notice:
  - ✓ Electrical Systems shutdown including Normal or emergency Power.
  - ✓ Fire Suppression Systems: Sprinkler shutdowns lasting over four (4) hours require notification and concurrence from the VISN Safety office. Fire Alarm work shall be conducted by Simplex.
  - ✓ Parking.
  - ✓ Cranes: Prior to crane arriving on site contractor shall submit: Crane maintenance logs, crane operator's license, drawings showing crane's operational and exclusion zone. All documents shall be revised and approved by the MVAMC Safety Office prior to scheduling the work.

## **7. SITE VISITS**

Job site shall be visited to verify all existing conditions and dimensions and the extent of work involved with the MVAMC COR. Visits to site may be made by appointment only during regular business hours and be previously approved by CO.

## **8. INSPECTIONS**

All work shall be inspected daily, during installation and at final completion by the MVAMC COR.

## **9. SAFETY REGULATIONS**

- All applicable Safety Regulations shall be observed during all work of this contract.
- The MVAMC Safety Officer shall have full authority to see that the contractor obeys all safety rules and regulations relative to the fulfillment of this contract.
- Provide all necessary barricades / signage where required.
- Isolate the area to prevent the spread of debris into adjacent area.
- Follow Infection Control regulations. Maintained the area negatively pressurized if required.
- Perform field test and participate on final acceptance tests for new equipment or systems installed. All Fire Alarm Test will be done on Saturdays at 900 am.
- Electrical shutdowns will be planned 3 weeks in advance and notified to COR.
- Provide a written certified statement indicating that the construction project meets the life safety code requirements. For those maintenance and repair projects where the life / safety code requirements is not applicable, a written statement shall also be provided accordingly.

## **10. SUBMITTALS**

- Submit documented proof of OSHA construction safety course.
- Submit as per Construction Documents and Specifications.
- Warranties.
- The Contractor should provide the Miami VAMC with a detailed proposal (no lump sum line items) and construction completion schedule for review and approval. Within 160 calendar days from the Notice to Proceed (NTP) the Contractor shall complete all work on the project.
- The Contractor shall provide to the Engineering Service two hard copies and one on a CD ROM of all As-Built drawings as well as equipment brochures and user manuals.

## **11. MATERIALS**

Contractor to provide all materials required, remove and replace finishes in accordance with Specifications.

## **12. EXECUTION**

- After scheduling work (including phasing according to General Requirements) with the MVAMC COR, provide the required signage and barricades as required to maintain safety and protection of work and around construction site.
- The contractor shall have all required equipment, tools and materials on site before any work starts.
- After Substantial Completion request Final Inspection from MVAMC COTR.

## **13. PROJECT CLASSIFICATION**

- This project has been classified according to the Construction Infection Control Risk Assessment as a Class I (Type C, High Risk Group) project.

## **14. DESIGN SUBMISSIONS AND REVIEWS**

### **a. Design Review Meetings:**

The detailed project development and construction plan should begin with the above-mentioned intense on-site physical survey and collection of previous project data.

All designs shall incorporate all architectural and engineering disciplines necessary to provide a complete and functional design. Designs shall be in accordance with all applicable requirements of NFPA, EPA, ANSI, OSHA, National Plumbing Code, National Electric Code, ASHRAE, National Safety Code, VA Specifications, VA Construction Standards, VA Design Handbooks, etc. and all applicable local, state, and Federal regulations and standards. Existing drawings will be made available to the CONTRACTOR; however, their accuracy shall be field verified by the CONTRACTOR and all consulting firms as part of investigative services.

The contractor will be required to perform all necessary site survey work such as verifying record drawings.

1. Provide all Engineer investigative work for application to this project including but not limited to Sanitary/Sewer Design system , electrical testing, structural analysis and any other test or study required to complete this project. Verify existing conditions to insure the accuracy of your design, and verify location of underground utilities prior to necessary excavations.
2. Field verify VA furnished drawings to insure CONTRACTOR design is accurate. It is the CONTRACTOR's responsibility to determine existing conditions and to base the design on this information.
3. Materials to be furnished to the contractor by the VA – The following shall be Furnished to the CONTRACTOR upon request:
  - a. VA Engineering Service will provide the CONTRACTOR with all applicable drawings for the project. The accuracy of the paper copies of Drawings is not guaranteed and shall be used only for general information. Actual conditions must be field verified by the CONTRACTOR and all consulting firms. The CONTRACTOR will then make copies of these drawings at the VA using VA equipment.
  - b. All VA standards, specifications, Space Planning Criteria, Equipment & Design Guides List and design submission guidelines can be obtained by accessing the World Wide Web at the following address:

b. Contractor shall attend a pre-design meeting with the Contracting Officer (CO), Contracting Officer Representatives (COR) from P&A and Biomedical Engineering Sections of the Engineering Service at the MVAMC, equipment manufacturer, OR Suite end user representative and all other stakeholders. Contractor shall be responsible for ensuring that other appropriate individuals representing all parties involved attend the meeting. Equipment purchase, delivery, rigging and installation are not part of this contract, those services will be addressed under different contract managed by Biomedical Engineering Section of the Engineering Service.

1. At completion of design and prior to start of construction, contractor shall attend a pre-construction meeting with the COR and other appropriate VA staff. Contractor shall be responsible for ensuring that other appropriate individuals attend the meeting.

2. A review meeting to resolve design issues will be held with the VA for each design review package submitted. The meeting will include discussion of VA comments regarding the submitted design package.
3. Participants will include VA Staff, and others as deemed necessary as appropriate for the specific package to be reviewed.
4. The contractor shall be responsible for generating meeting minutes for the post award meeting and any subsequent progress meetings. The meeting minutes shall document all items discussed at the meeting and shall include a list of meeting attendees. If meeting occur

**c. Design Review Submissions:**

Submissions will be reviewed for completeness against the CONTRACTOR Design Submission Requirements (PG-18-15 Volume C). The following specifies the documents, etc., required to be submitted by the CONTRACTOR to Engineering Service, for each scheduled review.

**Demolition Documents:**

1. General
  - a. The Contractor's Architect/Engineer will design the complete removal and demolition so that all applicable codes are met. The Contractor will be required to make a formal presentation in person at the 100% and Final design review as required.
  - b. The Contractor shall take written minutes of all design review meetings, participate in the pre-bid and pre-construction meetings, site visits, and any other site investigation meeting and provide copies of those minutes to the VA within five (5) work days after the meeting.
  - c. The overall demolition shall include CADD drawings, plans and specifications in conformance with recognized standards e.g. NEC, UL, NFPA, JCAHO, VA Construction Standards, and other references indicated above, etc. The most stringent standard shall be utilized.
  - d. In each submission, the Contractor shall incorporate all comments made by either the Medical Center, Network Safety & Fire Protection Engineer or VA Headquarters where applicable.

## **Construction Documents**

The Contractor shall prepare and submit construction documents, in accordance with standard professional practice and prevailing codes, for review and approval by the VA, in addition to submissions required for permitting.

### **1. General**

The following submissions are required:

**Conceptual Site Plan:** Provide 15 working days after notice to proceed. Provide Conceptual floor plan. CONTRACTOR shall provide one (1) full size and 2 (11"x17") size sets of project drawings produced on a Computer-Aided Drafting and Design (CADD) system. CADD system shall be compatible with AutoCAD LT 2010.

- a. The Architect/Engineer will design and estimate so that all applicable codes are met. The CONTRACTOR will be required to make a formal presentation in person at the 100% and Final design review as required.
- b. The CONTRACTOR shall take written minutes of all design review meetings, participate in the pre-bid and pre-construction meetings, site visits, and any other site investigation meeting and provide copies of those minutes to the VA within five (5) work days after the meeting.
- c. The overall design shall include all calculations, CADD drawings, plans and specifications in conformance with recognized standards e.g. NEC, UL, NFPA, JCAHO, VA Construction Standards, and other references indicated above, etc. The most stringent standard shall be utilized.
- d. In each submission, the CONTRACTOR shall incorporate all material specified and all revisions according to comments made by either the Medical Center, Network Safety & Fire Protection Engineer or VA Headquarters where applicable.

### **2. 35% Review/ First Review** – two sets of specifications, three sets of CADD drawings, cost estimates, and design calculations.

- a. Submittal Letter: CONTRACTOR shall provide a submittal letter addressed to the Chief, P&A Service stating documents submitted for 35% review.
- b. Specifications: CONTRACTOR shall provide a full set of project specifications, including "General Requirements," reflecting 35% of completed construction documents.

- c. Drawings: CONTRACTOR shall provide one (1) full size and 2 (11"x17") size sets of project drawings produced on a Computer-Aided Drafting and Design (CADD) system. CADD system shall be compatible with AutoCAD LT 2010. This shall include:
1. A title sheet with drawing index and department index for all drawings.
  2. Measured drawings of existing systems, utilities and facilities to be demolished or retained.
  3. New work to be performed including all involved disciplines, details sections, notes, legend, tables and any other necessary information to complete the project.
  4. Phasing drawing(s) including, but not limited to, traffic impact works for outside projects, temporary relocation of services/equipment during construction, and any other phasing coordination. This drawing shall be included in the final bid documents.

Cost Estimate: CONTRACTOR shall provide a current detailed cost estimate. It should include the various categories of work involved; and the quantities and unit cost. Magnitude estimates are not acceptable. A restriction affecting the CONTRACTOR's design is the construction cost limit as will be stated in the CONTRACTOR contract. The CONTRACTOR must design within this cost limit.

Should the VA change or modify the scope of work in any way to increase the cost the CONTRACTOR would not be responsible, but he must advise the Contracting Officer of the increase. If any other cost increases become evident, the CONTRACTOR must notify the Contracting Officer and recommend remedial action to reduce the estimated cost to within the approved limits. If an overrun is caused by the CONTRACTOR, the contract requires him/her to make whatever changes the Contracting Officer deems necessary to reduce the project's cost at no additional design expense to the Government. However, if the overrun in cost was not caused by the CONTRACTOR, or if the Contracting Officer agrees to a change in scope, the CONTRACTOR's fee will be adjusted. The responsibility for reducing costs to the lowest level while satisfying the functional requirements of project rests with the CONTRACTOR. Therefore, efforts toward controlling costs must begin in the earliest planning stages and continue through the final stages. The devices used to control construction costs are cost monitoring, value Engineering, bid alternates, scope reductions, etc.

1. This cost estimates shall include a contingency allowance of 5% for new construction and 10% for renovations or retrofit. An accurate, well-developed estimate by the CONTRACTOR is a critical element.
2. The construction estimate shall be based on the construction occurring according to the established schedule. It should include an inflation allowance, which is appropriate for our geographical area and accounts for the local bid climate at the anticipated construction award date.
3. Additionally the AE firm hired by the CONTRACTOR to complete the design portion of this project must provide a minimum of 20% of the Project design as deductive bid alternates and should be including in the specification section 01 00 00.

NOTE: These deductive bid alternates cannot affect the intended functionality of the project.

- d. The 35% design submissions will be reviewed for functional purposes only.  
Technical accuracy and details will be the responsibility of the CONTRACTOR firm.
  - e. There will be subsequent submissions at 35%, 50%, 100% and Final. CONTRACTOR and Design AE Firm shall provide a submittal letter stating the changes and corrections noted on the previous review have been evaluated and incorporated in the documents submitted for the 100% and Final Reviews.
3. 100% Review/ Fourth Review – two sets of specifications, three sets of CAD drawings, and a cost estimate.
    - a. Submittal Letter: CONTRACTOR and Design AE Firm shall provide a submittal letter stating the changes and corrections noted on the previous review have been evaluated and incorporated in the documents submitted for the 100% review.
    - b. Specifications: CONTRACTOR shall provide complete specifications, in accordance with previous review requirements, with all review comments accounted for and ready for use as final contract documents. Specifications shall include scope of work and phasing schedule requirements assembled with the general sections. Each section shall have a detailed index. Section 01 00 00 shall include the 10 hours OSHA training for all

employees and subcontractor's staff, and the 30 hours course for the superintendent if he will be assigned as a "competent person". In addition, the CONTRACTOR shall provide and described bid deductive alternatives in specification section 01 00 00 for funding constraints.

- c. Drawings: CONTRACTOR shall provide one (1) full set and two (2) 11"x17" copies of project drawings produced on a Computer-Aided Drafting and Design (CADD) system. CADD system shall be compatible with AutoCAD 2010. This submission shall include:
  - 1. All drawings developed for the previous reviews shall be detailed showing all utilities, services and sizes as well as required construction details.
  - 2. Also show complete details, notes, equipment schedules, sections and locations.  
Comments included in the 50% review shall be incorporated in the drawings.
- d. Cost Estimate: CONTRACTOR shall provide a revised detailed cost estimate and insure that the following items are included:
  - 1. Certification that the quantities have been checked and found to be correct.
  - 2. All estimates shall be based on the most up-to-date working drawings available and shall be current as of the date of submission.
  - 3. Materials are priced at the contractor's buying level. Sales taxes, when applicable, will be added into material costs.
  - 4. Cost totals should reflect labor and materials separately and should be formatted as follows:
    - a. Totals - labor and material for all branches of work.
    - b. Overhead and Profit – a nominal percentage to reflect variations of trades, project size, competition, etc.
    - c. Total Estimated Cost
    - d. Estimated cost and duration (time) for deductive alternates.
- e. This submission will be reviewed in a format similar to the 50% submission. This design will be reviewed for functional purposes only. **Technical accuracy and detail will be the responsibility of the CONTRACTOR firm.** Conditions and field verification are the total responsibility of the CONTRACTOR. **Therefore, change orders are not expected during construction due to design deficiency or negligence.** It is the CONTRACTOR's

responsibility to accurately determine conditions and to insure that the design is based upon correct current field verified data, and ensure no design deficiencies. All drawings furnished by the Department of Veterans Affairs shall be field verified by the CONTRACTOR.

4. Final Review Submission – After completion of the 100% review comments and corrections, the final bid contract documents shall be prepared and shall include:
  - a. Submittal Letter: CONTRACTOR shall provide a submittal letter stating that the changes and corrections noted on the previous review have been evaluated and incorporated in the documents submitted for the final submission.
  - b. Final Cost Estimate: CONTRACTOR is to provide the final cost estimate incorporating all changes and corrections noted in the previous review. A cost estimate for each deductive alternate shall also be included. In addition, the total completion date for the base bid and for each bid deductive alternate shall be included as part of the final cost estimate.
  - c. Certification: At the final review the CONTRACTOR will present the completed CADD produced drawings one (1) Full Size and three (3) Half Size (11"x17") each of which shall include a signature block that will bear the professional registration stamp of the registered professional architect and/or engineers responsible for the design. An architect's stamp (seal) must be applied to architectural drawings and an engineer's stamp to engineering drawings. In addition to the seals of the applicable Registered Professional Engineers, Certified Independent Third-Party Safety Professional or Professional Credential (CITP) and the Fire Protection Engineer in Charge of the final design revision are required as indicated in Section IV Certified Independent Third- Party Design Reviews of this document. Also a certification letter signed and stamped by the CITP indicating that the design is in compliance with the latest codes and regulations per Section V shall be included with this submission. **The Final Bid design package will not be accepted without the CITP Review certification letter.** After the drawings and specifications have been reviewed by Engineering, the Contracting Officer will issue for bid. If major discrepancies exist in the drawings, the technical clearance will be postponed until the CONTRACTOR has corrected these contract documents. **Technical accuracy shall be the CONTRACTOR's responsibility.**

- d. Electronic Drawings: Three (3) CD-ROM sets of electronic media containing all final CADD drawing files shall be submitted. Files must be compatible with current AutoCAD LT 2006 and all layers shall be unlocked prior to submission. In addition, electronic copies of the specifications in “Word” format and Cost Estimates shall be included in the CD-ROM’s
- e. CONTRACTOR shall include in specification section 01 33 23 “SAMPLES AND SHOP DRAWINGS” a list by specification and paragraph of all submittals require to be made under this project; however, a disclaimer statement is recommended. Section 01 00 00 shall include the 10 hours OSHA training for all employees and subcontractor’s staff, and the 30 hours course for the superintendent if he will be assigned as a “competent person”. In addition, the CONTRACTOR shall provide and describe bid deductive alternatives in specs section 01 00 00 for funding constraints.

#### **Construction / Demolition Period Service Requirements**

- A. Review of Submittals: CONTRACTOR shall review all material submittals, shop drawings and test reports that are required, etc. Reviews shall be completed and submittals returned to Engineering Service within ten (10) working days.
- B. Certification: Ensure all work performed meets all applicable codes and regulations.
- C. Review Analysis of Change Orders and Costs: CONTRACTOR shall provide prompt response when contacted by the COTR to review and provide analysis of Change Orders and Costs within five (5) working days.
- D. Record Drawing Requirements: CONTRACTOR shall provide one (1) complete finished set of AS-BUILT drawing reflecting all changes incorporated during the actual construction. These AS-Built are to be drawn on a CADD and highlighting all changes. The complete set will all be dated the same with “RECORD AS-BUILT DRAWINGS” on each page’s title block. The CONTRACTOR shall include a requirement note for the contractor to provide marked up prints directed to the CONTRACTOR showing actual construction and any changes, which occurred during construction. These shall be verified by the CONTRACTOR. CONTRACTOR shall also provide a complete updated set of record as-built drawing files as produced on (CADD) system compatible with

AutoCAD 2010 on CD-ROM. CONTRACTOR shall update drawings such that they shall meet the complete approval of the Engineering Service.

**Certified Independent Third- Party Design Reviews (CITP)**

A. The contractor will hire a Certified Independent Third-Party (CITP) Safety Professional or Professional Credential to provide the necessary design reviews for compliance with national and local codes, standards, and federal and state regulations included but not limited to:

- OSHA Standards
- JCAHO Standards
- Handicap Accessibility Standards
- NFPA Codes
- National and Local Building Codes
- EPA Regulations
- Emergency Preparedness infrastructure vulnerabilities
- Security infrastructure vulnerabilities
- Others as applicable

1. Requirement for acquiring and incorporating a Certified Independent Third-Party (CITP) Safety Professional or Professional Credential review of design documents

VA must comply with national and local codes, standards and regulatory requirements in order to comply with Public Law 100-678, Public Buildings Amendment Act of 1988 and Public Law 102-522, Federal Fire Safety Act of 1992.

Like other federal agencies with real property and construction authority, VA acts as its own building and code enforcing official or as the “Authority Having Jurisdiction” (AHJ) for meeting code requirements. As such, the VA has overall responsibility of ensuring compliance with codes.

The contractor will hire a CITP consultant(s) as necessary for the review of design and construction documents for compliance with applicable national and local codes, standards, federal and state regulations. The Design CONTRACTOR will take into consideration and

incorporate all third-party consultant comments/recommendations into the design documents prior to advertising for a construction contract award.

2. Certified Independent Third-Party Professional or Professional Credential Review and Approval  
Project plans must have a signature block or a letter on third-party Company's letterhead, a third party certified safety professional or professional credentials as applicable to the nature of review certifying and verifying the plans and specifications have been reviewed for compliance with applicable codes, standards and regulatory requirements. At the time of review, the CITP should identify all corrections necessary for the contractor to bring the design into compliance. The contractor is required to incorporate and make necessary corrections to the design to bring the design into compliance prior to the final design documents being issued for a construction contract award.

## **Design**

A. There will be five major stages of the CONTRACTOR's work under the contract as follows:

1. Conduct site investigations/project direction meeting.
  - a. Coordinate with VA Engineering
  - b. Using existing as-built as furnished by VA.
  - c. Consulting Engineers and other disciplines also involved.
  - d. VA Engineering available to discuss specific questions.
2. Present 35% review.
  - a. Formal meeting conducted by CONTRACTOR and Design AE.
  - b. Minutes prepared and submitted to VA within five (5) working days.
  - c. One (1) full size and two (2) half size (11"x 17") copies of drawings
  - d. Two (2) copies of edited specification
  - e. Construction schedule

3. Present 50% Review

- a. Formal meeting conducted by CONTRACTOR and Design AE.
- b. Minutes prepared and submitted to VA within five (5) working days.
- c. One (1) full size and two (2) half size (11"x 17") copies of drawings
- d. Two (2) copies of edited specification
- e. Construction schedule

4. Present 100% Design Review

- a. Formal meeting conducted by CONTRACTOR.
- b. Minutes prepared and submitted to VA within five (5) working days.
- c. One (1) full size (original) and three (3) half size (11"x 17") copies of drawings.
- d. One (1) copy of cost estimate including cost estimate for each deductive alternates and the estimated duration of the base bid and each alternative.
- e. Three (3) copies of fully edited specification.
- f. Three (3) CD-ROM sets of electronic media containing all final CADD drawing files.
- g. Construction schedule.
- h. Commissioning schedule & Plan

5. Present Final bid documents.

- a. Formal meeting conducted by Contractor and design A&E.
- b. Minutes prepared and submitted to VA within five (5) working days.

- c. One (1) full size (original) and three (3) half size (11”x 17”) copies of drawings.
- d. One (1) copy of cost estimate including cost estimate for each deductive alternates and the estimated duration of the base bid and each alternative.

Three (3) copies of fully edited specification.

Three (3) CD-ROM sets of electronic media containing all final CADD drawing files.

Note: The CONTRACTOR and AE Design Firm shall provide **ten (10)** complete sets of signed and sealed drawings and specifications of the final bid documents for advertisement purposes. Coordination with the contracting officer is required for delivery purposes.

B. In each submission, CONTRACTOR shall incorporate the material specified in the earlier submission, revised according to the comments made by the VA at the previous review.

## 15. SCHEDULE

The CONTRACTOR shall submit documents as indicated below:

<u>ITEM</u>	<u>DUE DATE</u> <u>(DAYS AFTER CONTRACT AWARD)</u>
35% Review	10 Can Modify
50% Review	10 days after 50% approval. Can Modify
100% Review	10 days after 95% approval Can Modify
Final Design Review	10 days after 100% approval. Can Modify

## 16. PERIOD OF PERFORMANCE

The period of performance for this project is 160 Calendars days from Contractor receipt of Notice to Proceed.

## 17. VA RESPONSIBILITY

The VA will coordinate meetings with the representative of medical stakeholders and the CONTRACTOR as requested. Any site visit and/or meetings shall be requested one (1) week in advance for proper coordination with the VA stakeholders.

## **18. RESOURCES**

All VA standards, specifications, Space Planning Criteria, Equipment & Design Guides List and design submission guidelines can be obtained by accessing the World Wide Web at the following address:

<http://www.cfm.va.gov/TIL/>

## **19. APPLICABLE PUBLICATIONS**

The following is not a comprehensive list of all applicable publications. Contractor/AE must research and review all publications applicable and abide to the highest national standards for adequate completion of this project.

- VA Tilt Specs.
- Florida Building Code.
- VA Interior Design Manual.
- National Fire Protection Association (NFPA).
- Underwriters Laboratories, Inc. (UL)
- Americans National Standards Institute (ANSI)
- American Society for Testing Materials (ASTM)
- National Manufacturers Association (NEMA)
- National Electric Code (NEC).