## Scope of Work – Design-Build Contract Upgrade Overhead Page and Nurse Call System for Fort Meade, SD 57741 Project Number 568-20-101

#### A. General Intention:

- Provide a design-build (DB) team to develop a complete design, conduct construction, install, and commission an upgraded Overhead Page/Mass Notification and Nurse Call/Code Blue System including hands free mobile devices and Real Time Locating System (RTLS) in the hospital complex (Buildings 113, 145, 146, 148, 165) and select out buildings (T296 – Fire Station) at the VA Black Hills Health Care System (BHHCS) in Fort Meade, SD. This is a highly technical project and requires extensive knowledge in designing, constructing, and commissioning Overhead Page and Nurse Call systems in both federal and hospital settings.
- 2. Background:
  - **a.** The existing Overhead page and Nurse Call System (Rauland 4/4k) is past its useful life and requires a complete upgrade to the system as repair parts are no longer manufactured and maintenance support on this equipment is becoming limited.
  - **b.** The Nurse Call in the CLC Wards E, F, and G in BLDG 148 are the top priority as those areas have been having the highest volume of service calls to keep it operational and there is concern that it may fail.
  - **c.** BLDG 148 Mental Health Ward D is the lowest priority as it was more recently upgraded to the Rauland 5K, but is still included to be upgraded to align with the rest of the hospital complex.
- 3. Additional Information:
  - a. CERNER Electronic Health Record System is planned to be incorporated within the next five years at the Black Hills Health Care System. Therefore, the system must be compatible with CERNER Electronic Health Record System to include RTLS, Wireless Messaging, and Mobile devices.
  - **b.** Approximately 20 pagers are utilized with the current systems. Upgraded system shall provide alternate mobile device included in the project to replace pagers. Additional Mobile devices are to be included to support the VA Medical Staff. A total of 230 Mobile devices are to be planned for the project.
  - c. General Drawings are provided for general reference for the Hospital Complex and for T296. File "113\_Inpatient\_MaxBeds\_Plan" shows the planned full capacity for Inpatient beds in BLDG 113 and the upgraded Overhead page and Nurse Call/Code Blue systems must support full capacity plans.

#### **B.** General Requirements:

- Contractor shall provide all labor, materials, equipment and incidentals necessary to provide DB services to accomplish Work Elements and requirements outlined in the Scope of Work (SOW).
- **2.** All Contractor's activities (design, construction, testing, submissions, commissioning, etc.) shall be done in accordance with reference material on VA's Office of Construction &

Facilities Management Technical Information Library (TIL) (See REFERENCE section). Additionally, contractor needs to meet applicable codes and regulations including, but not limited to: The International Building Code, State and Federal Regulations, National Fire Protection Association (NFPA), and Life Safety Code. When in conflict the most stringent specification requirements shall apply.

- 3. The system must be Federal Information Processing Standards (FIPS) compliant.
- 4. Sensitivity of Information: The sensitivity of information relating to this project is emphasized. All of the information in this SOW shall be treated as For Official Use Only. This information is not to be distributed without a confirmed need to know as determined by the CO/COR.
- 5. Discrepancies in Planning Information: The DB TEAM shall promptly report to the Contracting Officer in writing any discrepancies between this contract and the planning information provided by the Government. The DB TEAM shall make no adjustments to his work due to the discrepancy before the Contracting Officer has reviewed the matter and forwarded his determination to the DB TEAM. The DB TEAM's failure to report any such discovered discrepancy or to wait for the Contracting Officer's determination shall be at his risk and expense.
- 6. Change Orders: Any work that is not addressed by the contract and is considered a change order shall be immediately brought to the attention of the Contracting Officer. No "out-of-scope" or additional work shall be executed by the DB TEAM prior to negotiation with the VA BHHCS and approval by the Contracting Officer.
- 7. Ownership of Drawings: All designs, drawings, specifications, notes, and other work developed in the performance of this contract shall be and remains the sole property of the Government and may be used on any other work without additional compensation to the DB TEAM. With respect there to, the DB TEAM agrees not to assert any rights and not to establish any claim under the design patent or copyright laws.
- 8. The DB Team must have the following key individuals:
  - a. Lead/Solution Architect: The Lead/Solution Architect must be proficient in HL7, DICOM, SQL Databases, .NET Framework and Web Services, BACnet, and Modbus. The Architect shall have experience in working with Patient Engagement System providers, EMR providers, PACS providers, Integrated OR providers, Patient Monitoring providers, Integration/Middleware Platform providers, BAS providers, Physical Security providers, LAN/WLAN/VoIP providers to integrate various systems.
  - b. Project Manager: The Project Manager must have at least 5 years of project management experience on Federal and Hospital contracts. Additionally, must show they have managed large and multi-technology implementations.
  - c. Site Superintendent that must have at least 3 years of supervisory experience in Hospital settings on similar projects.

- d. Safety Officer in accordance with Safety Spec 01 35 26.
- e. Commissioning Agent must have a minimum of 5yrs experience with commissioning communication systems in federal and hospital setting and in accordance with commissioning Spec 01 91 00.
- f. Clinical Registered Nurse Manager/Informatics Manager to support the clinical hardware and software integrations. The Clinical RN Manager will participate in preconstruction meetings to facilitate clinical technology workflow decisions. The Clinical RN Manager must have experience in integrated technologies used by Nursing and Clinical Care providers in hospital Acute Care, ED, ICU, OR, CLC and other clinical areas.
- **9.** The DB TEAM shall arrange site visits with appropriate disciplines as they deem necessary to complete the design and ensure coordination. A clinical RN Manager must be part of the DB team that is present on the site visits to provide design assist with VA Clinical and Technical Staff. The VA expects the following site visits at a minimum.
  - a. The DB TEAM must conduct a thorough site visit to investigate all aspects of the existing space prior to the 65% design submittal to ensure accuracy of planning information. Investigation shall include data closets, electric rooms, and panel capacity, Nurse Call and Overhead page hardware and software, and all other utilities serving the upgraded system. The DB TEAM's investigation shall include validation of all field conditions.
  - **b.** The DB TEAM must conduct a site visit after the 65% design and prior to the 95% design. The purpose is to verify 65% plans are accurate and coordinated among disciplines and provide validation that field conditions are accurate and unchanged.
- **10.** The DB TEAM shall conduct joint meetings with the VA staff and project team to ensure technology system integrations and operation outcomes are aligned.
- 11. The DB TEAM shall include drawing cover page signature blocks for each group listed:
  - a. 65% Layout, MEP, and Finishes Concurrence: End Users including Medical and Clinical Staff, Safety, EMS, VA Fire Dept., VA Police, BioMed, OIT, and Facilities. COR/CO has final approval. VA has a 21 calendar day review period for 65% Layout.
  - b. 95% Concurrence: End Users including Medical and Clinical Staff, Safety, EMS, VA Fire Dept., VA Police, BioMed, OIT, and Facilities. COR/CO has final approval. VA has a 21 calendar day review period for 95% Layout.
  - **c.** 100% Approval: COR/CO is the approver and has 7 calendar days to review the 100% drawings to ensure completeness, accuracy, and compliance with 95% review.
- **12.** The DB Team shall procure systems and equipment required for the implementation of Overhead page and Nurse Call/Code Blue systems at BHHCS.
- **13.** The DB TEAM shall include a completed Equipment Schedule based on contract documents and meetings with the end user in the drawing that includes the following columns:
  - **a.** Equipment Code: Equipment code used on the Equipment/Furniture Plan Sheet
  - b. Equipment Name: Equipment name or description

- c. Equipment Power Requirements: Category,
- **d.** Equipment Purchaser and Installer: "VV" = VA purchased and installed, "VC" = VA purchased, and contractor installed, "CC" = contractor purchased and installed.
- e. Total Needed: Total number of pieces of equipment needed
- **f.** Preventative Maintenance Required (Yes or No): specify if equipment preventative maintenance is required.
- 14. The DB TEAM shall provide a completed excel spreadsheet documenting the items/equipment that will be needed for Overhead Page, Nurse Call, and Code Blue installation, activation, and commissioning (note, Equipment Guide Lists can be found on the CFM website in the TIL, which may expedite this task). The spreadsheet shall include the following columns: Room Number, Room Name, Room Size (ft<sup>2</sup>), Equipment Name/Description, Equipment Category (e.g. IT, Equipment), Responsible Service Line (e.g. OI&T, EMS, Clinical Staff, Facilities), and total number for the room. Each item in a room will have its own row, for example, if the new system is to include 10 shower rooms and each shower room needs an emergency pull cord, there will be 10 line items to document the emergency pull cords.
- 15. The DB Team must demo existing data/communication lines and pull new data/communication lines. The existing lines are also considered to be outdated and need to be removed.
- **16.** The DB Team must provide additional electrical distribution as needed to support the upgraded system.
- 17. Penetrations through fire/smoke barriers must meet NFPA and VA Fire Protection Design Manual Requirements. Abandoned penetrations must be filled, covered, or capped in accordance with NFPA and VA Fire Protection Design Manual. Penetrations are not to remain open when area does not have active work this means penetrations must be closed up before leaving the work site. Leaving penetrations open when no workers are present must be approved by COR.
- **18.** Pre-Construction Risk Assessment/ Infection Control Risk Assessment Form (PCRA\_ICRA Form-Risk Assessment, Attachment 001) must be prepared by the DB team form, and must be approved by VA COR, Fire Chief, Patient Safety, and Infection Control.
- Meeting Minutes must be recorded and submitted by the DB team to the COR for approval within 5 calendar days. Minutes will be treated as a submittal in accordance with SPEC 01 33 23.

# C. Specific Requirements:

- 1. See maps and drawings attachments (see Section J for List of attachments) for hospital and outbuilding areas.
- Removal of existing data lines from the VA network and terminations for new data lines into the VA network requires a VA OI&T representative to be on site. The contractor is responsible for removal and terminations.
- **3.** Demolition of existing nurse call and overhead page system is required to include cabling. Recycle items in accordance with VA specs and requirements.
- **4.** Nurse Call Hardware components are to be removed from service by the contractor, but provided to VA to retain existing components.
- 5. Nurse Call/Code Blue must have the following components and capabilities.
  - a. Software capabilities
    - (1) Dashboards and Reports

- (2) Patient Facing and Staff Facing Interface options
- (3) Census Boards
- (4) Activity Boards
- (5) Active Directory (ADFS)
- (6) Patient Management Integration (ADT)
- (7) Staff Assignment
- (8) Assignment Sharing
- (9) Phone Integration
- (10) Event API (Cerner, Medical Devices)
- (11) Staff Dashboards and Reports
- (12) Staff Location and Duress (RTLS)
- (13) Capable to add medical devices to the system.
- (14) Capable to support monitoring devices i.e. telemetry.
- (15) Programing ability to prioritize rounding in real time based on veteran satisfaction indicators, send rounding reminders, web on-call scheduling, and to identify high activity levels by nurse.
- (16) Support HL7 integration.
- (17) Integrate with telemetry alarms. Currently we have a Philips central monitoring that is planned to be upgraded.
- (18) Integrate with Bed Alarms. Tied into current Nurse Call System.
- (19) Integrate with IV pump and other equipment and medical device alarms.
- **b.** Minimum Salient Requirements
  - (1) Have a FDA 510K Class 1 Medical Device Listing
  - (2) High reliability system.
  - (3) Audit trail reporting for the Joint Commission
  - (4) Must have interoperability with 3<sup>rd</sup> party wired and wireless network devices within the facility including PCs, PDS's, mobile phones, databases, pagers, etc.
  - (5) Must be compatible with industry standard bed side-rail communications including visual and audible annunciation of patient safety and fall prevention.
  - (6) The system must not rely on any computer for primary operation. Systems requiring a PC to be connected for UL1069 operation shall not be accepted.
  - (7) Include all control equipment needed to enable open voice communication for patients within the system.
  - (8) Include in-room touch screen station(s).
  - (9) Call type/priority for each pushbutton or pull cord shall be programmable to annunciate the facility-determined call type.
  - (10) Physical device button label must be field replaceable to match the specified call type/priority.
  - (11) Devices shall be individually numbered to represent a separate and distinct location even stations on the same daisy chain.
  - (12) Peripheral devices must be hot swappable and not require system shutdown or removal of power prior to replacement.
  - (13) Tonal alarms must allow for programing to adjust volumes in different locations and at different times of the day.
  - (14) Must allow for alarm prioritization/stacking for at least 4 levels of alarms.
  - (15) Support multi-touch buttons which allows additional functionality on room devices.

- (16) Provide secure date encryption in transite and at rest to protect PHI.
- (17) Capability to have centralized management so that multiple locations can be managed from the single centralized servers.
- (18) Have a scalable network architecture to serve an additional 100% of current needs.
- (19) Dashboard to present data in near real time.
- (20) Reporting that can be customized per user, automatically generated, saved, and sent via email to designated users.
- (21) Configure Nursing workflows
- (22) The life-safety portions of the Nurse call system must be completely independent of the servers, software, and hospital network. In the event of a power loss or network failure the nurse call safety functions (includes tones, lights, and audio) must continue.
- (23) Life-Safety components must be purpose built and not contain any servers or external network components.
- (24) System has a "Safe Mode" that will still allow the Dome Light to function during a system communications failure.
- (25) While in "Safe Mode", the Dome Light shall provide a visual indicator when operating in "Safe Mode" and still provide a visual room alert display to indicate an active request while in "Safe Mode".
- (26) Provide the VA full ownership of all nurse call system data.
- (27) Be One-VA Technical Reference Model (TRM) approved. More information can be found at: <u>www.va.gov/trm</u>
- (28) Patient stations must have the minimum functionalities and/or characteristics:
  - (a) Expandable from single bed to dual occupancy without hardware change
  - (b) Unique bed ID with associated events
  - (c) Back box allow for mounting 2 gang or 3 gang without increasing rough-in/ back box requirements.
  - (d) Minimum of 2 call out button configuration with each button having at least two call types via a short/single press or long/double press activation. Must include Code Blue and Staff Assist Push button.
  - (e) Call Cancel Button
  - (f) Call Placed LED indicator
  - (g) Bed out LED indicator
  - (h) Cleanable mode to temporarily disable buttons for limited time for cleaning without nuisance alarms
  - (i) Suitable for ethylene oxide sterilization
  - (j) Cords shall be sealed design with smooth shape and minimal crevices to allow for easy comprehensive cleaning.
  - (k) Support Serial Input from Pillow Speakers
  - (I) Pillow Speaker/Handset with following functions
    - (i) Customizable with receptacle/call cord
    - (ii) Controls for lighting
    - (iii) Magnetic plug to minimize potential device damage
    - (iv) Contain selected options that include the nurse call button, a speaker, and controls for TV volume and channels in a molded, flame-retardant, ABS

housing. The cord shall be at least 8' in length and have an integrated sheet clip

- (m) Direct channel select and staff assist push buttons (i.e. pain, toilet assist, water)
- (n) Audio Microphone and speaker
- (o) Multiple call-in priorities
- (p) Auxiliary device receptacle with separate call-in priority settings
- (q) IV and bed exit alarm capabilities
- (r) Handset magnetic disconnect for cleaning and reduced risk of damage
- (s) Capable for serial number programming.
- (29) Audio and Non-Audio Pull Cord Stations with the below minimum functionalities or characteristics:
  - (a) Pull cord made with non-contaminant material to reduce the spread of infections.
  - (b) Meet IP44 ratings to be splash proof and suitable for use in wet areas
  - (c) Support 80 newtons of force before breakaway occurs.
- (30) Two-way audio to bath rooms/ bath stations
- (31) LED Zone indicator lights at hallway intersections to clearly direct staff.
- (32) LED Corridor Dome Light with a minimum of seven (7) color indicator lights placed outside patient rooms, hallway bathrooms, and any room with code blue/staff assist push buttons
- (33) LED Dome Light must not be greater than 6 inches in height and not protrude more than 4 inches.
- (34) Nurse Consoles mush have VoIP capabilities and have customizable one-touch functions.
- (35) Staff Terminals must have the following capabilities.
  - (a) Color Touch screens with minimum of 7 in screen and support 800x480 pixels or better.
  - (b) Capable of displaying/answering calls.
  - (c) Capable of placing calls.
  - (d) Ability to create user-configurable soft keys with multiple screens per terminal.
  - (e) Send specific needs for that locations, i.e. Emergency, Staff Assist, Cleaning Needed, Lifting Help, Order, Transport, Stat Order, and Rounding.
  - (f) Speed dial functions.
  - (g) Power over Ethernet so additional local power is not required.
  - (h) Hands-free duplex communications through built in speaker and separate microphone.
  - (i) Display multiple incoming calls.
  - (j) Dial through touch key pad.
  - (k) Support two-step credentialing to meet HER credentialing requirements.
- (36) Components must meet Joint Commission and OSHA infection control cleaning standards.
- (37) Device must be incapable of broadcasting PHI over a speaker in any environment.
- (38) Include centralized administrative interface to manage staff and clinician phonebook.
- (39) Include 10 each of the following specialty call cords.
  - (a) Breathcall<sup>®</sup> call cords for use by patients who do not have adequate use of their hands to initiate a call. The Breathcall<sup>®</sup> cord shall have a heavy duty, molded, ¼ inch

connector, a flexible PVC jacketed cable, and a momentary contact switch that is sensitive to air pressure. The cord shall be <9'> in length, feature an adjustable arm for clamping the call cord onto a headboard or bed frame, and be suitable for use in oxygen atmospheres. Each Breathcall<sup>®</sup> call cord shall be furnished with twelve (12) replacement straws

- (b) Air bulb call cords for use by patients who must remain distant from electrical fixtures. The air bulb call cord shall have a heavy duty, molded, combination ¼ inch connector/air pressure sensitive switch. The "cord" shall consist of <8'>of flexible tubing terminated with an air bulb, have an integrated sheet clip, be suitable for use in oxygen atmospheres, and be suitable for ethylene oxide sterilization.
- (c) Geriatric call cords for use by patients who have minimal use of their hands to initiate a call. The geriatric call cord shall have a heavy duty, molded, ¼" connector, a flexible PVC jacketed cable with a sensitive, momentary contact reed switch that requires only a gentle squeeze or tap to activate. The cord shall be <8'> in length, have an integrated sheet clip, and be suitable for ethylene oxide sterilization.
- 6. Overhead Page and Nurse Call/Code Blue requirements in Mental Health Area have unique requirements and must be in accordance with Mental Health Facilities and/or Mental Health Outpatient Services Design Manuals located on the TIL.
- 7. Wireless Network, RTLS, and Wireless Devices
  - **a.** Stand-alone Wireless Network system must be installed to support wireless devices that incorporate with the Nurse Call and overhead page systems.
  - **b.** Contractor to provide 230 wireless devices for end users. Wireless devices and RTLS to be incorporated into one device so staff not required to carry 2 separate devices.
  - c. Wireless devices must be capable of call back features.
  - d. Wireless devices must incorporate with Nurse Call systems
  - e. Provide UV sanitizing stations for sanitizing wireless devices.
  - f. Wireless devices must incorporate with RTLS system.
  - g. Wireless devices must provide secure voice and data communication.
  - Wireless integration must include at least 3 levels of staff, plus a charge nurse to be assigned "groups" that can be assigned to each patient/bed and/or call priority. Rollover time from primary, secondary, tertiary, and charge nurse shall be programable and definable by the facility.
  - i. Must have an automated call escalation program to allow any defined group of devices to receive selected call types. Must also have the ability to send a call cancel when event is handled to notify others that call has been answered.
  - j. Wireless devices must be capable of generating service tasks.
  - **k.** Message alerts must be encrypted end-to-end, so data remains secure.
  - I. Mobile applications for wireless devices must utilize robust, standards-based security and message encryption to ensure patient information and alerts remain secure.
  - m. RTLS must be integrated to Nurse Call.
  - **n.** RTLS must provide the following functionality when staff enter a room.
    - (1) Normal call shall be canceled, and associated LED's and signals must shut off if a staff console or wireless phone has not previously answered the call.

- (2) Pending reminders shall be cancelled and associated LED's and signals must shut off if the appropriate level of staff has entered the room for the given reminder level.
- (3) Signal dome light to indicate staff presence while in the room.
- (4) While staff is registered in a patient room, a method to quickly execute a code blue or staff emergency with call button or call cord must be available.
- (5) Generate privacy mode for messaging a nurse that is with a patient. Privacy mode will alert nurse of need, but insure private patient information is not shared.
- RTLS management reporting software shall record all events of staff entering and exiting patient rooms. This information shall be available to draw reports showing identification of staff entering patient rooms, time stamped, and duration with patient.
- **p.** RTLS must be capable of supporting Equipment Tracking.
- **q.** Duress button must be available on wireless device and/or RTLS system.
- r. Duress button must signal VA police and nearest staff to ensure rapid response. Programable to signal a minimum of 10 devices or numbers.
- 8. Overhead Page minimum salient characteristics.
  - **a.** Ability to adjust output levels automatically in response to changes in ambient noise levels.
  - **b.** Ability to adjust volume settings remotely
  - c. Ability to program overhead speakers into zones and to select specific zones when messaging. Zones to be programable in a hierarchy structure, i.e. Hospital Complex, BLDG 113, Med/Surg, Med/Surg corridors, Med/Surg South Corridor.
  - d. High performance and high reliability
  - e. LED Status Indicator.
  - **f.** 5 year warranty on components
  - g. Utilize IEEE compliant Power over Ethernet technology.
  - h. High reliability switches
  - i. Paging stations must have the following
    - (1) Minimum of 999 user-configurable page codes
    - (2) Optional PIN to restrict unauthorized use
    - (3) CE marked.
  - j. Capable to interface with emergency and/or fire alarm systems.
  - **k.** Components must be CE marked.
  - I. Provide options for paging specific locations, general locations, and campus wide.
  - **m.** Text-to-speech announcement creation
  - **n.** User configurable templates
  - **o.** Enable Announcements in multiple languages
  - p. Provide power redundancy to emergency and/or life safety components
  - q. Supports multiple device monitoring

#### D. Design Requirements:

1. Architecture

- a. Design shall detail the architectural construction requirements including phasing, demolition, floor and ceiling plans, equipment/furniture layouts, elevations, sections, details, schedules, finishes (e.g. material, color selection), and discipline coordination.
- b. Design shall meet or exceed the intent of the VA Design Guides and Specifications. New concepts seen in private industry shall be explored and considered.
- **c.** Architect shall include a proposed construction phasing plan to accommodate the migration from the old system to the new system
- **d.** Design shall include all infection control procedures necessary to complete project in accordance with Joint Commission, Black Hills Health Care System, and Life Safety requirements.
- 2. Structural
  - **a.** Design shall include any necessary structural construction requirements including all structural plans, elevations, sections, and details as required.
- 3. Mechanical
  - **a.** Mechanical Engineer shall field verify existing conditions to ensure that the HVAC infrastructure shall be sufficient to support the installation of the new system. If insufficient shall make recommendations on how to meet HVAC requirements.
- 4. Electrical
  - **a.** Electrical Engineer shall field verify existing conditions to ensure that the existing electrical infrastructure is sufficient to support the new overhead page and nurse call systems.
  - **b.** Evaluate power supply to the space. If additional circuits are required, this shall be included in the design.
  - **c.** Evaluate the heat load of the new systems and compare it to the existing system. Provide calculations and include the analysis in the Design Narrative.
  - **d.** Design shall include all electrical plans, elevations, sections, details, diagrams, and schedules showing electrical closet(s), power distribution systems, and auxiliary power systems needed to support the overhead page and nurse call system including mobile devices and wireless system.
  - e. Designer shall show all necessary service panels, circuits, cabling, wiring, conduit, outlets, relays, switches, etc. for a complete and usable electrical system.
  - **f.** All existing electrical systems and components planned for utilization shall be field-verified by the electrical engineer.
  - **g.** Design shall identify requirements for both normal and critical power.
- 5. Low Voltage and Health Care Systems
  - **a.** Design shall include all plans, elevations, sections, details, diagrams, and schedules showing data closet/room, distribution, and signaling systems.
  - **b.** Designer should include and coordinate all biomedical systems, security, fire alarm, patient monitoring, NC, panic/duress, telecommunications and data.
  - **c.** Designer shall work with Biomedical Instrumentation Service (BIS) team to layout biomedical equipment requirements. All supporting infrastructure for biomedical equipment shall be shown on the drawings.
  - **d.** Design shall include Nurse call (NC) and code blue systems including wireless devices and RTLS.
  - e. Design shall include Overhead paging, mass notification, and panic alarms.

- **f.** Designer shall evaluate the fire alarm system and determine interaction with the overhead page system.
- E. **References**: The DB TEAM shall incorporate, but not be limited to references for design, available at <a href="http://www.cfm.va.gov/til/spec.asp">http://www.cfm.va.gov/til/spec.asp</a> or from the COR, as applicable: Construction Criteria Base or Whole Building Design Guide.
  - **1.** VA Design Guides/Design Manuals
  - 2. VA Master Specifications
  - **3.** VA Equipment Guide Lists
  - 4. VHA National CAD Standards and Details
  - 5. VA BIM Guide
  - 6. International Building Codes, State and Federal Regulations, ASHRAE Standards
  - 7. NFPA and Life Safety Code
  - 8. VA Space Criteria

#### F. Government Provided Materials:

- The VAMC COR shall provide the DB TEAM with available as-builts and utility locations, as requested. The DB TEAM shall visit the project site to field-verify the information shown on as-builts. The VAMC does not guarantee the accuracy or completeness of as-builts. The DB TEAM shall promptly report any discrepancies to the VAMC COR for clarification.
- **2.** The VA COR will provide specification section 01 00 00, General Requirements, to the DB TEAM. The DB TEAM may modify the specification section to meet project requirements, but modification must be approved by the COR.
- **3.** BHHCS VA Drawing Title Page Template.

#### G. Deliverables:

- 1. Design Services:
  - a. Provide 65%, 95%, and 100% for review in accordance with VA PG 18-15 Minimum Requirements for A/E Submissions and contract documents. Contractor must deliver one hardcopy set of 65% and 95% drawings on bound ARCH E1 – 30" x 42" bond paper and an electronic version in PDF to the COR. Specifications must be provided in MS Word with edits shown for 65%. Specifications must be provided in MS Word for 95% review with edits and comments removed.
  - **b.** 100% for review must be submitted electronically in PDF. This review is to ensure set is complete and accurate and comments from the 95% are incorporated.
  - **c.** Project Schedule in accordance with Spec 01 32 16.16. Project must be phased and coordinated to maintain operations and minimize disruptions at BHHCS.
    - (1) Phase must keep a minimum of 75% of medical functions available. I.E. CLC must be able to maintain at least 75% room capacity.
    - (2) Phase must keep a minimum of 50% of non-medical functions available in a space. I.E. If two female bathrooms are available near primary care one can be down at a time.
    - (3) Phase for areas that cannot meet the above requirements require approval from COR to schedule. Where removal of 1 room reduces medical functions below 75% plan on taking one element or room at a time. I.E. There are 3 operating rooms and so removing one operating room from service drops the capability below 75%.

- d. Contractor must deliver one hardcopy set of stamped CD drawings on bound ARCH E1 30" x 42" bond paper and an electronic version in PDF to the COR. A second hardcopy must be provided to the CO upon request at no additional cost. CD drawings must also be provided in the following formats PDF, Revit, and AutoCAD (version 2019 compatible). CD specifications must be provided in MS Word and PDF format on submittal exchange or equivalent. Bound hard copy of specifications must be provided to the COR. Second hard copy set of Bound specifications must be provided to the CO upon request at no additional cost.
- e. Submittals in accordance with Spec 01 33 23.
- f. Construction Period Services to include submittal reviews and answering RFIs.
- g. Record Drawings in accordance with contract documents.
- **2.** Construction Services:
  - **a.** Provide all labor, equipment, supplies, and supervision to construct and install an upgraded Overhead Page/Mass Notification and Nurse Call/Code Blue System in accordance with contract documents, specifications, and drawings.
- 3. Commissioning:
  - **a.** Commissioning must be included in DB procurement package.
- H. **Qualifications of DB Team:** DB Team shall provide experienced engineers and staff to prepare the Overhead page and Nurse call system at the BHHCS. Personnel added to the DB team after award must provide resume and be approved by COR.
- Proposed Schedule: All days shown are calendar days. Days shown are completion times, therefore CD's are to be received NLT D+136. If submission or completion date falls on a weekend or Federal holiday expected the business day prior. Construction items 10-14 are shown in priority order, but may be completed concurrently so long as progress in the priority areas are not impacted.
  - 1. Notice to Proceed (NTP) D-Day
  - **2.** Design Initiated D+5
  - **3.** 65% Submission D+45
  - 4. 65% Review Completed by VAMC D+66
  - 5. 95% Submission D+87
  - 6. 95% Review Completed by VAMC D+108
  - **7.** 100% Submission D+122
  - **8.** 100% Back-Check Completed by VAMC D+129
  - 9. CD Submission D+136
  - Install, Train, and Commission Overhead Page and Nurse Call in BLDG 148 E, F, G Ward D+171
  - 11. Upgrade, Train, and Commission Overhead Page and Nurse Call in BLDG 145 D + 195
  - 12. Upgrade, Train, and Commission Overhead Page and Nurse Call in BLDG 113 D + 285
  - Upgrade, Train, and Commission Overhead Page and Nurse Call in BLDG 148 D Ward D + 300
  - 14. Upgrade, Train, and Commission Overhead Page and Nurse Call in Misc. locations D + 314
  - **15.** Record Drawings and O&Ms Received D + 328
  - **16.** Final Project Closeout D + 335
  - **17.** Total Period of Performance equals 335 calendar days after NTP.

### J. Attachments

- 1. "113\_Inpatient\_MaxBeds\_Plan" This drawing shows the maximum number of beds in Surgery, Med/Surg, and ICU locations. (Attachment 8)
- "130026 VA FtMeade As-Builts" This shows the drawings for the Nurse Call installed in 2013. (Attachment 9)
- "Drawings May 2018 SPS\_Endo Revised Final" This drawing shows the technology section of drawings for the SPS and Endo project that is under construction as of 12AUG2020. (Attachment 10)
- **4.** "PCRA\_Form (RiskAssessment)" This document must be completed by the contractor and approved by the VA. (Attachment 11)