



U.S. Department of Veterans Affairs

National Cemetery Administration

Scope of Work

Long Island National Cemetery

Farmingdale, New York

Columbarium/Perimeter Fence, Design/Build Project

VA Project 815CM3039

Date: 5/10/2017

1. GENERAL

This Scope of work (SOW) identifies the goal and objectives of this Design-Build (D/B) project. The D/B team shall provide Architectural and Engineering disciplines for the preparation of construction documents for the purpose of completing the construction project, and construction contractors for construction of the project.

The D/B Team shall provide all labor, materials, tools and equipment, and design-build services necessary for design and construction of a project described here and in other specific tasks as further defined by this solicitation. See Section 12 , 'Additional information for this design/build project.'

The D/B Team shall be responsible for the quality, accuracy and completeness of the documents and is required to meet the SOW. Requirements contained herein are minimums; each discipline performing engineering services for this contract shall meet current industry standards for the content and quality of deliverables. The D/B Team shall be responsible for coordinating the documents and for producing a complete set of drawings in accordance with professional practices. Complete and accurate coordination between the disciplines and quality control of all consultants' work shall be required. All drawings shall require a professional license seal and signature by the discipline responsible for the work.

The D/B Team shall be responsible for ensuring that the quality of construction and materials complies with the Construction Documents reviewed and accepted by the Government.

The D/B Team shall submit total project cost estimates along with the 50% and 95% submissions.

2. PROJECT GOAL

The purpose of this project is to provide design and construction for a new phase 1 - 6,240 niche columbarium, and perimeter fence restoration/changes/upgrades at Long Island National Cemetery (LINC). See project scope and design criteria, section 7. Fence scope includes an add alternate, see section 7.3.4. D/B Team shall ensure that a complete design/construction document package is completed for the work as described in this SOW. The DB team design and construct all new site infrastructure/utilities for the phase 1 columbarium build to easily accommodate the future phase 2 expansion of the Columbarium. The new columbarium will be located on the corner of Flagstaff Drive and Main Portal Drive per columbarium master plan RFP-01 included herewith as a reference, see section 7.4. All linear and square footage measurements given in section 7 of this SOW are approximate estimates, the D/B team is responsible for confirming these estimates prior to submitting a proposal.

The Architectural and Engineering (DB/AE) team shall provide a complete construction document package for the work as described in this SOW.

3. BACKGROUND

Long Island National Cemetery is located in the community of Farmingdale on Long Island in Suffolk County, N.Y. Address is 2040 Wellwood Avenue, Farmingdale, NY.

4. OPERATIONAL CONSIDERATIONS

Each national cemetery is managed by VA National Cemetery Administration (NCA) personnel in conformance with national and regional policies, priorities, goals, and objectives. The functions of a national cemetery include the operation and maintenance of all aspects of the cemetery. Typically, this includes burial of veterans and eligible family members, the interment of cremated remains, and the placement and maintenance of a headstone or grave marker. Cemetery operations include the conduct of Memorial Day and other special ceremonies, as well as the care of graves, structures and grounds. Long Island National Cemetery is operated and maintained by local NCA staff supervised by the cemetery director. Operating hours are Monday through Friday, 7:30 am – 4:30 pm. Closed federal holidays except Memorial Day and Veterans Day.

All survey work must take place during normal operating hours. Any request to work over these hours must be requested in writing and approved by the Cemetery Director in conjunction with the VA Project Manager/COR a minimum of 24 hours in advance. Also, the cemetery hosts numerous ceremonies and events, work shall not interfere with these ceremonies and shall cease during the ceremonies. All cemetery internments shall take precedence to any work being done by the D/B team. The D/B team shall coordinate with the cemetery Director to obtain an interment schedule. Notice will be provided by the cemetery staff 5 days in advance of scheduled ceremonies whenever possible. Occasionally events are

scheduled with less than 5 days' notice in which case the cemetery will provide as much notice as they can.

Parking is limited. Survey staff vehicle parking area is to be coordinated with the VA Project Manager/COR and cemetery director.

Smoking is not allowed on cemetery grounds.

Proper attire and professional conduct is required at all times.

All work shall cease during the time an internment is taking place near the project site. Special care must be taken to accommodate visitors and to ensure work does not interfere with their visit and ensure that there are no safety hazards present.

5. ENVIRONMENTAL COMPLIANCE

Based upon Department of Veterans Affairs "Environmental Effects of VA Actions," 38 CFR Part 26, the project is "categorically excluded" from the need for environmental documentation, specifically Section 26.6 of said code paragraph (b)(2). The D/B Team shall not be responsible for environmental compliance under NEPA.

6. HISTORIC COMPLIANCE

This project is located in the Long Island National Cemetery, which is eligible for listing in the National Register of Historic Places (NRHP). The proposed scope of work for this project is subject to compliance with Section 106 of the National Historic Preservation Act (P.L. 89-665, as amended). Accurate documentation of the work is required for this project to indicate the protection of cultural landscapes, and be compatible with contributing elements within the Cemetery. The scope of work is to be reviewed by the National Cemetery Administration (NCA) Historic Architect (HA), who will consult with the New York State Historic Preservation Office (SHPO) prior to work commencing. Proposed work, methods and treatments should meet the Secretary of the Interior's Standards for the Treatment of Historic Properties. The DB/AE team shall not be responsible for submissions to state agencies. All tasks associated with historic compliance must be completed within the design schedule. Relevant SHPO contributing properties are; main entrance gates (1938), entrance gate No. 2 (1941), entrance gate Nos. 3 and 4 (1956), picket fence (between 1938 and 1955), chain-link-fence (ca. 1968). SHPO may require that the chain link fence be replaced in kind, however VA NCA believes that if we offer a more attractive fence they will allow the upgrade.

7. PROJECT SCOPE AND DESIGN CRITERIA (the D/B team shall provide Survey, design, and is to include all the services associated with items in section 7 of this SOW. Site Survey and Investigation for all work areas in this SOW. (See section 12 of the SOW)

7.1. Site Survey and investigation for all work areas within this SOW. (See section 12 of the SOW)

7.1.1. Topography

7.1.2. Utilities

- 7.1.3. Geotechnical
- 7.1.4. Road and Curb
- 7.1.5. Structures as applicable
- 7.1.6. Plants
- 7.1.7. Fences
- 7.1.8. Sidewalks

7.2. 6,240 Niche Columbarium (Phase 1 of columbarium site master plan)

- 7.2.1. See Master Plan Concept drawing RFP-01, .pdf file (attached herewith).
- 7.2.2. See NCA standard columbarium detail drawings NCA 010 thru 013, .pdf booklet attached herewith as a reference. The Columbarium will be similar in design to what is shown on the standard drawings however columbarium piers shall have a historic looking brick veneer rather than stone veneer, brick shall be similar to existing historic brick at cemetery.
- 7.2.3. Provide design and construction documents for a phase 1, 6,240 niche columbarium per RFP-01 Columbarium Master Plan (provided herewith as a reference). Provide drawings sets that clearly indicate all required phase 1 construction work for the construction of 6,240 niches, phase 1 design must be done in such a way as to easily accommodate future phase 2 columbarium expansion.
- 7.2.4. Niches shall be standard 10-1/2" wide by 15" high by 20" deep.
- 7.2.5. Columbarium wall caps shall be smooth faced limestone (pre-cast concrete wall caps are unacceptable).
- 7.2.6. Letters, Numbers, Signage, shall be per attached standard columbarium detail drawing booklet.
- 7.2.7. Niche covers with stainless steel rosettes and stainless steel mounting hardware shall be white marble stone. The niche covers shall be Government-furnished / Contractor Installed (all mounting hardware shall be furnished by the D/B team). Niche covers are critical path items that require early procurement to meet schedule parameters. The transfer of government-furnished materials will be witnessed and documented by a representative of the Government. D/B Team shall be responsible for loss or damage of Government furnished materials after transfer. Include target date for niche covers to be on site in construction schedule.



Aerial View of Columbarium Site

7.3. Fence, sidewalk, and guardrail work.

- 7.3.1.** Complete historic preservation, restoration, and relocation of 6,000 linear feet of the historic iron fence and piers on the West and South sides of cemetery, including existing gates and brick piers at and around the gate areas. Provide an additional 10 sections of historic fence components as attic stock for future repairs. Fence, gates, and piers are to be relocated further away from Wellwood Avenue. It is assumed that the fence can be moved east at least 5' further away from and parallel to Wellwood Avenue at a minimum in order to provide space for a new pedestrian sidewalk outside of and adjacent to the new fence location. The farther the fence is from Wellwood Avenue the better, relocated fence cannot encroach on existing burial sites. Design drawings shall include all required demolition, all tree removal and tree replacement, clearing, and grubbing to facilitate this work. Design drawings shall also include new landscape and hardscape elements to replace those removed for new work.
- 7.3.2.** Portions of fence along Wellwood Avenue should be relocated at least 15' further east from Wellwood Avenue for a distance of about 200 linear feet South of intersections at 3 areas; gate 1 - Main Portal Drive, gate 3 - West Fifth Drive, and gate 4 - at North end West side. Additional width between road and fence is required for a future right turn deceleration lanes at each of these locations. Design shall also accommodate a future bus stop along with a Bus pull off lane on the cemetery side of the road near the intersection of west fifth drive and Wellwood Avenue. Design work for planning of future right turn deceleration

lanes, future bus stop, fence re-location, and new sidewalk must to be coordinated with New York State Historic Preservation Office (NYSHPO) for historic approval and with Suffolk County Department of Public Works Highway Construction... (SCDOPWHC) road planners to align with best engineering practices, property lines, and easements as applicable.

- 7.3.3.** Replace an additional 2,000 linear feet of chain link fence on the West side of the cemetery along Wellwood Avenue with a new fence to match the existing historic iron fence, this new fence is also to be relocated further away from Wellwood Avenue (new sections of fence shall match existing historic fence and must be approved by NYSHPO). Provide additional 5 sections of fence components as attic stock for future repairs.
- 7.3.4.** Remove 9,500 linear feet of chain link fence on the North, East, and South sides, replace with new vinyl coated chain link fence that meets NYSHPO requirements. The portion of fence along Little East Neck Road and Colonial Springs Road ending at the spoils area should be moved away from road, back 5 feet from its current location. The east side of the cemetery has a spoils area that will require a new 8' high vinyl coated chain link fence with privacy slats, provide this fence with privacy slats on the North, East, and South sides of spoils area. Include add alternate in design/build contract to provide an aluminum picket style fence upgrade for the portion of fence along Little East Neck Road and Colonial Springs Road ending at the spoils area on the east side of the cemetery, alternate fence shall align with the look of the existing historic iron fence (all proposed fence upgrades must be approved by NYSHPO). Length of add alternate fence upgrade along Little East Neck Road is about 4,000 linear feet. As part of add alternate provide additional 10 sections of fence components for future repairs.
- 7.3.5.** Remove all sections of existing sidewalk (about 16,000 square feet) along Wellwood Avenue and replace with new 5' wide concrete sidewalk (about 30,000 square feet) all along Wellwood Avenue on the West side of the cemetery. New side walk shall be adjacent to new/restored/ relocated perimeter fence and continue under the fence to provide a 1' wide mow strip for the fence on the cemetery side. Maintain 4' minimum width sidewalk outside of cemetery fence, maintain 3' minimum width sidewalk around piers. New side walk shall comply with accessibility requirements, include curb cuts, and passing/turn around areas at 200' intervals, side walk design and construction shall address storm water management.
- 7.3.6.** Add 300' of class 2 vehicle guide/guard rail around the corner of Little East Neck and Colonial Springs Road outside the new fence, 75' long on Colonial Springs, 225' long on Little East Neck.



Aerial View of cemetery

7.4. Government Provided Reference Material –Record construction documents, details and specifications. CAD files are unavailable; site survey work will be required to generate drawing backgrounds. The following .pdf drawings are attached as a reference;

7.4.1. RFP-01, Columbarium Master Plan, dated 3/1/2017 (VA NCA suggested layout).

7.4.2. NCA Standard Drawings, NCA 010 thru NCA 013, Columbarium Details, dated 3/14/2017 (provided as a reference only, design will be specific to site).

7.5. Accessibility- All features of the new design complex for columbarium shall be accessible in compliance with the Americans with Disabilities Act-1990, Architectural Barriers Act of 1968, as amended and local accessibility requirements. To achieve compliance, the National Cemetery Administration uses as its standard for building and facility design the ABA Accessibility Standard for Federal Facilities (ABAAS). The standards are found at the following URL: <http://www.access-board.gov/ada-aba/aba-standards-gsa.cfm>. All aspects of compliance related to this project are to be discussed and exceptions may apply based on site conditions.

7.6. Design Criteria- The following general guidance applies to the project. It can be accessed from the VA web site at the following URLs:

7.6.1. VA Program Guide PG-18-3, Topic 1 – Codes, Standards and Executive Orders (September 2013)

www.cfm.va.gov/til/cPro.asp

7.6.2. VA Program Guide PG-18-3, Topic 4- Foundation Drainage (April 2001)

www.cfm.va.gov/til/cPro.asp

- 7.6.3. VA Program Guide PG-18-3, Topic 16 - Sustainable Buildings Policy for VA Renovation and New Construction (May 2006)
www.cfm.va.gov/til/cPro.asp
- 7.6.4. VA Sustainable Design Manual (May 2014)
<http://www.cfm.va.gov/til/sustain/dmSustain.pdf>
- 7.6.5. Green Globes-New Construction
<http://www.cfm.va.gov/til/sustain/GPChecklist-GG-NC.docx>
- 7.6.6. VA Design and Construction Criteria, NCA Specific Criteria and Specifications
<http://www.cfm.va.gov/til/nca.asp>
- 7.6.7. VA PG 18-15 Volume D A/E Submission Requirements for National Cemetery Projects as applicable to design portion of the D/B contract. Use VA PG 18-15 Volume D as a general guide; see Section 8.0 on this SOW for the required deliverables on this project. <http://www.cfm.va.gov/til/ae/aesubcem/>
- 7.6.8. National Cemetery Signs. VA Signage Design Guide Section 12 (December 2012)
<http://www.cfm.va.gov/til/signs/Signage12-Cemetery.pdf>

8. TASKS, DELIVERABLES, AND SCHEDULE (The D/B Team shall be responsible for all work listed for the following tasks and shall submit all survey information and reports to the Contracting Officer's Representative (COR) for review and comment)

- 8.1. Task 1** - Surveys and investigations of existing conditions, design development drawings. Use VA PG 18-15 Volume D as a general guide, see 7.6.7.
 - 8.1.1. Preliminary Site Visit; meet on site with VA Project Manager/COR and local VA staff to evaluate scope of work and glean insight into the projects goals and challenges. Identify site issues, limitations and constraints with respect to proposed location, size, and layout of proposed facilities and structures.
 - 8.1.2. Complete pre-design survey which includes documentation of existing conditions and existing utility infrastructure in the area of proposed work.
 - 8.1.3. Complete a topographic survey, gather data, review existing site conditions, and analyze all pertinent documentation. Compile and analyze applicable Government provided reference materials, see 7.4. , 'government provided reference material.'
 - 8.1.4. Engage a licensed geotechnical engineer to perform site reconnaissance, soils investigation, testing and analysis of the project site. The purpose of surface and subsurface investigation is to locate any conditions which would indicate specific areas of concern and provide recommendations for site improvements, pavement cross-sections, walkway cross-sections, ground water control, and treatment of in-place soils for the support of foundations, and slabs on grade. The geotechnical engineer shall be responsible for obtaining all necessary clearances from the Department of Veterans Affairs Long Island National cemetery and all agencies and utility surveyors having facilities in the vicinity of the work. The DB/AE team shall log and sample a minimum of four (4) exploratory borings to a depth of 15 to 20 feet minimum below ground surface

or deeper per Geotechnical Engineer recommendations and have the samples laboratory-tested to determine soil characteristics. Coordinate all exploration work with the cemetery Director and the COR. The DB/AE team shall provide a written report of findings and recommendations for site preparation, concrete footing, concrete paving, and asphalt pavement design, and sign post installation, include within the report any other factors, i.e. underground utilities, which could influence the design of the proposed construction.

- 8.1.5.** Prepare a storm water management plan and related storm-water calculations as required for new site development.
 - 8.1.6.** Review available reference drawings, see 7.4. , 'government provided reference material.'
 - 8.1.7.** Prepare concept plans showing location and layout of structures, walkways, vehicular access roads, parking, and landscaping. Show grading, flow arrows, and percent slopes. All areas shall be properly graded to drain adequately. The Contractor shall perform a survey of existing trees and identify existing trees to remain in the area of new work.
 - 8.1.8.** Columbarium landscaping is limited to trees and turf. No shrubs or ground cover are allowed. Specify trees that are native to the area and already known to thrive there.
 - 8.1.9.** Existing landscaping, trees, plants, and hardscape at and around perimeter fence is to be replaced in like and kind if disturbed or removed for new construction.
 - 8.1.10.** Develop a preliminary construction cost estimate based on the level of detail shown on the drawings. Break out major costs of items by element, including labor and materials.
 - 8.1.11.** Deliverables: Conceptual design drawings for project scope of work. Provide site survey/topography drawings, Geotechnical Report with Boring Logs, including pavement cross-section design recommendations.
 - 8.1.12.** Time to complete: Fifty Six (56) days from the issuance of the Notice to Proceed.
 - 8.1.13.** **Task 1a**, Government review of task 1 deliverables: fourteen (14) days.
 - 8.1.14.** Consultation and approval from New York Historical Preservation Office is required. The DB/AE team shall prepare consultation documents, including letter of representation and project information, location and associated drawings/narratives for VA to submit to State Historic Preservation Office.
- 8.2. Task 2 - Construction drawings – 50% complete, Table of Contents for specifications, preliminary construction cost estimate.**
- 8.2.1.** Review the PG-18-15, Vol. D, A/E Submission Requirements for National Cemetery Projects (Dec 2011.) see section 7.6.7. . Prepare the drawing cover sheet and base sheets for each technical discipline using the survey drawings; begin construction drawings.
 - 8.2.2.** Survey existing cemetery signage. Add new signage and modify and/or replace existing signage as required to provide location information and directional information for new columbarium site where required throughout the cemetery.

Use VA Signage Design Guide, National Cemetery Signs for signage design guide, see Section 7.6.8 . Exterior site signage and posts shall match existing.

- 8.2.3.** Prepare the Table of Contents to include all specification sections that will be part of the final documents. Review NCA master specifications, see section 7.6.6. Identify any sections that DB/AE team shall need to write because no NCA or VA master spec. section exists, edit NCA master specifications to align with this project.
- 8.2.4.** Incorporate the soil boring location plan showing the exact location of each boring and boring profiles in the construction drawings.
- 8.2.5.** Design grading and erosion control for proposed work in accordance with NCA and ADA guidelines and per local permit requirements.
- 8.2.6.** Design vehicle parallel parking next to columbarium as shown on reference drawing RFP-01.
- 8.2.7.** Design irrigation systems as required. The DB/AE team shall tie-in to the existing irrigation system where possible, survey and locate nearest available point of connection for irrigation of New Columbarium area.
- 8.2.8.** Deliverables: 50% Construction drawings, including signage layout plan, signage schedule and sign face graphics, specifications, and preliminary construction cost estimate.
- 8.2.9.** Time to complete: One hundred twenty six (126) days from the issuance of the Notice to Proceed.
- 8.2.10.** **Task 2a**, Government review of task 2 deliverables: Fourteen (14) days.

8.3. Task 3 - Construction Documents-95% complete and coordinated set of construction documents, detailed cost estimate.

- 8.3.1.** Drawings: Submit 95% complete construction documents for all disciplines incorporating comments from VA review of the 50% CD submission and final geotechnical report findings and recommendations
- 8.3.2.** Specifications: Submit 95% complete set of construction specifications coordinated with the drawings.
- 8.3.3.** Cost Estimate: Submit a detailed estimate of construction cost consistent with the level of detail shown on the drawings. All items must be quantified; lump sum items are not acceptable. Break out costs of items by element, including all labor and materials
- 8.3.4.** Deliverables: Drawings, specifications, final Geotechnical Reports and cost estimate. Complete construction documents are required for the build out of the projects on site.
- 8.3.5.** Time to Complete: One hundred ninety six (196) days from the issuance of the Notice to Proceed.
- 8.3.6.** **Task 3a**, Government review of task 3 deliverables: Fourteen (14) days.

8.4. Task 4 – Final Construction Documents (drawings and specifications), final cost estimate.

- 8.4.1.** Submit 100% Final complete and coordinated set of construction documents for all disciplines that incorporate and address all review comments and changes.
- 8.4.2.** Deliverables: Final drawings, specifications and cost estimate.
- 8.4.3.** Time to Complete: Two hundred thirty eight (238) days from the issuance of the Notice to proceed.
- 8.4.4.** **Task 4a**, Government review of task 4 deliverables: Twelve (12) days.
- 8.4.5.** Construction Document Set complete: Two hundred fifty (250) days from Notice to Proceed.

8.5. Task 5 – Construction.

- 8.5.1.** Mobilization: Coordinate construction access, entrance to site, construction routes, and areas designated for equipment, materials, and contractor staff parking with VA Project Manager/COR and cemetery Director. Provide temporary signage for directions too and designation of these areas at the job site.
- 8.5.2.** Temporary erosion and storm water control: Provide and install sediment traps and barriers, basin traps, sediment fences, outlet protection, runoff control, runoff conveyance, storm drains, slope drains, etc. as required to mitigate erosion and control storm water. Comply with all applicable local codes. Obtain and pay for any required permits.
- 8.5.3.** Site preparation: Provide protective measures for existing trees to remain. VA NCA would like to keep as many existing trees in the area of work as possible. Project includes land clearing, cutting, filling and grading, mulching, and sodding.
- 8.5.4.** Site infrastructure: Construct permanent storm and ground water management systems, required utility systems, and irrigation system.
- 8.5.5.** Paving: Construct new parking areas and walkways.
- 8.5.6.** Structures: Project shall include excavation, construction of footing/foundations, columbarium structures, fences and fence piers.
- 8.5.7.** Landscaping: provide and install planting, final surface stabilization, top soil, trees, permanent seeding mulching, and sodding.
- 8.5.8.** Project delivery and close-out: Coordinate inspections with Government stakeholders well in advance of substantial completion of the project. Include time in the construction schedule to address and close out all open punch list items and for final testing of site infrastructure.
- 8.5.9.** De-Mobilization: Remove all temporary structures, materials, and equipment from job site and restore disturbed areas of site to original condition.
- 8.5.10.** Final preparation and cleaning for delivery: Remove dirt and debris from all areas of new work, groom site for final acceptance and delivery.
- 8.5.11.** Time to Complete: Five hundred and fifty (550) days from the issuance of the notice to proceed.

8.6. Task 6 – Prepare and Issue as built record set of drawings (per field as built mark-ups).

- 8.6.1.** Time to complete: Five hundred and seventy eight (578) day from the issuance of the notice to proceed.

8.7. Schedule Summary (The D/B Team shall complete the project per the schedule).

8.7.1. Time for Completion of Project – Five Hundred and Fifty days (550) days after the issuance of Notice to Proceed. Schedule duration is as follows

- The issuance of Notice To Proceed to begin design
- Task 1 Fifty Six (56) days (Survey, DD)
- Task 1a Fourteen (14) days (Government Review)
- Task 2 Fifty Six (56) days (50% Construction Documents)
- Task 2a Fourteen (14) days (Government Review)
- Task 3 Fifty Six (56) days (95% Construction Documents)
- Task 3a Fourteen (14) days (Government Review)
- Task 4 Twenty Eight (28) days (Final Design)
- Task 4a Twelve (12) days (Government Review)
- Task 1 thru 4 Total DB/AE schedule Two hundred fifty (250) days
- Task 5 Three hundred (300) days (Construction)
- Task 1 thru 5 Total D/B schedule Five hundred (550) days plus another 28 days for task 6, record set of drawings.
- Task 6 Four Twenty Eight(28) days (record set of drawings)

8.7.2. Meetings as follows:

- Site visit, project kick-off, pre-design kick off meeting.
- Conference call, after DB/AE review of VA comments on Task 1
- Conference call, after DB/AE review of VA comments on Task 2
- Conference call, after DB/AE review of VA comments on Task 3
- Conference call, after DB/AE review of VA comments on Task 4
- Bi-weekly working sessions and meetings at the cemetery for data gathering and coordination with NCA staff from project kick-off thru completion of task 1 thru 4.
- Bi-weekly project progress tele-conferences with NCA staff during task 5.
- Conference call, pre-construction meeting.
- Site visit, construction kick-off meeting.
- Additional weekly construction phase services/administration meetings if construction progress is behind schedule.
- Project close out meetings as required for punch list, substantial completion, and final project delivery (Design bid alternate)

9. PERSONNEL RESOURCES (The D/B Team shall provide the following personnel).

- 9.1.** Overall Project Manager: To manage the project, and negotiate fees; provide project communications point of contact, and monitor progress and overall quality of deliverables and construction.

- 9.2. Architect/Design Project Manager.
- 9.3. Construction Project Manager.
- 9.4. Architect/Engineer Field Representative.
- 9.5. Professional staff: of the disciplines required to prepare surveys, studies, design and construction documents, specifications and cost estimates in a professional, quality-based, timely, efficient manner.
- 9.6. Clerical Support: Includes the preparation and shipping of all deliverables to the Government and the typing of specifications.
- 9.7. Qualified construction staff.

10. INDIRECT RESOURCES (The D/B Team shall be responsible for the following)

- 10.1. Reproduction/Mailing: All submission deliverables shall be forwarded to VA in accordance with the distribution requirements listed in this scope of work. All printing and shipping costs are the responsibility of the D/B Team.
- 10.2. Travel: All travel expenses for D/B Team staff are the responsibility of the D/B Team.

11. GENERAL SUBMITTAL STANDARDS & REQUIREMENTS (The D/B Team shall be responsible for the following)

11.1. Drawing Sheets.

- 11.1.1. All plans are to use the standard VA/NCA title block. VA will provide an electronic version if the D/B Team requires it. Sheet size is 30" x 42". Half size hardcopy sets shall be requested for reviews.
- 11.1.2. All drawings shall be bound, along the left margin, into sets in the order of the drawing symbol list contained in this scope. At each submittal, the set of drawings shall have a cover sheet. The binding must not obscure any information on the drawings.
- 11.1.3. Each sheet as well as all materials submitted shall be clearly labeled above the title block, what submission it is, corresponding to the required submissions in this scope of work i.e., "Survey, Design Development Submittal," "50% Construction Documents Submittal," etc. This label shall be changed per each new submission.
- 11.1.4. Drawing Sheet Number Prefix shall be per National CAD Standard, see section 11.4.1.

11.2. Drawing Content.

- 11.2.1. Cover sheet: Cover sheet shall have the standard NCA Logo with the agency name next to it. Cover sheet must show: project title, project number, index of drawings in the set, names, addresses and phone numbers of all associated D/B firms, vicinity map, site location map, cemetery map showing project location and other pertinent project information. A complete legend of drawing abbreviations and drafting symbols for all disciplines shall be included either on the cover sheet or on a second sheet immediately following the cover.

- 11.2.2.** General phasing drawing: Show traffic control, access and staging areas, how access to the cemetery would be maintained during construction. This drawing must convey daily impact of construction work on cemetery operations.
- 11.2.3.** Subsurface investigation and Survey drawings: Topographic and Geotechnical surveys, must show surveyor's stamp on topographic survey sheet.
- 11.2.4.** Demolition drawing: Show limits of clearing and grubbing and miscellaneous other required demolition for tie in to existing infrastructure, roads and walkways where required.
- 11.2.5.** Civil drawings: Dimensioned layout plans showing location of all new work, new infrastructure, and other items as applicable to new work. Finished grading plans with spot elevations, rim elevations of storm drainage structures, retaining wall plans/sections/details, road/walkway sections/details.
- 11.2.6.** Finished grading plans with spot elevations, rim elevations of storm drainage structures, retaining wall plans/sections/details, road/walkway sections/details.
- 11.2.7.** Landscape drawings: Planting plans with symbols showing all trees, planting beds, and lawn seed mixture. The planting schedule should show common name, genus and species
- 11.2.8.** Erosion control drawings: Shall include necessary storm drain lines and any temporary erosion and sediment control measures required for applicable environmental permits. Consult with environmental permit office during design.
- 11.2.9.** Storm sewer drawings: Plans, profiles, details as applicable.
- 11.2.10.** Irrigation drawings: Show gross irrigation layout for mains and sub mains and a typical head layout for each type of watering condition. Show points of connection, head layout, pipe sizes, valve sizes, and all appurtenances. Layout of irrigation plans must be drawn to match irrigation controller coverage. Show water demand calculations. Flower watering stations are also to be provided at the columbarium, see RFP-01 drawing.
- 11.2.11.** Civil drawings: storm water system.
- 11.2.12.** Architectural drawings: Plans, sections, elevations, details of columbarium , and perimeter fence/paving work.
- 11.2.13.** Structural drawings: Plans, sections, details as applicable
- 11.2.14.** Plumbing drawings: Plans, details for irrigation and watering stations.
- 11.2.15.** Electrical drawings: Plans, details, schedules as applicable and for electrical distribution system repairs.

11.3. Graphic Standards.

- 11.3.1.** Drawings shall have graphic scales, north arrow (either true north or plan north; orientation shall be consistent throughout drawings, title block, and key plan clearly identifying the drawing component within the overall plan. Each

drawing, booklet, and other supporting submittal, including cover sheets, shall be clearly and consistently identified throughout the design process with the project title, location, building, phase, section, and segment. Each sheet shall be clearly labeled above the title block, what submission it is corresponding to the required submissions in this scope of work. Each sheet shall have a key map for locating and orienting individual drawing sheets to the whole site.

- 11.3.2.** Plans must clearly demonstrate what is new work and what is existing and what is to be demolished. New work must be graphically bolder than existing work. For example, existing items to remain may be screened, with new work shown solid. Demolition work shall be shown by dashed lines.
- 11.3.3.** Drawings using match lines must not overlap information. All information must stop at the match line and resume at the corresponding match line.
- 11.3.4.** Detail sheets should be organized logically and present the material intended in an orderly way, for example, head, jamb and sill should be arranged as such from top to bottom, not randomly placed on the sheet as space allows. Items with plan, front and side views should be arranged in that context to one another. Each detail must be clearly labeled and the scale indicated.
- 11.3.5.** A comprehensive legend of the abbreviations and symbols used on all of the drawings shall be provided on the cover sheet or immediately following the cover sheet.

11.4. Computer Aided Design and Drafting (CADD).

- 11.4.1.** The D/B Team shall supply all drawings in AutoCAD format in accordance with the United States National CAD Standard, Version 6.0. The standard includes presentation graphics, level/layer assignments, electronic file naming and standard symbols. These standards are available at the Internet website: <http://www.nationalcadstandard.org/>.
- 11.4.2.** If the Architect/Engineer office performs their project design work in two different CADD formats, the electronic file compact disk submission to the National Cemetery Administration shall be in only one unified CADD format, only .dwg format files will be accepted. The conversion and the integrity of the drawings is solely the responsibility of the Architect/Engineer. All CADD files created for this project shall be the property of the Department of Veterans Affairs and the National Cemetery Administration. CADD files shall not be altered in any way or locked to prevent them from being easily re-used and edited for future projects.
- 11.4.3.** The external label for the electronic submittal shall contain at a minimum:
 - 11.4.3.1.** Project Number
 - 11.4.3.2.** Format and version of the operating system software used

11.4.3.3. Name and version of utility software used for preparation (e.g., compression/decompression, if applicable) and copying files to media

11.4.3.4. Sequence number of the digital media

11.4.3.5. A list of the filenames on the digital media, as space on the label permits.

11.5. Reports/ Calculations/ Studies/ Analyses/ Estimates/ Specifications/ Materials.

- 11.5.1.** Submit 8 ½" x 11" copies of all required calculations, cost estimates and specifications to the VA Project Manager/COR. All letter reports shall be labeled with the project name, project number, name(s) of the D/B team(s), date and title of the report or estimate. Final submittal of specifications shall be in Microsoft Word format on compact disc. Foldout sheets, up to 11" x 17", for graphics may be incorporated in the reports.
- 11.5.2.** Specifications shall be prepared using National Cemetery Administration (NCA) Master Construction Specifications. Submissions shall show changes to master by using the "Track Changes" function. Project specifications shall include specifications for all products, materials, equipment, methods, and systems shown on the construction drawings in accordance with standard professional practice and the solicitation. The specification submitted for review shall include:
- a) The name of the manufacturer, the product name, model number, or other identification as appropriate to clearly identify the product that will be used in the construction of the project;
 - b) Other data as appropriate to clearly identify the product that will be used in the construction of the project i.e. shop drawings, product data, and samples as required by the documents; and
 - c) The required stamp of the licensed architect or engineer of record will be considered as certification of compliance with the solicitation requirements.
- 11.5.3.** The D/B Team shall submit agendas for planned meeting and submit minutes of meetings held with VA to the COR.
- 11.5.4.** All submitted documents shall be updated as per written responses in a mutually agreeable electronic review and correction tracking system to reflect review comments from previous phase and further development. The D/B Team shall verify that all changes based on the review of the previous phase have been entered into the electronic review and correction tracking system and approved by the VA COR.
- 11.5.5.** Color boards: Submit color board with samples of materials to be used for new columbarium structure, adjacent paving and hardscape.
- 11.5.6.** Sequencing Plan: The D/B Team shall develop a Microsoft Project Bar Chart schedule demonstrating fulfillment of the contract requirements. See NAS (Network Analysis System) Section of the NCA master specifications. Sequencing plan as referenced here involves a phasing or construction

sequencing plan and narrative of construction explaining impacts on the local environment and traffic. Show staging areas, construction access, and contractor parking. The plan shall be general in nature but thorough enough to address issues related to cemetery entrance and exits, utility issues, etc.

11.6. Distribution of Review Submissions by D/B Team.

VA STAFF	SETS of DRAWINGS	COST ESTIMATE	REPORTS/ CALCS.	SPECS	E-FILES
NCA Develop. Coord.	1-half-size	1	1	1	1 CD/DVD
VA PM/COR	1 half-size	1	1	1	1 CD/DVD
District Engineer	1 half-size	1	1	1	1 CD/DVD
NCA Cemetery Director	1 half-size				1 CD/DVD
NCA Irrigation Engineer Request contact info.	1 half-size	1	1	1	1 CD/DVD
NCA Crypt Specialist	1 half-size	1	1	1	1 CD/DVD
<i>Total</i>	6	5	5	5	6

11.7. Work Coordination and Reviews.

11.7.1. The VA Project Manager/COR is the Contracting Officer's Representative (COR). All work shall be coordinated with the COR. Only the Contracting Officer (CO) has the authority to make any changes to the contract.

11.7.2. Each drawing submittal will be reviewed by VA and comments will be provided to the D/B Team according to the schedule in the contract (typically 2 weeks). All comments are from various VA entities and changes shall be coordinated through the VA Project Manager/COR. If the D/B Team makes changes or modifications based on comments from VA entities other than the VA Project Manager/COR, the D/B Team is at risk of correcting changes at their own expense. The D/B Team must respond in writing to all comments within ten (10) calendar days of receiving VA comments. Subsequent work and changes made shall reflect the VA comments and the outcome of the review.

11.7.3. VA and the D/B Team shall utilize a tracking system to review and respond to all comments. At each phase, D/B Team shall verify that documents have been revised.

12. ADDITIONAL INFORMATION FOR THIS DESIGN/BUILD PROJECT:

12.1. Definitions.

12.1.1. Design-Build (DB): as defined by the Department of Veterans Affairs (VA) is the procurement by the Government, under one contract, with one firm or joint venture (JV) for both design and construction services for a specific project.

12.1.2. Contracting Officer (CO): The services to be performed under this contract are subject to the general supervision, direction, control and approval of the Contracting Officer.

12.1.3. Contracting Officer's Representative (COR): The Contracting Officer's representative is responsible for administering contracts under the immediate direction of the Contracting Officer.

12.1.4. Resident Engineer (RE): The Contracting Officer's authorized representative at the construction site. When more than one Resident Engineer is assigned to a construction project one is designated as being in-charge and is called the "Senior Resident Engineer". The Resident Engineer is responsible for protecting the Government's interest in the execution of the construction contract work. Their duties include surveillance of all construction work to assure compliance with the contract documents, interpretation of the contract documents, recommendations for approval of changed work, approval of all submittals, samples, shop drawings, etc.

12.1.5. Design Build Contract: This term, as used herein, refers to the Contract to perform the design and construction of the project.

12.1.6. D/B Team: This term, as used herein, refers to the awardee under this contract.

12.1.7. DB/AE: This term, as used herein, refers to the Architect-Engineer firm(s) that are a part of the D/B Team.

12.1.8. Schedule Objectives - The anticipated completion of this project is 550 days after the issuance of the "Notice to Proceed" (NTP). The proposed schedule may be shorter than this, see section 12.5.2.2.

12.2. Cost Range. The anticipated cost range for this project is between \$5M and \$10M.

12.3. VA Team Responsibilities.

12.3.1. The VA NCA Office of Design and Construction at VA Headquarters located in Washington, DC produced the solicitation documents, the solicitation was created by the CO. NCA Design and Construction office will provide design and construction period review and monitoring.

12.4. Design Build Team Responsibilities.

12.4.1. The D/B Team includes all Joint Venture (JV) partners, consultants and sub-contractors to the one firm. The D/B Team shall provide Architectural and Engineering (AE) disciplines for the preparation of construction documents, and construction contractor capabilities for construction of the project.

12.4.2. For the purpose of this contract, the Service Disabled Prime Contractor shall be responsible for the management and coordination of all subcontracted disciplines and consultants.

12.4.3. The solicitation documents are intended to define certain required items, and design parameters to be included in the project. It is the D/B Team's responsibility to complete construction documents and construction in a manner consistent with the intent of the solicitation documents within the required time period (contract length).

12.5. Technical Proposal Requirements. The proposal shall address the following evaluation factors during a 2 phase procurement process.

12.5.1. Phase I of this process, the VA will post a Phase I solicitation for a period of 30 calendar days requesting interested parties to submit a proposal that contains information on the Offeror's Corporate Specialized Experience, Technical Approach and Past Performance (Customer Satisfaction). Upon receipt of all responses to the Phase I solicitation, each source selection evaluation board voting member shall complete an individual evaluation of each response and relevance applicable to the Offeror's submission and provide a recommendation on ranking the offers. The Phase I evaluation will select approximately three (3) of the most highly qualified Offeror's proposals based on the qualifications received in response to the Request for Qualifications. The evaluation will be conducted using the following factors:

12.5.1.1. Factor 1: Corporate Specialized Experience: Will be evaluated on relevant and recent experience on design-build contracts and/or contracts of comparable size, complexity and scope within the last five years to determine if the Offeror is a viable competitor for the resultant acquisition. Include;

- Project title, location and brief description including the building use (National Cemetery Columbarium, etc.) and contracting method (design build, design bid build, etc.)
- Project owner and name and telephone number of owner's contact person.
- Project Statistics including start and completion dates (original vs. actual) for design and construction; cost (with brief explanation of what is included in the cost).

12.5.1.2. Factor 2: Technical Approach – Design/Build Narrative: Proposals shall be evaluated based on written narrative which includes all the major elements of design-build process. Proposals shall be evaluated based on the overall description of the design-build process from the issuance of notice to proceed to project completion which shall include all stages of design including

submittal milestones on to construction milestones and closeout of the project.

12.5.1.3. Factor 3: Past Performance (Customer Satisfaction) – Points of Contact supplied for projects submitted in response to this Phase 1 solicitation will be contacted by the Evaluation Panel and asked questions on the Past Performance Questionnaire. The responses given by the Contract Persons will be recorded on the questionnaire to evaluate past performance.

12.5.2. Phase II Technical Evaluation Factors (Proposal): All evaluation factors other than cost or price, when combined, are less than price. Evaluations will be based on the following evaluation factors:

12.5.2.1. Factor 1: Construction Management Proposals shall be evaluated based on design concept narrative, relevant and recent specialized experience of key personnel, management approach and schedule of design-build contracts and/or contracts of comparable size, complexity and scope within the last five years.

- **Sub Factor 1A, Project Personnel Experience:** Key Personnel shall be evaluated based on relevant management, design and construction knowledge and experience on past projects of comparable size, complexity and scope, key personnel must have at least 5 years of experience doing design and construction work.
 - Biographical data shall include the following:
 - Name of individual.
 - Company employed by.
 - Company position title.
 - Years with the company.
 - Describe work experience with projects that were of comparable size, complexity, and scope.
 - Position that the individual will hold in regard to this contract/project team, description of duties and what percentage of the individual's time would be committed to the project during both the design and construction phases.
 - Describe job related educational experience including degrees, certificates etc. and granting institutions.
 - Supply this biographical data for key personnel for at least the following: (Note if one individual is proposed for more than one

position listed):

- Prime Contractor's Design-Build Project Manager
- Architectural Design Project Manager
- Architect
- Structural Engineer
- Landscape Architect
- Engineering Project Manager
- Mechanical Engineer
- Electrical Engineer
- Plumbing Engineer
- Irrigation Specialist
- Construction Project Manager
- Construction Field Representative/Superintendent

- **Sub Factor 1B, Management Approach:** Shall be evaluated based on Project Delivery Philosophy, Quality Assurance / Quality Control Plan, Organizational Chart and Narratives.
 - Project Delivery Philosophy – Include expectation statements concerning:
 - Elements for Successful Partnering: Communication, Commitment and Conflict Resolution
 - Quality Assurance / Quality Control Plan
 - Provide Quality Control Plan for both design and construction phases of the project.
 - Project Organizational Chart and Narrative - Include team members submitted under Project Personnel Experience .
 - Provide Organizational Chart.
 - Provide Narrative, clearly describe the prime contracting firm (or firms if a J/V) and individuals as well as the roles and responsibilities of individuals proposed as consultants and sub-contractors.
 - Provide a list of consultants and all proposed major sub-

contractors, include web site address for each.

- **Sub factor 1C, Design and Construction Concept Narratives:** Contractor's understanding of project scope shall be evaluated based on the Design and Construction narratives.
 - Design Narrative
 - Provide a design narrative that describes all the design elements included in this scope of work, include information about materials and finishes to be used for the structures, utility systems, and any special considerations as applicable.
 - Construction Narrative
 - Provide a construction narrative that describes phasing of the work as applicable, mobilization, staging, site preparation, utility work, erection of structures, irrigation and landscaping.
- 12.5.2.2. Factor 2: Schedule:** Provide project design and construction schedule. Contractor's understanding of schedule and project specific schedule parameters shall be evaluated.
- Project Progress Schedule - The progress schedule will be in a time scaled bar graph format. The horizontal axis will be scaled for time beginning with the issuance of the Notice to Proceed and concluding with contract completion. The vertical axis will show the milestones and major portions of the contract work. All schedule items will show a start date and a completion date. The detailed schedule will indicate specific tasks with dates for each step of the process including:
 - Design Period: Include pre-design site survey work, each design and construction document review submittal milestone, and indicate Government review periods.
 - Construction Period: Include permitting as applicable, mobilization, site prep, staging, long lead items, start and completion of construction scope items.
 - Narrative of Schedule Parameters: Provide written commitment as to

the time frame for project completion. Specify how much allowance has been made for anticipated weather delays and potential delays due to cemetery operations and events.

- 12.5.2.3. Factor 3: Price:** Price not rated but evaluated based on the Offeror's total proposed price being complete, reasonable, and realistic given the proposed technical approach.

12.6. POST AWARD REQUIREMENTS

12.6.1. Design Review Submissions:

- 12.6.1.1.** The Design-Build Architect-Engineering Team (DB/AE) shall prepare and submit complete construction documents for review and approval by the VA in accordance with standard professional practice, the solicitation and prevailing codes.
- 12.6.1.2.** Submit complete design package for each submission and distribute via mail per section 11.6.
- 12.6.1.3.** Submission package will be reviewed at Survey/Design Development, 50%, 95%, and Final completion stages. Each review submission package shall incorporate the review comments from the previous review. If any package is not complete for the required stage, a post review may be required the cost of which will be borne by the DB/AE team.
- 12.6.1.4.** Each review submission package shall include 6 half size hard copy drawing sets, 5 copies of the cost estimate, 5 copies of reports and calculations, 5 copies of specifications and 6 CD-ROM/DVD which include electronic version of all submission documents. The package will include an index of drawings (by sheet number and title) and specifications (by section number and title) submitted. The packages shall be sent directly to the Development Coordinator, VA Project Manager/COR, District Engineer, Cemetery Director, Irrigation Engineer, and Crypt specialist as determined by the VA Project Manager/COR.

12.6.2. Design Review Meetings:

- 12.6.2.1.** A review meeting to resolve design issues will be held for each design review package submitted. The meeting will include discussion of VA NCA comments on functional relationships and technical peer review comments (by others).
- 12.6.2.2.** Participants will include VA Staff and the DB/AE team members as appropriate for the specific package to be reviewed and others. D/B Team management will be present at each review meeting.

- 12.6.2.3.** The DB/AE team shall allow a minimum of ten (10) working days for each review cycle. A review cycle includes:
 - a.) The VA's receipt of the design review submission package.
 - b.) The review meeting.
 - c.) DB/AE team's receipt of comments from the VA, either electronically, by fax, or by hard copy delivery.
- 12.6.2.4.** Coordination of the review meeting schedules will be the responsibility of the VA Project Manager/COR and the DB/AE team Project Manager.

12.6.3. Electronic Media:

- 12.6.3.1.** Design review submission drawings and final Construction Document submission drawings will be executed in electronic format AutoCAD 2014 or earlier .dwg format and in published .pdf format.
- 12.6.3.2.** The solicitation reference drawings included in the solicitation will be available to the DB/AE team in .pdf format. The user shall independently verify all information in the files. Any user shall agree to indemnify and hold the VA harmless from any and all claims, damages, losses, and expenses including, but not limited to, attorney's fee arising out of the use of the .pdf drawing files.
- 12.6.3.3.** Design review submission specifications and other 8 ½" by 11" formatted material and final Construction Document submission specifications and other 8 ½" by 11" formatted material will be executed in electronic format Microsoft Office Suite 2010 or earlier, Word.
- 12.6.3.4.** The construction record drawings shall be completed in AutoCAD 2014 or earlier version.
- 12.6.3.5.** Construction shop drawings are required to be completed in AutoCAD.

12.6.4. Professional Licensing:

- 12.6.4.1.** The DB/AE team who prepares the construction documents shall be a professional architect or engineer licensed in the state in which the design work is completed.
- 12.6.4.2.** The professional seal indicating such license by the state shall appear on the final construction documents. The architect whose seal is shown will be known as the Architect of Record. The DB/AE team shall certify compliance with the solicitation and all applicable codes.

12.6.5. Approved Construction Documents:

- 12.6.5.1.** The final construction document submission package will be submitted by the DB/AE team for approval by the VA after completion of the 100% review cycle for the final package to be submitted by the DB/AE team. The VA will have 1 week to take approval action.
 - 12.6.5.2.** The final construction documents submission package will include a full set of final construction documents including all disciplines/packages.
 - 12.6.5.3.** The final construction documents submission package will incorporate all VA supplied comments from the earlier 50%, 95%, and Final submission package reviews and will comply with the solicitation.
 - 12.6.5.4.** If the final construction documents submission package is not complete a post submittal may be required, the cost of which will be borne by the DB/AE team.
 - 12.6.5.5.** The approved final construction documents include such details that the project can be constructed and will be used for construction of the project.
 - 12.6.5.6.** See sections 11.6 for submittal distribution information.
 - 12.6.5.7.** Construction Drawing Preparation - See section 11 .
 - 12.6.5.8.** Construction Specifications – See section 11.5.2. .
 - 12.6.5.9.** Design Requirements - Compliance with codes and standards. Project design shall be in compliance with applicable standards and codes described in the VA Program Guides and design materials included or referenced in the solicitation materials. See section 7.6 .
- 12.6.6.** In the design and construction of work under this contract, the DB/AE team shall incorporate the following requirements as applicable:
- 12.6.6.1.** Zoning laws: Environmental and erosion control regulations; and laws relating to landscaping, open space, minimum distance of a building from the property line, maximum height of a building, historic preservation, and esthetic qualities of a building. Also similar laws, of the State and local political division, which would apply to the building if it were not to be constructed or altered by the U.S. Government.
 - 12.6.6.2.** The DB/AE team shall consult with appropriate officials of the Federal, state, and local jurisdiction, and submit plans under the rules prescribed by those reviewing authorities. The VA shall give due consideration to the recommendations of the referenced building officials. VA will also permit inspection by the officials during the construction period in accordance with the customary schedule of inspections in the locality of the building construction.

The DB/AE team shall provide VA with inspection schedules for officials before construction begins or give reasonable notice of their intention to inspect prior to the inspections as applicable.

12.6.6.3. The DB/AE team shall provide prompt, written notification to the Contracting Officer concerning conflicts with, or recommended deviations from codes, laws, regulations, standards, and opinions of review officials. No work altering the scope of this contract shall be undertaken prior to receipt of written approval from the Contracting Officer.

12.6.6.4. No action may be brought against VA and no fine or penalty may be imposed for failure to carry out any of the previously described recommendations of Federal, state, or local officials. VA and its contractors, shall not be required to pay any amount for any action taken by a state or political division of a state in carrying out functions described in this article, including reviewing plans, carrying out on-site inspections, issuing permits, and making recommendations.

12.6.6.5. The DB/AE team shall advise the Contracting Officer of any variances with the applicable Department of Labor, Occupational Safety and Health Standards, for occupancy requirements.

12.6.7. Quality Assurance/Quality Control:

12.6.7.1. To reduce design errors and omissions, the DB/AE team shall develop and execute a QA/QC plan that demonstrates the project plans and specifications have gone through a rigorous, thorough review and coordination effort.

12.6.7.2. Within 2 weeks of receipt of the issuance of the Notice to Proceed, the DB/AE team shall submit a detailed QA/QC plan describing each QA/QC task that will be taken during the development of the various design submission packages and the name of the DB/AE team member responsible for QA/QC.

a) Upon its completion each task shall be initialed and dated by the responsible DB/AE team member.

b) A 100% completed QA/QC plan shall be submitted with the final construction document submission package.

12.6.8. Construction Period Submittals:

12.6.8.1. The DB/AE team shall distribute 6 sets of the approved final construction documents prepared by the DB/AE team to the VA, as directed by the VA Project Manager/COR and per 11.6 .

12.6.8.2. Other submittals - The DB/AE team shall submit test results, certificates, manufacturer's instructions, manufacturer's field

reports, etc. as required by the solicitation specifications, to the VA Project Manager/COR.

12.6.8.3. Project record drawings - The DB/AE team shall maintain a set of construction documents (field as-built drawings) to record actual construction changes during the construction process as required by the solicitation. The project record drawings will be available for review by the VA Project Manager/COR at all times.

12.6.8.4. Shop drawings and submittals - The DB/AE team shall check shop drawings, detail drawings, schedules, descriptive literature and samples, testing labor-laboratory reports, field test data and review the color, texture and suitability of materials for conformity with the solicitation documents and construction documents. The DB/AE team shall recommend approval, disapproval, or other suitable disposition to the VA Project Manager/COR. The VA Project Manager/COR will have final approval authority. The DB/AE team shall evaluate the submittals with reference to any companion submittals that constitute a system. When necessary, the DB/AE team will submit related components of a system before acting on a single component. Should this procedure be inappropriate, the DB/AE team shall review all prior submittals for related components of the system before acting on a single component. The DB/AE team may be required to hold joint reviews with the VA technical staff on complicated system submittals. The DB/AE team shall notify the VA Project Manager/COR in writing of any and all deviations from the requirements of the construction documents that he has found in the submittals.

12.6.9. Project Close-Out. The DB/AE team shall comply with the requirements in the "General Conditions", Section 01001, and "General Requirements", Section 01010 (these spec sections to be generated by the DB/AE team per VA spec templates) for submission of final as built drawings, manuals, and other documents as noted. Required as built drawings and specifications will be submitted in the same format required for the construction documents.

12.6.10. Site Visits and Inspections. During the construction period the D/B Team's DB/AE team shall make monthly visits to the project site and when requested by the VA Project Manager/COR). The VA Project Manager/COR may also request visits for special purposes. Only registered architects and engineers thoroughly familiar with the project may make these site visits. The VA Project Manager/COR has the prerogative to determine the professional discipline(s) required for any visit. The D/B team shall observe the construction, advise the VA Project Manager/COR of any deviations or

deficiencies or solutions to issues discussed. A site inspection report which includes the purpose of the inspection, items reviewed, deficiencies observed, recommendations and additional actions required, shall be furnished to the VA Project Manager/COR within three work days following the site visit date.

Signed by Michael J. Borgman  Date: 5/10/17