

**RFQ 479**  
**SCOPE OF WORK FOR ARCHITECTURAL AND ENGINEERING**  
**DESIGN SERVICES FOR [Project Name]**  
**[Project Date]**

**A. BACKGROUND & GENERAL SCOPE:**

[Project Description]

**B. DESIGN CRITERIA:**

The Consultant shall be responsible for developing an original design which utilizes the [Pre Program Summary developed by the Design Manager dated...] and further develops functional relationships and blocking and stacking analysis. The Consultant is required to achieve a minimum rating of LEED Silver by the USGBC with a goal of sixty percent (60%) energy use reduction within budget for the new facility.

The design and documentation shall be based on and meet the latest codes and regulations, state and local authority regulations, including but not limited to the following:

1. Current Virginia Uniform Statewide Building Code.
2. The Loudoun County General Plan, Loudoun County Transportation Plan, and other supporting documents and ordinances that together comprise The Loudoun County Comprehensive Plan.
3. The Revised 1993 Loudoun County Zoning Ordinance
4. County of Loudoun Facilities Standards Manual.
5. 2014 Loudoun County Fire Station Design Manual
6. Current ADA accessibility requirements for site and building.
7. State and Local Health Department Regulations.
8. Virginia DOT Secondary Road Design Manual.
9. NFPA 1500 Standard on Fire Department Occupational Safety and Health Program and 1581 Standard on Fire Department Infection Control Program.
10. Concept Plan Conditions and/or Proffered conditions, Special Exception conditions and other specific requirements as set forth in Land Use approvals.
11. County of Loudoun design standards: Loudoun County Cabling Standards, Landscape Design Standards, Space Standards, Hardware Standards, System Furniture Standards, and Mechanical/Electrical Design Standards which will be provided upon award.
12. US Green Building Council's LEED **v2013** for New Construction and Major Renovations Rating System.
13. All other codes and standards required by architectural and engineering professional standards.
14. Current International Code Council (ICC).

**C. LOUDOUN COUNTY FURNISHED DATA:**

1. Loudoun County will furnish the following drawing and title block format, and upon request will furnish General Conditions, Division 1 and 2 specifications and all referenced County design standards.
2. The A/E shall be responsible for complying with all A/E responsibilities that are referenced in the County's Construction General Conditions and Division 1, and must include this level of effort in the basic fee proposal.
3. County Standards and design criteria for electrical and mechanical systems will be furnished as stated above in Item B.11.
4. A full team of consultants including (but not limited to) architectural, all engineering disciplines, historic preservation, traffic engineering if applicable and low voltage including security, acoustics and audio visual consulting is desired by the County to fully deliver the design and construction administration services for the project.
5. Loudoun County will hire a Third Party Commissioning Agent for this project. The AE shall coordinate with the Commissioning Agent as required during design and construction to ensure that all Commissioning related requirements and objectives are met. It is the County's goal to pursue the Enhanced Commissioning credit under LEED and the AE shall assume that level of coordination within their base scope of services.

## D. CORRESPONDENCE:

Address all correspondence to the County Design Manager:

Department of Transportation and Capital Infrastructure  
101 Blue Seal Drive SE  
Suite 102,  
PO Box 7500  
Leesburg, VA 20177-7500  
ATTN: [Name], Design Manager

## E. PROFESSIONAL SERVICES

1. **STANDARD OF CARE:** The Design and plans of the project shall incorporate the requirements of the Virginia Uniform Statewide Building Code as well as the requirements of all other applicable codes and regulations pertaining to the design and construction of the project. The Architectural and engineering services performed under this contract shall conform to that degree of care and skill for the project type ordinarily exercised by reputable members of its profession in the Northern Virginia area.
2. **GENERAL SCOPE:** The work consists of several tasks and all necessary services as outlined under Section F for a complete functional facility.
3. **DOCUMENTATION:** The County will require the AE to use E-Builder for the administration of the project. The County will provide the AE a license for E-Builder and training for the AE at no cost to the AE. E-Builder will provide the training to the AE to provide proficiency in E-Builder software practices. If the AE does not demonstrate proficiency with the software following this training, additional training required to achieve proficiency will be at the AEs cost. E-Builder may be contacted at 1-800-580-9322 or [www.e-builder.net](http://www.e-builder.net) for information regarding their technical requirements for utilizing the E-Builder software program.

Document all meetings, conferences, and information obtained by telephone and personal visits. Accurate notes and minutes shall be typed, reproduced, and mailed to the Design Manager within 5 working days.

4. **QUALITY CONTROL:** The AE team must perform internal quality control reviews on all documentation prepared for the project for the duration of the project and all deliverables. The County's expectation is that a Design Manager or other designated Quality Control Reviewer at the level of a Project Manager or higher coordinates the entire AE team (all disciplines) internal quality control reviews prior to the delivery of documents to the County. At 35%, 75% and 95% Construction Document packages, the County requests a copy of the AE team's redline quality control review set including "yellow out" markings to confirm the AE team's process.
5. **CONSTRUCTION BUDGET:** Monitor the estimated construction costs at all times during design to ensure the project provides a complete and usable facility within the construction budget. The construction budget for the project is as follows:

**Construction Budget: \$0,000,000 - \$0/SF including all site related costs.**

**Furnishings, Fixtures and Equipment Budget: \$TBD**

**This budget represents the estimated full budget for hard construction costs and does not include the County's construction contingency allowance. Owner's expenses such as estimated design fees, utility tap fees, third party inspections, security equipment, voice data and FF&E are not included in this figure.**

Should the cost estimates at any time determine that the project as designed exceeds the construction budget the AE shall notify the County's Design Manager in writing not more than five days after the submission of the cost estimate of any phase and provide recommended design alternatives that could be used to keep the project within budget.

The AE shall monitor the estimated construction costs at all times during design to ensure the project provides a complete and usable facility within the construction budget.

In the event that the lowest responsible bidder exceeds the construction budget by 5% or more, then the AE shall, with Owner's approval, revise the drawings and specifications as may be required to bring the project to budget at the sole expense of the AE.

6. DESIGN/CONSTRUCT SCHEDULE:

See Schedule attached to the Scope of Work.

7. LEED CERTIFICATION: The County requires the Consultant to provide a fully LEED Silver Certifiable project and register and document all LEED credits with USGBC per their online program. The Architect is required to incorporate LEED updates and discussions into all meetings and design content, to delegate LEED templates to team members, to review all completed template information (**including verifying that the General Contractor is completing all required template information for LEED credit**) and correct as needed and to manage the entire LEED process throughout the design and construction of the project. The County will pay for application and certification costs to the USGBC.

Provide Professional Energy Modeling Services that assist AE and County team in meeting Loudoun County's energy reduction goals of 60% through an integrated design approach for all building disciplines and building components. Energy modeling shall start at concept design and shall assist the Architect with design elements such as building orientation and fenestration. Energy Modeling shall continue through final construction documents and shall be used to assist design team in selection of building thermal envelope, HVAC systems and renewable energies, if utilized. Energy modeling reports to be submitted to the County at appropriate project submissions, but not less than 35%, 75% and Permit documents.

8. APPROVALS AND PERMITS: Prepare all forms, sketches, drawings, and supporting documentation necessary for the approval and permitting by the County Department of Building & Development. Applicant for the permits will be:

Joseph Kroboth, Director  
Department of Transportation and Capital Infrastructure  
101 Blue Seal Drive SE  
Suite 102,  
PO Box 7500  
Leesburg, VA 20177-7500

## F. SUBMITTAL/DELIVERABLE REQUIREMENTS

1. DOCUMENTS: All documents including drawings, specifications, schedules, cost estimates, design calculations, meeting minutes and reports shall be submitted to the County via e-Builder. The County may also require hard copies, to be determined by the Project Manager.

The document title, project name, contract number, and date shall appear on the coversheets of all documents. Divide volumes into logical sections. Include an opening summary or overview.

Electronic documents must comply with document naming conventions required by the County and for submission into e-Builder. A naming convention guide will be provided to the AE by the County.

2. QUANTITY: Coordinate all requirements with the County Design Manager and design schedule. Specific quantities of documents for each deliverable are identified with each individual task in Section G.
3. DELIVERY: Deliver submittals electronically via e-Builder or, if hard copies are required, by overnight mail or in person to the Design Manager.
4. REJECTION: If a task submission fails to meet the requirements specified, it will be rejected by the Design Manager and the reasons therefore explained. The A/E shall revise and resubmit rejected submissions, at no additional cost to the County and with no additional time added to the design schedule.
5. CONTRACT DRAWINGS: Provide drawings not larger than 30 x 42 inch but not smaller than the minimum size required by the permit application, reproducible sheets. Include a cover sheet. Prepare the drawings so they are legible and clear when reduced to half size, with lettering on the originals no smaller than 1/8 inch high.

Contract documents from conceptual design forward will be considered the exclusive property of the County of Loudoun and may not be reproduced or distributed by the A/E or Consultants or any printing company without the prior written approval of the Design Manager.

**CAD Drawing Standards:** Provide drawings in electronic CAD file format, including all addenda, in AutoCAD or Revit Architecture 2009 (or earlier version of AutoCAD) files. The County may require all working drawings to be in Revit but may request Revit model files to be exported to .dwg files. Include all supporting files, ie. fonts, xrefs, etc. necessary to load files not included in the stock AutoCAD application.

Drawing files should conform to the current National CAD standards as published by The National Institute of Building Sciences of Washington, DC. Include with the submission of drawing files a "Statement of Substantial Conformance" as published in the National CAD Standards. Describe any variations from proscribed CAD Standard format with the Statement of Substantial Conformance. All documents including drawings, specifications, design calculations, meeting minutes and reports shall be submitted to the County via e-Builder. The County may also require hard copies, to be determined by the Design Manager.

Deliver drawing files electronically through e-Builder and coordinate with Design Manager for delivery methods and/or requirements for hard copies. The County Design Manager may request contract drawings in TIF, PDF or other electronic formats.

6. **CONTRACT SPECIFICATIONS:** Format specs on 8.5 x 11 inch paper with 1-inch side margins and 1/2-inch top and bottom margins; double-sided. On each page type "Project Specifications: Project Name in the header; and type the CSI specification section name, and section number--section page number in the footer. Follow the 2004 CSI format for all specifications.

Deliver specification files electronically through e-Builder and coordinate with Project Manager for delivery methods and/or requirements for hard copies. The County Project Manager may request specifications in TIF, PDF or other electronic formats.

7. **DESIGN CALCULATIONS:** Prepare on 8.5 x 11 inch paper; double-sided. Calculations shall be detailed and broken down into all major structural, mechanical and electrical components of the project. Reference the various sections of codes and standards used where applicable throughout the calculations. Identify design criteria and equipment performance parameters in the calculations. Include an electrical load and fault current analysis in the calculations.

Deliver calculation files electronically through e-Builder and coordinate with Design Manager for delivery methods and/or requirements for hard copies. The County Design Manager may request calculations in TIF, PDF or other electronic formats.

8. **REVIEW SCHEDULE:** For most deliverables, the County will require a minimum of two (2) weeks for review. A specific schedule including County review periods will be required and will need to be developed by the AE in consultation with the County Design Manager.

## **G TASKING**

### 1. PROGRAMMING

- a. The AE shall further develop the initial space program from the [Pre Program Summary dated...] All required elements of the facility must be identified and planned for appropriately. This includes identification of existing spaces, if applicable, adjustments needed for renovation areas and new spaces.

The AE shall meet with the County as necessary to define the program and establish specific spaces and relationships. Programming interviews with the end-user group should be planned with the **User** to ensure the appropriate end-user staff groups have input into the program. All office and workstation planning shall be based on the County's Space Standards.

- b. The AE shall prepare, for County approval, a Programming Summary Report with Room Layouts which identify all spaces, functions, adjacencies, area square footages, allowances for circulation, and room diagrams for each of the spaces as well as building totals. The Room Layouts shall

indicate approximate furniture layout, outlet, data, telecommunications, and cable locations. The report shall be presented in written and graphic form as mutually agreed upon.

c. Deliverables:

- i. Programming Meeting Minutes
  1. Electronic copy via e-Builder
- ii. Programming Summary Report
  1. 2 hard copies
  2. Electronic copy in PDF format submitted via e-Builder

2. SITE AND HISTORIC SURVEY

- a. The AE team shall visit the site and become fully informed of conditions affecting the site and obtain sufficient information to permit the complete design for all approvals required by the Town of Leesburg and/or Loudoun County. .
- b. The Survey and subsequent Report shall cover the following areas at a minimum:
  - 1) Existing conditions including a description of all structures and their condition, historic condition and status including a historical survey and analysis, and existing vegetation. Existing structures shall be inspected for asbestos, lead paint, and underground storage tank and samples should be obtained and analyzed to determine the presence or absence of asbestos, lead paint, and petroleum contamination.
  - 2) Evidence of existing or abandoned wells, septic tanks, and leach fields
  - 3) Evidence of trash or construction debris on site, petroleum or chemical spills, and stockpiled soil or construction material
  - 4) Site limitations such as SWM limitations, water, sewer, electric and gas limitations
  - 5) Complete survey of existing utilities, including capacity and/or initial identification of private utility requirements as necessary
  - 6) Identification of improvements required by the Loudoun County General Plan, Loudoun County Transportation Plan, Loudoun County Bicycle and Pedestrian Mobility Master Plan, and other supporting documents and ordinances that together comprise The Loudoun County Comprehensive Plan
  - 7) Identification of improvements required by approved rezoning plans, proffer conditions and proffer agreements.
  - 8) Results of a title search identifying easements, covenants, use restrictions, or other encumbrances on the property
  - 9) Operational criteria/requirements
  - 10) Comments/suggestions collected
  - 11) Suitability of site for building
  - 12) Identify suitability for low impact development
  - 13) Identify problem areas/questions, if any
  - 14) ALTA survey to include topography with minimum of 2' contours, existing utilities with invert elevations (where accessible) with 24 inch gridlines and elevations referenced to mean low water/sea level; also indicate 100-year flood plain elevation and RPA lines and any other easements, site limits. (Topographical survey shall be on a reproducible 30x42 inch sheet plus CADD file on CD. Reduce this sheet so it will fit in the written site survey report)
  - 15) Obtain any existing drawings, to scale, of existing site and adjacent infrastructure improvements.
  - 16) Obtain any existing environmental or cultural resource assessments performed on the property.
  - 17) Analyze programmed budget in relation to provided information
  - 18) Unique site features which may affect the construction

- 19) Unique site features which may necessitate Federal, State and Local permits. Identify permits and certifications required for construction including but not limited to wetlands, grading, State Health Department and VDOT permits. All required permits, certifications and applications to be prepared and obtained by the A/E
  - 20) Identify roadway improvements required for site access, including any signalization
  - 21) Identify any cultural resource issues.
  - 22) Identify wetlands, flood plains and all environmental issues. Request Jurisdictional Determination for identified wetlands and include mitigation plans if necessary
  - 23) Identify current zoning and if proposed use is permitted by right, Special Exception, or requires rezoning. List setbacks associated with base zone. Identify any overlay districts and any additional setbacks beyond base zone setbacks
- c. Deliverables:
- 1) Existing Conditions Survey
    - a) 2 hard copies; 30" x 42" format
    - b) Electronic copy in PDF format submitted via e-Builder
    - c) Electronic copy in AutoCAD format submitted via e-Builder
  - 2) Meeting Notes for any Site Survey tasks including discussions utilities, etc.
    - a) Electronic copy in PDF format submitted via e-Builder
  - 3) ALTA Survey
    - a) 2 hard copies; 30" x 42" format
    - b) Electronic copy in PDF format submitted via e-Builder
    - c) Electronic copy in AutoCAD format submitted via e-Builder
  - 4) Written Site Survey Report
    - a) 2 hard copies; 8.5" x 11" format with folded drawings
    - b) Electronic copy in PDF format submitted via e-Builder

### 3. CONCEPTUAL DESIGN

Upon collection of enough site data to begin design, possibly simultaneously with Site Survey task, the A/E shall perform the following:

- a. Once the Programming and Site Survey tasks are complete and approved by the County, the AE shall prepare for the Design Charrettes.
- b. Design Charrettes: Lead two design charrettes with the County to develop the conceptual design direction for the project.

Prepare a minimum of three (3) different schemes showing block layout floor plans, conceptual elevations, and site plan sketches for use in a design charrette. The first charrette will be to review schemes and select the most appropriate concepts to further develop. The presentation of each scheme must address LEED strategies and daylighting, passive design /energy efficiency, functional requirements, adjacencies, building siting strategies, security requirements and discussion of operating impacts for [End User] staff. Discussion shall also include the relative costs, strengths, and weaknesses of each alternative.

The second charrette will be scheduled within two weeks once the Architect has had time to incorporate County comments, considerations and selections and make modifications into CAD format. Any revisions to plans and elevations will be reviewed and finalized, and major systems and energy reduction discussions will take place.

Follow-up the design charrettes with a written report of the findings/summary of both charrettes within ten (10) days.

- c. Concept Design Package: Based on the commentary from the design charrettes, prepare a Concept Design package to represent the "whole building" design approach for the preferred scheme or schemes reviewed in the charrettes for the Aldie Volunteer Fire & Rescue Department. The AE shall revise alternatives as necessary for County review and approval.

Prepare the Concept Design package and report, to include the following:

- 1) Site plan sketch which shall include:
  - a) Magnetic North
  - b) Engineering Scale: Minimum 1 inch equals 20 feet.
  - c) Graphic scale
  - d) Legend
  - e) Existing spot elevations with bench mark and survey data
  - f) Finished floor elevations
  - g) Existing utilities with future and new utility connections
  - h) Access and parking areas including ADA
  - i) Discuss option for low impact development and storm water management
  - j) Identify any zoning modification requirements
  - k) Identify roadway improvements for site access
  - l) .
  - m) Identify building physical security measures including landscape or other buffering measures for the building and site
  - n) Identify LEED or sustainable design concepts and strategies including building orientation, daylighting strategies, sustainable site strategies and energy conservation/renewable resource strategies
  - o) Identify major building system selections to be made by County, including but not limited to: HVAC systems, roofing, exterior wall systems, plumbing and lighting.
  - p) Describe options for each and first-cost and life cycle cost comparisons. For HVAC systems, prepare three (3) operating concepts for the facility and provide a detailed feasibility study that discusses the cost, advantages and disadvantages of each system.
- 2) Provide a minimum of three conceptual floor plans and elevations. Building concepts to include the following:
  - a) Floor plans showing functional areas and relationships at a scale of 1/8 inch equals 1 foot
  - b) Building elevations
  - c) Building sections
  - d) Gross space tabulations
  - e) Opinion of probable cost for selected scheme
  - f) Identify several deduct alternates for bidding
  - g) For sheets with match lines, show site location key on each sheet
  - h) Indicate code compliance requirements of the design and construction of the project.
  - i) Indicate all sustainable design strategies being considered for the project and coordinate cost information for review by the County.
  - j) Concept plan drawings shall be on standard drawing sheets; other materials shall be on 8.5 x 11 inch paper.
- 3) Report Narrative to include the following:
  - a) Identify code compliance requirements of the design and construction of the project.
  - b) Identify and describe all sustainable design strategies being considered for the project and coordinate cost information for review by the County. Include a preliminary LEED Scorecard.
  - c) Identification of major building system selections to be made by County, including but not limited to: HVAC systems, roofing, exterior wall systems, plumbing and lighting.
  - d) Discussion of security strategies and elements for the physical security, electronic security, etc.
- 4) Construction Cost Estimate for the scheme(s).

- 5) Design/Construction Schedule in MS Project confirming that the project is proceeding per the schedule included in the SOW or per the schedule discussed at the project kick-off meeting.
  - 6) Preliminary Furniture, Fixtures and Equipment (FFE) list necessary for the project and estimated cost information for County review.
- d. Deliverables:
- 1) Meeting Notes from Design Charrettes
    - a) Electronic copy via e-Builder
  - 2) Report of Findings/Summary of Design Charrettes
    - a) Electronic copy in PDF format submitted via e-Builder
  - 3) Concept Design Package
    - a) X hard copies; 30" x 42" drawings and 8.5" x 11" report formats
    - b) X hard copies; half size sets
    - c) Electronic copy in PDF format submitted via e-Builder

4. BOUNDARY LINE ADJUSTMENT AND LEGISLATIVE AND HDRC REVIEWS AND APPROVALS

- a. The AE will be required to consolidate the existing three parcels into one parcel through the Boundary Line Adjustment process. The AE will perform the require survey work, prepare the necessary drawings and applications, and submit the documents to the Department of Building & Development (B&D). This task will include addressing B&D comments and resubmitting drawings until the boundary line adjustment is approved.
  - b. The AE will be responsible for preparing and processing a Special Exception (SPEX) application for the fire & rescue station use on the consolidated parcel. This task includes coordinating and attending a pre-application meeting, preparing a SPEX plat and other required drawings, preparing and processing the SPEX application through the Department of Planning & Zoning, attending the Planning Commission (PC) briefing, presenting the application to the PC and Board of Supervisors during public hearings, sending notifications to adjacent property owners regarding the public hearings, advertising the public hearings, and other tasks and communication with Planning & Zoning to obtain SPEX approval.
  - c. The AE will be responsible for preparing and processing the proposed facility design through the Historic District Review Committee (HDRC) in accordance to requirements outlined in the Revised 1993 Loudoun County Zoning Ordinance. This task includes preparing the required drawings and renderings required and presenting the proposed design to the HDRC.
- d. Deliverables:
- 1) Meeting Minutes
    - a) Electric copy via E-Builder
  - 2) Boundary Line Adjustment
    - a) Application and drawings
    - b) Written responses to Loudoun County BUILDING & DESIGN comments
  - 3) SPEX
    - a) Pre-application package
    - b) Applications
    - c) Plat and drawings
    - d) Statement of Justification
    - e) Public Hearing notifications to adjacent property owners
    - f) Written responses to Planning & Zoning comments
    - g) Public Hearing presentations
  - 4) HDRC
    - a) Applications
    - b) Drawings, elevations, and renderings
    - c) Written responses to Planning & Zoning comments

d) Public Hearing presentations

5. FORMAL PRESENTATIONS:

- a. The AE shall prepare all required documents, visual aids, and attend formal presentations to the community, as well as all agencies required for approval and acceptance. Typical presentation materials will include rendered site plan, building elevations and 3D image(s). It is anticipated that one community meeting will occur towards the end of the concept design phase, but prior to the SPEX and HDRC public hearings. The second meeting for the community, if required, will likely occur during the Construction Documents phase.
- b. Presentations may be to the community, groups, neighbors, etc.
- c. All presentations required for approval by authorities having jurisdiction shall be included within the associated tasks and shall be provided by the AE at no additional costs to the County.
- d. Deliverables:
  - 1) Meeting Minutes
    - a) Electronic copy via e-Builder
  - 2) Presentations/Presentation Boards
    - a) 1 hard copy, format TBD with Project Manager
    - b) Electronic copy in PDF format submitted via e-Builder

6. SPECIAL EXCEPTION or ZONING MODIFICATION:

- a. Where a Special Exception, Zoning Modification or other similar application is required and upon the County's request, the Consultant will be responsible for preparing all drawings, documents, presentations and all tasks such as, but not limited to: traffic studies and other required studies, property owners notification, attending public meetings, pre-application meeting, Planning Commission and Board of Supervisors meetings and responding to comments resulting from the submittal process.

7. SITE PLAN SUBMISSION:

- a. Submit Site Plan required for the project. The Loudoun County Department of Building and Development approves all site plans. The Facilities Standard Manual provides information regarding the process and is available on the County's website under the Building & Development.
- b. No public water is available at the site. A drinking well will be required, tested, and integrated into the design.
- c. Grading Permit(s): Once the Site Plan(s) has been approved and the Zoning Permit(s) is issued by the Department of Building and Development, prepare and submit the Grading Permit application(s). The grading permit plans shall completely illustrate all phases of erosion and sediment control for the site during the construction process. Loudoun County's Department of Building and Development issues Grading Permits and the County's Facilities Standards Manual (FSM) provides information regarding the process and is available on the County's website under the Department of Building and Development.
- d. VSMP Permit Coverage
- e. VDOT Land Use Permits, Construction Permits, Signal Permits, Construction Entrance Permit and Permanent Entrance Permit: Prepare and submit VDOT permits as required for this project including, but not limited to, those listed.
- f. Preparation of the necessary drawings and documentation is included as part of this task. The AE is responsible for determining all County, utility providers and VDOT site development requirements applicable to the project including environmental impacts/constraints, wetlands mitigation, easements, attending all coordination/issues meetings with the County, utility providers and referral agencies, and furnishing a complete site development plan to ensure that site plan approval does not adversely impact the construction schedule of the project.
- g. The AE shall prepare any floodplain or floodplain alteration studies required to process the Site Plan as part of this task.

- h. The AE shall prepare and submit to the County Project Manager, stamped originals of all onsite and off-site easement plats for review and approval. Note that even though this is a County owned property that easements may be required for storm sewer, VDOT, electric, gas, phone, cable water, and sanitary sewer.
- i. The AE will be responsible for scheduling the pre-application meeting and responding to all review comments. To ensure that quality plans are submitted for review, it is noted here that should a third submission be required, the applicable fees for this submission will be the sole responsibility of the AE.
- j. The AE is responsible for confirming all submission requirements with the County and VDOT including number of review sets, signature requirements, etc.
- k. The County Design Manager will coordinate the Owner's signature as required.

The Owner for all submissions will be:

Loudoun County Board of Supervisors  
 1 Harrison Street  
 PO Box 7000  
 Leesburg, VA 20177

The Applicant for all submissions will be:

Joe Kroboth, Director  
 Department of Transportation and Capital Infrastructure  
 801 Sycolin Road, S.E.,  
 Suite 310,  
 PO Box 7100  
 Leesburg, VA 20177-7100

- l. Grading Permit- Once the site plan has been approved, prepare and submit the Grading Permit application. The grading permit plans shall completely illustrate all phases of erosion and sediment control for the site during the construction process.
- m. VDOT Construction Entrance Permit and Permanent Entrance Permit- Prepare and submit VDOT entrance permits if required for this project.
- n. Deliverables:
  - 1) Meeting Minutes from any coordination meetings
    - a) Electronic copy via e-Builder
  - 2) Approved Site Plan, Zoning Permit, Grading Permit, VSMP, VDOT Permits, other permits, etc.
    - a) 1 hard copy of all application materials submitted including revised submissions
    - b) Electronic copy via e-Builder
  - 3) All required applications materials and copies for the County or VDOT
    - a) Electronic copy of all application materials in PDF format submitted via e-Builder
  - 4) Final and Recordable Easement Plats required for all Land Use Approvals
    - a) 4 hard copies, signed and sealed as required
    - b) Electronic copy in PDF format submitted via e-Builder

## 8. UTILITY COORDINATION CONSULTANT

- a. The AE will be responsible for providing a "UTILITY COORDINATION CONSULTANT" sub-consultant whose primary responsibility will be to locate, verify providers serving the site, coordinate service requests with providers for all site utilities, coordinate the service design with the service provider and AE team, verify the need for temporary and permanent easements, coordinate/obtain plat, deeds, service agreements from the service providers and forward to the County Design Manager, and providing applicable information back to the provider for easement recordation. This includes but is not limited to;
  - 1) Power

- 2) Water
- 3) Sanitary Sewer
- 4) Phone
- 5) Natural Gas
- 6) Cable and Internet providers
- b. Deliverables:
  - 1) Meeting Minutes from any meetings
    - a) Electronic copy via e-Builder
  - 2) Progress Updates every two (2) weeks
    - a) Work completed
    - b) Work required by the County of Loudoun
    - c) Work to be completed
    - d) Schedule of activities

9. BOARD OF ARCHITECTURAL REVIEW (BAR)

- a. A Certificate of Appropriateness from the Town of Leesburg's Board of Architectural Review (BAR) will be required for the project. The AE is responsible for preparing all required application documents, renderings, exhibits, visual aids, samples, etc. and attend BAR meetings to present the project and render approval.
- b. Deliverables:
  - i. Meeting Minutes
  - ii. Electronic copy via e-Builder
  - iii. Presentations/Presentation Boards
  - iv. 1 hard copy, format TBD with Project Manager
  - v. Electronic copy in PDF format submitted via e-Builder
  - vi. Approved Certificate of Appropriateness
  - vii. 1 hard copy of all application materials submitted including revised submissions
  - viii. All required applications materials and copies for the BAR
  - ix. Electronic copy of all application materials in PDF format submitted via e-Builder

10. MEP SYSTEM SELECTION

- a. Between the approval of the Concept Design Package and before the submission of the Design Development Package, the AE team shall submit materials for the County's selection of the final building systems.
- b. The package shall include the following at a minimum:
  - 1) Life-Cycle Cost Analysis for not less than three (3) systems as reviewed and commented on during the County's review of the Concept Design Package
  - 2) Minimum required service sizes for domestic water, fire service, the need for fire pump, etc. Submit all calculations to county for verification.
  - 3) Load requirements for power and for emergency generator, if utilized
  - 4) Narrative discussion of any LEED related considerations, relative costs and implications to sizing of systems or utility services
- c. Life-Cycle Cost Analysis and LEED Energy Modeling: The objective of the Life-Cycle Cost Analysis and LEED Energy Modeling is to evaluate building envelope and building systems in an integrated approach to develop sustainable strategies, to evaluate building elements and systems for County energy conservation goals, to review life cycle costs associated with design strategies/decisions, and to assist in the LEED certification process.

Evaluate the life-cycle cost energy savings of the three (3) comprehensive Energy Conservation Opportunities (ECO's) from the Concept Design phase including operation and maintenance cost

savings in accordance with U.S. DOE Federal Energy Management Program (FEMP) guidelines and calculated using the NIST Building "Life-Cycle Cost" program, version 4.x (or the latest edition).

Coordinate and prepare the work to be within construction cost limitations. The study is to include, but not limited to, all cost estimates, calculation and preliminary layouts necessary to evaluate this project.

- d. The Life-Cycle Cost Analysis and LEED Energy Modeling analysis shall consider and include the following:
  - 1) Provide for optimum energy efficiency with a nominal discount rate of 10% using the following criteria: (i) Savings to investment ratio greater than 1.0
    - a) Minimize building life-cycle cost over 40 years
    - b) Maximize net savings over 40-year study period
    - c) Current cost versus historical high
    - d) Minimize simple payback period in years
    - e) Percent of Energy Savings
    - f) Minimize discounted payback period
    - g) Maximize adjusted internal rate of return on investment
    - h) Take into account utilities on site, gas and electric and County negotiated rates for services (current rates will be provided by the County).
    - i) Economic comparison of alternatives.
    - j) Monthly utility cost graph.
    - k) Annual operating cost graph.
- e. Include in the analysis for each building system studied, an itemized estimate of all major system component and/or materials and their annual operating and maintenance costs broken down by quantity, hours per year, and total annual cost. Also include all non-annual repair and replacement costs itemized annually over the study period along with anticipated life span of each system and/or material.
- f. Calculate annual energy consumption/performance for each building system using a commercially available energy simulation program, such as Carrier HAP, Trane Trace, DOE 2.1, Power DOE, EnergyPlus, Energy-10, or BLAST, latest version. Run analysis based on Washington DC as the region/location.
- g. The building systems which are studied shall include all energy using components and shall consider alternatives for energy efficient lighting, fuel sources, renewable energy sources, HVAC system types and combinations, HVAC and lighting control systems, building envelopes and orientations, including glazing, walls, roofs and materials. Include in final report, discussion of all systems and components studied even if not selected.
- i. Provide final report, including summary, appendices, graphics, and electronic copies of all computer-generated data.
- h. Deliverable:
  - 1) MEP Systems Selections Package
    - a) 2 hard copies; 30" x 42" drawings and 8.5" x 11" report formats
    - b) Electronic copy in PDF format submitted via e-Builder
    - c) Native file formats of energy simulation used submitted via e-Builder

11. 35% CONSTRUCTION DOCUMENTS TASK (DESIGN DEVELOPMENT):

- a. Based on the County's approval of any adjustments to the schematic documents, the Architect shall prepare Design Development Documents consisting of drawings and other documents to fix and describe the size and character of the entire project as to architectural, structural, mechanical and electrical systems, security systems, materials and such other elements as may be appropriate.
- b. The Design Development efforts must confirm all specific functional requirements, FFE planning requirements, systems and equipment requirements, etc. All office and workstation planning shall be based on the County's Space Standards.

- c. The Design Development effort shall integrate existing historical structures and exterior repair and prepare plans for structures to be demolished.
- d. The Architect shall provide for one progress review meeting with the County Design Manager at the midpoint of the 35% Construction Documents/ Design Development development period. This is required before the 35% Construction Document package will be accepted.
- e. Separate interviews with the County's support agencies may also be necessary including the County's Department of Information Technology (DIT), the Department of General Services (DGS) and Horticulturalist in the Department of Parks, Recreation and Community Services (PRCS).
- f. The AE shall include locating well(s) to be drilled, testing of the well(s), design to new structure, and design and permitting of a treatment system for the well water.
- g. The Architect shall prepare outline specifications including County provided General Conditions and specifications setting forth the basic requirements of the facility and including catalog cuts of systems basic equipment. The Architect shall provide an outline of furniture specifications (if required) and 1 set of color boards.
- h. The County review submission packages require a 2 week review. During the review time the Architect shall continue working on the Design Development plans. Submission requirements are described at the end of this section.
- i. The A/E shall prepare a cost estimate utilizing the services of an independent professional cost estimator.
- j. Design/Construction Schedule in MS Project confirming that the project is proceeding per the Concept Design Schedule.
- k. The Architect shall make such adjustments as are necessary in the project plans and specifications to conform to the limits of the Design-to-Build cost provided in the contract, and shall cooperate and coordinate with the Owner in determining Value Engineering reductions required, if any. The County shall reserve the right to submit all materials for third party review.
- l. The A/E shall complete site plans and submit to, obtain approval of, and secure the required site permits from ALL reviewing agencies and authorities. The Architect shall complete site plans and notify the Design Manager when the plans will be submitted to the Loudoun County Department of Building and Development (B&D) for review and permitting. The A/E shall also submit site plan notices, as required by the Department of Building and Development, to adjacent landowners and submit all records to the Design Manager.
- m. The Architect is responsible for coordinating with the Owner and utility companies to identify existing utilities, required relocations, and utility requirements for this facility.
- n. The Architect shall apply for and obtain any required wetlands permits.
- o. The County of Loudoun will pay any permit fees directly to issuing authority or agency.
- p. The Architect shall prepare and submit to the County, stamped originals of all on-site and off-site easement plats for review and approval. Note that even though this is a County owned property that easements will be required for storm sewer, VDOT, electric, gas, phone, cable and sanitary sewer.
- q. The Architect shall submit options for low impact development.
- r. There will be an A/E presentation to County staff for purpose of reviewing proposed equipment for electronic and physical security, audio-visual, energy management; and proposed major building materials selections and finishes selections.
- s. The County reserves the right to have a third party conduct a constructability review of design at 95 percent submittal. If findings of third party constructability team require modifications to the drawings, A/E to perform modifications at no additional expense to the County.
- t. When Construction Drawings are complete to the 35 percent stage, drawings shall include at least the following:
  - 1) Site Plan:
    - a) All plan requirements for Loudoun County review with cover sheet and the following:

- a. Magnetic North
  - b. Engineering Scale: 1 inch equals 50 feet or as required by the review agency
  - c. Graphic scale, legend, vicinity map
  - d. Existing elevations with bench marks and survey data
  - e. New elevations to include two foot contour intervals (one foot contour interval lines for slopes less than 2%) and finished floor elevations
  - f. Wetlands and flood plains
  - g. Existing and new utilities indicating connections
  - h. Existing and new structures
  - i. Existing and new roads
  - j. Parking areas with spaces
  - k. Building location, dimensionally
  - l. Pertinent grades, adjacencies, setbacks, easements etc.
  - m. Paths, ramps, stairs, curbs
  - n. Location of site fixtures such as light fixtures, benches, railings, trash enclosures, generators etc.
  - o. Easement plat
  - p. Landscape plan, including berms or other security measures. Consultant to design using LC landscaping standards, which will be provided. Landscaping, sidewalks, paths, site furniture, etc shall be shown at an enlarged scale where adjacent to the building in order to provide appropriate dimensions and detail for construction. This may be an enlarged civil plan or an architectural site plan.
- 2) Building Plans:
- a) Floor plans at 1/8" or 1/4" showing:
    - a. Major dimensions
    - b. Building footprint
    - c. Exterior wall type, thickness, composition with physical security features identified
    - d. Structural system with fixed grid and column sizes
    - e. Major mechanical/electrical systems and their requirements
    - f. Building core w/stairs, shafts, elevators etc developed
    - g. Built-in furniture and equipment
    - h. Room names, numbers and space tabulations
    - i. Finish board including exterior and interior material selection
    - j. Location of new furniture required
- 3) Elevations showing:
- a) All fenestration and building materials
  - b) Building overall heights and finished floor heights
  - c) Section cut locations
- 4) Building sections showing:
- a) Foundation and structural systems
  - b) Typical wall construction including exterior and interior
  - c) Masonry coursing
  - d) Parapet or overhang design
  - e) Ceiling heights, clerestory windows, architectural elements
  - f) Schedules
  - g) Interior finishes
  - h) Frame and door
  - i) Window and glazing

- 5) Structural drawings at 1/8" or 1/4" showing:
  - a) Typical and non-typical framing
  - b) Slab design w/depressions and thicknesses
  - c) Beam sizes
  - d) Column grid
  - e) Preliminary details
- 6) MEP drawings at 1/8" or 1/4" showing:
  - a) Major shafts and chases, sized
  - b) Mechanical, Electrical and Telecom rooms, sized
  - c) HVAC equipment locations, nominal sizes and proposed capacities of mechanical and electrical equipment
  - d) Fire detection and protection systems
  - e) Design calculations including electrical load and fault current analysis
  - f) Lighting plans, power distribution and lighting cut sheets
  - g) Communication System(s) rough-ins (j-boxes, conduit, etc.)
  - h) Electronic Security
  - i) Audio-Visual Plan, to include PA/alerting/call notification systems, projection if needed
  - j) Lightning Protection- performance specification at this stage only.
  - k) Plumbing plans, plumbing fixture schedule, cut sheets
  - l) Flow diagrams of mechanical systems
  - m) Exterior louver requirements
  - n) Roof top equipment, vents, etc.
- 7) Discussion of major systems, including the following:
  - a) Materials of construction
  - b) Fenestration
  - c) Foundation
  - d) Framing
  - e) Mechanical systems
  - f) Lighting and power distribution
  - g) Incoming Electrical and COMM services & their locations on Site
  - h) Internal and external power distribution systems
  - i) Fire detection and protection systems
  - j) Building Envelope
  - k) Physical Security Systems
  - l) Communications, to include phone system
  - m) Audio / Visual
  - n) Electronic Security, Doors and Hardware
  - o) Cost estimate, including a line-by-line project cost. Follow the FPP format for the cost estimate.
  - p) Design calculations.
  - q) Electrical load and fault current analysis.
  - r) Lightning Protection
  - s) List of technical specification sections.
- u. Updated Life-Cycle Cost Analysis and LEED Energy Modeling: Based on the approved system selected during the MEP Systems Selection Task, provide updates to the Life-Cycle Cost Analysis and LEED Energy Model as required.

- 1) Provide final report, including summary, appendices, graphics, and electronic copies of all computer-generated data.
  - 2) In conjunction, provide updated reporting on all utilities and coordination including the following:
    - a) Submit to each of the public utilities a load letter and preliminary plan for the project. Submit a copy of each letter to the County Project Manager.
    - b) Obtain direction from each utility as to the route of each service and budget estimates for same. Identify all costs for service and connection that will be outside the construction contractor's responsibility.
    - c) Provide copy of this information to the County Project Manager.
    - d) Provide direction of anticipated required easements (onsite and offsite) for each utility. Provide copy of this information to the County Design Manager.
    - e) Provide Meeting Minutes for any discussions and meetings related to utilities.
    - f) Preliminary Utility Review:
      - a. Submit to the County and each of the public utilities a load letter and a preliminary Site Plan for the project. Submit a copy of each letter to the Design Manager.
      - b. Obtain direction from each Utility company as to the route of each service. Identify all costs for service and connection that will be outside the construction contractor's responsibility. Provide copy of this information to the Design Manager.
      - c. Identify service availability for each utility.
- v. Deliverables:
- 1) Meeting Notes for all meetings, presentations, discussions, etc.
    - a) Electronic copy via e-Builder
  - 2) Draft Easement Plats
    - a) X hard copies
    - b) Electronic copies in PDF format submitted via e-Builder
  - 3) Design Development Package
    - a) X hard copies of project manual, drawings, calculations, cut sheets, cost estimate, etc.
    - b) Electronic copies in PDF format submitted via e-Builder
    - c) Finish Boards
  - 4) Updated Life-Cycle Cost Analysis and LEED Energy Model
    - a) 1 hard copy of report
    - b) Electronic copy in PDF format submitted via e-Builder
    - c) Native file formats of energy simulation used submitted via e-Builder
  - 5) Summary of outstanding issues, etc. to County Project Manager submitted via e-Builder

12. VALUE ENGINEERING (VE) ANALYSIS (OPTIONAL TASK):

- a. The A/E shall provide in house value engineering analysis during all phases of design. However, the County may have a VE study performed in which the A/E shall comply with the following:
  - 1) The County may enter into a contract with a Certified Value Specialist team (C.V.S. Team) for performing a value engineering analysis at the completion of the Design Development Phase.
  - 2) The value engineering analysis shall consist of a minimum 40-hour study/workshop conducted by the C.V.S. Team.
  - 3) The C.V.S. Team members shall be different from the project team members.
  - 4) The A/E shall provide four (4) copies of the independent cost estimate, plans, and specifications to the C.V.S. Team.
  - 5) The A/E shall present an overview of the project to the C.V.S. Team to explain design intent and answer questions.
  - 6) The A/E and his consultant design team shall attend a presentation meeting on the value engineering recommendations.

- 7) The A/E shall provide comments on the value engineering analysis report within 14 calendar days of receipt of the report.
- 8) The A/E shall participate in the joint review and value engineering resolution meeting.
- 9) The A/E shall submit a report within 14 calendar days of the resolution meeting to the Owner.
- 10) The A/E shall implement all final value-engineering recommendations accepted by the Owner into the project design at no additional cost to the owner. The Design to Build cost may be adjusted to reflect the accepted recommendations.

This is a separate task, which will be invoiced only after written approval by the County that the revisions identified have been adequately addressed.

b. Deliverables:

- 1) Value Engineering Report Comments submitted via e-Builder
- 2) Value Engineering Resolution Report submitted via e-Builder
- 3) Revised drawings and specifications to incorporate accepted Value Engineering recommendations
  - a) 1 hard copy of drawings and specifications
  - b) Electronic copy in PDF format submitted via e-Builder

13. CONSTRUCTION DOCUMENTS TASK:

This task consists of developing the selected scheme into completed construction drawings and specifications. County reviews are included in this task at the 75, 95 (PERMIT SET), and final 100 (IFB SET-Bid Set) percent stages. The County review submission packages each require a two week review period. Submission requirements are described at the end of this section. Due dates will be set forth in the schedule.

County review comments in the form of marked up drawings, specifications and written comments will be returned to the A/E after every submittal. The A/E shall incorporate County comments into the construction documents after every review. The A/E shall respond to the County comments in writing to the Design Manager after every review explaining that each item has been incorporated into the documents or will explain why it was not.

The A/E design team shall include a Quality Control (QC) program at each submittal during the Construction Documents phase. The County Design Manager may request verification of the A/E's QC review. The objective for the County is for the A/E to produce fully coordinated construction documents.

- a. 75 Percent Submittal: Deliver the 75 Percent Submittal to the Design Manager. Review comments will be returned to the A/E, who shall incorporate the comments into the 95 Percent Submittal. The 75 percent submittal shall include:
  - 1) Building sections showing all floor to floor heights or floor to ceiling heights and all associated typical details.
  - 2) Building exterior elevations showing fenestration and exterior building materials including all associated typical details and schedules.
  - 3) Space tabulations of net square footage by room, and total gross square footage.
  - 4) Structural, mechanical, electrical, plumbing, security, fires detection/protection systems, and A/V systems and all associated typical details.
  - 5) Landscaping plan indicating in block form the type, location and extent of plant material and other landscaping features recommended, including berms or other security buffering measures.
  - 6) Riser diagrams (isometric type) for mechanical systems including plumbing.
  - 7) Specifications consisting of edited and marked or typed guide specs, and legible handwritten or typed specs for items not in the guide specs.
  - 8) Cost estimate shall be broken down by systems format. Lump sums are not acceptable.
  - 9) Design/Construction Schedule in MS Project confirming that the project is proceeding per the Design Development Schedule.
  - 10) Design calculations.
  - 11) Updated electrical loads on all Panel schedules.

- 12) Heating and cooling loads for each space.
- 13) Phone and data requirements, including phone and data room layout per County DIT guidelines.
- 14) The Consultant shall prepare and submit to the County, stamped originals of all on-site and off-site easement plats for review and approval. Note that even though this is a County owned property that easements will be required for storm sewer and sanitary sewer and other utilities.
- 15) Final finish board including exterior and interior materials based on 35% selections.
- 16) Deliverables:
  - a) Meeting Notes
    - a. Electronic copy via e-Builder
  - b) Draft Easement Plats
    - a. 2 hard copies
    - b. Electronic copies in PDF format submitted via e-Builder
  - c) 75% Construction Document Package
    - a. 2 hard copies of project manual, drawings, calculations, cost estimate, cut sheets, etc.
    - b. Electronic copies in PDF format submitted via e-Builder
    - c. 2 Final Finish Boards
- 17) Hard copy of AE Team's Quality Control Review Set (Redline and Yellow Out Set)
- 18) Summary of outstanding issues, etc. to County Project Manager
  - a) Electronic copy in PDF format submitted via e-Builder
- b. Permit Submittal: Deliver the Permit Submittal to the Design Manager. Review comments and those provided by the AHJ (Authority Having Jurisdiction) will be returned to the A/E, who shall incorporate the comments into the IFB submission. The submittal shall include:
  - 1) Specifications - complete, typed, and including the list of submittals, the list of operation and maintenance manuals and spare parts.
  - 2) Cost estimates based on quantity take-off and unit material and labor prices. The estimate shall be complete in every respect including overhead, profit, mobilization and demobilization costs, and quotations to support major cost items. Design contingencies shall not be used at this stage.
  - 3) Design calculations for all structural, mechanical, electrical, plumbing, and civil systems; include manufacturers' model numbers, performance curves, and other design descriptions as appropriate.
  - 4) Separate listings that identify long lead time items and items, which, because of their uniqueness, criticality, or lack of tolerance in manufacture or installation, require particular scrutiny during construction; and proprietary items. Note: proprietary items shall not be used without express prior approval by the County.
  - 5) There will be a presentation to County Staff for the purpose of reviewing proposed equipment for electronic and physical security, energy management, and proposed major building materials selections and finish selections.
  - 6) Deliverables:
    - a) Meeting Notes
      - a. Electronic copy via e-Builder
    - b) Draft Easement Plats
      - a. 2 hard copies
      - b. Electronic copies in PDF format submitted via e-Builder
    - c) 95% Construction Document Package
      - a. 2 hard copies of project manual, drawings, calculations, cut sheets, etc.
      - b. Electronic copies in PDF format submitted via e-Builder
    - d) Final Finish Boards
      - a. Hard copy of AE Team's Quality Control Review Set (Redline/Yellow Out Set)
    - e) Summary of outstanding issues, etc. to County Project Manager
      - a. Electronic copy in PDF format submitted via e-Builder

- c. IFB Submittal: Submit the IFB drawings and specifications to the Design Manager for review. The IFB submittal shall include:
  - 1) Complete construction drawings to include Communication drawings, plus CAD files.
  - 2) Complete construction specifications.
  - 3) Cost estimate and design calculations revised according to the 95 percent submittal review comments.
  - 4) Updated electrical load information.
  - 5) Updated heating and cooling requirements
- d. With the approval of the Design Manager, submit the construction documents to Building and Development for permit review. The A/E is to provide 4 full size sets of signed/sealed documents for permitting, where each sheet of drawings has an original seal. The A/E is responsible for addressing all permit comments that are generated by Building and Development and making any necessary revisions to the documents.
- e. IFB: Submit the IFB Documents upon approval by the Design Manager. The A/E will be required to coordinate with the Design Manager to develop the Invitation for Bid and package the documents in a manner that allows for control and tracking of the plans during the bid phase. Specific protocols for confidentiality will be further discussed prior to bidding.
- f. Deliverables:
  - 1) Meeting Notes
    - a) Electronic copy via e-Builder
  - 2) Final Easement Plats
    - a. 4 hard copies
    - b. Electronic copies in PDF format submitted via e-Builder
  - 3) IFB Construction Document Package
    - a. 2 hard copies of project manual, drawings, calculations, cost estimate, etc.
    - b. Electronic copies in PDF format submitted via e-Builder
    - c. Electronic copies in AutoCAD format submitted via e-Builder
    - d. Hard copy of AE Team's Quality Control Review Set (Redline and Yellow Out Set)
  - 4) Permit Set
    - a. 4 hard copies of drawings to Building and Development (1 copy which will be returned to County Design Manager)
    - b. Electronic copies in PDF format of all permit drawings and specifications submitted via e-Builder
  - 5) Bid Set
    - a. 2 hard copies of project manual and drawings
    - b. Electronic copies in PDF format submitted via e-Builder
    - c. Electronic copies in AutoCAD format submitted via e-Builder
    - d. 1 CD with PDF files of all bid drawings and specifications

14. CONSTRUCTION BIDDING PHASE:

- a. Be responsible for answering questions from bidders. All correspondence shall be documented and forwarded to the Purchasing Officer.
- b. Attend a Pre-Bid Conference. Present a brief overview of the project and prepare response to questions from bidders.
- c. The A/E shall prepare such clarifications and addenda to the bidding documents as may be required. The A/E will provide these to the County for review. The County will then direct the A/E to provide the approved addendum for reproduction and distribution by the County.
- d. Should first bidding or negotiating prices be in excess of five percent (5%) of the approved Estimated Construction Cost, the A/E shall participate with the County in such re-bidding, renegotiating, and design revisions, at no additional expense to the County, as may be necessary to obtain price(s) within the approved ECC or price(s) acceptable to the County. The County will assist in the design revision decisions. The County must approve all redesign.
- e. The A/E is to review requests for substitutions and submit recommendation(s) to County for approval.

- f. The A/E shall be responsible for preparing final construction documents that incorporate all issued addenda and shall provide one full reproducible set of the specifications and contract drawings and three sets of half-size drawings. The A/E shall also provide to the County electronic specifications and contract drawings, which include all issued addenda.
- g. Deliverables:
  - 1) Responses to bid questions and Addenda
    - a. Electronic copy in County-furnished format
  - 2) Updated Construction Documents including all addenda
    - a. 1 full size hard copy of drawings
    - b. 1 hard copy of specifications
    - c. Electronic copies in PDF format submitted via e-Builder
    - d. Electronic copies in AutoCAD format submitted via e-Builder

## 15. CONSTRUCTION PHASE

- a. Progress Meetings: The County Construction Project Manager will conduct the Construction Progress Meetings to be held every two weeks. The AE shall prepare the agenda including outstanding items and new items to be discussed via e-Builder. The AE shall be responsible for providing written notice and agenda for each meeting to all attendees two days in advance of the meeting date.

The General Contractor shall take care in preserving the existing historic structures. The AE will be required to document the General Contractor's work to ensure preservation activities are performed according to approved drawings and procedures.

The General Contractor shall be required to be prepared with updates and information regarding agenda items as identified including updates on the construction schedule, submittals, RFI's, etc. and any other items identified by the County.

The AE shall be responsible for preparing, distributing and correcting minutes from progress meetings that address all concerns of the County and the Construction Contractor and monitor the construction progress. Recorded meeting minutes shall be distributed by the AE to all meeting attendees within three (3) working days after each meeting. This administration will be conducted by the AE through e-Builder.

- b. Site Visits: Periodic visits to the construction site by the AE shall occur not less than two times per month, timed to coincide with the twice monthly construction progress meeting with the Construction Contractor. Each engineering discipline shall make periodic visits not less than once monthly, during the course of work applicable to its discipline. During critical work phases, each of the disciplines may be required to make additional visits. On the basis of such on-site observations, the AE and any and all consultants shall take the appropriate steps to guard the County against defects and deficiencies in the Work of the Construction Contractor. If the AE observes any work that does not conform to the Contract Documents, the AE shall immediately make an oral and written report of all such observations to the County. The AE and any and all consultants shall not be required to make exhaustive or full-time on-site observations to check the quality or quantity of the Work, but shall make as many observations as may be reasonably required to fulfill their obligations to the County.

The AE shall submit site visit reports via e-Builder no less than twice a month summarizing the construction progress, observations, deficiencies or other issues that may require further discussion. A report shall be issued each time a member of the AE team visits the site. The AE shall render written field reports relating to the periodic visits and observations of the project required by the above paragraphs within three (3) working days to the County and the Construction Contractor.

The AE shall verify that the Contractor is maintaining the Construction Record Drawing set.

The AE shall verify that the General Contractor is maintaining all LEED template information for LEED credit.

- c. Changes:
  - 1) Change Orders: The AE shall, when requested by the County, prepare Change Order documentation. Change Orders shall be identified as follows:
    - 1. Owner Changes: These will be additional services.
    - 2. Changes due to design errors or omissions: These will be at no cost to the County.

3. Changes due to differing site conditions: These will be additional services.
  - 2) The AE shall review all Construction Contractor requests for Change Orders and make recommendations to the County. The AE shall periodically meet to review change orders to determine the nature of the change orders and the proper disposition thereof. All review of changes will be through e-Builder.
  - 3) The AE will not issue revised construction documents without prior approval of the County Design Manager, i.e. substitutions, drawing changes, and letters of correction.
- d. RFIs: The AE shall respond to all Construction Contractor Requests-For-Information (RFI), within five (5) working days unless otherwise authorized by the County Project Manager and prepare subsequent Project Modification (PM) drawings as required. RFI's will be managed through e-Builder. The AE shall transmit all RFI responses and PMs to County Project Manager for review prior to transmitting to the Construction Contractor.
- e. Submittals: The AE shall review and recommend approval or disapproval of all Construction Contractor submittals including catalog cuts, shop drawings, material samples, manufacturer's certifications, and the contractor's construction bid cost breakdown. Copies of catalog cuts, shop drawings, material samples, and manufacturer's certifications shall be marked-up, stamped, and returned to the Construction Contractor electronically through e-Builder.
- 1) Submittal reviews shall be completed and returned to the Construction Contractor within ten (10) working days after receipt. All submittal reviews will be conducted electronically through e-Builder. Retain one copy of all approved submittals and a log of all submittals until construction is complete, at which time all copies will be returned to the County Project Manager.
  - 2) Each submittal copy and the Material Approval Request form shall be reviewed and signed by the AE and shall include a statement regarding the submitted item's compliance with the drawings and specifications:
    - a) Submittal complies: Stamp "APPROVED". Material Approval Request Forms: Check "APPROVED"
    - b) Submittal complies, but with clarification or minor change (no re-submittal required): Stamp "APPROVED AS NOTED" and note clarification or change that is required for compliance. Material Approval Request Forms: Check "SEE REVERSE" and write on the back of the form the clarification or change that is required for compliance.
    - c) Submittal does not comply (requires re-submittal and review): Stamp "DISAPPROVED - RESUBMIT" and note reason for disapproval. Material Approval Request Forms: Check "DISAPPROVED" and "SEE REVERSE" blocks and type on the back of the form "DISAPPROVED - RESUBMIT" and reason for disapproval.
- f. Certificate of Payment: Based upon observations at the site and upon the Construction Contractor's Applications for Payment, the AE shall determine the amount owed to the Construction Contractor(s), shall consult with the County Project Manager in the determination of the amount due the Construction Contractor and the AE shall sign the Certificate of Payment prior to the time it is transmitted to the County Project Manager for final approval for payment. All review and approval of the draft Certificate of Payment will be conducted electronically through e-Builder. The AE's signing of a Certificate of Payment shall constitute a representation by the AE to the County, based upon the AE's observations at the site the County/Construction Contractor Contract, and shall within two (2) days after receipt of Application from Construction Contractor, issue Certificates for Payment to the County in such amounts. The County and the data comprising the Application for Payment that the Work has progressed to the point indicated that to the best of the Architect's knowledge, information and belief, the quality of the Work appears to be in accordance with the Contract Documents. (This is subject to an evaluation of the Work for conformance with the Contract Documents upon Substantial Completion; the results of any subsequent tests required by the Contract Documents; minor deviations from the Contract Documents correctable prior to completion; and to any specific qualifications stated in the Certificate for Payment.) In signing the Certificate of Payment the Architect certifies that the Construction Contractor is entitled to payment in the amount certified. However, if it should later be found that the Construction Contractor has failed to comply with its contract with the County in any way or detail, such failures and subsequent compliance shall be the sole responsibility of said Construction Contractor provided that Architect has complied with the terms of this contract. By signing the Certificate for Payment to the County,

the Architect shall not be deemed to represent that it has made any examination to ascertain how and for what purpose the Construction Contractor has used the monies paid on account of the Construction Contract Sum.

- g. Punch List: When the Construction Contractor states that the Work or portions of the Work are substantially complete, the AE and any and all consultants shall inspect the Work or portions of the Work, prepare and submit to the County Project Manager typed punch lists of the Work of the Construction Contractor(s) which is not in conformance with the Contract Documents. The County shall transmit such punch lists to the Construction Contractor(s). The AE will inspect and prepare a punch list on portions of the Work. The AE and any and all consultants shall conduct up to two (2) comprehensive substantial completion inspections per construction contract at the request of the County. If more than two (2) substantial completion inspections are required for the project through no fault of the AE, the additional inspections shall be deemed additional services.

The AE shall verify that the General Contractor has completed LEED template information for LEED credit.

- h. The AE and any and all consultants shall observe and review test data of the original operation of any equipment or system such as initial start-up testing, adjusting and balancing to verify that all equipment and systems are properly installed and functioning in accordance with the design and specifications.
- i. Construction phase coordination will be required by the AE with County vendors including the Third Party Commissioning Agent and others.
- j. Upon correction of the deficiency reports (punch lists), and acceptance of all other closeout submittals and certificates of the Construction Contractor, the County Project Manager and the AE shall approve the Application for Final Payment.
- k. Should errors, omissions or conflicts in the drawings, specifications or other Contract Documents by the AE be discovered, the AE shall prepare and submit to the County, within five (5) working days unless authorized by the County, such amendments or supplementary documents and provide consultation as may be required. See Item c above for description of compensation.
- l. The AE shall not be responsible for construction means, methods, techniques, sequences or procedures, or safety precautions and programs in connection with the Work, and shall not be responsible for the Construction Contractor's failure to carry out the Work in accordance with the Contract Documents.
- m. The County shall have authority to condemn or reject Work when in the County's or the AE's opinion the Work does not conform to the Contract Documents. The AE will verify non-conformance and the County will issue a formal notice to the Construction Contractor. Whenever in the County's or the AE's reasonable opinion it is considered necessary or advisable to ensure the proper implementation of the intent of the Contract Documents, the County shall have the authority to require special inspection or testing of any Work in accordance with the provisions of the Contract Documents whether or not such Work is fabricated, installed or completed.
- n. The AE shall be responsible for assisting the Construction Contractor in obtaining governing agency occupancy approval. If any exceptions arise related to the design or specified materials the AE is responsible for correcting the situation at no additional expense to the County.
- o. The AE is required to provide as-built Site Plan documents as required by Loudoun County Department of Building and Development for final site/zoning inspections and coordinate with the Construction Contractor as required.
- p. Deliverables:
  - i. Progress Meeting Agendas and Minutes via e-Builder
  - ii. Site Visit Reports and Coordination Meeting Minutes via e-Builder
  - iii. Responses to RFI's via e-Builder
  - iv. Submittal Review via e-Builder
  - v. Change Order preparation and review via e-Builder
  - vi. Contractor pay application review via e-Builder
  - vii. Punch List via e-Builder
  - viii. Inspection Reports via e-Builder

- ix. Test and Balancing and Equipment Start-Up Reports Review and Comments via e-Builder
- x. For all of the above, provide electronic copies in PDF format to extent possible and hard copies as required (TBD)

16. FURNISHINGS CONTRACT ADMINISTRATION (optional task)

- a. Provide furniture and equipment design and contract administration services to fully outfit the project and based on the County's available FFE budget. Furniture and non-fixed equipment is assumed to be FFE. Fixed equipment, building systems related equipment and audiovisual equipment are planned to be part of the General Contractor's scope of work and shall be included within the Construction Documents. Furnishings budget is approximately 50,000, however this budget will be further refined as technology requirements are identified during design.
- b. Furnishings Design Phase:
  - i. Meetings with the County and Courts staff as required for full selection of new furnishings and equipment including but not limited to the following:
    - 1. Furniture Concept Presentations – Provide options for review and to narrow down selections for each piece and area;
    - 2. Selections Meetings – Final selections on items;
    - 3. Finishes/Fabric Selections Meetings; and
    - 4. Public Area Furnishings Meetings.
  - ii. Provide one (1) draft and one (1) final specifications manual, including cut-sheets, color and finish selections, full specifications and details necessary to obtain competitive bids for the furnishings.
  - iii. Provide final furnishings plan with all pieces tagged by individual furniture type and referenced to specifications manual. Tag each piece uniquely including any differences in finishes and fabrics. For example, a C1 chair may be the same furniture piece as a C2 chair, but if they have different fabrics/finishes, they should be tagged uniquely.
  - iv. Provide final furnishings detail drawings for any custom furnishings required.
- c. Procurement of Furnishings:
  - i. Where possible, furniture and equipment items shall be purchased from existing approved County contracts. A list of available contracts will be furnished to the AE for coordination and the County will work with the AE to identify options for contracts. Where there are not contracts available, full bid documents will be required.
  - ii. Assist the County in the evaluation of the bids received. Provide recommendations to the County for the award of contracts for the furnishings.
  - iii. Assume that multiple contracts/vendors will be involved with multiple purchase orders.
- d. Contract Administration/Installation Coordination (for all FFE) shall include:
  - i. Preparation of Bill-of-Materials.
  - ii. Coordination with the County Project Manager to schedule all vendors for installation. Detailed coordination, planning and scheduling will be required.
  - iii. Reports to the County Project Manager on the furniture status and projected installation dates.
  - iv. Field coordination for electrical connections to systems furniture.
  - v. On-site receipt and inspection of furniture and equipment.
  - vi. Reports to the County Project Manager and the vendors on any follow-up on corrections of errors and/or damaged goods. Coordination of schedule for any repairs or replacements.
  - vii. Statement of completion for each vendor/purchase order when all items are complete, received and installation with no open issues so that County Project Manager can approve final payment on purchase orders.
- e. Deliverables:
  - i. Meeting Minutes
    - 1. Electronic copy via e-Builder
  - ii. Furniture Specifications (Draft and Final)
    - 1. 1 hard copy

- 2. Electronic copy in PDF format submitted via e-Builder
- iii. Furniture Drawings (Draft and Final)
  - 1. 1 hard copy
  - 2. Electronic copy in PDF format submitted via e-Builder
- iv. Furniture Bid Documents (as required)
  - 1. 1 hard copy drawings and specifications
  - 2. Electronic copy in PDF format submitted via e-Builder
  - 3. 1 CD with electronic copy in PDF format
- v. Reports, as identified above, during the installation phase
  - 1. Electronic copy in PDF format submitted via e-Builder

17. BUILDING COMMISSIONING (optional task)

- a. The County shall provide for the Building Commissioning and Testing Services under separate Task Order contracts. The A/E shall be available to coordinate commissioning and testing activities to include: provide project specifications, video documentation and oversight during all start-up and training to ensure that all major building systems, including, but not limited to the following items, are completed to the full satisfaction of the County by the construction contractor:
  - 1) Piping systems pressure testing
  - 2) Equipment start-up/demonstration by factory-authorized persons
  - 3) Duct pressure testing
  - 4) Demonstration of complete security systems
  - 5) Air balancing
  - 6) Tests and demonstrations required by Local Code Authorities
  - 7) Submittal of all required certificates, warranties, and test reports
  - 8) Submittal of Operations and Maintenance Manuals (3 sets)
  - 9) Demonstration of Audio-Visual systems
  - 10) Fire alarm / suppression systems
  - 11) Mechanical systems components and controls demonstration
  - 12) Emergency Power Systems
  - 13) Specified training for operation of building systems
  - 14) Attend a minimum of ten (10) commissioning meetings as necessary during construction
  - 15) The building commissioning is a County task and the AE is to be available to coordinate with the County Task Order Commissioning agent on the required Commissioning documentation.

18. POST-CONSTRUCTION PHASE

- a. Conduct thorough punch list inspections and prepare the written punch list incorporating those items compiled by the County. This task includes the inspection conducted prior to expiration of the warranty period.
- b. Prepare record "as-built" drawings on CAD files based on marked-up prints, drawings and other data furnished by the General Contractor. Submit final record drawings within 30 calendar days after receipt of marked-up drawings from the General Contractor. All final revisions shall be on the signed reproducible sheets and CAD files on diskette. The final "as-built" drawings shall show the actual construction only, except where the originals contain portions of the drawings marked "N.I.C." (not in contract) or when optional methods of construction are shown. Deletions or superseded portions of the drawings, or original methods of construction not used, shall be crossed out and noted "NOT BUILT". No change need be made to those portions, and symbols shall be removed from the body of the drawings. The revision notation in the revision block shall remain. Where a drawing is modified to show "as-built" conditions, the notation "RECORD DRAWING" shall be entered on the top most available line in the revision block.
- c. The A/E shall prepare a set of reproducible record drawings which show significant changes in the Work made during the Construction process, based on neatly and clearly marked-up contract drawings, prints, and other data furnished by the construction Contractor(s) and the applicable Addenda, Clarifications, and Change Orders which occurred during the Project.
- d. The A/E shall attend the original operation of any equipment or system such as initial start-up, testing, adjusting and balancing.

- e. The A/E and any and all consultants shall observe and review test data of the original operation of any equipment or system such as initial start-up testing, adjusting and balancing to verify that all equipment and systems are properly installed and functioning in accordance with the design and specifications.
- f. The A/E and any and all consultants shall conduct up to two (2) of each comprehensive Final Completion inspections for the project at the request of the County. If more than two (2) of each Final Completion inspections are required for the project, through no fault of the A/E, the additional inspections shall be deemed additional services.
- g. Upon correction of the deficiency reports (punch lists), and acceptance of all other closeout submittals and certificates of the Construction Contractor, the County and the A/E shall approve the Application for Final Payment.
- h. The A/E and any and all consultants shall conduct an inspection of the project, with the exception of furniture and equipment, thirty (30) working days prior to warranty expiration and provide to the County a written report specifying any warranty deficiencies which may exist.
- i. Deliverables:
  - i. Warranty Inspection Report
    - 1. 2 hard copies
    - 2. Electronic copy in PDF format submitted via e-Builder
  - ii. Test and Balancing and Equipment Start-Up Reports
    - 1. 2 hard copies
    - 2. Electronic copy in PDF format submitted via e-Builder
  - iii. As Built Drawings
    - 1. 2 hard copies
    - 2. Electronic copies in PDF format submitted via e-Builder
    - 3. Electronic copies in AutoCAD format submitted via e-Builder
    - 4. 1 CD with electronic files of all of the above in approved format

#### 19. ADDITIONAL ARCHITECTURAL/ENGINEERING SERVICE

- a. If required by the County, provide additional architectural-engineering services at the hourly rates provided on the pricing page under Section 4.0 "Compensation". Provide an hourly rate for each of the following representative categories. Minimum experience is indicated in parentheses for each category. Rates included herein should correspond as closely as possible to the actual rate category identified in the individual firm's fee/rate schedule even though the category titles may differ.
  - i. Principal (Corporate Officer or Partner)
  - ii. Project Manager (Registration + 10 yrs. experience + 3 yrs. as Project Manager)
  - iii. QC Manager (+10 years' experience in construction, architecture or combined)
  - iv. Architect 1 (Registration + 7-10 years' experience)
  - v. Architect 2 (Registration + 3-7 years' experience)
  - vi. Task Leader (0-5 years' experience)
  - vii. Technician 1 (5-7 years' experience + required certifications)
  - viii. Technician 2 (3-5 years' experience + required certifications)
  - ix. Administrative (3 years' general office experience)
- b. **There will be no reimbursable expenses for additional services unless discussed and agreed to in writing for a specific project task.**

#### 20. AE EVALUATION CRITERIA

##### **Scope of Work for Architect and Engineer Contracts- Administration Requirements and Protocol**

- 1. The Consultant shall accept full responsibility to comprehend and verify the required Deliverables as stated in the Consultants Scope of Work (SOW), and provide all information as described. The

Consultant shall be knowledgeable of the project site, its conditions, and all other constraints that may impact the fee. The Consultant shall understand all administrative and legislative approvals that will be required for the project. The Consultant shall complete the Design and Bid Documents in accordance with the Scope of Work, Budget, and Schedule.

2. The Consultant shall provide bimonthly project updates (meetings) to the County (or as dictated by the Design Manager). This update should include:
  - a. Project Updates/Status; Impacts to the Budget & Schedule
  - b. Critical items which may become potential issues and their timely resolution
  - c. Coordination/Communication with Loudoun County and other Agencies
  - d. Required Easements and/or Land Acquisition
  - e. Coordination with Wet & Dry Utility providers and issues
3. The Consultant shall adhere to the following Communication Guidelines:
  - a. Voice Mails shall be responded to within 1-2 business days (depending on importance)
  - b. Emails shall be responded to within 1-2 business days (depending on importance)
  - c. Schedule Design Progress Meetings (as noted above) and provide an Agenda for every meeting
  - d. Meeting Minutes shall be issued within 2 business days of the meeting, copying all present
4. The Consultant shall provide a CPM Project Schedule to be approved by the Design Manager (DM) that includes all essential Activities and Durations as stated in the Scope of Work. The Schedule shall also be updated monthly and should include:
  - a. Project Milestones and essential Activities
  - b. Deliverable Dates for all Plan Submissions as dictated in the Scope of Work
  - c. Status of County Reviews, i.e., STPL, SPAM, SPEX, etc.
  - d. Administrative, Legislative, Approval Processes Dates and Durations
  - e. LEED template completion dates
5. To minimize errors and omissions, the Consultant shall perform a comprehensive internal Quality Control (QC) of all design documents prior to the issuance of all Plan Submissions and/or Bid Documents. The Consultant shall provide the necessary QC, and document all review comments using eBuilder© software. The minimum QC performed shall include annotations as noted in red and by highlighting any corrections.
6. The Consultant shall coordinate all work with their subcontracted design firms and other regulatory agencies prior to each Deliverable and is to be included in the QC process noted above.
7. The Consultant shall properly coordinate and be proactive in problem resolution with all sub-consultants, utility and service providers, procurement of easements including updates with the Design Manager of all potential issues. (See note above).
8. The Consultant shall provide an Estimate of Probable Construction Costs as stated in the SOW. The estimate should include the following minimum costs and/or as required Design Manager:
  - a. Design/Estimating Contingency
  - b. Construction Contingency

- c. Inflation to the mid-point of construction
  - d. Allowances
  - e. Deduct Alternates
9. The Consultant shall provide accurate and timely Invoices which are consistent and conform to the design completed. Hours expended for each discipline or personnel type may be requested.
10. The Consultant shall provide complete Conforming Documents accurately reflecting all Addenda.
11. No additional work or schedule/completion delays resulting in a contract change to include time and/or fee adjustment shall be performed by the Consultant unless prior approval has been provided by the Design Manager. The Consultant shall immediately notify the Design Manager of the potential change and prepare a Draft Proposal or revised Schedule in a timely manner for review and approval (5 working days). The final Proposal for additional services must be submitted and processed through e-Builder.
12. The Consultant shall attend and prepare for the Pre-Bid conference by addressing the following items:
- a. Sign-In Sheet and Agenda
  - b. Project description; location, and include any unique requirements and criteria
  - c. Staging Area(s)
  - d. Hours of Work (Limitations)
  - e. Security Requirements
13. The Consultant shall review and analyze the Contractor's Potential Change Orders, Change Orders and other construction costs and make recommendations to the Owner as to their validity, accuracy and completeness.
14. The Consultant shall attend and manage, in conjunction with the Design and Construction Managers regular (minimum bimonthly) Project Construction Meetings. Meeting Minutes shall be recorded and disseminated by the Consultant and will include:
- a. Construction Progress & CPM Schedule review
  - b. Two Week Look Ahead Schedule
  - c. Anticipated Work and Pre-installation Meetings
  - d. Submittal & RFI Status
  - e. Potential Change Orders, Changes and other issues (responsibility and status) to be resolved
  - f. LEED Issues & Progress
15. The Consultant shall respond in a timely manner to RFI's, 5 business days to Submittals, Change Orders, and other Construction related informational requests as may be needed. An expeditious response shall be required for critical issues affecting the project work, budget, and schedule.
16. The Consultants design and construction administration team shall remain consistent throughout the duration of the project. DTCl shall be notified of any changes in the personnel.

## Architect and Engineer Design Evaluation Form

The Consultant will be reviewed and rated in accordance with the aforementioned requirements in the Scope of Work and as summarized below:

1. Comprehensive Deliverables, Project & Administrative Knowledge	1	2	3	4	5
2. Project Progress Meetings, Updates & Notifications	1	2	3	4	5
3. Communication & Responsiveness	1	2	3	4	5
4. Submission and quality of Baseline CPM Schedule & Updates	1	2	3	4	5
5. Quality Control and Documentation	1	3	3	4	5
6. Coordination with Sub-consultants & Regulatory Agencies	1	2	3	4	5
7. Effective Problem Resolution and Coordination	1	2	3	4	5
8. Delivery and Accuracy of Cost Estimates	1	2	3	4	5
9. Accurate and timely Invoicing	1	2	3	4	5
10. Quality and Completeness of Conforming Documents	1	2	3	4	5
11. Validity and Notification of Change Orders & Schedule Impacts	1	2	3	4	5
12. Attendance & Requirements of Pre-Bid Conference	1	2	3	4	5
13. PCO & Change Order Review and Quality	1	2	3	4	5
14. Attendance and Interaction with Construction Progress Mtgs.	1	2	3	4	5
15. Responsiveness to RFI's, Submittals, CO's and Construction Issues	1	2	3	4	5
16. Consistency of Team Members throughout project	1	2	3	4	5
<b>TOTALS:</b>					

Rating Scale

- 1 Unsatisfactory
- 2 Needs improvement
- 3 Meets job requirements
- 4 Exceeds job requirements
- 5 Outstanding