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August 24, 2016



RESOURCE
CONSULTING
ENGINEERS LLC

Kenny Schmitz

Director of Building Services

Woodbury County

620 Douglas Street

Sioux City, IA 51101

Re: Woodbury County Courthouse and Law Enforcement Center – Control System Upgrades

Dear Kenny,

I am pleased to present you with this proposal for services related to a Control System Upgrades Project for the Woodbury County Courthouse and Law Enforcement Center. This proposal includes Engineering Design and Construction Administration Services for the project. I appreciate the opportunity to provide this proposal, and look forward to helping Woodbury County in significantly improving operational reliability and efficiency for these two important facilities.

Based on the decision made by the County Board of Supervisors at their meeting on August 23, 2016, we understand that the scope of this project will be to replace the existing Building Automation Systems (BAS) throughout the Woodbury County Courthouse and the Woodbury County Law Enforcement Center (LEC). Existing systems are a combination of digital, electric, and pneumatic controls, and do not allow for effective monitoring of systems and spaces, or diagnosing of system issues. The current systems also limit opportunities to improve both occupant comfort and building energy efficiency. Additionally, numerous existing actuators do not function properly and require replacement. Providing new Building Automation Systems for these facilities will help to improve occupant comfort, building energy performance, and building operation and monitoring capabilities.

Scope of services:

Services to be provided:

- Mechanical and Electrical Engineering Design Phase Services, including:
 - Site Surveys to document locations of existing control components and to determine requirements for new control systems, e.g., what sensors will be required to control a system and where they will be located
 - Development of sequence of operations for each system located in the Courthouse and LEC
 - Development of required points list for each system located in the Courthouse and LEC
 - Development of electronic background drawings for first floor of Law Enforcement Center (to be based on existing hard copy or scanned drawings provided by Woodbury County – field verification will not be completed in spaces other than those housing mechanical equipment)
 - Development of Drawings showing:
 - Locations of equipment to be controlled
 - Locations of control components not mounted at equipment, including temperature sensors, differential pressure sensors, static pressure sensors, etc.
 - Flow diagrams where necessary to communicate system configuration and control component locations
 - Details related to installation of new control components (valves, flow measurement devices, etc.)
 - Sequences of Operations
 - Point Lists
 - Information for required electrical power system modifications to serve new control components
 - Development of Project Manual, including:
 - Procurement and Contracting Requirements (Division 00 Specification Sections) – specific forms and requirements to be reviewed with County Personnel prior to development
 - General Requirements (Division 01 Specification Sections)
 - Technical Specifications (expected to include Division 23 and Division 26 Specification Sections)
 - Review meeting(s) with County Personnel to review proposed sequences of operations and point lists for new control systems

- Development of bid alternates as determined appropriate by County Personnel
- Review meeting with Woodbury County Personnel to verify required information is included in Contract Documents to be used for bidding the Project
- Production of contract documents to include:
 - Project Manual
 - Drawings
- Mechanical and Electrical Engineering Bidding Phase Services, including:
 - Response to requests for information
 - Attendance at pre-bid meeting
 - Preparation of Addenda as necessary
- Mechanical and Electrical Engineering Construction Phase Services, including:
 - Review of submittals
 - Response to contractor questions
 - Preparation of Supplemental Instructions, Proposed Contract Document Revisions, etc., as necessary
 - Attendance at project construction progress meetings
 - Field observations during construction phase as appropriate
 - Preparation of punch list
 - Incorporation of changes into electronic record documents

Not included (available upon request):

- Mechanical system design and construction services not listed above, including:
 - Heating and cooling load calculations
 - Ventilation calculations
 - Building pressurization analysis
 - Energy modeling services
 - Modifications to other mechanical systems not specifically identified above
- Development of electronic background drawings for Law Enforcement Center not specifically identified, or requiring field measurement and verification of all spaces

- Design of modifications to electrical power distribution system (other than those specifically required to serve control system modifications)
- Design of modifications to plumbing systems
- Design of modifications to fire alarm system (other than those associated with control of mechanical equipment such as air handling units)
- Design of modifications to lighting or lighting control systems
- Design of modifications to communications systems
- Design of modifications to building architectural components
- Building code analysis
- Review with Authority overseeing building areas listed on National Register of Historic Places (not believed to be required due to scope of project)
- Design of modifications to, or analysis of, building structural components
- Design of modifications to building systems other than those described herein
- Commissioning Services
- Civil Engineering services
- Support for LEED or other third party certification programs

Deliverables:

- Review Documents to be approved before production of Contract Documents, including detailed opinion of cost
- Contract Documents (assumed to be a single set for both buildings) to include:
 - Project Manual including Procurement and Contracting Requirements, General Requirements, and Technical Specifications
 - Drawings defining scope of Project Work (scope limited to necessary information to locate controlled equipment and system components – will not include all mechanical system components)

Schedule

We will work with Woodbury County and Baker Group to develop a detailed schedule for completion of documents once we have received a notice to proceed. Based on our understanding of the project at this time, we expect to be able to complete the work described in this proposal by mid-November of 2016.

Basic Services

We propose to provide the Architectural and Engineering Design and Construction Administration Services outlined above for a fixed fee of \$64,000. This fee is based on an expected total project construction cost of approximately \$820,000 or less.

Additional services outside the scope defined in this proposal will be provided on an hourly basis. No additional services will be provided without prior authorization from Woodbury County. The hourly rates for staff expected to work on this project are as follows:

- Senior Mechanical Engineer/Project Manager - \$140/hour
- Senior Electrical Engineer - \$140/hour
- Mechanical or Electrical Engineer - \$125/hour
- Engineering Intern or Designer - \$80/hour
- Clerical - \$40/hour

Summary

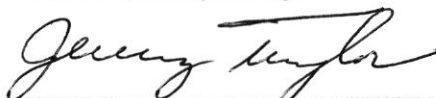
I appreciate the opportunity to provide this proposal to provide design and construction administration services for a Controls System Upgrade Project at the Woodbury County Courthouse and Law Enforcement Center. If you have questions or comments regarding this proposal, please do not hesitate to share them with me. I would be happy to review scope and fees in detail if it is helpful. I look forward to working together on this project. Thank you.

Respectfully,



Corey B. Metzger, PE
Principal
Resource Consulting Engineers, LLC

Proposal Accepted By:



Woodbury County Board of Supervisors