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#### Public Works

City Transit 263-8152

Engineering

## MEMORANDUM

Equipment Maintenance Roadway Maintenance Collection & Drainage Building & Grounds

To:

Gregg Mandsager, City Administrator

CC:

Fran Donelson, Secretary

FROM:

Randy Hill, Public Works Director

DATE:

July 5, 2011

RE:

Musser Museum Boiler Consultation Agreement

## INTRODUCTION:

The City of Muscatine has two old boilers (1960's vintage) at City Hall and the Musser Museum. Replacement of these boilers is necessary because they have outlived their usefulness and are not energy efficient.

## BACKGROUND:

The City of Muscatine has not budgeted for replacing the Musser Museum boiler in the FY11/12 budget. However, there are energy grants available at this time if the council would choose to move forward with this upgrade. An energy audit was completed by the Energy Group in 2010 which give the city the necessary data to apply for an Energy Efficient and Conservation Block Grant. The boiler at the Musser Museum operates at 65% efficiency. However, providing the type of energy detail required in a grant application and in plans and specifications for a new boiler is beyond the city staff's level of expertise. A&J Associates worked with the city on the grant application for replacing the City Hall boiler as well as the geo-thermal system installed at the Public Safety Building.

## RECOMMENDATION/RATIONALE:

The Building & Grounds – Public Works Division recommends the city enter into an agreement with A&J Associates for \$6,900. This cost will cover grant application assistance as well as construction drawings, specifications, project management and other related administrative requirements if the city can secure a grant and council chooses to replace the Museum boiler.

# BACKUP INFORMATION:

- Copy of A&J Associates Proposal
   3.
   4.



May 10, 2011
Proposal for Consulting Engineering Services

City of Muscatine, Iowa

Boiler Replacement for Museum A&J #201116.00

## SCOPE OF WORK

A&J Associates PC (A&J) proposes to provide consulting engineering services for the City of Muscatine for the design and construction of a boiler replacement project for City Museum Building in Muscatine, Iowa:

- The basis of agreement between A&J and City of Muscatine for consulting engineering services will be this
  executed proposal.
- Registered Professional Mechanical and Electrical Engineers from A&J will sign and seal the construction documents.
- 3. Design shall include:
  - Hot water boiler replacement with high efficiency closed combustion boiler
  - Demolition of non-condensing exhaust flues
  - · New sealed combustion air intake and condensing exhaust for high efficiency boilers
  - · Electrical, structural, architectural and plumbing systems that are incidental to the boiler replacement.
  - · Check state of repair of hot water circulating pumps and chemical feed system
- A&J's basic scope of work includes:
  - · The development and completion of the construction drawings.
  - The preparation of the project manual, including the advertisement for bids, the notice of public hearing and construction specification sections.
  - Assist the City of Muscatine in pursing available energy block grants from the Iowa Office of Energy Independence (OEI) or the U.S. Department of Energy (DOE). The amount of A&J Associates' assistance in pursing these block grants is equal to 15 hours of Senior Engineering Time. This assistance is considered basic service.
  - Bidding and negotiation period discussions with mechanical and electrical contractors including preparation of any required /applicable addenda to bidding documents
  - · Review of contractor's bids and providing a recommendation for contract award.
  - Shop drawing review and construction administration work as specified below.
  - The following construction administration items:
    - 1. Attendance at periodic construction coordination meetings on site during construction
    - 2. Review and processing of contractor's pay applications associated with this work
    - 3. Processing change orders
    - Performing on-site review and preparing observation reports
    - Preparing a punch list of at substantial completion. A&J will follow up to confirm the contractors have picked up punch list items.
    - 6. Initial decision maker regarding disputes between owner and contractors.
  - Printing, copying and distribution of construction documents, including addenda and supplemental drawings during construction. This will be done as a reimbursable expense.

#### WORK EXCLUDED

The following items are not part of A&J's basic scope of work or design responsibility:

- Architectural and structural design, except for patching and repair incidental to the boiler and accessory replacement.
- Scheduling utility shutdowns
- Acting as construction coordinator
- Participating in any energy conservation rebate analysis program provided by the serving Utility companies. The energy rebate analysis design fees are reimbursed by the utility company and are considered to be additional services
- Fire Protection System Design



## ASSUMPTIONS FOR DETERMINING FEE

A&J proposes to do the basic services scope of work as described above based on the following assumptions and clarifications:

- The City of Muscatine will provide A&J with available architectural floor plans and mechanical and electrical drawings of the existing Museum Building. The drawings will be in electronic format if available. If electronic format drawings are not available, the City of Muscatine shall provide paper copies.
- A&J will perform all printing, copying and distribution of all drawings and specifications. These items will be considered reimbursable expenses.
- · A&J will attend and administer one pre-bid conference
- A&J will attend the bid opening
- · A&J will attend and administer one pre-construction conference
- A&J personnel will attend periodic construction coordination meetings and will make on-site
  observation visits five (5) times during the construction period. A&J assumes project will be 3 months in
  duration. A total of 10 trips to the project location are included in the proposed fee for basic services.
- A&J personnel will perform an inspection and prepare a punch list of mechanical and electrical items at substantial completion. A&J will follow up to confirm the contractors have corrected up punch list items.
- A&J will review and process periodic contractor pay applications
- A&J will review and process contract change orders
- Personnel from A&J and City of Muscatine will meet periodically with the user group or other owner/user representatives during the design phase to formally discuss the project status and exchange information on a formal basis. Informal information exchange can occur on a daily basis through mail, telephone, fax or email means.
- A&J will provide the billing equivalent of 15 hours of Senior Engineering time as part of basic services in pursuit of energy conservation block grants.

## **DELIVERABLES**

A&J will provide the City of Muscatine with the following deliverables during the project duration.

- Construction drawings in the Auto-Cad format plotted on vellum for printing and/or in electronic format via "E-Mail" or on 3.5" disks.
- One paper copy of construction specifications
- Intermediate issue of the construction drawings as needed for review by the City of Muscatine or the
  contractors involved in the project. These will be submitted in the Auto-Cad format printed on bond
  paper or on 3.5" disks or via "E-Mail".
- · "As-Built" drawings in electronic format for the work completed
- Review of Substantial Completion certificates prepared by the Contractor.
- Review and signed periodic contractor pay applications

#### SCHEDULE

The schedule for the project is assumed to be as follows:

Start work
 Finish CD's
 Construction complete
 To be determined
 To be determined

# FEES AND EXPENSES

The fee for consulting engineering service proposed above will be a stipulated sum \$6,900.00. Fee is based on work required for a boiler replacement, chemical treatment and combustion exhaust/air intakes evaluation/replacement project with an estimated value of between \$75,000 and \$110,000.



Any additional services work outside the scope of work described as basic services will be based and billed on the following hourly charge rates of the personnel performing the work.

Senior Engineer time \$85.00/Hr.
Engineer time \$70.00/Hr.
Designer/Technician time \$60.00/Hr.
Clerical time \$30.00/Hr.
Drafting Production \$45.00/Hr.
Specification Production \$60.00/Hr.

Any additional services work outside the scope of work described above will be performed only with prior direction to proceed from the City of Muscatine.

Travel expenses for additional services to destinations outside of the lowa City area when directed by City of Muscatine will be billed at the rate of \$0.51/mile for automobile travel.

Travel expenses for basic services are included in the basic services fee.

Any other reimbursable expenses will be billed and compensated at A&J's direct costs.

The following are reimbursable expenses:

- Printing or reproduction of construction documents or shop drawings for review or use by City of Muscatine, contractors or bidders.
- Long distance telephone calls, postage, freight or handling of documents.

## PROJECT CONTACTS

A&J Associates Victor A. Amoroso, PE City of Muscatine Jerry McKenzie

## TERMS AND CONDITIONS

#### Payments:

Terms of payment to A&J shall be net 30 days after initial billing invoice date. A&J will bill each month of the duration of the project.

#### Standard of Care:

Services provided by A&J under this Agreement will be performed in a manner consistent with that degree of care and skill ordinarily exercised by members of the same profession currently practicing under similar circumstances.

# Drawings, Specifications, Other Documents - WORK PRODUCT

Drawings, Specifications and other documents including those in electronic form, prepared by A&J are WORK PRODUCT for use solely with respect to this Project. Unless otherwise provided, A&J shall be deemed the author and owner of A&J's Work Product and shall retain all common law, statuary and other reserved rights, including copyrights.

Upon execution of this Agreement, A&J grants to City of Muscatine a nonexclusive license to reproduce A&J Work Product for purposes of designing, bidding, construction administering, using and maintaining the Project, provided that City of Muscatine shall comply with all obligations, including prompt payment of all sums when due, Any termination of this Agreement prior to completion of the Project shall terminate this license. Upon such termination, City of Muscatine shall refrain from making further reproductions of A&J's Work Product and shall return to A&J within seven days of termination all originals and reproductions in City of Muscatine's possession or control. If and upon that date A&J is adjudged in default of this Agreement, the foregoing license shall be deemed terminated and replaced by a second, nonexclusive license that permits City of Muscatine to continue to use and to reproduce A&J's Work Product and to authorize other similarly credentialed design professionals to reproduce and where permitted by law, to make changes, corrections or additions to A&J's Work Product, solely for the purposes of completing, using and maintaining the Project. Any such changes to A&J's Work Product shall be at City of Muscatine's sole risk and without liability to A&J.

Except for the licenses granted above, no other license or right shall be deemed granted or implied under this Agreement. City of Muscatine shall not assign, delegate, sublicense, pledge or otherwise transfer any license granted herein to another party without the prior written agreement of A&J. Submission or distribution of A&J's Work Product to meet official regulatory requirements or for similar purposes in connection with the Project is not construed as publication in derogation of the reserved rights of A&J. City of Muscatine shall not use A&J's Work



Product for future additions or alterations to this Project or for other projects, unless City of Muscatine obtains the prior written agreement of A&J. Any unauthorized use of A&J's Work Product shall be at City of Muscatine's sole risk and without liability to A&J.

City of Muscatine and A&J shall not make changes in each other's Work Product without written permission of the other party.

A&J shall maintain on file and make available to City of Muscatine design calculations for this part of the Project, and shall furnish copies thereof to City of Muscatine on request.

#### Insurance:

A&J will provide, upon request, the City of Muscatine with a certificate of insurance which outlines the insurance coverage in force for A&J.

#### Fee for Service

This agreement is based on "fee for service". City of Muscatine shall pay for services rendered by A&J Associates in accordance with other conditions specified in this agreement. If City of Muscatine refuses to pay or stop paying for services performed by A&J, A&J may stop design work under this agreement without incurring any breach of contract liability for stopping this work. A&J will resume work upon resumption of payment of fees for services provided.

**Termination or Suspension** 

If the City of Muscatine suspends the Project, A&J shall be compensated for services performed prior to notice of such suspension. When the project is resumed, A&J shall be compensated for expenses incurred in the interruption and resumption of A&J's services. A&J's fees for the remaining services and the time schedules shall be equitably adjusted.

If the City of Muscatine suspends the Project for more than 90 cumulative days for reasons other than the fault of A&J. A&J may terminate this Agreement by giving not less than fourteen (14) days' written notice.

Either party may terminate this Agreement upon not less than fourteen (14) days' written notice should the other party fail substantially to perform in accordance with the terms of this Agreement through no fault of the party initiating the termination.

City of Muscatine may terminate this Agreement upon not less than seven (7) days' written notice to A&J for the City of Muscatine's convenience and without cause.

In the event of termination not the fault of A&J, A&J shall be compensated for services performed prior to termination, together with reimbursable expenses then due and all termination expenses as defined below.

Termination expenses are in addition to compensation for A&J's services and include expenses directly attributable to termination for which A&J is not otherwise compensated.

Design Proposal Changes

This design proposal may be changed only by written amendment to the proposal. A&J will not proceed with the work described under such amendments unless authorized to do so by City of Muscatine. Such authorization will be in the form of written acceptance of the addendum. In the case of "time is of the essence" changes during the construction period authorization may be by other means to be followed by City of Muscatine approval.

Accepted By:

A&J Associates PC

Victor A. Amoroso, PE

365 Beaver Kreek Centre, Suite B

North Liberty, Iowa 52317

Accepted By:

City of Muscatine .

Richard W. O'Brien, Mayor

Muscatine, IA 52761

Date: 07/07/2011

