



MEMORANDUM

DATE: August 12, 2004

FROM: Don Freel, Director WPCP 

TO: A. J. Johnson, City Administrator

SUBJECT: Mad Creek – Hershey Station Improvements

The Mad Creek Improvement Study, completed by Stanley Consultants in June 2004, recommended major changes to be implemented at the Mad Creek and Hershey Avenue pumping stations to overcome the current pumping deficiencies at these stations. We have asked Stanley Consultants to provide us with the costs to refine their recommendations, perform the necessary design work to implement the improvements and to provide engineering services through bidding and construction. They initially gave us a lump sum price for their services; however, we have agreed that it would be better if we did the Design Development investigation and then finalized the cost to implement the corrective actions.

We have met several times with Stanley folks and settled on a three-part approach. The first phase is for Design Development. In this phase the two pumping stations will be field evaluated to define exactly how the recommendations will be implemented, what equipment will be replaced, what related equipment will be replaced, any safety issues will be resolved, and any improvements necessary to meet all current codes. Stanley will provide all engineering disciplines necessary. The thoroughness of this phase will help refine (and control) the costs of the next phase, Design. The cost for Design Development will be done on a time and material basis not to exceed \$28,500.

After we have clearly defined all of the necessary work to be done, then we will enter into the actual design. Because these costs are contingent on the findings in Design Development, the final cost for Design will be determined after Design Development. The current estimated cost of Design is \$54,000.

The third phase will provide the services during bidding and construction of the project. As a cost saving measure both pumping stations will be done as a single project. This will minimize the fees and fixed costs from both the engineer and the contractor. The current estimated cost for the third phase is \$45,500. This cost will also be refined as the project

becomes clearer. For example, until we know exactly what work will be required by Design, we don't know how much time to allot for services during construction.

With this three-step approach we have a way for the City and the consultant to calculate a cost for engineering services that meets the needs of this project while at the same time establishing a budget price (with an opportunity for cost savings) for engineering services for the entire project. We would like you to include this item on the Council's agenda for August 19, 2004. We will ask for their concurrence to enter into an agreement with Stanley Consultants for Professional Services for the estimated cost of \$128,000 for engineering services to rehabilitate the Mad Creek and Hershey Avenue Pumping Stations. Two copies of the agreement are included with this memo. Please let me know if you need further information.



PROFESSIONAL SERVICES AGREEMENT

THIS IS AN AGREEMENT made as of August 19, 2004, between CITY OF MUSCATINE (CLIENT) and STANLEY CONSULTANTS, INC. (CONSULTANT). CLIENT intends to rehabilitate the Mad Creek and Hershey Avenue Pump Stations (hereinafter called "project").

CLIENT and CONSULTANT agree:

1. **Scope of Services.** CONSULTANT shall perform professional services as stated in Exhibit 1.
2. **Compensation.** CLIENT shall compensate CONSULTANT for CONSULTANT's services as stated in Exhibit 2.
3. **Terms and Conditions.** CONSULTANT shall provide professional services in accordance with the terms and conditions stated in Exhibit 3. If client issues a purchase order or other document to initiate the commencement of services hereunder, it is agreed that any terms and conditions appearing thereon shall have no application and only the provisions of this Agreement shall automatically apply.
4. **Special Provisions.** Special provisions to this Agreement, if any, are stated in Exhibit 4.
5. CLIENT has provided or shall provide for payment from one or more lawful sources of all sums to be paid to CONSULTANT.
6. Following exhibits are attached to and made part of this Agreement:

Exhibit 1 - Scope of Services
Exhibit 2 - Compensation
Exhibit 3 - Standard Terms and Conditions

IN WITNESS WHEREOF, the parties below have executed this Agreement as of the day and year first above written.

STANLEY CONSULTANTS, INC.

By:

Michael J. McKenna
Vice President

Attest:

By:

Kim Burdakin

Address for giving notices:

STANLEY BUILDING
225 IOWA AVENUE
MUSCATINE, IA 52761-3764

CITY OF MUSCATINE

By:

Attest:

By:

Address for giving notices:

WATER POLLUTION CONTROL PLANT
1202 MUSSER STREET
MUSCATINE, IA 52761-1645



PROFESSIONAL SERVICES AGREEMENT

EXHIBIT 1 SCOPE OF SERVICES

1. Background

- A. The CLIENT'S Muscatine Mad Creek and Hershey Avenue Pump Stations, originally constructed in 1953 and 1963 respectively, have been modified and improved several times since their original construction. Both pump stations need pumps replaced to match the capacity of the current influent flow rates and pumping head requirements. Some of the equipment, including mechanical, HVAC, electrical and controls, is over 50 years old, was sized for different conditions and flow rates, and may have reached the end of their useful service life.
- B. The CLIENT wants the CONSULTANT to, based on the recommendations of a recent study, to prepare Bid Documents for the replacement and/or modification of the existing pumps, piping and flow monitoring equipment at the Mad Creek and Hershey Avenue pump stations.
- C. CLIENT intends to advertise, bid, and award a single construction contract for all work at both pump stations. Therefore BASIC SERVICES described herein will be conducted to facilitate advertising, bidding, and award of a single construction contract.

2. Basic Services

A. Design Development Phase

- 1. Meet with CLIENT to determine preferences of equipment (type and manufacturer).
- 2. Conduct field review of each pump station to determine, based on visual inspection, the condition of the buildings, pumps, piping, electrical and controls.
- 3. Review each pump station for code compliance with respect to access and ventilation.
- 4. Evaluate each structure to determine its size and adequacy for new pumps, controls and flow monitoring equipment.
- 5. Evaluate size and condition of existing piping and miscellaneous equipment to determine necessity for replacement. **Note:** *It is assumed that all existing piping and valves will be replaced to the extent possible.*
- 6. Evaluate electrical service to determine adequacy for new pumps, and investigate an alternative power source for each pump station. **Note:** *It is assumed that all existing interior electrical equipment will be replaced.*
- 7. Determine the size and number of pumps, and make recommend the pump model. Consider structure modifications that may be required for mounting new pumps.
- 8. Develop *Preliminary Estimate of Probable Construction Cost*. **Note:** *Costs for each pump station will be itemized separately.*
- 9. Prepare *Design Development Report* and provide five (5) copies to CLIENT.

B. Design Phase



PROFESSIONAL SERVICES AGREEMENT

1. Prepare *Project Manual* (plans, specifications and bidding documents); and submit three (3) preliminary copies of *Project Manual* to the CLIENT for review and comment.
2. Incorporate CLIENT comments into final contract documents.
3. Prepare *Final Estimate of Probable Construction Cost*. **Note:** *Costs for each pump station will be itemized separately.*
4. Submit six (6) copies of the final *Project Manual* to the CLIENT for bidding.

C. Bidding Phase Services

1. Provide twenty-five (25) sets of construction contract documents (Bid Documents) for plan houses and prospective bidders.
2. Attend and administer Pre-bid Meeting.
3. Answer bidders' questions.
4. Prepare and issue necessary addenda.
5. Attend Bid Opening.
6. Evaluate bids and make recommendation of award.
7. Assemble and process documents for contract award.

D. Construction Phase Services

1. Administer the construction contract including pay application request processing, request for information, change orders, and instructions to contractor.
2. Attend and administer the Pre-construction Conference.
3. Review contractor submitted data for general conformance and compliance with contract documents.
4. Visit project sites to observe the progress and conformance of the work with contract documents and prepare the construction "*punch-list*". Site visits shall not exceed a total of forty (40) hours under BASIC SERVICES. Additional visits, if requested by CLIENT, shall be ADDITIONAL SERVICES.
5. Conduct a final inspection to determine if work has been completed in accordance with contract documents; and recommend final payment and acceptance of work.
6. Prepare one (1) set of reproducible record drawings showing changes made during construction based on the contractor's as-built plans.
7. Prepare a conformed set of plans for each pump station that incorporate the original structural and architectural design plans with the as-built improvements resulting from the design services described herein. Copies of the original pump station plans will be provided by the CLIENT. One (1) set of plans and an electronic file of the plans will be provided for each pump station.
8. A valuation (excluding real estate values) will be prepared for each pump station. **Note:** *The value of each pump station will be expressed in 2004 dollars.*



PROFESSIONAL SERVICES AGREEMENT

3. Additional Services

- A. Services requested by the CLIENT that are not included in the BASIC SERVICES, as described herein, shall constitute ADDITIONAL SERVICES. The CLIENT prior to commencement of the work shall authorize ADDITIONAL SERVICES. ADDITIONAL SERVICES may include:
 - 1. Design of structural and architectural modifications to comply with current code or equipment requirements.
 - 2. Preparation of U.S. Department of Army permits.



PROFESSIONAL SERVICES AGREEMENT

EXHIBIT 2 COMPENSATION

1. BASIC SERVICES:

A. Compensation for BASIC SERVICES shall be in accordance with the following:

1. **Design Development Phase:** Design Development Phase services shall be compensated on a HOURLY basis for DIRECT LABOR, plus REIMBURSABLE expenses for a NOT-TO-EXCEED amount of Twenty-eight Thousand Five Hundred dollars (\$28,500.00). Hourly charges and reimbursable expenses shall be invoiced in accordance with "*Hourly Fees and Charges Fiscal Year 2004-2005*" (Form C/B 04-05), copy attached.
2. **Design Phase:** The CLIENT and CONSULTANT shall mutually determine the compensation amount for CONSULTANT Design Phase services at the conclusion of the Design Development Phase. For budgeting purposes, the estimated CONSULTANT compensation for Design Phase services is Fifty-four Thousand Dollars (\$54,000.00).
3. **Bidding and Construction Phase:** The CLIENT and CONSULTANT shall mutually determine the compensation amount for CONSULTANT Bidding and Construction Phase services at the conclusion of the Design Phase. For budgeting purposes, the estimated CONSULTANT compensation for Bidding and Construction Phase services is Forty-Five Thousand Five Hundred Dollars (\$45,500.00).

2. ADDITIONAL SERVICES:

- B. Compensation for ADDITIONAL SERVICES shall be on an HOURLY basis for DIRECT LABOR, PLUS REIMBURSABLE EXPENSES in accordance with the current "*Hourly Fees and Charges Fiscal Year 2004-2005*" (Form C 00-01). CONSULTANT will provide additional sets of the Bid Documents for a cost of \$50.00 per set.