TEM # <u>22</u> DATE: 09-13-16

COUNCIL ACTION FORM

SUBJECT: ENGINEERING SERVICES FOR STRUCTURAL REPAIRS AT WATER POLLUTION CONTROL FACILITY

BACKGROUND:

A comprehensive evaluation of the structural condition of the Water Pollution Control Facility (WPCF) buildings and structures was performed in 2012 by HDR Engineering. Based on that assessment, the facility is generally in overall good condition. However, the facility is more than 27 years old and is showing signs of age-related deterioration. As a part of the condition assessment, a schedule for structural rehabilitation was developed. The drivers for the schedule are the estimated remaining useful life in each structure and coordination with future improvements to the facility.

On March 8, 2016, a Request for Qualifications (RFQ) for engineering services was issued for structural services at the WPCF. The work that will be performed for this project will include a number of individual discreet tasks, including the possibility of some on-call services not yet defined. The intent of this RFQ was to select one firm to enter into a master agreement, with individual task orders being issued for each discrete task. On April 1, 2016, proposals were received from six firms in response to the RFQ. After a thorough review of each firm's proposal, staff determined that HDR Engineering was the most qualified firm for the project. Responding firms were asked to submit a fee schedule (hourly billing rates) for the staff they proposed to work on the project. City staff reviewed the fee schedule for HDR and determined it was reasonable and in line with the other firms that submitted on the work. A copy of the fee schedule provided by each firm responding to the RFQ is attached.

Because of the piece work nature of the project, staff proposes to enter into a Master Agreement with HDR that will include all of the narrative contractual terms of the agreement, and then issue individual Task Orders that would identify the technical scope of work and associated fee for each discrete task.

Staff and HDR have agreed on the scope of services for the initial Task Order 1 of the Agreement with HDR to include design, bid, and construction phase engineering services at a price not to exceed \$97,700. Task Order 1 includes engineering services to address the following items included in the FY 15/16 and FY 16/17 Capital Improvements Plan:

FY 15/16 Repair of the precast and cast-in-place concrete deterioration (all but trickling filters); repair of the solids contact box slabs and sidewalks; address settlement at the Raw Water Pump Station;

repair perimeter curbs at the base of the digesters. Total authorized funding: \$786,000.

FY 16/17 Joint repairs at the sludge pumping building; clean and seal precast and cast-in-place concrete. Total authorized CIP funding: \$308,000.

Task Order 1 also includes \$2,010 to provide structural assistance on evaluating options for painting the digester lid which is part of the Digester Improvements CIP project. The overall CIP budget for tasks identified in Task Order 1 is a total of \$1,094,000, which includes \$119,000 for engineering and \$975,000 for construction. Task Order 1 does not include construction phase services. The level of construction oversight and assistance needed will be evaluated during the design process.

ALTERNATIVES:

- 1. a.) Approve the Master Agreement for engineering services with HDR Engineering, Inc. of West Des Moines, Iowa; and
 - b.) Approve Task Order 1 for design and bidding phase structural engineering services for the Water Pollution Control Facility in an amount not to exceed \$97,700.
- 2. Do not award an engineering contract for these services at this time.

MANAGER'S RECOMMENDED ACTION:

In order to preserve the significant investment in infrastructure at the Water Pollution Control Facility, periodic structural rehabilitation of buildings and structures is necessary. Because of the value and significance of the structures identified in this project, it is essential that rehabilitation be done prior to a structural failure. Staff has determined that HDR Engineering, Inc. will provide the best value to the City for engineering services needed to accomplish these projects.

Therefore it is the recommendation of the City Manager to adopt Alternative No. 1 as described above.

Fee Schedule



Proper communication on any project starts with a well defined scope of services. Clear scope and communication will be especially critical for the portions of the project where the Owner desires to perform a portion of the engineering services themselves. Clear delineation will avoid duplication of efforts and allow our staff to work as an extension of yours

HDR 2016 Rate Schedule:

Schedule of Billing Rates by Classification

CLASSIFICATION	HOURLY RATE
Project Principal	\$250-\$280
Project Manager	\$180-\$220
Senior Engineer/QC	\$200-\$220
Project Engineer	\$100-\$140
Civil Engineer	\$150-\$180
Process Engineer	\$150-\$180
Structural Engineer	\$120-\$150
Mechanical Engineer	\$120-\$150
Electrical Engineer	\$120-\$150
Instrumentation Engineer	\$120-\$150
Environmenal Engineer	\$120-\$150
Architect	\$120-\$155
Senior CADD Technician	\$90-\$135
Junior CADD Technician	\$70-\$90
Administrative Assistant	\$50-\$80
Construction Observer	\$90-\$110
Operations Specialist	\$150-\$200

Reimbursable Expenses

- Auto mileage will be reimbursed on the basis of \$0.575 per mile, the current 2016 allowed IRS rate.
- Telephone, postage, and copy costs will be invoiced as actual costs incurred.
- Computer charges will be invoiced at a rate of \$3.70 for each labor hour, the current 2016 allocated rate.

Subconsultants

Subconsultants will be reimbursed at invoice plus 5 percent markup.

Annual Adjustments

The Billing Rates and Reimbursable Expenses are effective as of January 1, 2016 and will be adjusted annually to reflect equitable changes in the compensation payable to Engineer.



Fee Proposal

HR Green is committed to an ongoing relationship with the City of Ames, to serve as an extension of the City's staff, and to assist with minor and major capital improvements projects. We propose an on-call services contract to cover ongoing day-to-day structural engineering services. For larger or more complex projects we can provide a stand-alone contract with a detailed scope of services, if requested.

In order to recognize the City's commitment to this ongoing relationship, we will provide a discounted rate to cover normal ongoing day-to-day engineering services.

HR Green will provide the first 20 hours of service every month at the following discounted rates:

- Project Manager @ \$140 / hour
- Structural Engineer @ \$100 / hour
- Technology Fee @ \$3 / hour

Our professional fees for minor and major capital projects and services beyond the 20 hours a month for day-to-day engineering services described above will be based on our standard billing rates, on a cost-plus with a maximum, or lump sum basis based on a finite detailed scope of services. Our standard billing rates are included as follows and are set to be competitive with market conditions and are adjusted on an annual basis.

There are many components to fees for professional engineering services. HR Green's philosophy is to provide the best engineering value to clients. Providing the best engineering value starts with a complete scope for the work and thoroughly evaluating the project options and selecting those that best fit with the Client's long term goals. Unless a client dictates differently, we are focused on the best sustainable life cycle cost solution to meet your project needs.

HR Green has a history of accurately estimating engineering fees and project construction costs to help reduce "surprises" at bid opening or with change orders for our clients. In fact, our change order history (less than 1%) is well below the industry average (4 to 6%). This means saving our clients a great deal of money during construction.

Below are client references where HR Green has provided on-call engineering services for three Grade IV wastewater treatement plants in Iowa. Please do not hesitate to contact these references to see how we can perform for the Ames WPCF. Note that for these three communities, HR Green's on-call services are not limited to structural engineering services.

Kam Reeves

WPCF Superintendent City of Ottumwa, Iowa 641.683.0641 reevesk@ci.ottumwa.ia.us

Steve Anderson

District Director Iowa Great Lakes Sanitary District 712.338.2626 iglsd@milfordcable.net

Rick Graves

WPCF Superintendent City of Indianola, Iowa 515.961.9416 rgrayes@cityofindianola.com



HOURLY FEES AND CHARGES

Fiscal Year 2016-2017

I. Compensation for office-based personnel in the contiguous United States for time in the performance of the work shall be in accordance with the following Hourly Fees:

Classification	Hourly Fee	Classification	Hourly Fee	Classification	Hourly Fee
BC-1	38.00	BC-11	127.00	BC-21	244.00
BC-2	46.00	BC-12	140.00	BC-22	258.00
BC-3	55.00	BC-13	150.00	BC-23	273.00
BC-4	64.00	BC-14	161.00	BC-24	285.00
BC-5	72.00	BC-15	173.00	BC-25	300.00
BC-6	82.00	BC-16	184.00	BC-26	314.00
BC-7	90.00	BC-17	195.00	BC-27	328.00
BC-8	99.00	BC-18	207.00	BC-28	418.00
BC-9	108.00	BC-19	219.00		
BC-10	117.00	BC-20	232.00		

Travel time in the interest of the work and away from the assigned office, either local or intercity, will be charged in accordance with the foregoing schedule. When traveling by public carrier, the maximum charge will be eight hours per day.

II. Compensation for items of expense and other charges incurred in connection with the performance of the work shall be in accordance with the following schedule:

Automobile	\$0.65/mile
Automobile Assigned to Project Site	\$46.00/cal. day
Four-Wheel Drive Vehicles	\$0.80/mile
Four-Wheel Drive Vehicles Assigned to Project Site	\$56.00/cal. day
Ground Transportation (rental car, taxi, etc.)	At Cost Plus 10%
Air Travel (commercial and charter)	At Cost Plus 10%
Living Expenses (away from assigned office)	At Cost Plus 10%
Telephone and Facsimile	At Cost Plus 10%
Equipment Rental	At Cost Plus 10%
Laboratory Work	At Cost Plus 10%
Soils Testing and Analysis	At Cost Plus 10%
Outside Photographic Work	At Cost Plus 10%
Duplicating Work	(schedule supplied upon request)
Technical Testing and Surveying Equipment	(schedule supplied upon request)

- III. Compensation for purchases, items of expense, and other charges not scheduled above, incurred in connection with the performance of the work, shall be at cost plus 10%.
- IV. Interest at the rate of 11/2% per month will be charged on invoices not paid within 30 days.
- V. Charges are subject to revision on or after April 1, 2017.



PROPOSAL SUBMITTAL

Swand Associates, inc.* 910 West Wingra Drive Medison, WI 53715

SAMPLE

Task Order No. Year {__}-No. {__} City of Ames (OWNER) and Strand Associates, Inc.® (ENGINEER) Pursuant to Technical Services Agreement dated

, 20

Project Information

Project Name: {Project Name}

Project Description: {Project Description}.

Services Description: {Services Description}

Scope of Services

ENGINEER will provide the following services to OWNER:

{Appropriate Verbiage}

{Appropriate Verbiage}

Compensation

The estimated fee for the Services is based on wage scale/hourly billing rates, adjusted annually on July 1, that assumes the Services will be completed as indicated. Should the completion time be extended, it may be cause for an adjustment in the estimated fee that reflects any wage scale adjustments made.

Hourly Billing Rates*	\$234 to \$414 \$156 to \$214 \$ 82 to \$154 \$ 80 to \$ 99 \$ 34 to \$122 \$ 82 Average	ò
	Principal Engineer Senior Project Manager Project Managers Project Engineers and Scientists Engineering Technicians and Draftspersons Office Production	* Updated annually on July 1

Schedule

on is anticipated

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Fee Schedule

Water Pollution Control Facility Structural Engineering Services



Team Member	Classification	Hourly Rate
Forrest S. Aldrich	Engineer I-A	\$158
Larry Spellerberg	Engineer I-C	\$142
Gene Arnold	Engineer II	\$130
Mark Henderson	Engineer II	\$130
Engineer	Engineer IV	\$80
Cadd	Drafter I	\$87
Cadd	Drafter II	\$74
Cadd	Drafter III	\$70
Cadd	Drafter IV	\$66
Clerical	Clerical I	\$80
Clerical	Clerical II	\$56
Clerical	Clerical III	\$41

City of Ames, Iowa





Fee Proposal and Sample Form of Agreement

2016 Fee Schedule

Classification	Hourly Rate
Project Manager	\$121.00
Project Engineer	\$107.00
Land Surveyor	\$116.00
Design Engineer	\$ 86.00
*Survey Crew (2-Person)	\$199.00
*Engineering Technician	\$ 74.00

^{*}Subject to overtime costs, if applicable

Reimbursable expenses include mileage at current IRS reimbursement rate; actual cost of reproduction and printing; and actual out-of-pocket expenses such as field supplies, cost of recording documents, permit fees, etc.

When performing a service for the client, WHKS invoices the Client in increments of 0.5 hours of service.

Generally, inquiries over the phone are not billed to the client because we want our clients to feel free to call us at any time. Again, we feel communication is a critical factor in Client/Engineer relations.

Sample Form of Agreement

A sample form of agreement is attached. This follows a similar format that has been approved by the City of Ames legal staff for previous project contracts.

