



# City of Grand Island

Tuesday, May 12, 2009

Council Session

## Item G13

**#2009-113 - Approving Agreement for Professional Engineering Services for a Project to Replace the Primary Clarifier Mechanisms at the Waste Water Treatment Plant**

Staff Contact: Steven P. Riehle, Public Works Directory

# **Council Agenda Memo**

**From:** Steven P. Riehle, Public Works Director

**Meeting:** May 12, 2009

**Subject:** Approving Agreement for Professional Engineering Services for a Project to Replace the Primary Clarifier Mechanisms at the Waste Water Treatment Plant

**Item #'s:** G-13

**Presenter(s):** Steven P. Riehle, Public Works Director

## **Background**

The Waste Water Division of the Public Works Department advertised on March 4, 2009 with a Request For Proposals (RFP 101-2009) for furnishing engineering consulting services for design and services during construction of a project to replace the primary clarifier mechanisms at the Waste Water Treatment Plant. The mechanisms date back to the construction of the plant in 1964 and are in need of replacement.

## **Discussion**

The RFP was sent to 16 potential firms and advertised in the Grand Island Independent. Three (3) proposals were received and opened on March 26, 2009. Proposals were received from Black & Veatch Corporation of Kansas City, Missouri, CH2MHill of Denver, Colorado & HDR, Inc. of Omaha, Nebraska.

The proposals were reviewed by the Waste Water Division of the Public Works Department and Purchasing Division of the Legal Department. The selection committee conducted phone interviews with the firms that submitted proposals on April 8, 2009 and on April 9, 2009. The engineering firm Black & Veatch Corporation of Kansas City, Missouri submitted the proposal and conducted the phone interview that received the highest rating from the selection committee. The rating criteria listed in the RFP and used for the rating were as follows:

- Experience and qualifications of the team 25%
  1. Knowledge of wastewater treatment facilities
  2. Knowledge of condition assessment methodologies
  3. Firm's experience, efficiency, judgment & integrity

- |                                                   |     |
|---------------------------------------------------|-----|
| 4. Knowledge of Primary Settling Basins           |     |
| • Work plan and understanding of the project      | 15% |
| • Level of effort relative to services provided   | 15% |
| • Past performance/references                     | 15% |
| • Ability to complete the work on time and budget | 15% |
| • Consulting Fee                                  | 15% |

An agreement was negotiated with Black & Veatch Corporation with work to be performed at actual costs with a maximum amount of \$125,000.00. The work to be performed includes the following primary activities:

### **Task 1 – Design Phase**

(Maximum Compensation: \$77,000.00)

**Objective** – Evaluate performance enhancement options and develop a Design Report summarizing design criteria including code requirements, process schematics, equipment sizing, materials of construction & site layout. Prepare final drawings and specifications to receive lump sum bids from general contractors.

- Kick Off Meeting
- Project Instructions
- Prepare Preliminary Opinion of Probable Construction Cost
- Prepare Design Report
- Submit Design Report to NDEQ
- Civil Design
- Site Survey
- Architectural Design
- Structural Design
- Process Mechanical Design
- Instrumentation and Controls Design
- Electrical Design
- 90% Contract Plans and Specifications
- Quality Assurance/Quality Control Review
- 90% Design Development Review Workshop
- Submit Contract Documents to NDEQ
- Contract Plans and Specifications
- Prepare Final Opinion of Probable Construction Cost

### **Task 2 – Bidding and Construction Phase Services**

(Maximum Compensation: \$48,000.00)

**Objective** – Provide bidding phase support services to the City during advertisement of the project, and provide construction phase services through the duration of construction of the improvements.

- Distribute Documents
- Pre-Bid Conference
- Answer Bidders Questions
- Prepare and Issue Addenda

- Evaluate Bids and Recommend Award
- Shop Drawings Review
- General Construction Phase Services
- Project Completion
- Record Drawings
- Standard Operating Procedure Manual

### **Alternatives**

It appears that the Council has the following alternatives concerning the issue at hand. The Council may:

1. Move to approve
2. Refer the issue to a Committee
3. Postpone the issue to future date
4. Take no action on the issue

### **Recommendation**

City Administration recommends that the Council approve the award of the agreement to Black & Veatch Corporation of Kansas City, Missouri.

### **Sample Motion**

Move to approve the award of the agreement to Black & Veatch Corporation of Kansas City, Missouri.



Wes Nespor, Purchasing Agent

*Working Together for a  
Better Tomorrow, Today*

**REQUEST FOR PROPOSAL  
FOR  
101-2009 PRIMARY CLARIFIER MECHANISMS**

**RFP DUE DATE:** March 26, 2009 at 4:00 p.m.

**DEPARTMENT:** Public Works

**PUBLICATION DATE:** March 4, 2009

**NO. POTENTIAL BIDDERS:** 12

**SUMMARY OF PROPOSALS RECEIVED**

**CH2M Hill, Inc.**  
Omaha, NE

**Black & Veatch/Olsson Associates**  
Kansas City, MO

**HDR Engineering, Inc.**  
Lincoln, NE

cc: Steve Riehle, Public Works Director  
Jeff Pederson, City Administrator  
Dale Shotkoski, City Attorney  
John Henderson, WWTP Supt.

Catrina DeLosh, PW Admin. Assist.  
David Springer, Finance Director  
Wes Nespor, Purchasing Agent

**P1330**

**AGREEMENT  
FOR  
ENGINEERING SERVICES**

THIS AGREEMENT (Agreement) is by and between The City of Grand Island, Nebraska (Owner) and Black & Veatch Corporation (Engineer);

**WITNESSETH:**

**WHEREAS**, Owner intends to replace primary clarifier mechanisms at the existing wastewater treatment plant site (the Project);

**WHEREAS**, Owner requires certain engineering services in connection with the Project (the Services); and,

**WHEREAS**, Engineer is prepared to provide the Services.

**NOW, THEREFORE**, in consideration of the promises contained in this Agreement, Owner and Engineer agree as follows:

**ARTICLE 1 - EFFECTIVE DATE**

The effective date of this Agreement shall be \_\_\_\_\_, 2009.

**ARTICLE 2 - GOVERNING LAW**

This Agreement shall be governed by and construed in accordance with the laws of the State of Nebraska without giving effect to the principles thereof relating to conflicts of law.

**ARTICLE 3 - SERVICES TO BE PERFORMED BY ENGINEER**

Engineer shall perform the Services described in Attachment A, Scope of Services. Engineer shall have no liability for defects in the Services attributable to Engineer's reliance upon or use of data, design

criteria, drawings, specifications, or other information furnished by Owner or third parties retained by Owner.

#### **ARTICLE 4 – COMPENSATION**

4.1 Payment shall be due and payable upon receipt by Owner to Engineer in accordance with Attachment B, Compensation.

4.2 Method of Payment. Payments due Engineer under this Agreement shall be electronically transferred either by ACH, specifically in CCD+ or CTX format, or wire transfer to the bank account and in accordance with the bank instructions identified in Engineer's most recent invoice in immediately available funds no later than the payment due date. Invoice number and project name shall be referenced in the bank wire reference fields or the ACH addenda information. In the event that such electronic funds transfer methods are not available to Owner, then payments due Engineer under this Agreement shall be made by check and mailed to the PO Box identified in the remittance instructions on the Engineer's most recent invoice, and received by Engineer no later than the payment due date. The Remittance Advice document shall be mailed with the check to the PO Box.

4.3 In the event Owner disputes any invoice item, Owner shall give Engineer written notice of such disputed item within ten (10) days after receipt of such invoice and shall pay to Engineer the undisputed portion of the invoice according to the provisions hereof. If owner fails to pay any invoiced amount when due, ENGINEER reserves the right to seek any remedy allowed by law, including, but not limited to, the right to seek judgment interest together with any principal amount due in a court of competent jurisdiction.

#### **ARTICLE 5 - OWNER'S RESPONSIBILITIES**

Owner shall at such times as may be required by Engineer for the successful and expeditious completion of the Services:

5.1 Obtain all permits and licenses required to be taken out in the name of Owner which are necessary for the performance of the Services;

5.2 Provide Engineer with all specifications necessary for the completion of the Services;

5.3 Advise Engineer of the existence and undertake the abatement and disposal of all hazardous materials, including, but not limited to, asbestos, polychlorinated biphenyls (PCBs) and radioactive material and other toxic substances, encountered by Engineer in the performance of the Services; and

5.4 Appoint an individual who shall be authorized to act on behalf of Owner, with whom Engineer may consult at all reasonable times, and whose instructions, requests, and decisions will be binding upon Owner with concurrence of the City Council as to all matters pertaining to this Agreement and the performance of the parties hereunder.

#### **ARTICLE 6 - STANDARD OF CARE**

Engineer shall exercise the same degree of care, skill, and diligence in the performance of the Services as is ordinarily possessed and exercised by a professional engineer under similar circumstances. ***NO OTHER WARRANTY, EXPRESSED OR IMPLIED, IS INCLUDED IN THIS AGREEMENT OR IN ANY DRAWING, SPECIFICATION, REPORT, OR OPINION PRODUCED PURSUANT TO THIS AGREEMENT.***

#### **ARTICLE 7 - LIABILITY AND INDEMNIFICATION**

7.1 General. Having considered the potential liabilities that may exist during the performance of the Services, the benefits of the Project, and the Engineer's fee for the Services, and in consideration of the promises contained in this Agreement, Owner and Engineer agree to allocate and limit such liabilities in accordance with this Article. Indemnities against, releases from, and limitations on liability expressed in this Agreement shall apply even in the event of the breach of contract or warranty, tort (including negligence), strict liability or other basis of legal liability of the party indemnified or released, or of the party whose liability is limited. Such indemnities, releases, and limitations shall extend to the partners, licensors, subcontractors, vendors and related entities of such party, and all such parties' directors, officers, shareholders, employees, and agents.



7.2 Indemnification. Engineer agrees to defend, indemnify, and hold harmless the Owner, from and against legal liability for all claims, losses, damages, and expenses resulting from death or bodily injury to any person, damage or destruction to third-party property to the extent such claims, losses, damages, or expenses are caused by its negligent acts, errors, or omissions. In the event such claims, losses, damages, or expenses are caused by the joint or concurrent negligence of Engineer and Owner, they shall be borne by each party in proportion to its own negligence.

7.3 Consequential Damages. Notwithstanding any provision in this Agreement to the contrary, and to the fullest extent permitted by law, Engineer (including any of its related or affiliated companies) shall not be liable to Owner and Owner expressly waives all claims for loss of profits, revenue, use, opportunity, and goodwill; cost of substitute facilities, goods, and services; cost of capital; increased operating costs; and for any special, indirect, incidental, consequential, punitive, or exemplary damages resulting in any way from the performance or non-performance of the Services whether arising under breach of contract or warranty, tort (including negligence), indemnity, strict liability or other basis of legal liability in excess of \$2,000,000.00.

7.4 Limitations of Liability. To the fullest extent permitted by law, Engineer's (including any of its related or affiliated companies) total liability to Owner for all claims, losses, damages, and expenses, whether arising under breach of contract or warranty, tort (including negligence), indemnity, strict liability or any other basis of legal liability, resulting in any way from the performance or non-performance of the Services shall not exceed \$2,000,000.00 (whether such damages are actual or consequential in nature).

7.5 Survival. Upon completion of all Services, obligations, and duties provided for in this Agreement, or if this Agreement is terminated for any reason whatsoever, the terms and conditions of this Article shall survive.

## **ARTICLE 8 – INSURANCE**

During the performance of the Services under this Agreement, Engineer shall maintain the following insurance:

- (1) General Liability Insurance, with a limit of \$1,000,000 for each occurrence and in the aggregate.
- (2) Automobile Liability Insurance, with a combined single limit of \$1,000,000.
- (3) Workers' Compensation Insurance in accordance with statutory requirements and Employers' Liability Insurance, with limits of \$500,000 for each occurrence and in the aggregate.
- (4) Professional Liability Insurance, with a limit of \$1,000,000 per occurrence and in the aggregate.

Engineer shall, upon written request, furnish Owner certificates of insurance which shall include a provision that such insurance shall not be canceled without at least thirty days' written notice to Owner. Engineer will provide written notice of changes to policy coverage amounts or changes to the name of the insured within thirty days of such occurrence. If Owner purchases, or causes a contractor to purchase, a builders' risk or other property insurance policy for the Project, Owner shall require that Engineer be included as a named insured on such policy without liability for the payment of premiums.

Owner assumes sole responsibility and waives all rights and claims against Engineer for all loss of or damage to property owned by or in the custody of Owner and any items at the job site or in transit thereto (including, but not limited to, construction work in progress), however such loss or damage shall occur, except damage when is the fault or negligence of Engineer.

Owner shall require all Project contractors under contract with Owner to include Owner and Engineer as additional insureds on their general, automobile, excess, and umbrella liability insurance policies.

#### **ARTICLE 9 - LIMITATIONS OF RESPONSIBILITY**

Engineer shall not be responsible for: (1) construction means, methods, techniques, sequences, procedures, or safety precautions and programs in connection with the Project; (2) the failure of any contractor, subcontractor, vendor, or other Project participant, not under contract to Engineer, to fulfill contractual responsibilities to the Owner or to comply with federal, state, or local laws, regulations, and codes; or (3) procuring permits, certificates, and licenses required for any construction unless such responsibilities are specifically assigned to Engineer in Attachment A, Scope of Services.

#### **ARTICLE 10 - OPINIONS OF COST AND SCHEDULE**

Since Engineer has no control over the cost of labor, materials, or equipment furnished by others not under contract to Engineer, or over the resources provided by others not under contract to Engineer to meet Project schedules, Engineer's opinion of probable costs and of project schedules for construction shall be made on the basis of experience and qualifications as a professional engineer. Engineer does not guarantee that proposals, bids, or actual Project costs will not vary from Engineer's opinions of probable cost or that actual schedules will not vary from Engineer's projected schedules.

## **ARTICLE 11 - REUSE OF DOCUMENTS**

All documents, including, but not limited to, drawings, specifications, and computer software prepared by Engineer pursuant to this Agreement are instruments of service in respect to the Project. They are not intended or represented to be suitable for reuse by Owner or others on extensions of the Project or on any other project. Any reuse without prior written verification or adaptation by Engineer for the specific purpose intended will be at Owner's sole risk and without liability or legal exposure to Engineer. Owner shall defend, indemnify, and hold harmless Engineer against all claims, losses, damages, injuries, and expenses, including attorneys' fees, arising out of or resulting from such reuse. Any verification or adaptation of documents will entitle Engineer to additional compensation at rates to be agreed upon by Owner and Engineer.

Any files delivered in electronic media may not work on systems and software different than those with which they were originally produced. Engineer makes no warranty as to the compatibility of these files with any other system or software. Because of the potential degradation of electronic medium over time, in the event of a conflict between the sealed original drawings/hard copies and the electronic files, the sealed drawings/hard copies will govern.

## **ARTICLE 12 - OWNERSHIP OF DOCUMENTS AND INTELLECTUAL PROPERTY**

Project specific engineering documents, drawings, and specifications prepared by Engineer as part of the Services shall become the property of Owner when Engineer has been compensated for all Services rendered, provided, however, that Engineer shall have the unrestricted right to their use. Engineer shall, however, retain its rights in its standard drawing details, specifications, data bases, computer software, and other proprietary property. Rights to intellectual property developed, utilized, or modified in the performance of the Services shall remain the property of Engineer.

### **ARTICLE 13 - TERMINATION**

This Agreement may be terminated by either party upon written notice in the event of substantial failure by the other party to perform in accordance with the terms of this Agreement. The nonperforming party shall have fifteen calendar days from the date of the termination notice to cure or to submit a plan for cure acceptable to the other party.

Owner may terminate or suspend performance of this Agreement for Owner's convenience upon written notice to Engineer. Engineer shall terminate or suspend performance of the Services on a schedule acceptable to Owner. If termination or suspension is for Owner's convenience, Owner shall pay Engineer for all the Services performed and termination or suspension expenses, including, but not limited to, demobilization, remobilization and cancellation charges approved by the Owner. Upon restart, an equitable adjustment shall be made to Engineer's compensation.

### **ARTICLE 14 - DELAY IN PERFORMANCE**

Except for Owner's payment obligation, neither Owner nor Engineer shall be considered in default of this Agreement for delays in performance caused by circumstances beyond the reasonable control of the non-performing party. For purposes of this Agreement, such circumstances include, but are not limited to: unusually severe weather conditions; floods; earthquakes; fire; epidemics; war, riots, and other civil disturbances; strikes, lockouts, work slowdowns, and other labor disturbances; sabotage; judicial restraint; and inability to procure permits, licenses, or authorizations from any local, state, or federal agency for any of the supplies, materials, accesses, or services required to be provided by either Owner or Engineer under this Agreement.

Should such circumstances occur, the non-performing party shall, within a reasonable time of being prevented from performing, give written notice to the other party describing the circumstances preventing continued performance and the efforts being made to resume performance of this Agreement.

## **ARTICLE 15 - PRE-EXISTING CONTAMINATION**

Anything herein to the contrary notwithstanding, title to, ownership of, and legal responsibility and liability for any and all pre-existing contamination shall at all times remain with Owner.

"Pre-existing contamination" is any hazardous or toxic substance, material, or condition present at the Project site or sites concerned which was not brought onto such site or sites by Engineer for the exclusive benefit of Engineer. Owner shall release, defend, indemnify, and hold Engineer harmless from and against any and all liability which may in any manner arise from or be in any way directly or indirectly caused by such pre-existing contamination except if, and then only to the extent, such liability is caused by Engineer's sole negligence or willful misconduct.

## **ARTICLE 16 - COMMUNICATIONS**

Any communication required by this Agreement shall be made in writing to the address specified below:

Engineer:	Mr. Derek Cambridge Black & Veatch Corporation 8400 Ward Parkway Kansas City, MO 64114
Owner:	Mr. Steve Riehle City of Grand Island Public Works Director 100 E. First St. Grand Island, NE 68802-1968

Nothing contained in this Article shall be construed to restrict the transmission of routine communications between representatives of Engineer and Owner.

## **ARTICLE 17 - WAIVER**

A waiver by either Owner or Engineer of any breach of this Agreement shall be in writing. Such a waiver shall not affect the waiving party's rights with respect to any other or further breach.

## **ARTICLE 18 - SEVERABILITY**

The invalidity, illegality, or unenforceability of any provision of this Agreement or the occurrence of any event rendering any portion or provision of this Agreement void shall in no way affect the validity or enforceability of any other portion or provision of this Agreement. Any void provision shall be deemed severed from this Agreement, and the balance of this Agreement shall be construed and enforced as if this Agreement did not contain the particular portion or provision held to be void. The parties further agree to amend this Agreement to replace any stricken provision with a valid provision that comes as close as possible to the intent of the stricken provision. The provisions of this Article shall not prevent this entire Agreement from being void should a provision which is of the essence of this Agreement be determined void.

## **ARTICLE 19 - INTEGRATION**

This Agreement represents the entire and integrated agreement between Owner and Engineer. It supersedes all prior and contemporaneous communications, representations, and agreements, whether oral or written, relating to the subject matter of this Agreement. This Agreement may only be modified by a written amendment executed by both parties.

## **ARTICLE 20 - SUCCESSORS AND ASSIGNS**

Owner and Engineer each binds itself and its directors, officers, partners, successors, executors, administrators, assigns, and legal representatives to the other party to this Agreement and to the directors, officers, partners, successors, executors, administrators, assigns, and legal representatives of such other party in respect to all provisions of this Agreement.

## **ARTICLE 21 - ASSIGNMENT**

Neither Owner nor Engineer shall assign any rights or duties under this Agreement without the prior written consent of the other party, except that Engineer may do so to any of its related, affiliated, or successor entities upon written notice to Owner of same. Unless otherwise stated in the written consent to an assignment, no assignment will release or discharge the assignor from any obligation under this Agreement. Nothing contained in this Article shall prevent Engineer from employing independent consultants, associates, and subcontractors to assist in the performance of the Services.

## **ARTICLE 22 - THIRD PARTY RIGHTS**

Nothing in this Agreement shall be construed to give any rights or benefits to anyone other than Owner and Engineer.

## **ARTICLE 23 – GRATUITIES AND KICKBACKS**

City Code states that it is unethical for any person to offer, give or agree to give any city employee or former city employee, or for any city employee or former city employee to solicit, demand, accept, or agree to accept from another person, a gratuity or an offer of employment in connection with any decision, approval, disapproval, recommendation, or preparation of any part of a program requirement or a purchase request, influencing the content of any specification or procurement standard, rendering of advice, investigation, auditing, or in any other advisory capacity in any proceeding or application, request for ruling, determination, claim or controversy, or other particular matter, pertaining to any program requirement or a contract or subcontract, or to any solicitation or proposal therefore. It shall be unethical for any payment, gratuity, or offer of employment to be made by or on behalf of a subcontractor under a contract to the prime contractor or higher tier subcontractor or any person associated therewith, as an inducement for the award of a subcontract or order.

## **ARTICLE 24 – EXHIBITS INCORPORATED**

All Attachments listed below and discussed in this AGREEMENT are hereby incorporated into the AGREEMENT by this reference.

- Proposal submittal dated 26 March 2009 by Black & Veatch Corporation; Professional Services for the Design of Primary Clarifier Mechanisms; RFP # 101-2009
- Attachment A; Scope of Services - Primary Clarifier Mechanism Replacement
- Attachment B; Compensation - Primary Clarifier Mechanism Replacement
- Attachment C; Schedule of Hourly Billing Rates and Charges - Primary Clarifier Mechanism Replacement



IN WITNESS WHEREOF, the parties hereto have executed this Consulting Services Agreement as of the date and year first above written.

Consultant: (Consultant Name, City, State)

By  Date May 5, 2009

Title VICE PRESIDENT

CITY OF GRAND ISLAND, NEBRASKA,

By \_\_\_\_\_ Date \_\_\_\_\_

Margaret Hornady, Mayor

Attest: \_\_\_\_\_ Date \_\_\_\_\_

RaNae Edwards, City Clerk

The contract is in due form according to law and is hereby approved.

\_\_\_\_\_ Date \_\_\_\_\_

Wesley D. Nespor, Assistant City Attorney

## Scope of Services – Primary Clarifier Mechanism Replacement

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### General

This scope of work describes the services to be rendered by Black & Veatch (the “ENGINEER”) to the CITY of Grand Island (the “CITY”) for the design, bidding, and construction phase services for the replacement of the existing primary clarifier mechanisms and associated improvements at the Grand Island Wastewater Treatment Plant (WWTP). The improvements project will be bid on a lump sum basis by general contractors performing all phases of the work.

### Project Information

**Project Title:** Primary Clarifier Mechanism Replacement for the Grand Island WWTP (the “PROJECT”)

**Objective:** The CITY requires the rehabilitation of both existing primary clarifiers, including mechanism replacement, weir and scum baffle replacement, and concrete and crack repair as required. In addition to the detailed design specifications and drawings for the primary clarifier rehabilitation, the CITY also requires a design report. The design report will evaluate various related future improvements and possible performance enhancements that could be implemented with the project. The design report will also be submitted to the Nebraska Department of Environmental Quality (NDEQ) for review. This scope of work is intended to provide design, bid, and construction phase services as detailed in the remainder of this Attachment A.

The ENGINEER shall complete the services described herein within three hundred sixty (360) days based on notice to proceed by May 18, 2009. This schedule assumes that documents will be provided to CITY seven (7) working days before major scheduled milestone review workshops, and that all CITY review comments will be received within a reasonable time frame after the workshops.

The CITY system goals for the project of technology proven, flexible and expandable, reliable, sustainable life cycle, architectural consistent with surrounding facilities, control odors, cost effective and avoiding proprietary solutions shall be achieved by ENGINEER in the descriptors include but are not limited to:

- Design Report outlining proposed improvements and various alternatives evaluated.
- Rehabilitation of two existing primary clarifiers.

**Project Administration and Controls:** The ENGINEER will provide ongoing direction and management of the PROJECT. Review staffing, budget, progress, and quality of work throughout the course of the PROJECT for ENGINEER and subcontractors. Provide PROJECT status reports to the CITY with each invoice and at the completion of each major phase of the project.

1. **Progress Reporting:** The progress report accompanying each invoice shall include an updated schedule, summary of work completed, outstanding project issues, potential scope adjustments, and a comparison of work completed compared against the invoiced amount.
2. **Trend Management:** In the event there is consideration to change the scope of the PROJECT, the ENGINEER shall develop and present a Potential Scope Adjustment (PSA) document which itemizes the potential change(s) in scope, details the anticipated cost impact on both the ENGINEER's work as well as for the PROJECT's construction, and indicates any anticipated changes in the initial PROJECT's schedule. The CITY will provide direction to ENGINEER on the implementation of any PSAs and both parties will endeavor to negotiate an amendment to the task. The approval of all PSAs, schedule, and compensation shall be authorized in resolution form by the Mayor and Council of the City of Grand Island prior to notice to proceed.
3. The fee for Project Administration and Controls was developed on the following contract duration (in calendar days):

Contract	Construction
Notice to Proceed to Project	
Substantial Completion	570 days (19 months)
Project Substantial Completion to	
Final Completion	600 days (20 months)

Any changes to the schedule may cause the ENGINEER to request an adjustment to the fee.

## Project Location

The PROJECT site is the Grand Island WWTP in Grand Island, Nebraska.

## Work Tasks

ENGINEER shall perform the following specific tasks as part of this Scope of Work:

### **Task 1 – Design Phase**

Design Phase Compensation: \$ 77,000.00

**Objective:** Evaluate performance enhancement options and develop a Design Report

summarizing design criteria including code requirements, process schematics, equipment sizing, materials of construction, and site layout. Prepare final drawings and specifications to receive lump sum bids from General Contractors.

**Subtasks:**

1. Kick-off meeting: Determine needs and goals of the CITY staff. Facilitate one (1) conference call to discuss the PROJECT goals with the CITY staff. Discuss theory of operation and performance modifications suggested in the ENGINEER's proposal. It is anticipated that costs will be obtained from manufacturers for various baffling and clarifier performance improvements and a general discussion of the potential benefits will be discussed along with a conceptual level opinion of construction costs and recommendations. The improvement alternatives include:
  - Mid-radius and in-board perimeter baffling. Evaluate the additional costs for mid-radius and in-board perimeter (Stamford) baffling.
  - Energy dissipating inlets (EDIs). Evaluate the additional costs for EDIs on the primary clarifiers.
  - Raising the primary clarifier walls. Evaluate the structural feasibility of raising the perimeter walls of the primary clarifiers and determine costs. Discuss concept with clarifier manufacturers and determine additional costs to allow new mechanism to be raised in the future if the walls are raised. Hydraulics will prevent raising the walls prior to the completion of the new grit facilities.
  - Chemically Enhanced Primary Treatment (CEPT). Evaluate current chemical feed facilities to determine if adequate storage and feed facilities are available for implementing CEPT. If storage or feed facilities are not adequate, develop conceptual costs for necessary improvements. Efforts associated with design of chemical feed improvements are not currently included in this scope of work.
  - Spiral collectors. Evaluate the additional costs for using spiral collectors versus plow type collectors.
2. Project Instructions: ENGINEER shall develop a "Project Procedures Manual" to identify lines of communication, project schedule, and other appurtenant information required to initiate the PROJECT
3. Prepare Preliminary Opinion of Probable Construction Cost. Develop a preliminary opinion of probable construction cost based on preliminary layouts and sizing. ENGINEER shall use past project experience and internal cost information to develop opinion of cost.
4. Prepare Design Report. Summarize evaluations and the design criteria in a draft Design Report and submit ten (10) copies to the CITY for review. Attend a one (1) day workshop in Grand Island to review the document with the City Staff. Revise the Design

Report based on City comments and submit ten (10) hardcopies and one (1) electronic copy in PDF format to the City.

The Design Report will include:

- Summary of primary clarifier enhancements considered and associated costs.
  - Design criteria established in the schematic design documents.
  - Preliminary facility layouts, including plan and major cross-sections.
  - Conceptual structural design descriptions of facilities.
  - Process and instrumentation diagrams (P&IDs) of major systems.
  - Equipment lists (with preliminary process equipment information and control functions) and tagging conventions.
  - Regulatory and local (City of Grand Island) code requirements.
  - Preliminary cost opinion for recommended work.
  - Implementation schedule for design, bidding, and construction.
5. Submit Design Report to NDEQ. Submit four (4) copies of the design report to NDEQ for review. Respond to questions and incorporate review comments.
  6. Civil Design: Following selection of desired clarifier improvements, develop the design criteria, drawings, and specification for the rehabilitation of two primary clarifiers.
  7. Site Survey: Provide, through a subcontract, the necessary field design surveys for the preparation of construction drawings and specifications. Surveys will determine existing elevations and utility locations within limits of construction using survey data of visible above-ground features and professional judgment, adjacent existing plant structures, buildings, and above grade facilities. The survey format shall follow the CITY's existing facility coordinate and elevation datum system using three (3) established control points.
  8. Architectural Design: Develop design standards for improvements as required.
  9. Structural Design: Define design standards for improvements as required. Provide revised mechanism anchor bolt design if required.
  10. Process Mechanical Design:
    - a. Define general design guidelines for mechanical systems.
    - b. Develop preliminary major process flow schematics for coordination and inclusion in the Process and Instrumentation Diagrams (P&IDs)
    - c. Evaluate storage and feed capabilities of existing ferric chloride and polymer feed pumps to provide chemically enhanced treatment.
  11. Instrumentation and Controls Design.
    - a. Coordinate with civil and process mechanical design to create process P&IDs.

- b. Discuss with City Staff existing control philosophies and automation to determine needed control requirements and signals to the existing PLC.

12. Electrical Design.

- a. Define general design guidelines for electrical design.
- b. Develop required construction drawings and specifications to replace existing electrical supply to the primary mechanisms. It is assumed that the existing MCC and embedded conduit will be reused.

13. 90% Contract Plans and Specifications.

- a. Produce project drawings that shall include, but not limited to: 1) Title Sheet, 2) Site Plans, 3) Legends and Symbols Lists, 4) Standard Detail Sheets, and 5) Construction Drawings as needed. A total of approximately sixteen (16) drawings are anticipated in the final set of drawing which is to be bound as an appendix in the specification.
- b. Produce contract specifications including: 1) Black & Veatch Corporation standard "front-end" contract documents which include Table of Contents, Invitation to Bid, Instructions to Bidders, Bid Forms, Bond Forms, Certificate of Compliance with Fair Labor Standards, List of Subcontractors, Questionnaires, the Agreement, Nebraska Performance Bond, Nebraska Payment Bond, Insurance Certificates, General Conditions, Supplementary Conditions, and Exhibit A that lists the duties, responsibilities and limitations of the authority of the resident project representative, 2) CITY's forms, and 3) Technical Specifications. Submit front-end documents to CITY's legal department for review and recommendations

14. Quality Assurance/Quality Control Review. ENGINEER shall conduct an internal quality assurance/quality control review of the 90% contract documents.

15. 90% Design Development Review Workshop. ENGINEER shall submit ten (10) copies of the 90% Design Contract Documents to the CITY for review. Coordinate a conference call to review the documents with CITY Staff. All preliminary plan sets will be on 11-inch by 17-inch size paper. Engineer shall provide an updated opinion of probable construction costs at the workshop.

Anticipated elements in the 90% Design Development Review stage are as follows:

- Final Process and Instrumentation Diagrams (P&ID)
- Draft front-end documents
- Final power distribution functional diagram
- Final site arrangement drawings
- Equipment Control Descriptions and final Control System Block Diagram
- Major equipment specifications
- Electrical power/lighting plans

- Final civil site/utility drawings
  - Project Requirements specification including a sequence of construction
  - Commodity specifications
  - Instrumentation plans
  - Instrumentation schedules and details
  - Mechanical, electrical, and instrumentation specifications
  - Electrical schematics and one-lines
  - Remaining drawings and specifications
  - Updated Opinion of Probable Cost and summary of potential scope adjustments
16. Submit Contract Documents to NDEQ. Submit four (4) copies of the bidding documents to NDEW for construction permit approval.
  17. Contract Plans and Specifications. Integrate CITY, State, and internal quality control comments into contract documents to finalize bidding documents. Submit four (4) sets of documents including specifications, two (2) electronic copies in PDF format, and two (2) electronic copies of the drawings in AutoCAD 2008 format.
  18. Prepare Final Opinion of Probable Construction Cost. Prepare final opinion of probable construction cost based on bidding documents. ENGINEER shall use past project experience, equipment manufacturer's quotes, and internal cost information to develop opinion of cost.

## **Task 2 – Bidding and Construction Phase Services**

Public Information Program Compensation: \$ 48,000.00

**Objective:** Provide bidding phase support services to the CITY during advertisement of the project, and provide construction phase services through the duration of construction of the improvements.

### **Subtasks:**

1. Distribute Documents. Assist the CITY in establishing a bid opening date and distribute project drawings and contract specifications in accordance with CITY's procedures to all interested parties and clearinghouses. Document distribution may be on a third-party plan distribution website as approved by CITY.
2. Pre-Bid Conference. Assist with, at a date and time selected and a place provided by CITY, a pre-bid conference to:
  - a. Instruct prospective bidders and suppliers as to the types of information required by the Contract Documents and the format in which bids should be presented.
  - b. Review special project requirements and Contract Documents in general.
  - c. Receive requests for interpretations that will be issued to plan holders.

- d. CITY personal if needed, shall prepare minutes of conference and issue to plan holders.
3. Answer Bidders Questions. Interpret questions from prospective bidders regarding the construction Contract Documents.
4. Prepare and Issue Addenda. Prepare and issue addenda to the construction Contract Documents when required.
5. Evaluate Bids and Recommend Award.
  - a. Assist the CITY in reviewing the bids for completeness and accuracy.
  - b. Examine the questionnaire to identify any supplier whose equipment or materials may not conform to the construction Contract Documents.
  - c. Prepare and distribute formal bid tabulation sheets, evaluate bids, and make written recommendations to OWNER concerning qualifications of the apparent low bidder.
  - d. Assistance with bid protests and rebidding will be considered a supplemental service.
  - e. Prepare and distribute conforming copies of the construction Contract Documents. These services will include transmitting the construction Contract Documents to CITY for signature and distribution.
6. Shop Drawings Review. Review drawings and other data submitted by each Contractor as required by the construction contract documents. ENGINEER's review shall be for general conformity to the construction contract documents and shall not relieve the Contractor of any of his contractual responsibilities. Such reviews shall not extend to means, methods, techniques, sequences, or procedures of construction, or to safety precautions and programs incident thereto.

Submittals shall be limited to one original submittal and one resubmittal per section or item. Costs for additional re-submittal reviews shall be borne by Contractor, as required by the contract documents.

7. General Construction Phase Services.
  - a. Interpret construction contract documents when requested by CITY or Contractor.
  - b. Receive and review drawings and other data submitted by the Contractor as required by the construction contract documents. ENGINEER's review shall be for general conformity to the construction contract documents and shall not relieve the Contractor of any of his contractual responsibilities. Such reviews shall not extend to means, methods, techniques, sequences, or procedures of construction or to safety precautions and programs incident thereto.



- c. Provide general construction observation support to the CITY for a total of one hundred and thirty (130) hours as requested by CITY.
  - d. ENGINEER will work with CITY to receive, review, and recommend approval, the Contractor's monthly payment requests. Review shall be for the purpose of making a full independent mathematical check and evaluating the equity in progress of the Contractor's payment request.
  - e. Provide documentation and administer the processing of change orders, including applications for extension of construction time. Evaluate the cost and scheduling aspects of all change orders and, where necessary, negotiate with the Contractor to obtain a fair price for the work. Said negotiation shall be subject to the approval of CITY.
  - f. Work related to unusually complex or unreasonably numerous claims are covered in Supplemental Services.
  - g. Act on claims of CITY and the Contractor relating to the acceptability of the work or the interpretation of the requirements of the construction contract documents. Services related to legal claims including but not limited to preparation of legal documents, depositions, and testimony are not included in this scope of work and are considered a supplemental service.
  - h. Performance testing of equipment will be performed and supported by Contractor and equipment supplier as required by Contract Documents. ENGINEER will not be involved in performance or startup testing without written notice from OWNER and agreement of hours to be used from OWNER's allowance.
8. Project Completion.
- a. Upon substantial completion, inspect the construction work and prepare a punch-list of those items to be completed or corrected before final completion of the project. Submit results of the inspection to CITY and the Contractor.
  - b. Upon completion or correction of the items of work on the punch-list, conduct a final inspection to determine if the work is completed.
  - c. Provide warranty inspection, thirty (30) days prior to warranty expiration notify owner and establish, document, review and establish measures for correction.
9. Record Drawings. Upon completion of the project, revise the construction contract drawings to conform to the construction records. As required, each drawing shall be modified based upon field mark ups of the contract drawings provided by the Contractor and CITY. Submit to the CITY drawings on a CD as electronic images (AutoCAD). Each drawing shall be identified by a unique sheet number.

10. Standard Operating Procedure Manual. Modify, expand or edit CITY'S existing manual to the extent needed for proper procedures and changed conditions to operation of the primary clarifiers.

### **SUPPLEMENTAL SERVICES**

Any Work requested by CITY that is not included in one of the items listed in any other phase will be classified as supplemental services. All supplemental services requested and negotiated by CITY shall have City Council approval prior to the commencement of such work. Such services are as follows:

1. Additional meetings with local, State, or Federal agencies to discuss the PROJECT.
2. Appearances at public hearings or before special boards.
3. Supplemental Engineering Work required to meet the requirements of regulatory or funding agencies that become effective subsequent to the date of this agreement.
4. Special consultants or independent professional associates requested or authorized by CITY.
5. Revisions of design, drawings, and specifications arising from external Value Engineering Review which cause changes in the general scope, extent or character of the PROJECT, including but not limited to changes in size, complexity, CITY's schedule, character of construction, or method of financing.
6. An environmental assessment report and/or environmental impact statement as requested by CITY or required by review agencies.
7. Provision, through a subcontract, of a cultural resources or archaeological study and report on the construction site.
8. Provision, through a subcontract, of archaeological consultations regarding artifacts that may be uncovered during construction.
9. Conducting pilot plant studies and tests.
10. Changes in the general scope, extent, or character of the project, including, but not limited to:
  - a. Revision of previously accepted studies, reports, design documents, or construction contract documents when such revisions are required by changes in laws, rules, regulations, ordinances, codes, or orders enacted subsequent to the preparation of such studies, reports, documents, or designs; or are required by any other causes beyond ENGINEER's control.

## **Compensation – Primary Clarifier Mechanism Replacement**

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For the services covered by this Agreement, the CITY agrees to pay the ENGINEER as follows:

1. For services described in Attachment A, Scope of Services, an amount equal to the ENGINEER's salary billings plus reimbursable expenses and subcontract billings. The maximum billed for these services shall not exceed One hundred and Twenty Five Thousand Dollars and no cents (\$125,000.00) without further authorization. The maximum billed for each task shall not exceed the following amounts without further authorization:

Task 1 – Design Phase \$77,000

Task 2 – Bidding and Construction Phase \$ 48,000

2. The schedule of hourly billing rates and charges by job classification is shown in Attachment C.
3. For supplemental services, an amount equal to the ENGINEER's salary billings plus reimbursable expenses and subcontract billings. Each item of supplemental services shall be specifically authorized by the CITY COUNCIL, and written notice to proceed authorized by public works director and a maximum billing limit shall be established before the work is started. The amount billed for each item of supplemental services shall not exceed the amount established for it without further authorization. Additional amounts for supplemental services may be authorized, if necessary, as the work progresses. The schedule of hourly billing rates and charges by job classification is shown in Attachment C.
4. The ENGINEER agrees to use its best efforts to perform the services within the billing limit stated above and in accordance with the agreed upon performance schedules. If, at any time, the ENGINEER has reason to believe that the cost of the services will be greater than the billing limit, the ENGINEER shall promptly notify the CITY to that effect, giving a revised billing limit for performance of the services.
5. Monthly payments shall be made to the ENGINEER by the CITY based on the ENGINEER's statement. The statement shall indicate the name of the individuals working on the project and the hours associated with each of their efforts.

Each invoice shall be accompanied by a progress report prepared by ENGINEER's Project Manager. The report shall describe, in narrative form, the work accomplished during the period covered by the invoice and present a summary of the status of the project to-date. The summary shall address the project schedule, budget, and any significant changes in the scope of the work.

In the event CITY disputes any invoice item, CITY shall give ENGINEER written notice of such disputed item within ten (10) days after receipt of such invoice and shall pay to ENGINEER the undisputed portion of the invoice according to the provisions hereof.

6. It is understood and agreed that the maximum billings is based on the start of the services being authorized not later than May 18, 2009. If start of services is not authorized by the date given, it is understood and agreed that the maximum billing limit will be adjusted accordingly by a supplement to this Agreement.

7. It is understood and agreed:

That the ENGINEER shall start the performance of services listed in Attachment A within ten days of receipt of notice to proceed.

That the ENGINEER shall keep records on the basis of generally accepted accounting practice of costs and expenses and which records shall be available to inspection at reasonable times.

## Schedule of Hourly Billing Rates and Charges – Primary Mechanism Replacement

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1. Compensation for personnel used in the performance of engineering services shall be in accordance with the following hourly billing rates.

<u>Black &amp; Veatch Classification</u>	<u>2009 Hourly Billing Rates</u>
Principal – Bill Stoner	\$245
Project Manager – Derek Cambridge	\$175
Project Administration and Clerical	\$ 74
Project Accountant	\$ 84
Engineering Manager	\$163
Project Engineer	\$130
Design Engineer	\$ 98
CAD Coordinator	\$150
CAD Technician	\$ 82
Architect	\$144
Architect Tech	\$94
Senior Structural Engineer	\$155
Structural Engineer	\$119
Structural Technician	\$85
Senior Process Mechanical Engineer	\$151
Process Mechanical Engineer	\$121
Process Mechanical Technician	\$97
Senior Mechanical Engineer	\$151
Mechanical Engineer	\$103
Mechanical Tech	\$109
Mechanical CAD	\$70
Senior Process Engineer – Ed Kobylinski	\$220
Process Specialist	\$159
Process Engineer	\$129
Quality Control Reviewer	\$195
Estimator	\$140

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

<u>Expense Item</u>	<u>Unit Cost</u>
Travel, Subsistence, and Incidental Expenses	Net Cost
Automobile/Motor Vehicles – Local Mileage	\$.55/mile
Automobile/Motor Vehicles – Rental	Net Cost
Telephone and Telegraph Costs	*
Reproduction of Reports, Drawings & Specifications	Net Cost
Postage & Shipping Charges of Job-Related Materials	*
Computer Services	*
Photograph and Video Reproductions	Net Cost
Sub-Consultant Fees	Net Charge

\* Included in hourly miscellaneous expense charge of \$8.75 per hour.

3. The Schedule of Hourly Billing Rates and Charges indicated herein is effective for service in 2009. The Schedule of Hourly Billing Rates and Charges will be revised and re-issued in March of subsequent years.

RESOLUTION 2009-113

WHEREAS, the city desires to hire a professional consulting engineer to provide services for design and services during construction related to replacing the primary clarifier mechanisms at the Waste Water Treatment Plant (WWTP); and

WHEREAS, on March 4, 2009 the City of Grand Island issued a Request For Proposals (RFP) for those professional consulting engineering services according to the RFP on file with the Wastewater Division of the Public Works Department; and

WHEREAS, on March 26, 2009 proposals were received; and

WHEREAS, on April 8, 2009 and on April 9, 2009 a selection committee interviewed the engineering firms Black & Veatch Corporation of Kansas City, Missouri, CH2MHill of Denver, Colorado & HDR, Inc. of Omaha, Nebraska for selection criteria requirements; and

WHEREAS, based on the City's rating of all proposals received, in accordance with the rating system in the RFP, the engineering firm Black & Veatch Corporation has been deemed most qualified for the services called for; and

WHEREAS, the negotiated agreement, with work performed at actual costs with a maximum fee of \$125,000.00 is considered fair and reasonable; and

NOW, THEREFORE, BE IT RESOLVED BY THE MAYOR AND COUNCIL OF THE CITY OF GRAND ISLAND, NEBRASKA, that the agreement with consulting engineering firm, Black & Veatch Corporation of Kansas City, Missouri for the professional services associated with replacing the primary clarifier mechanisms at the WWTP is hereby approved.

BE IT FURTHER RESOLVED, that the Mayor is hereby authorized and directed to execute such agreement on behalf of the City of Grand Island.

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Adopted by the City Council of the City of Grand Island, Nebraska, May 12, 2009.

\_\_\_\_\_  
Margaret Hornady, Mayor

Attest:

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Approved as to Form	☐ _____
May 7, 2009	☐ City Attorney

RaNae Edwards, City Clerk