



City of Grand Island

Tuesday, February 12, 2013

Council Session

Item G12

#2013-35 - Approving Amendment No. 5 to the Agreement for Professional Engineering Services entitled "Wastewater Treatment Plant and Collection System Rehabilitation" with Black & Veatch

Staff Contact: Terry Brown, Interim Public Works Director

Council Agenda Memo

From: Marvin Strong, Wastewater Treatment Plant Engineer

Meeting: February 12, 2013

Subject: Approving Amendment No. 5 to the Agreement for Professional Engineering Services entitled "Wastewater Treatment Plant and Collection System Rehabilitation" with Black & Veatch

Item #'s: G-12

Presenter(s): Terry Brown, Interim Public Works Director

Background

On October 11, 2011 City Council approved, by Resolution No. 2011-307 in the amount of \$1,121,160.00, the initial agreement with Black & Veatch for project management, collection system master planning and conceptual designs for the Northeast Interceptor sewer, Collection System rehabilitation and Wastewater Treatment rehabilitation.

On April 24, 2012 City Council approved, by Resolution No. 2012-111 Amendment No. 1, in the amount of \$1,910,075.00, to this agreement in continued design effort to finalize design and prepare bidding documents. Bidding documents in Amendment No. 1 included; Lift Station No. 7 Improvements, 4th to 5th Eddy to Vine, Northeast Interceptor Phase 1A, and 1B, South and West Collection System rehabilitation, and Wastewater Treatment Rehabilitation.

At the August 28, 2012 City Council meeting Resolution No. 2012-229 was approved for Amendment No. 2, in the amount of \$53,000.00, to this agreement. This amendment added Community Development Block Grant (CDBG) guideline provisions, as well as provided for construction engineering services for the Lift Station No. 7 Improvements and 4th Street to 5th Street; Eddy Street to Vine Street rehabilitation.

At the November 13, 2012 City Council meeting Resolution No. 2012-329 was approved for Amendment No. 3, in the amount of \$265,754.00, to this agreement. This amendment added construction engineering services and resident inspection during construction for the 5th Street Sanitary Sewer Improvements, as well as for the South & West Sewer Interceptor Improvements with the consulting firm Black & Veatch of Kansas City, Missouri.

Discussion

Amendment No. 5 provides preliminary design engineering services in Phase II of the North Interceptor Sewer planning. Phase II will begin the preliminary design to replace aged gravity sanitary sewer, reduce or eliminate current sewer pumping station(s), provide additional capacity for existing, and new growth areas of Grand Island. The Preliminary gravity sewer collection planning will develop a corridor from Diers Avenue / Capital Avenue to the end point of Phase I work at the intersection of Seventh Street / Sky Park Road / Fourth Street. This route equates to approximately twenty one thousand (21,000) feet of forty two (42) inch diameter interceptor sewer to increase capacity and improve condition of the sewer. The street corridor between Webb Road and Broadwell Avenue (Phase II-B) will advance to a final bidding document design in correlation to Capital Avenue Widening Project.

The agreement cost increase for Amendment No. 5 is \$451,896.00, resulting in a revised agreement cost of \$3,831,885.00.

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 Amendment No. 5 to the original agreement with Black & Veatch of Kansas City, Missouri and pass a Resolution authorizing the Mayor to sign the amendment.

Sample Motion

Move to approve the resolution authorizing the Mayor to sign Amendment No. 5 with the consulting firm Black & Veatch of Kansas City, Missouri.

**AMENDMENT NO. 5
TO AGREEMENT BETWEEN
CITY OF GRAND ISLAND
AND
BLACK & VEATCH CORPORATION
FOR PROFESSIONAL SERVICES
FOR
Consulting Engineering Services for the WWTP and Collection System Rehabilitation**

THIS IS AN AMENDMENT made as of _____, 2013 to the Agreement between City of Grand Island (OWNER) and Black & Veatch Corporation (ENGINEER) dated October 17, 2011, and entitled Consulting Engineering Services for the WWTP and Collection System Rehabilitation. OWNER and ENGINEER agree to amend such Agreement as follows:

ARTICLE 3 – SERVICES TO BE PERFORMED BY ENGINEER

The scope of services for this amendment includes the following services:

- 1. North Interceptor (LS 19 to 7th/Skypark Road - Phase 2))** – Preliminary Design.
- 2. North Interceptor (Webb to Broadwell – Phase 2B) – Final Design and Bidding Phase Services.**

The Scope of Services as described in Attachment A – Scope of Services shall be amended to include the following:

Task 3.6 – Preliminary 30% Design – North Interceptor (LS 19 to 7th/Skypark Road – Phase 2)

General

The scope of services for this Amendment includes engineering services in connection with preliminary design of Phase 2 of the North Interceptor Sewer (LS 19 to 7th/Skypark Road-end of Phase 1)

Phase 2 – LS 19 to 7th/Skypark Road including the following segments:

- Phase 2A – Broadwell Street to 7th/Skypark Road
- Phase 2B – Webb Road to Broadwell Street
- Phase 2C – LS 19 to Webb Road

As outlined in this Amendment, the scope of services is based on the following additions, modifications, and/or changes to the existing North Interceptor:

1. The existing 12-inch and 24-inch diameter force main pipe between LS 19 and Oak Street will be abandoned when the new interceptor is placed into service. The existing gravity sanitary sewer interceptor pipe between Oak Street and Skypark Road will be removed and the new interceptor will be installed generally in the same alignment as the existing pipe. The new interceptor will then be located in Skypark Road between Capital and 7th Street.
2. Preliminary design of approximately 20,600 feet of 42-inch diameter interceptor sewer to increase capacity and improve condition of the sewer.

The preliminary design will include an analysis of potential gravity and/or pumped tie-ins for Lift Stations 2, the Soldiers & Sailors lift station at the north side Capital & Lafayette, 4, 8, 15, and 19. In addition the connection with the gravity sewer from McCain will be included in the preliminary design evaluation.

Objective: Prepare 30% contract documents for the North Interceptor
(LS 19 to 7th/Skypark Road – Phase 2)

Subtasks:

1. Conduct Preliminary Design Evaluations. Preliminary design evaluations will be prepared to establish the final design pipeline alignment, verify existing utility information, identify permitting requirements, review constructability, verify surface features, identify traffic and public impacts, verify connection requirements to existing sewers, determine operational needs, and establish final easement needs. In addition, the design evaluation will include identification of the future inverts required for lift station and connecting gravity sewer connections. Lift station connections will consider potential inverts required to convert lift stations to gravity connections. A preliminary design memo will be prepared and submitted as described in Subtask 5.
2. Conduct Route Survey:
 - a. Provide field design surveys for the preparation of construction drawings and specifications. Surveys will determine site topography within 1-foot contours, pertinent utility locations within limits of new facilities 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 OWNER's existing facility coordinate and elevation datum system using three (3) city established control points.
3. Conduct Geotechnical Services: Provide Engineering services including exploratory work (22 borings estimated), laboratory and field testing, and professional guidance in tests to be made at test locations based on preliminary drawings and designs and including professional interpretations of exploratory and test data. The services will include:
 - a. Initial geotechnical exploratory work, such as soil borings, penetration tests, soundings, subsurface explorations, laboratory tests of soils, groundwater levels, rock formations, and other geophysical phenomena which may be required to provide information for design, and other field and laboratory tests and analyses which are required to provide design information.
 - b. An initial geotechnical report interpreting the data on the exploratory work and testing and setting out the site conditions that can be anticipated from this initial exploratory work.
4. Conduct Initial Site Assessment (ISA). ENGINEER shall conduct an ISA for the interceptor route corridor to assess potential for contaminants and cultural/historical resources to be encountered during construction. The ISA includes a paper study and records research to determine locations of past underground storage tanks or contaminant spills and dump sites. A report will be prepared and submitted with the preliminary design memorandum in Subtask 5.

5. Prepare Preliminary Design Memorandum. A final design memorandum will be prepared summarizing the findings of the design evaluations, ISA, permit list, and the recommended final design criteria.
6. Prepare 30% Contract Documents. Preliminary plan and profile drawings will be prepared showing pipeline depth, connections, and manhole locations. A specification outline will be prepared. Coordinate design from Webb to Broadwell with the roadway design engineer. Conduct up to two (2) coordination meetings with the design engineer. Forty (40) plan and profile sheets are anticipated.
7. Identify Permits. Identify required permits for Phase 2. Coordinate with the applicable entity on the permit requirements. Anticipated permits include NDEQ Construction Permit, BNSF RR Crossing Permit, 404 Permit (Drainage Ditch), and NDOR Crossing Permit at Hwy 281. This subtask assumes one draft submittal, two one-hour meetings, and one final submittal included in Subtask 5.
8. Prepare 30% Estimate of Probable Construction Cost. Prepare 30% opinion of probable construction cost based on documents. ENGINEER shall use past project experience, equipment manufacturer's quotes, and internal cost information to develop opinion of cost. Estimate will be based on AACE Class 3 level detail.
9. Quality Assurance/Quality Control Review. ENGINEER shall conduct an internal quality assurance/quality control review of the 30% contract documents.
10. Submit 30% Contract Documents. ENGINEER shall submit eight (8) copies of the 30% Design Contract Documents to the OWNER for review.
11. Conduct 30% Contract Documents Review Workshop. ENGINEER shall submit eight (8) copies of the 30% Design Contract Documents to the OWNER for review. One (1) electronic copy in PDF format. Attend one (1) half-day workshop at the Grand Island Olsson Associate office to review the documents with OWNER's staff. All preliminary plan sets will be on 11-inch by 17-inch size paper at half scale. ENGINEER shall provide an updated opinion of probable construction costs at the workshop.

Task 3.7 – Final Design – North Interceptor (LS 19 to 7th/Skypark Road – Phase 2))

General

The scope of services for this Amendment includes engineering services in connection with detailed design and bidding of Phase 2B – Webb to Broadwell) a North Interceptor Sewer. As outlined in this Amendment, the scope of services is based on the following additions, modifications, and/or changes to the North Interceptor:

Phase 2A – Broadwell to 7th/Skypark Road (To be included in future amendment)

Phase 2B – Webb to Broadwell

Phase 2C – LS 19 to Webb (To be included in future Amendment)

Task 3.7.1 – 90% Contract Document Development

Task 3.7.1.1 - 90% Contract Documents Development Phase 2A (To be included in future amendment)

Task 3.7.1.2 - 90% Contract Documents Development Phase 2B

Objective: Prepare 90% contract documents for the construction of the improvements identified herein.

Subtasks:

1. Contract Plans and Specifications.
 - a. Produce project drawings for Phase 2B.
 - b. (1) Title Sheet, (2) Site Plans (if applicable),(3) Legends and Symbols Lists, (4) Standard Detail Sheets, and(5) Construction Drawings, (6) Plan and Profile Sheets as needed. A total of approximately 25drawings are anticipated in the final set of drawings for Phase 2B. It is anticipated that all drawings will be submitted for review with the 90% review documents.
 - c. Produce complete draft contract specifications document including: (1) OWNER 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) OWNER's forms, (3) Division 1 specifications, and (4) technical specifications.
2. Quality Assurance/Quality Control Review. ENGINEER shall conduct an internal quality assurance/quality control review of the 90% contract documents.
3. 90% Design Development Review Workshop. ENGINEER shall submit eight (8) copies of the 90% Design Contract Documents to the OWNER for review. One (1) electronic copy in PDF format. Attend one (1) half-day workshop at the Grand Island Olsson Associate office to review the documents with OWNER'S Staff. All preliminary plan sets will be on 11-inch by 17-inch size paper at half scale. ENGINEER shall provide an updated opinion of probable construction costs at the workshop prepared to AACE Class 1 Level.
4. Easement Acquisition. ENGINEER shall complete items associated with the permanent and temporary easement acquisition for the tracts along the Phase 2B of the sanitary sewer route. It is anticipated that there are two (2) tracts with a total of two (2) individual landowners from which easements (one (1) temporary and one (1) permanent for each tract) will be required. Subtasks to be completed include:
 - a. ENGINEER shall prepare legal descriptions and tract drawings for the permanent and temporary easements required from each of the impacted tracts.
 - b. ENGINEER shall perform a title search and have an appraisal completed for each of the impacted tracts for use in the acquisition of the temporary and/or permanent easement...

- c. ENGINEER shall assist the OWNER in the negotiations for the acquisition of the temporary and/or permanent easements. ENGINEER will prepare the easement documents, present, explain offers, answer related questions and secure signatures from interested parties. ENGINEER will attempt to meet with each property owner (assumed three meetings per property owner) at least three times, if necessary.

ENGINEER will perform the ROW negotiation services in accordance with the OWNER'S procedures. The goal will be to acquire the necessary right-of-way through amicable negotiations. If condemnation is required, ENGINEER will deliver the parcel files to the OWNER and be available for consultation or condemnation testimony.

ENGINEER will submit signed purchase agreements, deeds, and temporary easements, along with a payment transmittal letter to OWNER. The OWNER will approve all signed purchase agreements and easement documents and will make payments to each property owner and tenant, if necessary. OWNER will record the deeds at the County Courthouse, and provide copies of the recorded documents and payment vouchers or checks to the ENGINEER in order to complete the acquisition file.

Task 3.7.1.3 - 90% Contract Documents Development Phase 2C (To be included in future amendment)

Task 3.7.2 – Final Contract Documents

Task 3.7.2.1 - Final Contract Documents Phase 2A (To be included in future amendment)

Task 3.7.2.2 - Final Contract Documents Phase 2B

Objective: Finalize contract documents for the construction of the PROJECT by a single General Contractor bidding on a unit price basis.

Subtasks:

1. Contract Plans and Specifications. Integrate OWNER and internal quality control comments into contract documents to finalize bidding documents. Submit four (4) sets of documents including specifications, half size (11"x17"), and full sized plans (22"x34"), two (2) electronic copies in PDF format, and two (2) electronic copies of the drawings in AutoCAD 2008 format.
2. Prepare Final Opinion of Probable Construction Cost. Prepare final opinion of probable construction cost based on bidding documents to AACE Class 1 Level detail. ENGINEER shall use past project experience, equipment manufacturer's quotes, and internal cost information to develop opinion of cost.
3. Obtain Project Approvals. ENGINEER shall assist in obtaining approval from the governmental authorities having jurisdiction over the design criteria of the PROJECT, consisting of any required correspondence and the attendance of one (1) meeting, if required, with the appropriate governmental agencies. ENGINEER shall prepare sealed documents for review by NDEQ.

Task 3.7.2.3 - Final Contract Documents Phase 2C (to be included in future amendment)

Task 3.8 – Bidding Phase Services – North Interceptor (LS 19 to 7th/Skypark Road))

Task 3.8.1 – Bidding Phase Services Phase 2A (To be included in future amendment)

Task 3.8.2 – Bidding Phase Services Phase 2B

Objective: Provide bidding phase support services to the OWNER during advertisement of Phase 2B of the North Interceptor (LS 19 to 7th/Skypark Road)) project.

Subtasks:

1. Distribute Documents. Assist the OWNER in establishing a bid opening date and distribute project drawings and contract specifications in accordance with OWNER's procedures to all interested parties and clearinghouses. Document distribution may be on a third-party plan distribution website as approved by OWNER.
2. Pre-Bid Conference. Assist with, at a date and time selected and a place provided by OWNER, 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. OWNER personnel will prepare minutes of conference and issue to plan holders.
3. Answer Bidders Questions. Interpret questions from prospective bidders regarding the construction Contract Documents (assumed 34 hours total)
4. Prepare and Issue Addenda. Prepare addenda (2 assumed) to the construction Contract Documents when required. OWNER will issue any addenda to plan holders.
5. Evaluate Bids and Recommend Award.
 - a. Assist the OWNER 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. The list of subcontractors will also be reviewed.
 - 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.

Task 3.8.3 – Bidding Phase Services Phase 2C (To be included in future amendment)

**Task 3.9.1 – Construction Phase Services – North Interceptor (LS 19 to 7th/Skypark Road)
(To be included in a future amendment)**

Task 3.9.2 – Resident Inspection Services During Construction – North Interceptor (LS 19 to 7th/Skypark Road) (To be included in a future amendment)

ARTICLE 4 – COMPENSATION

4.1 The total amount of payments for services and Reimbursable Expenses in accordance with Attachment B-1, Compensation shall be changed from \$3,379,989 to \$3,831,885 representing an increase of \$451,896.

All other provisions of the Agreement shall remain the same.

IN WITNESS WHEREOF, the parties hereto have made and executed this Amendment as of the day and year first above written.

OWNER:

ENGINEER:

CITY OF GRAND ISLAND, NEBRASKA

BLACK & VEATCH CORPORATION

By: _____

By: _____

Title: _____

Title: _____

RESOLUTION 2013-35

WHEREAS, on October 11, 2012 Grand Island City Council, by Resolution No. 2011-307, approved the consulting agreement with Black & Veatch of Kansas City, Missouri; for project management, collection system master planning and conceptual designs for the Northeast Interceptor sewer, Collection System rehabilitation and Wastewater Treatment rehabilitation in the amount of \$1,121,160.00; and

WHEREAS, on April 24, 2012 Grand Island City Council, by Resolution No. 2012-111, approved Amendment No. 1 allowed for the continuation of the design effort to final design and bidding, in the amount of \$1,910,075.00; and

WHEREAS, on August 28, 2012 Grand Island City Council, by Resolution No. 2012-229, approved Amendment No. 2 to add CDBG guideline provisions, and provided for construction engineering services for the Lift Station No. 7 Improvements and 4th Street to 5th Street; Eddy Street to Vine Street rehabilitation, in the amount of \$53,000; and

WHEREAS, Amendment No. 3 provided for construction engineering services and resident inspection during construction for the 5th Street Sanitary Sewer Improvements, as well as for the South & West Sewer Interceptor Improvements with the consulting firm Black & Veatch of Kansas City, Missouri, in the amount of \$265,754.00; and

WHEREAS, Amendment No. 4 provided for the review to the "Report on Revenue Requirements, Cost of Service and Rates for Wastewater", in the amount of \$30,000.00; and

WHEREAS, Amendment No. 5 will provide preliminary design engineering services in Phase II of the North Interceptor Sewer planning, and final bidding documents for Phase II-B North Interceptor Sewer with the consulting firm Black & Veatch of Kansas City, Missouri; and

WHEREAS, the agreement cost increase for Amendment No. 5 is \$451,896.00, resulting in a revised agreement cost of \$3,831,885.00.

NOW, THEREFORE, BE IT RESOLVED BY THE MAYOR AND COUNCIL OF THE CITY OF GRAND ISLAND, NEBRASKA, that such Amendment No. 5 to the agreement with Black & Veatch of Kansas City, Missouri is hereby approved.

BE IT FURTHER RESOLVED, that the Mayor is hereby authorized and directed to execute such Amendment No. 5 on behalf of the City of Grand Island.

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Adopted by the City Council of the City of Grand Island, Nebraska, February 12, 2013.

Jay Vavricek, Mayor

Attest:

RaNae Edwards, City Clerk

Approved as to Form	☐ _____
February 12, 2013	☐ City Attorney