



City of Grand Island

Tuesday, November 14, 2017

Council Session

Item G-21

#2017-325 - Approving Amendment No. 2 with HDR Engineering, Inc. for Engineering Services Related to Cell 3 Liner Construction at the Grand Island Regional Landfill

Staff Contact: John Collins, P.E. - Public Works Director

Council Agenda Memo

From: Jeff Wattier, Solid Waste Superintendent

Meeting: November 14, 2017

Subject: Approving Amendment No. 2 with HDR Engineering, Inc. for Engineering Services Related to Cell 3 Liner Construction at the Grand Island Regional Landfill

Presenter(s): John Collins PE, Public Works Director

Background

The Grand Island Landfill Phase I development is comprised of four cells (Cells 1, 2, 3, and 4) of lateral expansion that are located within a 52 acre landfill footprint. Cell 1 was constructed in 1993 and Cell 2 was constructed in 1998. Landfilling will continue in Cells 1 and 2 until intermediate and final grades are achieved. Cell 3 will need to be constructed within the next year, and the project will be paid from our restricted fund account. Cell 4 will be constructed when filling in Cell 3 nears completion or as facility operations warrant.

On January 24, 2017, via Resolution No. 2017-12, City Council approved an agreement between the City and HDR Engineering, Inc. of Omaha, Nebraska for engineering services related to Cell 3 Liner Construction at the Grand Island Regional Landfill, in the amount of \$126,570.00.

On June 13, 2017, via Resolution No. 2017-168, City Council approved Amendment No. 1 to the original engineering services agreement with HDR Engineering, Inc. to add the design and specifications for a new leachate control room, while removing the optional permit modification provided for in the original scope. Amendment No. 1 resulted in an agreement decrease of \$17,160.00, for a revised agreement amount of \$109,410.00.

Discussion

It is now necessary to add construction phase services, which consist of onsite observation and testing during the construction of Cell 3 Liner and Leachate System at the Grand Island Regional Landfill.

Summary of Amendment No. 2-

Original Agreement =	\$126,570.00
Amendment No. 1 =	(\$17,160.00)
<u>Add Construction Phase Services =</u>	<u>\$230,500.00</u>
Revised Agreement =	\$339,910.00

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 Amendment No. 2 to the agreement with HDR Engineering, Inc. of Omaha, Nebraska, for a revised agreement amount of \$339,910.00.

Sample Motion

Move to approve the resolution.

AMENDMENT NO. 2
Exhibit A
Scope of Services
Grand Island Regional Landfill
Cell 3 Liner Design & Construction Phase Services

Amendment No. 2 to Agreement, City Purchase Order #33617-00

As part of the future Additional Services listed in the Agreement, construction period services are provided in this Amendment No. 2.

Task 5 – Basic Construction Phase Services

Objective:

The key objective is to document that the intent of the design and contract documents are realized with the desired quality and the agreed upon price for the Cell 3 liner and to obtain the quality assurance documentation necessary for the NDEQ to approve the construction.

HDR Activities:

Develop a Construction Quality Assurance Manual (CQAM) for use in managing construction activities and gathering required documentation, including material testing, personnel responsibilities, sampling methods and documentation requirements.

Conduct a pre-construction and up to five progress meetings with City staff, the contractor and subcontractors during the construction period. Communications will be supplemented with bi-weekly conference calls scheduled between the meetings.

HDR will perform a substantial completion inspection meeting (punchlist) and final completion inspection meeting.

HDR will be responsible for construction contract administration and documentation, processing of change orders, review of request for substitutions or change proposals, review and maintenance of shop-drawings and review of Contractor-provided “as-recorded” drawings. HDR will prepare, process, and recommend payment requests and change orders.

HDR will also provide interpretation and consulting on design modifications. This will include resolution meetings with City staff and the contractor and site visits by the designers (assume 2 site visits/meetings total).

At the completion of construction, HDR will prepare written reports of construction quality assurance documentation for Cell 3 liner necessary for acceptance and approval by the NDEQ and provide copies of such documentation to the City.

Meetings:

These would include one (1) pre-construction meeting, five (5) progress meetings during liner construction, one (1) substantial completion meeting, two (2) design modification resolution meetings, and one (1) final inspection meeting.

Deliverables:

- Agenda and meeting notes including distribution to all meeting attendees
- Copies of completed pay requests and change orders for processing by the City

- Copies of shop drawings and contractor submittals released for distribution
- Final Construction Quality Assurance Documentation Report for Cell 3 liner with a transmittal letter to NDEQ, certified by a Nebraska Professional Engineer (2 hard copies to NDEQ; 1 hard copy and 1 electronic copy to City)
- “As recorded” drawings with a reproducible AutoCAD (CADD) format

Key Understandings:

- The number of meetings and quality control/quality assurance documentation and processing is based on an assumed construction duration of four months.
- City will provide the hard copies of the Contract Documents to the selected contractor.

Task 6 – Resident Construction Observation and Testing Services

Objective:

The key objective is to provide a competent and experienced full-time resident project representative to document that the intent of the design and contract documents for the lateral expansion are realized with the desired quality and the agreed upon price.

HDR Activities:

HDR will provide construction observation person (resident project representative) during the liner construction period. These services will consist of the following:

- Preparation of daily and weekly observation reports
- Review of site conditions and document ongoing activities and corrective actions
- Assist in issuing field orders and change proposal requests
- Conduct progress meetings
- Observe site work and earthwork construction
- Review stored materials for proper storage and payment
- Coordinate with testing firm for QA testing
- Verify material quantities associated with contractor’s invoices
- Maintain progressive punch list
- Review and document schedule status
- Review of surveys provided by Contractor

HDR will subcontract with Benesch to provide testing services and periodic construction observation. These services will consist of the following:

- Conduct pre-construction survey of Cell 3 area
- Periodic observation of bulk excavation/earthwork construction
- Conduct soils sampling and construction quality assurance testing for the test pad, clay liner and granular drainage layer at frequencies required by the Grand Island Regional Landfill CQA Plan—services will also include completion of such testing
- Compile field and lab test data

A full-time resident project representative (60 hours per week for 20 weeks) has been budgeted based on the contract documents and the level of required oversight. Periodic observation during bulk excavation is budgeted at 40 hours (10 hours per month for 4 months). During the test pad construction, an

additional technician (from Benesch) has been budgeted (20 hours) to assist in the testing. Benesch will provide technician from their Grand Island office and material testing services from their Lincoln office.

Prepare written summaries of construction quality control and quality assurance documentation provided during this period of service. Field reports and photos will be posted to a Dropbox.com folder maintained for the project.

Meetings:

Includes the five (5) progress meetings during liner construction. Other meetings included in Task 5.

Deliverables:

- Daily field reports and documentation
- Weekly summary reports
- Supporting documentation for “as recorded” drawings
- Coordination and maintenance of field test reports and quality assurance activities
- Photographic documentation

Key Understandings:

- Services include on-site construction observation, material testing, and preparing field records of ongoing construction activities.
- Quality assurance surveying, testing and documentation preparation will be outlined in the CQAM.
- Quality control/quality assurance surveying will be completed by a licensed surveyor under the construction contractor and reviewed by HDR for compliance with the CQAM and the Cell 3 liner contract documents.
- HDR has assumed a single construction contractor and all of the liner construction work will occur in 2018. It is possible that bulk excavation by the contractor may begin during fall of 2017. Construction observation will not be provided during bulk excavation; periodic site visits are assumed.

Schedule

Notice to Proceed is anticipated to begin in November 2017. Full time observation will not begin until the start of recompacted clay liner which will be after March 15, 2018. Substantial Completion for the Contractor is scheduled for August 10, 2018 with Final Completion by October 31, 2018.

Compensation

The following table was developed to show the adjustment in fee as a result of the changes to the scope of services as described in this Amendment No. 2.

- The estimated fee for new Tasks 5 and 6 is Two Hundred Thirty Thousand Five Hundred dollars (\$230,500.00), not-to-exceed without written authorization of the City.

HDR will continue to invoice the City on a per diem plus Reimbursable Expenses basis pursuant to the Agreement. Compensation terms are defined in the Agreement between the City and HDR.

Amendment No. 2 Fee Estimate Table

Amended Contract Fee (Amendment No. 1)	\$109,410
Amendment No. 2:	
Task 5 – Basic Construction Phase Services	\$51,100
Task 6 – Resident Construction Observation and Testing Services	\$179,400
Amendment No. 2 Fee Adjustment	\$230,500
Amended Total Contract Fee	\$339,910

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the _____ day of _____ 2017.

CITY OF GRAND ISLAND, NE

“OWNER”

BY:

NAME:

TITLE:

ADDRESS:

HDR ENGINEERING, INC.

“ENGINEER”

BY:

NAME:

Matthew B. Tondl, PE

TITLE:

Senior Vice President

ADDRESS:

8404 Indian Hills Drive

Omaha, NE 68114

RESOLUTION 2017-325

WHEREAS, on January 24, 2017, via Resolution No. 2017-12, City Council approved an agreement between the City of Grand Island and HDR Engineering, Inc. of Omaha, Nebraska for engineering services related to Cell 3 Liner Construction at the Grand Island Regional Landfill, in the amount of \$126,570.00; and

WHEREAS, on June 13, 2017, via Resolution No. 2017-168, City Council approved Amendment No. 1 to the original agreement resulting in an agreement decrease of \$17,160.00, for a revised agreement amount of \$109,410.00; and

WHEREAS, it is now necessary to add construction phase services, which consist of onsite observation and testing during the construction of Cell 3 Liner and Leachate System; and

WHEREAS, such modifications to the original agreement are detailed in Amendment No. 2 and result in an agreement increase of \$230,500.00, for a revised agreement amount of \$339,910.00.

NOW, THEREFORE, BE IT RESOLVED BY THE MAYOR AND COUNCIL OF THE CITY OF GRAND ISLAND, NEBRASKA, that Amendment No. 2 to the Engineering Services Agreement between the City of Grand Island and HDR Engineering, Inc. of Omaha, Nebraska for engineering services related to Cell 3 Liner Construction at the Grand Island Regional Landfill, in the amount of \$230,500.00, is hereby approved for a revised agreement amount of \$339,910.00.

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

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Adopted by the City Council of the City of Grand Island, Nebraska, November 14, 2017.

Jeremy L. Jensen, Mayor

Attest:

RaNae Edwards, City Clerk

Approved as to Form	☐ _____
November 9, 2017	☐ City Attorney