



City of Grand Island

Tuesday, May 11, 2010

Council Session

Item G7

#2010-126 - Approving Change Order Number 1 for Primary Clarifier Mechanisms at the Waste Water Treatment Plant

Staff Contact: Steven P. Riehle, Public Works Directro

Council Agenda Memo

From: Steven P. Riehle, Public Works Director

Meeting: May 11, 2010

Subject: Approving Change Order Number 1 for Primary Clarifier Mechanisms at the Waste Water Treatment Plant

Item #'s: G-7

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

Background

The Waste Water Division of the Public Works Department on November 9, 2009 presented, by Resolution Number 2009-293, to the City Council of the City of Grand Island in approval to the agreement with the contracting firm, Oakview Construction, Inc. of Red Oak, Iowa in the amount of \$602,400.00 for the contracting services associated with Project WWTP-2010-2 Primary Clarifier Mechanism Replacement.

On January 12, 2010, the Grand Island City Council approved Addendum Number 1 with the contracting firm, Oakview Construction, Inc. of Red Oak, Iowa in the amount of \$290.00 for furnishing property insurance for WWTP-2010-2 Primary Clarifier Mechanism Replacement by Resolution Number 2010-14.

Discussion

Change Order Number 1 covers additional concrete repair in the effluent boxes and troughs for the primary clarifiers, which results in a change in Contract Price. Following dewatering, high pressure cleaning and surface blasting of Primary Clarifier No. 2, deterioration of the existing concrete surfaces was more severe than originally anticipated. It is also anticipated that additional concrete repair will be required for Primary Clarifier No. 1. As such, allowances for Primary Clarifier No. 1 are included in this change order.

There is no change in the Contract time as a result of these changes.

This change order includes all costs, direct, indirect, and consequential, and all changes in Contract Time arising from the work included in the items for the Change Order. No additional claims shall be made for changes in Contract Price or Contract Time arising from these work items. All other provisions of the contract remain unchanged.

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 Change Order Number 1 with the contracting firm, Oakview Construction, Inc. of Red Oak, Iowa.

Sample Motion

Move to approve Change Order Number 1 with Oakview Construction, Inc. of Red Oak, Iowa.

**CITY OF GRAND ISLAND, NEBRASKA
WASTEWATER TREATMENT PLANT
PRIMARY CLARIFIER MECHANISM REPLACEMENT PROJECT**

**CITY PROJECT WWTP-2010-2
BLACK & VEATCH PROJECT NO. 165278**

CHANGE ORDER NO. 1

Change Order No. 1 covers additional concrete repair in the effluent boxes and troughs for the primary clarifiers, which result in a change in Contract Price. Following dewatering, high pressure cleaning and surface blasting of Primary Clarifier No. 2, deterioration of the existing concrete surfaces was more severe than originally anticipated. It is also anticipated that additional concrete repair will be required for Primary Clarifier No. 1. As such, quantity allowances for Primary Clarifier No. 1 are included in this change order. The quantities of work to be performed under this change order are estimated and payments will be based on the actual quantities of work performed. An itemized list of the work items is included in the attached change order summary.

Item CO1-1. Concrete Repair for Primary Clarifier Effluent Box Decks

Initiated by: Engineer

When primary clarifier number 2 was emptied and work began, it was acknowledged that the underside of the concrete deck on the effluent box was significantly degraded. The thickness of the deck was reduced by approximately 4 inches and existing reinforcing steel was exposed. The reinforcing steel had deteriorated and compromised the structural strength of the deck. The repair material originally specified would be more expensive due to the nature of the degradation at the contract unit price of \$500 per cubic foot. An alternate repair method shall be tasked in additional work involving removal of deteriorated reinforcing steel, preparing the existing concrete surface, drilling and epoxy grouting of two #6 reinforcing steel bars into the existing walls, applying a bonding agent, and forming and placing a new concrete under-deck. The under-deck repair will add to the existing concrete surface with 8 inches thick at the back and 5 inches thick at the front to make for a sloped surface and prevent a buildup of corrosive gases under the deck. The contractor shall provide a protective coating system of 10 mills thickness to the work in CO1-1, and CO1-2. The agreed lump sum unit price was negotiated and is deemed fair and reasonable based on the amount of work involved as listed above. The same repair work is expected to be needed for primary clarifier number 1, and reflected in the quantities.

Item CO1-2. Additional Concrete Repair for Primary Clarifier Effluent Box Walls

Initiated by: Engineer

This change involves an overrun of the contract item for Concrete Repair. The interior face of the existing concrete walls on the effluent box for primary clarifier number 2 was degraded more than anticipated. The bid

unit price and repair method shall remain and is the most cost effective solution to this type of repair. We anticipate primary clarifier number 1 will be the same and have included estimated quantities in this change order.

Item CO1-3. Concrete Repair for Primary Clarifier Effluent Trough Walls

Initiated by: Engineer

The original bid specified concrete repair for the effluent trough walls using the same repair material and contract unit price as was used for repair of the effluent box walls (see change order item C01-2). When the concrete trough walls on primary clarifier number 2 were uncovered by pressure cleaning and surface blasting, it was discovered that portions of the walls had degraded as much as ½ inch and needed filling prior to applying the protective coating system.. The repair material originally specified would be more expensive due to the nature of the surface area at the contract unit price of \$500 per cubic foot. An alternate repair method shall be tasked in additional work involving application of an epoxy concrete filler (Tnemec Mortarclad product). The product shall provide a compatible base needed for the protective coating system. The agreed not to exceed quantity and cubic foot unit price was negotiated and is deemed fair and reasonable based on the amount of work involved. We anticipate that primary clarifier number 1 will need similar repairs and have included estimated quantities in this change order.

Item CO1-4. Adjustment to Crack Repair Work – Route & Seal

Initiated by: Engineer

This change involves eliminating the contract item Crack Repair Work – Route & Seal. The original bid included a unit price for the effluent trough walls. The cracks were to be routed and sealed with an approved caulk. The contract item for crack repair work – route & seal will be eliminated. The work of routing the cracks will be paid for under change order item C01-5. The cracks will be sealed monolithic with the surface area with the application of the epoxy concrete filler listed under CO1-3.

Item CO1-5. Adjustment to Crack Repair Work for Primary Clarifier No. 2

Initiated by: Engineer

The routing portion of the work under the original contract item for Crack Repair Work – Route & Seal shall be completed. The work shall provide the recommended opening size required for concrete crack repair . The original estimated quantity of Crack Repair Work – Route & Seal was 300 lineal feet. This work shall provide concrete routing of 285 lineal feet to primary clarifier number 2, and an estimated quantity of 350 lineal feet to primary clarifier number 1. The total estimated quantity of cracks for both primary clarifiers is 635 lineal feet and is included on this change order. The agreed not to exceed quantity and lineal feet unit price was negotiated and is deemed fair and reasonable based on the amount of work involved

**CITY OF GRAND ISLAND, NEBRASKA
WASTEWATER TREATMENT PLANT
PRIMARY CLARIFIER MECHANISM REPLACEMENT PROJECT**

**CITY PROJECT WWTP-2010-2
BLACK & VEATCH PROJECT NO. 165278**

SUMMARY

CHANGE ORDER NO. 1

The Contract Price shall be modified as follows as a result of the changes described by this modification request. Additions to the Contract Price are indicated by a "+" in front of the amount and deductions by a "-".

<u>Item</u>	<u>Description</u>	<u>Qty</u>	<u>Unit</u>	<u>Bid</u>	<u>Total</u>
CO1-1	Concrete Repair for Primary Clarifier Effluent Box Deck (Agreed Unit Price)	2.0	l.s.	\$1,700.00	\$3,400.00
CO1-2	Additional Concrete Repair for Primary Clarifier Effluent Box Walls (Contract Unit Price)	3.0	c.f.	\$500.00	\$1,500.00
CO1-3	Concrete Repair for Primary Clarifier Effluent Trough Walls (Agreed Unit Price)	32.0	c.f.	\$344.00	\$11,008.00
CO1-4	Eliminate Crack Repair Work - Route and Seal (Contract Unit Price)	(300.0)	l.f.	\$12.00	(\$3,600.00)
CO1-5	Route Cracks (Agreed Unit Price)	635.0	l.f.	\$8.20	\$5,207.00
NET CHANGE IN CONTRACT PRICE					\$17,515.00
ORIGINAL CONTRACT AMOUNT					\$602,400.00
PREVIOUS ADDENDUM					<u>\$290.00</u>
REVISED CONTRACT AMOUNT					\$620,205.00

Effect on Contract Time

There is no change in the Contract Time as a result of these changes.

This change order includes all costs, direct, indirect, and consequential, and all changes in Contract Time arising from the work included in the items for Change Order No. 1. No additional claims shall be made for changes in Contract Price or Contract Time arising from these work items.

All other provisions of the contract remain unchanged.

Agreed to this _____ day of _____, 2010

Recommended:
Black & Veatch Corporation

By: _____
Project Manager

Date: _____

Approved:
City of Grand Island

By: _____

Date: _____

Approved:
Oakview Construction, Inc.

By: _____

Date: _____

Approved as to Form _____
May 10, 2010 City Attorney

RESOLUTION 2010-126

WHEREAS, on November 9, 2009, by Resolution Number 2009-293, the City Council of the City of Grand Island approved a \$602,400.00 contract with Oakview Construction, Inc. of Red Oak, Iowa for Project WWTP-2010-2 Primary Clarifier Mechanism Replacement at the City of Grand Island, Waste Water Treatment Plant; and

WHEREAS, by Resolution Number 2010-14, the City Council of the City of Grand Island approved Addendum Number 1 with Oakview Construction, Inc. in the amount of \$290.00 for furnishing property insurance for the project; and

WHEREAS, city staff & consulting firm Black & Veatch have negotiated Change Order Number 1 with Oakview Construction, Inc at \$17,515.00; and

WHEREAS, after Addendum Number 1 and Change Order Number 1 the revised contract is \$620,205.00; and

NOW, THEREFORE, BE IT RESOLVED BY THE MAYOR AND COUNCIL OF THE CITY OF GRAND ISLAND, NEBRASKA, that Change Order Number 1 with the contracting firm, Oakview Construction, Inc. of Red Oak, Iowa, in the amount of \$17,515.00 for Project WWTP-2010-2 Primary Clarifier Mechanism Replacement is hereby approved.

BE IT FURTHER RESOLVED, that the Mayor is hereby authorized and directed to execute a contract for such change order 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 11, 2010.

Margaret Hornady, Mayor

Attest:

RaNae Edwards, City Clerk

Approved as to Form
May 10, 2010

City Attorney