



City of Grand Island

Tuesday, August 12, 2008

Council Session

Item G11

**#2008-206 - Approving Change Order #1 for Capital Avenue
Widening, Street Improvement District Number 1256**

Staff Contact: Steven P. Riehle, City Engineer/Public Works Direc

Council Agenda Memo

From: Steven P. Riehle, Public Works Director

Meeting: August 12, 2008

Subject: Approving Change Order #1 for Capital Avenue
Widening, Street Improvement District Number 1256

Item #'s: G-11

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

Background

Bids were opened for the Capital Avenue Widening Project on March 27, 2008. The council awarded the bid on May 13, 2008 and the contract was fully executed on May 20, 2008. Approximately 80% of the Capital Avenue Widening Project is being paid for using Federal and Surface Transportation Program dollars.

The project to widen Capital Avenue from the Moores Creek Drainway to Webb Road has storm drain improvements that conflict with the sanitary sewer force main between Diers Avenue and Webb Road. Engineers at Olsson Associates in Grand Island worked with engineers at CH2MHill in Omaha to relocate the sanitary sewer force main. The existing 12" diameter cast iron pipe (CIP) force main will be relocated and upsized to a new 24" diameter polyvinyl chloride (PVC) force main from Lift Station #19 (at the southwest corner of Diers Avenue and Capital Avenue) to east of Webb Road. The Capital Avenue Project is paying for the cost to relocate the sanitary sewer force main which is estimated at 50% of the total. The Wastewater Division is paying for the cost to upsize the sanitary sewer force main from 12" to 24" which is estimated at 50% of the total.

The increase in force main size to east of Webb Road will improve the performance of Lift Station #19 by reducing the effective head pressure the pumps have to work against. Lift Station #19 is shown in fiscal years 2010 & 2011 as being replaced with Lift Station #21 in the proposed 2009 budget book on page 219. The upgrade to the Capital Avenue sanitary sewer force main from east of Webb Road to Oak Street is shown in fiscal year 2012 in the proposed 2009 budget book on page 219.

Discussion

Design of new Lift Station #21 is being performed by engineers at CH2MHill. Preliminary plans were received in May 2008 for the piping and manhole work near existing Lift Station #19. The lift station plans overlaid onto the plans for the Capital Avenue Widening Project to look for conflicts. There is a lot of sanitary sewer pipe and manhole work that needs to be completed in conjunction with the Capital Avenue Widening Project to prevent future utility conflicts and avoid tearing out new storm sewer, traffic signals, and an estimated \$71,000.00 of new pavement on Capital and Diers Avenues.

City Engineering & Wastewater Staff collaborated with engineers at Olsson Associates and CH2MHill to determine what sanitary sewer piping and manhole work was necessary. The sanitary sewer piping and manhole work was part of the future Lift Station #21 work, but should be completed as part of the Capital Avenue Project to avoid unnecessary future conflicts and expenses.

Olsson Associates is providing services during construction including surveying, traffic control design, construction inspection, and materials testing for the Capital Avenue Widening Project. If this change order is approved an amendment to the existing agreement with Olsson Associates for services during construction will be brought forward for council consideration.

Funds are available in the Wastewater budget for this change order with The Diamond Engineering Company and a future amendment to the agreement with Olsson Associates.

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 proceed with the sanitary sewer piping and manhole work as a change order to the Capital Avenue Widening Project. Performing the work now will save dollars for the future Lift Station #21 project and avoid unnecessarily tearing up new pavement on Capital and Diers Avenues.

Administration recommends against referring the issue to a committee, postponing the item to a future date or no action because the work must be done and adding the work to the Capital Avenue Widening Project reduces the costs on the future Lift Station #21 project.

Sample Motion

Motion to approve Change Order #1.

City of Grand Island
100 East 1st Street
Grand Island, Nebraska 68801

CHANGE ORDER NUMBER 1

Date of Issuance: August 1, 2008

PROJECT: Capital Avenue Widening, Street Improvement District 1256

CONTRACTOR: The Diamond Engineering Company

CONTRACT DATE: May 20, 2008

There is a lot of sanitary sewer pipe & manhole work for future Lift Station #21 that needs to be completed in conjunction with this project.

The scope of work for Change Order Number 1 shall include prepared construction drawing and specification listed as follows:

1. Yard Piping Plan, Drawing 5-C-2
2. Gravity Sewer Profiles, Drawing 5-C-4
3. 24" Forcemain Plan and Profile, Drawing 5-C-5
4. Civil Details Sheet 1, Drawing 5-C-7
5. Plan and Section Manhole No. 1, Drawing CS-1
6. Plan and Section Manhole No. 2, Drawing CS-2
7. Plan and Section Manhole No. 3, Drawing CS-3
8. Plan and Section Manhole No. 4, Drawing CS-4
9. Details, Drawing G-1
10. Details, Drawing G-2
11. City of Grand Island Division V Storm and Sanitary Sewer Specification

Bypass pumping

The City of Grand Island will be responsible for all bypass pumping during the construction of Manholes #2, #3, & #4. The live lines in the bottom of these manholes shall have the flow diverted during the construction of the manhole base, the manhole walls, and the cradle supports for the existing lines. The City shall furnish and install all pumps, plugs, piping and other appurtenances and monitor and operate all equipment necessary for bypass pumping. The Diamond Engineering Company will be on site to assist the City if needed.

Testing

The Diamond Engineering Company will perform all work in accordance with City of Grand Island Specifications. This proposal does not include costs for infiltration, exfiltration, or air testing of pipe and manholes. The City of Grand Island is responsible for televising the sewer lines and visual inspection of the pipe and manholes.

Working Days

This additional work relating to LS #19 will add 90 calendar days to the substantial and final completion dates for this project.

The list of quantity's in Change Order No. 1 are:

<u>Description</u>	<u>Qty</u>	<u>Unit</u>	<u>Unit Bid</u>	<u>Total Bid</u>
Bypass Connection Manhole	1.00	each	8099.15	8099.15
Construct 24" dia. PVC C-905	70.00	l.f.	243.50	17045.00
Build 24" dia. Plug Valve & Box	1.00	each	16644.02	16644.02
Build 24" x 24" x 12" Tee, M.Jt.	1.00	each	4365.00	4365.00
Build 24" x 24" 45-degree Bend, M.Jt.	1.00	each	3648.30	3648.30

Dewater Site	1.00	lump	16252.14	16252.14
Steel Sheeting	1.00	lump	24469.52	24469.52
24" dia. Pipe Restraints for Pipe Bell Joints	1.00	each	845.07	845.07
24" dia. Pipe Restraints for Fittings	6.00	each	483.80	2902.80
Construct 15" dia. Sanitary Sewer Main SDR #26	62.42	l.f.	211.91	13227.42
Construct 27" dia. Sanitary Sewer Main SDR #26	30.32	l.f.	322.09	9765.77
Construct 36" dia. Sanitary Sewer Main SDR #26	95.00	l.f.	357.44	33956.80
Build 36" dia. PVC S.W. Cap Plug	1.00	each	2965.38	2965.38
Build 2" dia. Corporation Stop w/ Saddle	1.00	each	740.59	740.59
Build 2" dia. Curb Stop & Box w/ enlarged Base	1.00	each	784.81	784.81
Construct 2" dia. Type "K" Soft Copper Serv. Line	60.00	l.f.	52.42	3145.20
Build Special Manhole #1 Approx. 25.67 vft	1.00	each	43599.52	43599.52
Build Special Manhole #2 Approx. 22.43 vft	1.00	each	62771.06	62771.06
Build Special Manhole #3 Approx. 21.58 vft	1.00	each	59812.81	59812.81
Build Special Manhole #4 Approx. 23.59 vft	1.00	each	26178.88	<u>26178.88</u>
				\$351,219.24

The changes result in the following adjustment to the Contract Amount:

Contract Price Prior to This Change Order	\$3,365,842.25
Net Increase/ Decrease Resulting from this Change Order	\$ 351,219.24
Revised Contract Price Including this Change Order	<u>\$3,717,061.49</u>

Approval Recommended:

By _____
Steven P. Riehle, Public Works Director

Date _____

The Above Change Order Accepted:

The Diamond Engineering Company
Contractor

By _____

Date _____

Approved for the City of Grand Island:

By _____
Margaret Hornady, Mayor

Attest: _____
RaNae Edwards, City Clerk

Date _____

RESOLUTION 2008 - 206

WHEREAS, on May 13, 2008, by Resolution 2008-122, the City Council of the City of Grand Island awarded The Diamond Engineering Company of Grand Island, Nebraska, the bid in the amount of \$3,365,842.25 for Street Improvement District 1256 for widening of Capital Avenue from the Moores Creek Drain to Webb Road; and

WHEREAS, Street Improvement District 1256 for widening of Capital Avenue from the Moores Creek Drain to Webb Road will cause conflict with new and existing sanitary sewer infrastructure; and

WHEREAS, the Diamond Engineering Company of Grand Island, Nebraska is the general contractor for such Street Improvement District 1256; and

WHEREAS, Change Order No. 1 to the Street Improvement District 1256 has been reviewed and negotiated for such work by the general contractor; and

WHEREAS, the agreed price for such reviewed and negotiated work to be completed in Change Order No. 1 to Street Improvement District 1256 is acceptable when compared to the engineers estimate; and

WHEREAS, Change Order No. 1 to Street Improvement District 1256 will provide tie-in connections to the existing gravity sanitary sewer infrastructure in preparation of construction of a new lift station #21; and

WHEREAS, Change Order No. 1 to Street Improvement District 1256 will provide new gravity sanitary sewer infrastructure below the new roadway, buried utilities and storm sewers; and

WHEREAS, Change Order No. 1 to Street Improvement District 1256 will provide new water service under Diers Avenue in preparation of construction of a new lift station #21; and

WHEREAS, Change Order No. 1 to Street Improvement District 1256 will provide cost savings by avoiding future removal and replacement of roadway, utilities and storm sewers that are above and near the city's gravity sanitary sewer system; and

WHEREAS, the work for Change Order No. 1 to Street Improvement District 1256 is necessary to complete in conjunction with the Capital Avenue Widening Project, Street Improvement District 1256; and

WHEREAS, it is recommended that Change Order No. 1 to the work for Street Improvement District 1256 be completed by the general contractor, The Diamond Engineering Company of Grand Island, Nebraska; and

WHEREAS, such work is incorporated into Change Order No. 1; and

WHEREAS, the result of Change Order No. 1 will increase the contract amount by \$351,219.24 for a revised contract price of \$3,717,061.49; and

WHEREAS, the result of Change Order No. 1 will increase the contract completion date by 90 calendar days; and

NOW, THEREFORE, BE IT RESOLVED BY THE MAYOR AND COUNCIL OF THE CITY OF GRAND ISLAND, NEBRASKA, that the Mayor be, and hereby is, authorized and directed to execute Change Order No. 1 between the City of Grand Island and The Diamond Engineering Company of Grand Island, Nebraska on Street Improvement District 1256.

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Adopted by the City Council of the City of Grand Island, Nebraska, August 12, 2008.

Margaret Hornady, Mayor

Attest:

RaNae Edwards, City Clerk