



TO: Michael C. Van Milligen, City Manager

FROM: Gus Psihoyos, City Engineer

DATE: September 4, 2014

SUBJECT: SRF Green Alley Bid Set 2 – Year 2
(CIP 7102450, 7201008, 7101289, 7401405)

INTRODUCTION

The enclosed resolution authorizes the award of the construction contract for the SRF Green Alley Bid Set 2 – Year 2 Project.

BACKGROUND

This project was originally scheduled to be awarded at the September 2, 2014 City Council meeting. Fehr-Graham, the City's consulting engineer on this project, revised their estimate of probable cost significantly after the project was initiated with the City Council. Engineering received one bid from Drew Cook and Sons Excavating. Engineering requested the project award be delayed so the proposed project costs could be discussed with the contractor and engineer.

DISCUSSION

Bid Set 2 – Year 2 will involve the reconstruction of eight (8) alleys in the Bee Branch Watershed. The alley locations are as follows:

- Alley from Loras Blvd. to Fillmore St between Adair Street and North Grandview Avenue
- Alley from Fillmore Street to Decorah Street between Adair Street and North Grandview Avenue
- Alley from Decorah Street to Delaware Street between Adair Street and North Grandview Avenue
- Alley from Custer Street to Loras Blvd. between North Grandview Avenue and Atlantic Street (This alley includes water main that will be replaced)
- Alley from Loras Blvd. to Fillmore Street between North Grandview Avenue and Atlantic Street
- Alley from Fillmore Street to Decorah Street between North Grandview Avenue and Atlantic Street
- Alley from Decorah Street to Delaware Street between North Grandview Avenue and Atlantic Street

- Alley from Poplar Street to Bunker Hill Road between Asbury Road and Finley Street

This project will reconstruct the second bid set of green alleys slated for year 2 in the Bee Branch Watershed. Currently, there are 28 alleys under contract. Of these 28 alleys, 12 alleys are complete and currently being used by the abutting property owners. The remaining 16 alleys are under construction. Engineering has 20 additional alleys in the process of being designed. These 20 alleys will be brought to the City Council for consideration in the near future.

The reconstruction of the alleys will include:

- Removal of the existing alley pavement
- Excavation of the subgrade to allow the placement of clean washed stone for a storage medium
- Installation of a concrete border for the brick pavers
- Installation of concrete headers at the alley intersection with the intersecting streets.
- Reconstruction of the pavement surface with interlocking concrete pavers
- Sanitary Sewer section repair
- Installation of a water main in one alley

This project will reconstruct the alleys into green alleys. These alleys allow rainwater to infiltrate into the pavement rather than runoff into the storm sewers. This infiltration allows for filtering of the water and recharge back into the aquifer. Monitoring wells are also planned to be installed so that water quality improvements can be documented.

A water main is proposed in the alley from Custer Street to Loras Boulevard between North Grandview Avenue and Atlantic Street. Currently there are three houses that take service from a long copper service line. This public water main froze this past winter, a new water main will be installed at a greater depth to prevent the freezing in the future. Installing a new water main will improve the service to these properties by providing a water main loop, thus removing the dead end line and minimizing the potential for freezing.

The project construction documents will follow the Statewide Urban Design and Specifications (SUDAS) in the development of the construction documents.

The Iowa Department of Natural Resources (IDNR) have reviewed and approved the plans so that the City cost can be covered with SRF funds. The Water Department will be funding the water main costs in one of the alleys. There are no private water services being replaced and assessed.

This project will have special assessments.

BID RESULTS

The City of Dubuque received the following bids for the SRF Green Alley Project - Bid Set 2 – Year 2 on August 21, 2014:

<u>Contractor</u>	<u>Bid Results</u>
Drew Cook and Sons Excavating	\$ 1,006,608.30

Drew Cook and Sons Excavating of Dubuque, Iowa, submitted the only bid in the amount of \$1,006,608.30. This amount is 4.02% over the revised estimate of probable cost.

REVISED COST ESTIMATE

In the development of the construction documents, Fehr-Graham had an original construction estimate of \$751,989.00 for the project. After the City started to receive the recent bids for green alleys, Fehr-Graham reviewed those bids, revisited their estimate, added additional bid items, revised quantities and revised some estimated unit prices. The revised estimate added \$215,676.50 to the project.

New Items –

Here is a list of the new items that were added. These items add \$64,698 to the estimate of cost.

<u>Added Item</u>	<u>Cost</u>
Below Grade Excavation (core out)	\$13,350
Subgrade Preparation	\$13,240
Sub-base, Special backfill – Gradation 30	\$900
Rigid Insulation Board	\$2,560
Sanitary Sewer Service Pipe, 6"	\$12,996
Storm Sewer Gravity main, 24" RCP	\$3,800
Removal of Storm Sewer, under 36" dia.	\$2,910
Concrete Collar Connection	\$800
Pipe Lining, CIPP, 8"	\$7,040
Fittings, Mega Lug, 6"	\$2,000
Connection to Existing Intakes	\$1,000
Sidewalk, PCC 4" Thickness	\$2,352
Driveway, Granular	\$1,750
TOTAL	\$64,698

Revised Quantities –

Here is a list of the bid items with a revision to their original estimated quantity by more than 20 percent. These revised item quantities added \$137,573 to the estimate of cost.

<u>Revised Item</u>	<u>Original Quantity</u>	<u>Revised Quantity</u>	<u>Price Difference</u>
Excavation	4300 CY	6050 CY	\$21,000
Subbase, Granular	423 Ton	1040 Ton	\$11,106
3" Breaker	503 Ton	890 Ton	\$9,675
Porous Agg. Grad. 3	835 Ton	2015 Ton	\$24,780
Curb and Gutter	725 LF	1205 LF	\$12,000
Full Depth Patch, HMA	60 SY	808 SY	\$33,660
Brick Pavement, Type 2	2410 SF	3890 SF	\$11,840
Geotextile Fabric	3896 SY	8400 SY	\$13,512
		TOTAL	\$137,573

Revised Unit Prices –

Here is a list of the bid items with a revised unit price from the original estimate to the revised estimate. These revised unit prices added \$13,405.50 to the estimate of cost.

<u>Revised Item</u>	<u>Original Unit Price</u>	<u>Revised Unit Price</u>	<u>Unit Price Difference</u>
Mobilization	\$18,400/LS	\$24,000/LS	\$5,600
Water Service	\$100/LF	\$120/LF	\$20/LF
Relocation, Copper			
Full Depth Patches, HMA	\$45/SY	\$85/SY	\$40/SY
SWPPP Qualifying Rainfall Event	\$100/EA	\$400/EA	\$300/EA

Engineering Department staff met with the contractor, Drew Cook and Sons Excavating, their previous paving contractor, Nauman Nursery and also with the engineer on the project, Fehr-Graham to discuss the bid prices and the project as a whole. Based on these discussions, the Engineering staff agrees the revised estimate is more appropriate for this project.

These alleys are located toward the west end of the Bee Branch Watershed. The sub-surface conditions (clay soils) of these alleys require more drain tile and stone to accommodate the design storms versus the alleys downtown which are on top of sand. These alleys are also in more construction constrained areas versus the flatter and more open alleys downtown. These constraints include rolling topography, tree conflicts, and retaining walls. Due to the topography constraints, the paved section of the alley is narrower in some cases. In terms of constructability, the contractor will need to pour the concrete collar on one side of the alley using a redi-mix truck and pour the other side of

the alley with motorized buggies. The additional labor required due to these constraints causes the overall cost of the alleys to increase in price.

Even though the City received only one bid for this project, the bid prices appear to be in line with the revised estimate of costs. Drew Cook and Sons Excavating has historically been the low bidder on the alleys bid thus far.

As a result, special assessments for residents will be held at the preliminary assessment average of \$1,316.00, including engineering and contingency.

RECOMMENDATION

I recommend that the contract for the SRF Green Alley Bid Set 2 – Year 2 Project be awarded to Drew Cook and Sons Excavating of Dubuque, Iowa in the amount of \$1,006,608.30 which is 4.02% over the engineer's revised estimate of probable cost.

The IDNR has reviewed the bid tab and concurs with the award of the contract.

BUDGET IMPACT

The estimate of probable cost for the SRF Green Alley Bid Set 2 – Year 2 Project is as follows:

	<u>Orig. Estimate</u>	<u>Revised Estimate</u>	<u>Award</u>
Construction Contract	\$751,989.00	\$967,665.50	\$1,006,608.30
Contingency	75,198.90	96,766.55	100,660.83
Construction Engineering & Inspection	<u>124,078.19</u>	<u>124,078.19</u>	<u>124,078.19</u>
Total Project Cost	<u>\$951,266.09</u>	<u>1,188,510.24</u>	<u>\$1,231,347.32</u>

The project funding summary is as follows:

<u>CIP No.</u>	<u>Fund Description</u>	<u>Fund Amount</u>
7102450	SRF Green Alley Project	\$777,165.40
	Special Assessment – Alley Improvement, Residential	97,418.92
	Special Assessment – Alley Improvement, Commercial	0.00
	Special Assessment – Residential Deficiency	0.00
7201008	Storm Sewer Improvements/Extensions	10,580.46
7101289	General Sanitary Sewer	2,277.00
7401405	Water Main Replacements	<u>63,824.31</u>
	Total Project Funding	<u>\$951,266.09</u>

ACTION TO BE TAKEN

I recommend that the City Council adopt the attached resolution awarding for the SRF Green Alley Project Bid Set 2 – Year 2 to Drew Cook and Sons Excavating, Inc. in the amount of \$1,006,608.30.

Prepared by Jon Dienst, PE

cc: Jenny Larson, Budget Director
Don Vogt, Public Works Director
John Klostermann, Street & Sewer Maintenance Supervisor
Deron Muehring, Civil Engineer II
Denise Ihrig, Environmental Engineer
Casey Stickfort, Fehr-Graham
Ryan Wicks, Fehr-Graham