

City of Grand Island

Tuesday, December 21, 2010 Council Session

Item G14

#2010-367 - Approving Supplemental Agreement #2 for Construction Engineering Services on the Capital Avenue Widening Project

Staff Contact: Steve Riehle, City Engineer/Public Works Director

Council Agenda Memo

| From: | Steven P. Riehle, City Engineer / Public Works Director | | | | | |
|---------------|---|--|--|--|--|--|
| Meeting: | December 21, 2010 | | | | | |
| Subject: | Approving Supplemental Agreement # 2 for Construction Engineering Services on the Capital Avenue Widening Project | | | | | |
| Item #'s: | G-14 | | | | | |
| Presenter(s): | Steven P. Riehle, Public Works Director | | | | | |

Background

Any supplements to professional services agreements must be approved by council. On September 26, 2006 an agreement with Olsson Associates for construction engineering work was approved by the council. The agreement provided for construction engineering services on the project to widen Capital Avenue from the Moores Creek Drainway to Webb Road. Work is to be performed at actual costs with a maximum of \$346,703.

On September 9, 2008 the council approved supplemental agreeement number 1 for additional construction engineering services related to sanitary sewer lift station construction at the southwest corner of the Captital Avenue and Diers Avenue intersection. The agreement was for work to be performed at actual costs with a maximum of \$35,000 for a revised agreeemnt total of \$381,703.

The project is approximately 80% funded with federal Surface Transporation Funds administered by the Nebraska Department of Roads (NDOR).

Discussion

The agreement for construction engineering services was approved in advance of the project start date to facilitate utility relocation work. The agreement was based on an anticipated start date in January 2007 with completion in 12 months. The actual start date for the project was pushed back to August 2008 by Right-Of-Way acquisitions through eminent domain. The substantial completion date for the project was in November 2009 with an anticipated final completion date of January 2011.

Due to the length of the project, adjustment of the salary rates in the agreement are necessary. Using the same annual salary increases as non-union city employees increases the amount of the agreement by \$31,497.

The agreement did not include development of a Stormwater Pollution Prevention Plan (SWPPP). Since the City is involved in enforcing the requirements of a SWPPP as a Phase 2 Stormwater community, it was deemed more appropriate for a consultant to develop the plan for City approval. The estimated cost for the development and tracking required for SWPPP work is \$8,000.00

The Nebraska Department of Roads allows the agreement for construction engineering services to be supplemental for work performed that is outside of the scope of the original agreement or for changed conditions such as change orders, overruns of contract items, extensions to contract time allowance, or overruns of contract time allowance. The estimated construction engineering cost as a result of the extended construction schedule, construction administration and additional construction phasing exhibits are detailed on exhibit 2SA and estimated at \$33,500.00.

The construction engineering agreement did not include the work of replacing property pins that were disturbed along the project. Since the City does not have a licensed land surveyor on staff, the consultant was asked to quote the work. The cost to survey and install the property pins is estimated at \$4,237.00.

Since the work is being performed using federal funds, the format for the supplemental agreement was furnished by the Nebraska Department of Roads. Funds are available in the Wastewater budget, federal aid STP fund account, and general fund for this supplement 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

Public Works Administration recommends that the Council approve Supplemental Agreement #2 to the agreement with Olsson Associates, in an amount not to exceed \$77,234.00 for a revised agreement total of \$458,937.00.

Sample Motion

Move to approve Supplemental Agreement #2 to the agreement with Olsson Associates, in an amount not to exceed \$77,234.00.

Exhibit S2B Capital Avenue Paving Improvements City of Grand Island PROJECT NO. STPAA-5436(4), C.N. 42427 Supplemental #2 Construction Engineering Services

| | Snr Project | Senior | Senior | Associate | Survey | Senior | Assistant | | |
|---|---|-----------|------------------|------------------------------|----------------------|--------------|--------------|----------|--------|
| | Engineer | | Const. Obs. | Engineer | | Survey Tech. | Survey Tech. | Clerical | TOTALS |
| 1. NPDES Permit | | | | | | | | | |
| A. SWPPP | 4.0 | 16.0 | | | | | | 2.0 | 22.0 |
| B. Erosion Control Plan | 2.0 | 16.0 | | | | | | | 18.0 |
| C. Bi-Weekly Inspections (27 inspections) | 8.0 | | 54.0 | | | | | | 62.0 |
| | | | | | | | | | |
| Extended Construction Schedule (8 additional weeks) | | | | | | | | | |
| A. Construction Observation | 32.0 | | 320.0 | | | | | 8.0 | 360.0 |
| B. Reporting Forms | 4.0 | | 16.0 | | | | | | 20.0 |
| | | | | | | | | | |
| 3. Additional Construciton Administration | | | | | | | | | |
| A. Additional Pay Requests (6) | 8.0 | | 30.0 | | | | | | 38.0 |
| B. Additional Change Order | 8.0 | | 4.0 | | | | | | 12.0 |
| B. Additional Change Order | 0.0 | | 4.0 | | | | | | 12.0 |
| | | | | | | | | | |
| 4. Property Pins (45) | _ | | | | | | | | |
| A. Setting Property Pins | | | | | 4.0 | 24.0 | 24.0 | | 52.0 |
| | | | | | | | | | |
| Additional Construction Phases | | | | | | | | | |
| A. Additional Construction Traffic Control | | | | | | | | | |
| Phases | 12.0 | 32.0 | | | | | | | 44.0 |
| B. Landowner Exhibits | 6.0 | 20.0 | | | | | | | 26.0 |
| | | | | | | | | | |
| | | | | | | | | | 0.0 |
| | | | | | | | | | 0.0 |
| | + | | | | | | | | |
| | | | | | | | | | 0.0 |
| | + | | | | | | | | 0.0 |
| | | | | | | | | | 0.0 |
| | | | | | | | | | 0.0 |
| | | | | | | | | | 0.0 |
| | | | | | | | | | 0.0 |
| | | | | | | | | | 0.0 |
| | | | | | | | | | |
| Subtotal (Hours) | 84.0 | 84.0 | 424.0 | 0.0 | 4.0 | 24.0 | 24.0 | 10.0 | 654.0 |
| | 01.0 | 0.1.0 | | 0.0 | | | | | |
| | | | | | | | | | |
| | Hours | | \$/Hour | | | | | | |
| | Hours | | -φ/ΠOUI | | | | | | |
| | | | * ~~ ~~ | | <u> </u> | | | | |
| Senior Project Engineer, Matt Rief | 84.0 | | \$39.90 | | \$3,352 | | | | |
| Senior Technician, Zack Loomis | 84.0 | | \$20.10 | | \$1,688 | | | | |
| Senior Construction Observer, James McClellan | | | \$22.84 | | \$9,684 | | | | |
| Associate Engineer, Ryan Kavan | 0.0 | | \$25.48 | | \$0 | | | | |
| Survey Manager, Jai Andrist | 4.0 | | \$28.85 | | \$115 | | | | |
| Senior Surveyor, Jesse Hurt | 24.0 | | \$20.00 | | \$480 | | | | |
| Assistant Surveyor, Jaden Hurt | 24.0 | | \$14.00 | | \$336 | | | | |
| Clerical, Enid Cederlind | 10.0 | | \$16.15 | | \$162 | | | | |
| | 10.0 | | <i>\</i> 10.10 | | φ102 | | | | |
| | | | Direct | bor Subtotal: | ¢15 017 | | | | |
| | + | | | abor Subtotal: @ 160.00%: | \$15,817 \$25,307 | <u> </u> | | | |
| | | | Overnead | @ 160.00%: | \$25,307 | | | | |
| | | | | | | | | | |
| | | | | Subtotal | \$41,124 | | | | |
| | _ | | | | | | | | |
| <u> </u> | | | | Profit (10%): | 4,112 | | | | |
| | | | | | | | | | |
| | | | | Total Labor: | | | \$45,237 | | |
| | | | | | | | | | |
| | | 1 | 1 | | | | | | |
| Direct Costs | 1 | | Amount | | | 1 | 1 | | |
| Mileage | | | \$300 | | | | | | |
| Mileage | | | | | | | | | |
| | | | 0400 | | | 1 | | | - |
| Phone | | | \$160 | | | | | | |
| Phone Postage | | | \$20 | | | | | | |
| Phone Postage Copies | | | | | | | | | |
| Phone Postage | al: | | \$20 | | \$500 | | | | |
| Phone Postage Copies | al: | | \$20 | | \$500 | | | | |
| Phone Postage Copies | al: | | \$20 | | \$500 | | | | |
| Phone Postage Copies | al: | | \$20 \$20 | Direct Costs: | \$500 | | \$500 | | |
| Phone Postage Copies | al: | | \$20 \$20 | | \$500 | | \$500 | | |
| Phone Postage Copies | al: | | \$20 \$20 | | \$500 | | \$500 | | |
| Phone Postage Copies | | Increased | \$20 \$20 | Direct Costs: | \$500 | | | | |
| Phone Postage Copies | | Increased | \$20 \$20 | | \$500 | | \$500 | | |
| Phone Postage Copies | | Increased | \$20 \$20 | Direct Costs: | \$500 | | | | |
| Phone Postage Copies | | Increased | \$20 \$20 | Direct Costs: | \$500 | | | | |

NDOR Project No. STPAA-5436 (4) Control No. 42427 CAPITAL AVENUE PAVING IMPROVEMENTS Supplemental #2 Exhibit "S2B" Page 1 of 1

EXHIBIT S2A Scope of Services Capital Avenue Paving Improvements City of Grand Island PROJECT NO. STPAA-5436(4), C.N. 42427 Supplemental #2 Construction Engineering Services

Wage Rate Increases

From the original contract dated September 8, 2006, Olssons had estimated that our total labor costs, including overhead and profit would be \$321,698.00. This was based on a construction start date of January 1, 2007 and an anticipated completion date of January 1, 2008, with Olsson Associates expending 5,498 hours for the agreed scope of work. Olssons did incur some labor costs for utility relocations prior to construction in 2006 and 2007. However due to factors beyond our control the project was not awarded until May 13, 2008 and construction did not start until August 26, 2008. Olsson Associates has incurred additional costs due to salary and direct expense increases since the original contract was executed. The annual salary increase for the City of Grand Island non-union staff was 4% for 2007, 5% for 2008, and 3% for 2009. Below is a table showing percentage of work completed each year of the original contract labor. An inflation rate for the annual salary increase was applied for wages incurred on the project at 4% for 2007 and 2008 and 3% for 2009. The total adjustment for inflation is **\$31,497** on the original contract labor.

| CONSTRUCTION ENGINEERING COSTS | | | | | | | |
|--------------------------------|-----------------------|---------------|-----------|-------|--------------|--|--|
| Original | Contract Labor Amount | \$ 321,698.00 | | | | | |
| | | | Inflation | | T () | | |
| Year | % Work Completed | @ | Rate | Total | | | |
| | | | | | | | |
| 2006 | 5.20% | | 0.00% | \$ | - | | |
| 2007 | 5.20% | | 4.00% | \$ | 669.13 | | |
| 2008 | 19.60% | | 8.16% | \$ | 5,145.11 | | |
| 2009 | 70.00% | | 11.41% | \$ | 25,682.76 | | |
| | | | | | | | |
| ADJUSTMENT FOR INFLATION | | | | | 31,497.00 | | |

NPDES Permit

A Storm Water Pollution Prevention Plan (SWPPP) was developed as required for the Construction Storm Water Notice of Intent (CSW-NOI). This included creating a detailed erosion control plan for the project which was incorporated into the SWPPP. Construction Storm Water Notice of Intent (CSW-NOI) was completed and then fully executed. Storm Water bi-weekly inspections were completed as part of the SWPPP including additional inspections after 1/2" rain events. This was not a requirement when original agreement was signed in 2006.

PROJECT NO. STPAA-5436(4) CONTROL NO. 42427 CAPITAL AVENUE PAVING IMPROVEMENTS SUPPLEMENTAL #2 EXHIBIT S2A Page 1 of 2

Extended Construction Schedule

The original agreement assumed 52 weeks of construction and supplemental agreement #1 assumed 8 weeks of construction for a total of 60 weeks of construction. Construction started August 26, 2008 and extended thru the winter except for approximately a 2 week shut down for winter conditions. As of October 26, 2009, sixty-two (62) weeks had passed since the construction start date. Construction was shut down December 7, 2009 and construction was completed in spring 2010. This is approximately an additional 6 weeks of construction for punch list items. Major contributing factors in extending construction period were the additional time required for subgrade stabilization and for by-pass sanitary sewer pipes/manholes for the future lift station. Another factor was additional utility relocations.

Construction Administration

We also anticipate a total of 20 pay requests for the project. This is an increase of 6 pay requests from the original agreement and supplemental #1. Also, we assumed 3 change orders but the project required 4 to complete.

Additional Construction Phasing Exhibits

The original plans called for 3 primary phases. There have been several changes to the construction phasing from the original phasing plan facilitated by the Contractor. We have completed 11 construction phasing traffic control plans for the project and 5 informational exhibits to distribute to landowners. We are requesting additional time to create the construction phasing traffic control exhibits and landowner.

Property Pins

Setting property pins for the new right of way takings for the project. The pins had not been previously set because of the construction limits and this task was not included in the original scope.

RESOLUTION 2010-367

WHEREAS, on September 26, 2006, by Resolution No. 2006-273, the City Council of the City of Grand Island approved an agreement with Olsson Associates of Grand Island, Nebraska to perform construction engineering services to widen Capital Avenue form the Moores Creek Drainway to Webb Road at actual costs with a maximum of \$346,703.00; and

WHEREAS, on September 9, 2008, by Resolution No. 2008-243, the City Council of the City of Grand Island approved Supplemental Agreement #1 to the agreement with Olsson Associates for additional services during construction work at actual costs with a maximum of \$35,000.00; and

WHEREAS, additional construction engineering services are required for development of a Stormwater Pollution Prevention Plan (SWPPP), an extended contract schedule, and relocating property pins in connection with the project; and

WHEREAS, costs of the additional services shall not exceed \$77,234.00.

NOW, THEREFORE, BE IT RESOLVED BY THE MAYOR AND COUNCIL OF THE CITY OF GRAND ISLAND, NEBRASKA, that the supplemental to the original agreement with Olsson Associates of Grand Island, Nebraska is hereby approved.

BE IT FURTHER RESOLVED, that the Mayor is hereby authorized and directed to execute the supplemental to the original agreement for such services on behalf of the City of Grand Island.

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Adopted by the City Council of the City of Grand Island, Nebraska, December 21, 2010.

Jay Vavricek, Mayor

Attest:

RaNae Edwards, City Clerk

Approved as to Form ¤ _____ December 17, 2010 ¤ City Attorney