## **Responses to Questions**

*Q1:* What was specifically missed by the Consulting Engineer?

Q2: Since we knew in March, can you help me to understand why we are just hearing about these oversights now?

The staff was alerted to the missed items when we interviewed the Owner's Representatives in March/April, and the actual cost increase was determined by the consulting engineer on May 8, 2020.

*Q3:* What were the "other costs not anticipated by all the contractors"?

Q4: Please provide a detailed list of line items that were missed and the additions/changes.

On 1/14/20, the City's consultant for the SR 91 North Turn Lane (NTL) project provided their final certified estimated cost of the project. At that time, the base estimated cost was \$4,867,744.34 + 6% contingency = \$5,159,809 total project cost estimate. This cost was used for the Council Permission to Bid & Award the project. The City staff & ODOT reviewed the cost estimate

Bid Advertising for the project started on 4/19/2020. Prior to the bid opening on May 12, the City updated the consultant's estimate based upon the review comments from Owner's Representative and the interviews conducted in April and plan errors identified were submitted to the Consultant to update for the bid process. The revised base estimate was changed to \$5,088,869.98 which was an increase of approximately \$202,000 over the original estimate from 1/14/2020. The total revised estimate plus a 6% contingency was \$5,394,202.18.

The additional items ("Missed by the Consulting Engineer") added prior to the bid opening that were identified by the Owner's Representatives were as follows:

- 1. +\$14,880.00 for Linear Grading Bid Item Added due to ODOT required Spec Change from 2016 to 2019 via email dated 3/10/20.
- 2. +\$62,465.00 for Partial Depth Pavement Repair Bid item due to units in plan error that used 500 square yards (SY), but general summary & bid tab used cubic yards (CY). Error caught 3 days prior to bid. In order to avoid an addendum, requiring bid date change which would jeopardize award date requirement by FHWA, unit cost was changed to reflect estimated CY cost.
- 3. +\$14,400.00 for Short Side Water Service Connections Item Added prior to bid to Meet City of Akron Construction Needs
- 4. +\$22,500.00 for Long Side Water Service Connections Item Added prior to bid to Meet City of Akron Construction Needs
- 5. \$75,000.00 for additional Maintenance of Traffic Bid Item due to plan error found prior to bidding which required 100 CY allowance of additional base asphalt = 100 CY x \$75 = \$75,000. Additional asphalt needed to maintain traffic near area of Darrow Rd Park where roadway profile is being raised, ½ road per phase.
- 6. \$5,953.64 for increased duration of job trailer on site from 8 months 12 months match anticipated project duration
- 7. \$5,000.00 for added preconstruction video as separate bid item prior to bidding to meet Hudson Standards
- 8. \$1,600.00 for added separate bid item for pipe removal costs to better meet anticipated field conditions of abandoned, small dia. pipe needing removed

On May 12, the City opened bids for the SR 91 North Turn Lane project. The apparent low bidder was Liberta Construction with a total base bid amount of \$5,765,572.21, which was over the revised estimate,

but within 10% of the engineer's estimate and therefor acceptable per Ohio law. Staff analyzed all the bid tabs to identify which bid items came in over the estimate.

The items that significantly increased the overall project cost are as follows:

- 1. Bid Item 1- CLEARING AND GRUBBING, AS PER PLAN came in \$299,500.00 over the estimate
- 2. Bid Item 39 4" CONCRETE WALK, AS PER PLAN came in \$100,000 over the estimate
- 3. Bid Item 57 TOPSOIL, AS PER PLAN came in \$85,000 over the estimate
- 4. Bid Item 95 PARTIAL DEPTH PAVEMENT REPAIR (441), AS PER PLAN came in \$72,000 over the estimate
- 5. Bid Item 98 ASPHALT CONCRETE BASE, PG64-22, AS PER PLAN came in \$70,000 over the estimate
- 6. Bid Item 99 AGGREGATE BASE, AS PER PLAN came in \$38,000 over the estimate
- 7. Bid Item 103 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (446), AS PER PLAN came in \$38,000 over the estimate.

## Q5: Council approval & timeline?

The City will need to enter into an agreement with the contractor in June, based on the federal funding requirements for ODOT projects.

Q6: We need to do a better job at identifying the costs of projects. How can we ensure that this does not happen again?

The Current Review Process for Estimates are as follows (1-3):

- 1. Consulting Engineer certifies cost estimate & uses ODOT cost estimate tables.
- 2. City reviews estimate with Engineering and Construction Inspectors.
- 3. ODOT reviews the Consultant's Estimate against their own estimate tables.

Additional recommendations that we will be considering in the future on these larger projects:

- 4. Obtain a second Consulting Engineer's Opinion on the submitted Cost Estimate. This will increase the cost to the overall project design. This would eliminate any large errors, but since the ODOT Estimate Tables are used by most Consultants, we most likely will not see much difference in the cost.
- 5. Owner's Rep. review construction process. This will increase the cost to the overall project design. This would eliminate any design errors and reduce potential cost of the project prior to bidding vs. in change orders to the Contractor.
- 6. Move the advertising dates of all future ODOT project bid dates at least 3 months in advance for any future re-bidding.