

MEMORANDUM

DATE: February 26, 2016

TO: Mayor and Council

FROM: Michael G. Nearing, P.E. *MGN*
Senior Project Manager

RE: Stadium Boulevard Reconstruction Project – Hutchins Ave. to Kipke Dr.
Project Status – Revised Project Plan
File No. 2014-035.17_(mgn)

We are writing to address the current status of the subject project, our intended course of action for completing the project, and the most-current project timeline given the bids that were received for the work on February 5, 2016 through the Michigan Department of Transportation (MDOT.)

Analysis of February 2016 Bid Results

On February 5, 2016 bids were received for the project through MDOT. Three bids were received for the project. They were as follows:

Hoffman Brothers, Inc. - \$12,431,934.13
Dan's Excavating, Inc. - \$12,612,359.45
E. T. MacKenzie Company - \$14,652,000.00

Engineer's Estimate - \$8,342,204.55

The lowest responsible bidder's price was approximately 49% above the Engineer's Estimate. Based on the bids received and the financial resources available to construct the project, we informed MDOT on February 9, 2015 that we were formally rejecting the bids received and would plan on reconfiguring the project and re-bidding it at a later date. Based on our review of the prices that we received for the work, it appears to us that several factors led to the project being over budget. They were:

1. The bidding climate in the road construction industry has dramatically changed with the State Legislature and the U.S. Congresses' passing of legislation to ensure funding for surface transportation for the next five years. It appears that contractors are no longer fearful of not having enough work;
2. Several large projects will be occurring this construction season that are absorbing a significant amount of the capacity in the road building industry (i.e. the I-275 Reconstruction Project, I-75 Widening, Detroit Metro Airport runway reconstruction);
3. The Buy America requirements that are now included in construction contracts as part of the federal funding have increased the cost of the iron and steel products by a reported 10 to 25% depending on the particular item;

Memo to Mayor and Council

Re: Stadium Boulevard Reconstruction Project – Hutchins Ave. to Kipke Dr.
Project Status – Revised Project Plan
File No. 2014-035.17_(mgn)

Page 2

4. The project is a large and complicated roadway reconstruction project that is less than “straight-forward” such that there are not many contractors with the capability to perform the work. This point, coupled with Item No. 1, increased the cost of the work;
5. Prices from the last several years were artificially low due to the unstable state and federal funding program and contractor’s concern with regard to the amount and type of work available; and
6. We did not accurately estimate some of the work items.

We will study the bid results obtained, review our assumptions regarding the anticipated project costs, discuss the project in greater depth with prospective contractors and material suppliers, and create a more accurate revised construction cost estimate for the project.

Anticipated Next Steps – Stadium Boulevard Reconstruction

Given the fact that project as originally conceived is approximately \$4.1M above the Engineer’s Estimate, we do not have the financial resources available to complete the project for the bid amount. Also, there are several items of work that we do not feel it is prudent to compromise in order to preserve the integrity of the project and the values of the community as expressed at our three public engagement meetings (e.g. on-street bikelanes, completion of the sidewalk gap along the south side of E. Stadium Boulevard, storm water quality and quantity improvements that will allow the City to perform some of the work at a reduced cost due to SRF funding opportunities, etc.), it is evident that the only way we can construct the project is to revise the project limits. The existing roadway pavement sections both east and west of S. Main Street are not in good condition. However, the segment of pavement along E. Stadium Boulevard is in worse condition than the segment west of S. Main Street.

Consequently, the section of E. Stadium Boulevard from S. Main Street to Kipke Drive will be reconstructed as part of the current project in 2017, which will also include the reconstruction of the South Main Street/Stadium Boulevard intersection. By constructing this segment of roadway first, it also allows us to update the underground utilities in a contiguous and logical fashion. Pedestrian improvements at the Stadium/Edgewood intersection will proceed as planned in 2016 (see below for more information).

Due to the bid prices we have received, we are examining the individual elements of the project to determine if our original project assumptions are still valid. For example, we originally intended on constructing E. Stadium Boulevard with concrete pavement in order to provide the most long-lived pavement section. However, given the prices that were received, we are going to evaluate an asphalt pavement section and

Memo to Mayor and Council

Re: Stadium Boulevard Reconstruction Project – Hutchins Ave. to Kipke Dr.
Project Status – Revised Project Plan
File No. 2014-035.17_(mgn)

Page 3

are performing a life-cycle cost analysis to verify which type of pavement section is most economical and affordable over its entire life. Also, due to some of the prices we received with regard to the water mains that are required to be replaced within the project limits, we are also evaluating alternative materials such as PVC and/or HDPE pipe. While we presently believe that the cost advantage of PVC or HDPE may not be that significant, we are examining them to ensure that our assumptions are still valid. Additionally, we are examining the possibility of closing E. Stadium Boulevard completely to traffic and allowing the contractor to work on the segment of the roadway from Kipke Drive to S. Main Street using a complete roadway closure. In order to perform the work in this manner, we would utilize the roadway closure that was in place during the reconstruction of the Stadium Bridges Project in 2012. While it's difficult to accurately predict the actual cost savings, it is assumed that they will be significant. Also, this will allow the contractor to construct this portion of the project in less time.

It appears that we will be able to prepare revised plans for the reconfigured project such that the project can be included in either the August or September 2016 MDOT Bid Letting. If the project is included in either of these bid lettings, we believe that it is prudent to begin the construction of the project after the last University of Michigan Home Football Game in mid- to late-November, 2016. In fact, the Contractor could work most of Winter 2017 on underground utilities and related work under a complete roadway closure. This would allow us to utilize much more of the calendar year for construction than the original project schedule allowed. As stated earlier, we are closely examining this option.

If we utilize the full-closure scenario with the reconstruction of E. Stadium Boulevard, it appears at the time of this writing that we will be able to reconstruct both the S. Main Street/Stadium Boulevard intersection and E. Stadium Boulevard from S. Main Street to Kipke Drive and have them fully open to traffic by the end of August 2017. We are still planning on reconstructing the S. Main Street/Stadium Boulevard using concrete pavement as we strongly believe that concrete pavement will be more durable given the multitude of turning and starting and stopping movements in this intersection.

Finally, in order to re-configure the project to be able to be completed within the available resources, it will be necessary to amend the design contract with our consultant, Northwest Consultants, Inc. in the amount of \$92,968. This amount also includes \$17,836 for additional design tasks that were outside of the original scope of services of our agreement. Some of the additional funds will be used to amend the already completed design of the W. Stadium Boulevard portion of the project for bidding and construction at a later date. Note, even though we are taking these steps at this time, it will be necessary to re-visit the design of the roadway, utilities, maintenance of traffic plans, and the project specifications in order to update them to the future

Memo to Mayor and Council

Re: Stadium Boulevard Reconstruction Project – Hutchins Ave. to Kipke Dr.
Project Status – Revised Project Plan
File No. 2014-035.17_(mgn)

Page 4

conditions when the project is under taken. A contingency amount of \$94,000 was approved by Council with the approval of the original design agreement to cover costs such as these.

W. Stadium Boulevard Reconstruction – S. Main Street to Hutchins Avenue

Given the current federal and local funding that is available and other currently planned projects in the next several fiscal years, the next opportunity for Federal Funds to reconstruct the final segment of W. Stadium Boulevard would be in 2021. Given the condition of the existing pavement, we are considering options for short-term repairs to this segment of roadway that will allow us to effectively bridge the gap between the poor condition of the existing pavement and its poor drainage until such time as it can be properly reconstructed.

With our recommendation to postpone construction along W. Stadium Boulevard from S. Main Street to Hutchins Avenue, we will have additional time to more thoroughly examine, prioritize, and determine funding opportunities for the storm water related issues that currently exist at the Edgewood Drive/Snyder Avenue intersection. It is probable that work could be included in the W. Stadium Reconstruction Project from Hutchins Avenue to S. Main Street. However, it remains uncertain at this writing if that particular storm water element can be added to this project or if it is more sensible to perform the work as its own standalone project. Additional planning and study is needed prior to a final decision being made regarding this work. Both the road reconstruction work and the stormwater improvements will be considered in upcoming Capital Improvements Plan update efforts.

Additionally, given the public interest in the pedestrian elements of the Edgewood Drive/W. Stadium Boulevard intersection, we are planning to install the revised sidewalk ramps and the RRFB at this intersection to facilitate pedestrian crossings during Summer 2016. This will allow us to study the operation of the intersection and verify the safety of this crossing prior to its reconstruction.

Memo to Mayor and Council

Re: Stadium Boulevard Reconstruction Project – Hutchins Ave. to Kipke Dr.
Project Status – Revised Project Plan
File No. 2014-035.17_(mgn)

Page 5

Conclusion

Based on all the above information, and as described earlier, we believe reconstructing E. Stadium Boulevard from S. Main Street to Kipke Drive and reconstructing the S. Main Street intersection from Snyder Avenue to about 300' south of Stadium Boulevard during 2017 is our best option for this project. This would also include the replacement of the existing domestic and raw water mains, storm water quality and quantity improvements, on-street bikelanes, the completion of the sidewalk gap along the south side of E. Stadium Boulevard, and all related improvements.

MGN:mgn (memorandum – stadium – revised project approach – final - 160226.docx)

cc: Tom Crawford, Interim City Administrator
Craig A. Hupy, P.E., Public Services Area Administrator
Nicholas S. Hutchinson, P.E., City Engineer