

City Council Memorandum

To: Mayor Fasbender & City Council Members

From: Nick Egger – Public Works Director

Date: October 31, 2019

Item: Resolution - Rejection of Bids - Water Chlorination System Project

COUNCIL ACTION REQUESTED

Council is requested to adopt the attached resolution to reject the bids for the Water Chlorination System project and refer the project back to staff for scope and project delivery modifications.

BACKGROUND INFORMATION

The City unfortunately received only two bids for this project on September 25th, with the lowest bid, submitted by Minnesota Mechanical Systems of Savage, MN, coming in about 35% higher than the final construction cost estimate. The amount of the bid was \$477,880, which is roughly \$127,000 more than the \$351,000 final construction cost estimate we provided earlier in the summer.

With just two bidding contractors, we understood that there likely was a market force impact heavily playing into the low level of competition, and that we were actually competing for contractors' interest in the project more heavily than anticipated. In discussions with the low bid contractor, they assigned much higher expenses to some of the project elements than we could reasonably anticipate as the final project design and scope were being put together. I have attached a written summary from our consultant engineer, Ryan Capelle, of Stantec, which provides a more in-depth discussion of the matter.

FINANCIAL IMPACT

The City strongly desires to deliver this project within budget parameters. Awarding a contract for the amount bid would overrun the budget significantly. Therefore, staff is recommending rejection of the bid and referral of the project back to staff to work with Stantec and restructure the project parameters and delivery method with aim at issuing a new solicitation for bids over the winter. Consequently, we believe that the total working timeline of the project will need to change such that we'd expect work to be wrapping up in the 4^{th} quarter of 2020 rather than the 2^{nd} quarter.

STAFF RECOMMENDATION

Staff is recommending the Council adopt the attached resolution to reject the bids received on September 25th.

ATTACHMENTS

- Resolution
- Memo from Stantec

CITY OF HASTINGS

DAKOTA COUNTY,	Minnesota
RESOLUTION NO.	

RESOLUTION RECEIVING AND REJECTING BIDS WATER CHLORINATION SYSTEM PROJECT

WHEREAS, pursuant to an advertisement for bids for water chlorination systems implementations, the following bids was received on September 25, 2019, and tabulated according to law:

			Add	Add
	<u>Bidder</u>	Base Bid	Alternate <u>No. 1</u>	Alternate <u>No. 2</u>
	Minnesota Mechanical Systems, Inc. – Savage, MN	\$477,880.00	\$19,200.00	\$36,300.00
	Magney Construction – Chanhassen, MN	\$578,400.00	\$35,000.00	\$81,800.00

and

WHEREAS, these bids are both much higher than the estimate for this portion of the work, and higher than City budget parameters.

WHEREAS, the City desires maximum competition for this contract, and delivery of a fully functional project within budget parameters.

NOW, THEREFORE BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF HASTINGS AS FOLLOWS:

- 1. The City hereby rejects the bids.
- 2. This project is referred to staff and engineering consultants for re-scoping and alteration of project delivery conditions.

ADOPTED BY THE CITY COUNCIL OF HASTINGS, MINNESOTA, THIS 4TH DAY OF NOVEMBER, 2019.

Ayes:		
Nays:		
		Mary D. Fasbender, Mayor
ATTEST:		
	Julie Flaten, City Clerk	

SEAL



Stantec Consulting Services Inc.
733 Marquette Avenue Suite 1000, Minneapolis MN 55402-2309

October 30, 2019 File: 193804617

Attention: Nick Egger 1225 Progress Drive Hastings, MN 55033

Dear Nick,

Reference: Chlorine Systems Implementation

Per your request, this letter provides context to explain the bid results for the Chlorine Systems Implementation Project that was bid on September 25, 2019. As you may recall the estimated cost for the work was approximately \$350,000 as provided during the Disinfection Evaluation Study. The low bid amount was \$477,880 from Minnesota Mechanical Services (MMS).

We understand that cost estimates provide valuable insight to City leaders when making decisions on budgets and directing funds appropriately. When bids come in higher than expected it places additional stress on those making decisions and we sympathize with the position you are placed in due to the bid results for the project referenced above. Our team worked collaboratively with your staff during the design process to attempt to match the construction effort to the budget. Throughout the design process and elements of work were identified, verified with staff (and with appropriate authorities having code jurisdiction) and considered items to be included or omitted along the way.

Historically our knowledge and experience helps us deliver accurate estimates that prepare communities for difficult decisions. We acknowledge that the estimate provided in the evaluation stage of this project did not provide the reflection of the actual bids that we strive to achieve.

While we acknowledge the importance of accurate cost estimating, it is also appropriate to acknowledge that the nature of estimating, particularly estimating retrofitting work, is inherently difficult. This is particularly true when a project requires unique design conditions at multiple sites with multiple trades and varying degrees of retrofit at each location. The proposed project involves five sites and includes technical work from process, electrical, mechanical, structural, architectural, and civil trades.

When other factors such as competition, market conditions, code interpretation/compliance and widely varying material costs are mixed in it adds another layer of difficulty and unpredictability to the art of estimating.

Unfortunately, the combination of under estimating/omissions in the estimate, market conditions, and a greater supply of projects available to contractors conspired to create a less competitive bid for this project during the late summer/early fall. The bidding environment resulted in only two general contractors bidding on the proposed project and in some cases, such as electrical and controls-integration, only one subcontractor providing pricing for their portion of work. It's worth noting that the bids could have been higher yet given that MMS offered a price that was \$100,000 less (17%) than the second bidder (Magney Construction).

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Reference: Chlorine Systems Implementation

In moving forward from where we are, perhaps it is more important that we understand how the bid costs compared to the estimate so that priorities can be identified, and decisions can be made on how to proceed. We have been communicating with MMS to identify specific areas where the bids varied from the estimate prepared during the study earlier in the year. The following bullets summarize our findings:

Summary of Variances Between Bid and Estimate:

- 1. Electrical/Controls: The cost associated with electrical / controls work was higher than expected.
 - Variance: \$52,000 more than estimate. The bid included approximately \$162,000 for this area of work while our estimate accounted for approximately \$110,000.
 We suspect that the difference can be attributed to underestimating electrical and controls costs and less than usual competition due to limited sub-contractors vying for the work.
- 2. Mobilization: Our estimate did not capture the extent of cost assigned to mobilization at the 5 sites.
 - Variance: \$14,000 more than estimated. The cost for mobilizing multiple sites was greater than expected.

3. Cast-in-place concrete:

 Variance: \$27,000 more than estimated. The low bid included \$42,000, our estimate included approximately \$15,000. Admittedly during the study only, the interior space modifications were considered, therefore the estimate was low because it did not include exterior concrete needs.

4. Painting:

Variance: \$15,000 more than estimated. Painting of chemical feed lines and electrical conduit was omitted from the estimate during the study. This issue was caught during design and discussed with Staff. We talked about the City doing the painting except for the outside painting. In the end, some painting was left in the project hoping to keep staff from having to do the paint work and that the bids would be competitive enough to absorb the cost.

5. Chemical Feed Systems:

Variance: \$19,000 more than estimated. An additional chlorine feed system was added at the WTP. During design the decision was made with input from suppliers and Staff to accommodate an additional chlorine storage system at the WTP to decrease interactions with chlorine gas during bottle replacement. The bid included an additional \$19,000 for this work. This was not included in the original estimate and is not an absolute requirement for operation. However, we believe the provisions should be made. Therefore, it presents an opportunity for the City to

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Reference: Chlorine Systems Implementation

remove it from consideration in the current project scope and perhaps it can be reserved for a future budget as resources allow.

We understand modifying the scope of work after the bid can be a delicate issue. It should be explained that retrofit projects often include a complex mix of work tasks and require specific direction to accurately define the work being specified. This level of description is difficult to describe in an itemized line item on a bid form. For this reason, we have found that lump sum pricing with a short list of potential alternates keeps the bid form more manageable and minimizes disputes during the construction phase. Rather than creating a cumbersome bid form we typically require a detailed breakdown of pricing from the contractor within a reasonable period of time after the bid. This allows for adequate tracking of work, but does make it more difficult to itemize work "ala carte" in the event modifications in scope are desired after the bids are received.

In conclusion, we hope that the information provided herein provides you with the needed context to understand how the costs estimated during the evaluation study differ from the bids received. There are many factors that contribute to the variance. Please know that the estimate was based upon reasonable hourly rates, reasonable hours, and reasonable judgement. We noted that no local contractors or subs participated in the bids. Perhaps the shorter bid advertisement period and time of year also contributed to higher bids.

Regardless of the reasons for the results, we are committed to helping you move forward and are prepared to discuss options for how to proceed as you see fit.

Regards,

Stantec Consulting Services Inc.

Ryan Capelle PE (MN, ND, WI)

Senior Associate Phone: 651 604 4857 Fax: Fax Number

Ryan.Capelle@stantec.com

Attachment: None

c. C.C.