



AGENDA ITEM EXECUTIVE SUMMARY

Agenda Item number: 5.f

Title:

Recommendation to Approve Notice of Intent to Award for the Phosphorus and Digester Construction Project

Presenter:

Tim Wilson

Meeting: Government Services Committee

Date: June 26, 2017

Proposed Cost: \$13,294,896

Budgeted Amount: \$13,446,379

Not Budgeted:

Executive Summary *(if not budgeted please explain):*

Staff is requesting approval of a Notice of Intent to Award by the City Council for the Phosphorous Removal and Digester Improvement Project. City staff and Trotter and Associates, Inc. (TAI) went out to bid for the construction project in April.

The EPA bids require a 45 day minimum bidding process. Bids were opened on June 13th and have been reviewed by City Staff and TAI. Attached is a Letter of Recommendation and Bid Summary from TIA. There were three (3) bids submitted on the project with the low bidder being IHC out of Elgin, IL in the amount of \$13,294,896. Construction costs in the amount of \$13,446,379 have been budgeted and we have received a preauthorized loan approval.

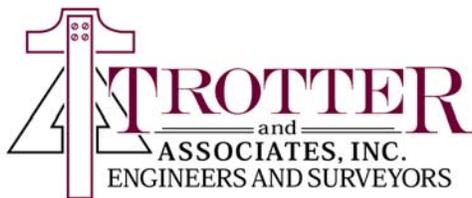
As part of the IEPA Loan Program process, the Notice of Intent to Award along with the bid packet will be submitted to IEPA for review. Once the documents are reviewed and approved by IEPA, a Notice of Award will be issued.

Attachments *(please list):*

* Letter of Recommendation * Bid Summary * Notice of Intent to Award

Recommendation/Suggested Action *(briefly explain):*

Recommendation to Approve Notice of Intent to Award to IHC Construction Companies for the Phosphorus Removal and Digester Improvements Project in the amount of \$13,294,896 and a Resolution authorizing the Mayor and Clerk to execute the same on behalf of the City of St. Charles.



June 15, 2017

Mr. Tim Wilson
Environmental Services Manager
City of St. Charles
200 Devereaux Way
St. Charles, Illinois 60174

**Subject: City of St. Charles – 2017 Phosphorus Removal and Digester Improvements
Recommendation to Award**

Dear Mr. Wilson,

The design of the improvements for the City of St. Charles' Main Wastewater Treatment Facility to meet a 1 mg/L phosphorus limit began in April of 2016. The scope of work included site piping, construction of a primary sludge fermenter, retrofitting of the existing aeration basins with mechanical mixers, construction of an internal recycle pump station and a chemical feed and storage system for process optimization. In August of 2016, the City expanded the scope of improvements to include refurbishing the existing egg-shaped anaerobic digester structures, replacing all piping, pumps, boilers, and gas safety equipment within the complex, and replacing the existing digested sludge storage tank with a new structure that will have gas-storage capabilities. The City Council approved \$15,841,494 to cover the design and construction of this project as part of the \$17,121,000 loan authorizing ordinance 2016-M-29 in May of 2016.

During the design phase of the project, the City and design team identified several opportunities to enhance operational performance and control. While most of these items could be incorporated within the original project budget, there were five items which were clearly out of scope. Trotter and Associates, Inc. designed these additional enhancements and structured the bid documents such that the base bid would include the original scope of work and the five enhancements would be included as Additive Alternates as budgets allowed.

- #1 Provide and install mechanical mixers with sound enclosures on the lids of the anaerobic digesters. Engineer's Estimate = \$305,000
- #2 Provide and install sound enclosures on the mechanical mixers in the biological process and on the sludge storage tank cover. Engineer's Estimate = \$91,000
- #3 Provide and install sensors for Nitrate and Total Suspended Solids to enhance biological process monitoring. Engineer's Estimate = \$111,704
- #4 Provide and install three analyzers that utilize optical water monitoring to enhance biological process monitoring. Engineer's Estimate = \$307,000
- #5 Provide and install an additional control panel to minimize energy consumption and optimize performance of three proposed aeration blowers. Engineer's Estimate = \$79,000

TAI established within the bid documents that the low, responsible, responsive bidder would be determined on the basis of the Base Bid plus the selected Additive Alternate(s). While each Alternate would have a beneficial impact on the long-term operation and maintenance of the WWTP, it was recognized that the City may not be able to finance all of the desired enhancements. Prior to the bid opening, City Staff established an order of preference for selection of the Alternates which is as follows: #2, #3, #5, #1 and #4. This list was not made known outside of City Staff and TAI.

*City of St. Charles – 2017 Phosphorus Removal and Digester Improvements
Recommendation to Award
June 15, 2017
Page 2 of 3*

The City received bids on Tuesday, June 13, 2017 in accordance with the advertisement. Three bids were received for the project and these bids were opened and read aloud in Council Chambers. The following is a tabulation of the bids received compared to the Engineer’s Estimate:

	Engineer's Estimate	IHC Construction Companies LLC	Joseph J. Henderson & Son, Inc	Williams Brothers Construction, Inc.
Lump Sum Base Bid	\$ 13,417,920	\$ 13,095,393	\$ 13,108,000	\$ 13,530,000
Additive Alternate #1	\$ 305,000	\$ 323,531	\$ 312,000	\$ 320,000
Additive Alternate #2	\$ 91,000	\$ 45,138	\$ 210,000	\$ 110,000
Additive Alternate #3	\$ 111,704	\$ 92,518	\$ 109,000	\$ 100,000
Additive Alternate #4	\$ 307,000	\$ 442,138	\$ 429,000	\$ 410,000
Additive Alternate #5	\$ 79,000	\$ 61,847	\$ 71,000	\$ 65,000

IHC Construction Companies, LLC (IHC) of Elgin, Illinois is the apparent low bidder. TAI has worked extensively with all three bidders. The largest project that TAI has worked on with IHC was the Algonquin Wastewater Treatment Facility Expansion - Phase 6 in 2006 (\$17.4 Million). That project included implementation of biological process upgrades to remove phosphorus similar to the design for St. Charles. TAI is currently working with IHC on the Roselle FOG and Devlin Digester Covers project (\$1.2 Million) which opened bids on June 1, 2017. IHC is located in Elgin, Illinois, and is well known to TAI and the wastewater industry. In addition, we have reviewed the bidding documents, required certifications and disadvantaged business enterprise (DBE) documentation requirements of the Illinois EPA Loan Program and verified that they have met all of the bidding requirements. It is therefore our recommendation that the City of St. Charles award the contract to IHC Construction Companies, LLC.

The bid from IHC was \$350,000 below the original project budget. This allows the City to select one or more of the Alternates and remain under budget. The chart below outlines the estimated project cost if the City awards the project in order of preference.

	Original Budget	Base Bid	Base + 2, 3 & 5	Base + 2, 3, 5 & 1	Base + All
Bid Amount	\$ 13,446,379	\$ 13,095,393	\$ 13,095,393	\$ 13,095,393	\$ 13,095,393
Additive Alternate #1				\$ 323,531	\$ 323,531
Additive Alternate #2			\$ 45,138	\$ 45,138	\$ 45,138
Additive Alternate #3			\$ 92,518	\$ 92,518	\$ 92,518
Additive Alternate #4					\$ 442,138
Additive Alternate #5			\$ 61,847	\$ 61,847	\$ 61,847
Construction Cost	\$ 13,446,379	\$ 13,095,393	\$ 13,294,896	\$ 13,618,427	\$ 14,060,565
Engineering	\$ 1,849,812	\$ 1,737,500	\$ 1,737,500	\$ 1,737,500	\$ 1,737,500
IEPA Issued Contingency @ 3%	\$ 403,392	\$ 392,862	\$ 398,847	\$ 408,553	\$ 421,817
Construction Period Interest	\$ 141,911	\$ 216,674	\$ 219,975	\$ 225,328	\$ 232,644
Total Amount to Borrow	\$ 15,841,494	\$ 15,442,429	\$ 15,651,218	\$ 15,989,808	\$ 16,452,526
Amount Above (Below) Original Budget		\$ (399,065)	\$ (190,276)	\$ 148,314	\$ 611,032

The City may select Alternates #2, #3 and #5 and remain within the original budget. If the City should select to add Alternate #1 and/or Alternate #4, it may do so and still remain within the original loan authorization of \$17.1 Million. However, this would affect Low Interest Loan funding for the future lift station projects.

City of St. Charles – 2017 Phosphorus Removal and Digester Improvements

Recommendation to Award

June 15, 2017

Page 3 of 3

Trotter and Associates, Inc. feels that incorporation of all the Alternates will provide the City of St. Charles superior process control and lower operational costs. However in order to stay within the original budget, it is our recommendation that the City of St. Charles award the contract to IHC Construction Companies, LLC for the bid amount of \$13,294,896.00 which includes Alternates #2, #3 and #5. This award should be made contingent upon approval of the Illinois EPA and execution of the loan agreement for the project. If you should have any questions or wish to discuss this further please contact me at your earliest convenience.

Sincerely,

TROTTER AND ASSOCIATES, INC.

R. Scott Trotter, P.E., BCEE
President

City of St. Charles -Phosphorous and Digester Bid Tabulation

Bid Open-

6/14/2017 1:00 P.M.

	IHC Construction Companies LLC	Joseph J. Henderson & Son, Inc.	Williams Brothers Construction, Inc.
Lump Sum Base Bid	\$ 13,095,393.00	\$ 13,108,000.00	\$ 13,530,000.00
Additive Alternate #2	\$ 45,138.00	\$ 210,000.00	\$ 110,000.00
Additive Alternate #3	\$ 92,518.00	\$ 109,000.00	\$ 100,000.00
Additive Alternate #5	\$ 61,847.00	\$ 71,000.00	\$ 65,000.00
Total Amount for Award	<u>\$ 13,294,896.00</u>	\$ 13,498,000.00	\$ 13,805,000.00

SECTION 00 51 00.10 - NOTICE OF INTENT TO AWARD

Date: June 15, 2017

To: IHC Construction Companies, LLC
1500 Executive Drive
Elgin, Illinois 60123
(847) 742-1516

Project: City of St. Charles, Illinois – 2017 Phosphorus Removal and Digester Improvements
Job Number: STC-100

The OWNER has considered the BID submitted by you for the above described WORK in response to its Advertisement for Bids and Information for Bidders.

You are hereby notified that your BID will be accepted, contingent upon Illinois Environmental Protection Agency (IEPA) approval, for items in the amount of **Thirteen Million Two Hundred Ninety Four Thousand Eight Hundred Ninety-Six Dollars and Zero Cents (\$13,294,896.00)**.

You will be required by the Information for Bidders to execute the Agreement and furnish the required CONTRACTOR'S PERFORMANCE BOND, PAYMENT BOND and CERTIFICATES OF INSURANCE within ten (10) calendar days of the final Notice of Award to be sent upon IEPA approval, to you.

Dated this ____ day of _____, 2017.

Raymond Rogina, Mayor

END OF SECTION 00 51 00.10

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