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Department of Utilities Water Treatment Facility 2281 Manitowoc Road Menasha, WI 54952 920-997-4200 tel. 920-997-3240 fax

TO:

Chairperson Greg Dannecker and Members of the Utilities Committee

FROM:

Utilities Director Chris Shaw

DATE:

June 2, 2016

RE:

Approve Amendment #1 to Robert E. Lee and Associates for the Water

Clarifier Coating Contract to increase field inspections services

resulting in an increase of \$16,000

BACKGROUND:

The City of Appleton has a contract agreement with Robert E. Lee and Associates for engineering services and field services related to the Clarifier Coating Projects at the Appleton Water Treatment Facility. Engineering services for this project include system evaluation, preparation of plans and specifications, contract administration services, and field services. This project required a structural engineer with a Professional Engineering (PE) license who has considerable knowledge of structural steel mechanical equipment and corrosion resistant coating systems. The project field services portion of the contract includes inspecting contractor's conformance with project specifications, inspecting coatings for defects and performing non-destructive dry film mil thickness testing. Additional responsibilities include reviewing tank and weir modifications.

Robert E. Lee and Associates has performed well in their role as engineer and inspector. Due to circumstances beyond Robert E. Lee and Associates control their firm has had to perform additional testing and inspecting from what originally estimated in their quote. This project work was based on time and materials. This additional work load is the result of the contractor's method of work delivery.

RECOMMENDATION:

I have reviewed the May 27, 2016 letter from Robert E. Lee and concur with their estimate of additional resources necessary to successfully complete this project. The funding source for this contract amendment would be the 2016 water treatment plant operating budget. Therefore, I recommend the Committee approve Amendment #1 to Robert E. Lee and Associates for the Water Clarifier Coating Contract to increase field inspections services resulting in an increase of \$16,000

If you have any questions regarding this project please contact Chris Shaw at ph: 832-5945.



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May 27, 2016

Mr. Chris Shaw, Director of Utilities APPLETON WATER TREATMENT FACILITY 2281 Manitowoc Road Menasha, WI 54952-8924

Dear Chris:

Robert E. Lee & Associates, Inc., (REL) has an agreement to provide engineering services associated with the recoating of two water treatment clarifiers for the City of Appleton water treatment facility. The agreement was based on our proposal, dated March 19, 2015. We estimated the total engineering fee for the scope of services on a time-and-expense basis of \$59,800. A detailed breakdown of the engineering fee for completion of the scope of services was provided with the original proposal, and is included as Attachment A to this letter.

As I explained in the e-mail transmitting our most recent invoice through May 1, our total billing is approximately \$53,700 compared to our total project budget on a time-and-expense basis of \$59,800. As we explained in previous e-mail correspondence, we had budgeted a total of 30 part-time inspection visits per clarifier for a total of 120 hours per clarifier. Through April, we have had over 80 inspection visits, resulting in approximately 260 hours for part-time inspection. The additional fee for the inspections has been partially offset by completing the design and bidding phase for approximately \$7,000 less than budgeted.

As you are aware, our effort regarding the on-site inspection is dictated by the contractor's schedule. Change Order No. 1 adjusted the Milestone No. 1 completion to March 15 and Substantial Completion to July 15. The adjusted milestone reflected a later than anticipated Notice to Proceed (November 12) and a longer schedule to complete the initial clarifier (4 months compared to 2 months). Actual completion of the initial clarifier was approximately one month later than March 15 milestone date. It is anticipated completion of the second clarifier, which was initiated April 20 with preliminary preparations, will not be completed by the July 15 Substantial Completion date. In accordance with the agreement, liquidated damages can be assessed for delay to the Contractor. However, Appleton's preference, as expressed in meetings, was to have a long lasting coating application, rather than possibly compromise quality and push for schedule completion.

Obviously, the longer it takes for the various stages of the coating process, the more site visits are required. As a reminder of the Engineer's responsibility for allowing a schedule that increases the Engineer's inspection effort, Article 9 of the Standard Conditions, Section 9.09, Paragraph B, Limitations on Engineer's Authority and Responsibilities, states the following:

"Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto...".

May 27, 2016 Mr. Chris Shaw, Director of Utilities APPLETON WATER TREATMENT FACILITY Page 2

Therefore, we advise that we will not be able to complete the on-site inspections for the second clarifier within our current time and expense budget, and are requesting an engineering amendment for our services to continue to provide part-time on-site inspection services for the additional clarifier. We are somewhat optimistic that modifications and efficiencies in the contractor's approach, as a result of knowledge gained, will result in the schedule for completion of the second clarifier in less time than the approximately four months required for the initial clarifier. However, assuming the second clarifier re-coating will require four months, and two inspection trips are required per week, we have estimated an additional 32 trips, resulting in an additional estimated fee for time and expenses of approximately \$16,000. We estimate each additional month will add an additional estimated fee for time and expenses of approximately \$4,000.

The amendment to our engineering services will address the following for the additional clarifier:

- Review contractor conformance with specifications for surface preparation and coatings and review protection devices of existing equipment.
- Review that proper coating system is being used on the project.
- Review paint application for defects, such as missed areas and excess paint runs.
- Conduct non-destructive dry film mil thickness testing of coating system at random locations after each coat.
- Review installation of fiberglass weir plates.
- Review any tank modifications required per the specifications.

Therefore, we request an amendment to our engineering services to increase our estimated fee on a time-and-materials basis from \$59,800 to \$75,800. We are pleased to answer any questions that you may have regarding our requested amendment.

Sincerely,

ROBERT E. LEE & ASSOCIATES, INC.

Terry W. Stebor, P.E.

Tim W. Silver

Water/Wastewater Engineering Manager

Mark J. Larson CPA, CGMA

President

TWS/MJL/LAR

ENC.