



Board of Public Works and Safety

Agenda Item

Cover Sheet

MEETING DATE: May 15, 2018

☒ New Item for Discussion

☐ Previously Discussed Item

☐ Miscellaneous

ITEM #: 15

INITIATED BY: John Beery

☒ Information Attached

☐ Bring Paperwork from Previous Meeting

☐ Verbal

☐ No Paperwork at Time of Meeting

MEMORANDUM

TO: BOARD OF PUBLIC WORKS AND SAFETY

FROM: JOHN BEERY

DATE: MAY 10, 2018

**RE: CITY OF NOBLESVILLE SANITARY SEWER MASTER PLAN
CONTRACT AMENDMENT NO. 1**

The draft of the Master Plan is now complete under the terms of the original contract. Staff with the Wastewater Utility have determined that there are more specific areas that required more detailed analysis than for which the original contract provided. As summary of the work is provided in the attached amendment letter to the original contract.

I recommend that the Board of Public Works and Safety approve the agreement with American Structurepoint for the update of the City's Sanitary Sewer Master Plan for an additional amount not to exceed \$55,500.



AMERICAN
STRUCTUREPOINT
INC.

May 8, 2018

Mr. John Beery, P.E.
City Engineer
City of Noblesville
16 South 10th Street, Suite 155
Noblesville, Indiana 46060

Re: City of Noblesville: Amendment No. 1 for Sanitary Sewer Master Plan Update

Dear Mr. Beery,

This letter serves as a proposal from American Structurepoint, Inc., (Consultant) to provide additional services to the referenced project for the City of Noblesville (Local Public Agency). The scope of services is to evaluate three alternatives to convey sewage from the current lift station (LS) service areas for LS20 and LS24. The three (3) alternatives to be evaluated are as follows:

1. Alternative 1 – Pump from LS20 east to a new LS off of River Road. Pump from LS24 north to proposed LS at River Road utilizing existing LS20 FM. Construct new FM from new LS at River Road to the wastewater treatment plant (WWTP) to convey flow from both service areas.
2. Alternative 2 – Construct new gravity sewer from LS20 east to new LS off of River Road and eliminate LS20. Pump from LS24 north to new LS off of River Road utilizing existing FM and construct new FM to the treatment plant to pump flow from both service areas.
3. Alternative 3 – Pump from LS20 east to new gravity interceptor beginning at River Road utilizing existing LS24 FM. Pump from LS24 to new gravity interceptor at River Road utilizing existing FM. Convey pumped flow from LS20 and LS24 via new gravity interceptor to the WWTP.

Specific scope items for this project are as follows:

1. Project Kickoff Meeting – Consultant will attend a kickoff meeting with the Local Public Agency will be held to establish evaluation goals and deliverables. Consultant will prepare minutes from this meeting and distribute to all attendees for review before finalizing minutes.
2. Data Collection and Analysis and Site Visit – Consultant will provide Local Public Agency with list of data required to complete evaluation and work with the Local Public Agency to obtain the information. Information will include, but not be limited to, as-built plans and existing pump data for LS 20 and LS24 including FM information and available geotechnical reports in the project area. Additionally, Consultant will complete a site visit to LS24 to perform pump down testing of the existing pumps so that an effective C value can be determined for the LS24 FM. During site visit, Consultant will evaluate potential site for new LS.

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Mr. John Beery

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3. Determination of Peak Flows for Pumping and Gravity Conveyance – Consultant will utilize information developed during initial Sewer Master Plan effort to establish estimated future buildout sewage flows for the LS20 and LS24 service areas. Additionally, this information will be utilized to determine LS modification requirements as well as FM and gravity sewer sizing. Develop GIS Map for Each Alternative – Consultant will utilize Local Public Agency's GIS database to develop a GIS map that indicates the proposed location and size(s) of proposed infrastructure for each alternative.
4. Develop Preliminary Layout of Proposed Lift Station – Consultant will develop a general site layout and section of the proposed LS at River Road that will convey flow from both LS20 and LS24 service areas to the WWTP for Alternatives 1 and 2.
5. Develop Preliminary Connection Location for Either FM or Gravity Sewer at WWTP – Consultant will utilize existing GIS information to determine potential connection locations for proposed FM or gravity sewer for conveyance of flow for each alternative to the WWTP. Evaluation will not include determination of available conveyance capacities of existing interceptor sewers upstream of WWTP.
6. Develop Preliminary FM and Gravity Sewer Plan and Sections – Consultant will develop basic plan and profile (P&P) views of the proposed FM and gravity sewer for all alternatives to aid in development of preliminary opinion of probable construction costs for each alternative. P&P views will be developed using contour information obtained from the Local Public Agency's GIS database and will indicate proposed pipe layout only (i.e. existing utilities will not be shown).
7. Preliminary Design of Pumps Including Cut Sheets on Proposed Equipment – Consultant will evaluate the existing pumps at LS 20 and LS24 to determine if modifications to the existing pumps is required as well as preliminary selection of new pumps (if applicable) for each alternative. This will include selection of proposed pumps for the new LS off of River Road. Consultant will include cut sheet information on the modified pumps or new pumps as part of deliverable.
8. Develop Opinion of Probable Construction Costs (OPCC) for Each Alternative – Consultant will develop an initial opinion of probable construction costs (OPCC) for each alternative. Each OPCC will be Class 3 per AACE Cost Estimate Guide.
9. Develop Life Cycle Costs (LCC) for Each Alternative – Consultant will develop life cycle costs for each alternative based upon a 20-year life cycle. Evaluation will include initial equipment costs, operation and maintenance costs, and replacement costs. Local Public Agency will provide Consultant with information required to complete life cycle costs development including typical power costs and operation and maintenance costs for lift stations and sewers.
10. Prepare Draft Sanitary Sewer Masterplan Amendment for LS 20, LS 24, and new LS/gravity sewer (Amendment) Summarizing Evaluation Findings – Consultant will provide Local Public Agency with an amendment that summarizes the evaluation and findings for each alternative.
11. Meeting with Local Public Agency to Discuss Draft Amendment – Consultant will meet with Local Public Agency to discuss the contents of the draft amendment and determine required modifications to finalize.
12. Finalize Amendment – Consultant will finalize the Sanitary Sewer Masterplan Amendment based upon review comments provided by Local Public Agency and discussion at meeting noted above.

○ AMERICAN STRUCTUREPOINT, INC.

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The not-to-exceed (NTE) hourly fee to provide the services noted above is \$55,500. This fee will be added to the original NTE hourly fee of \$175,600 for a new fee NTE hourly fee of \$231,100.

If this proposal is acceptable, please sign below and return one copy.

Sincerely,



M. David Mohler II, PE, LEED AP
Vice President

Mayor John Ditslear, Board of Works President