

**AMENDMENT NO. 1 TO
PROFESSIONAL SERVICES AGREEMENT
FOR HARPETH RIVER INTERCEPTOR ASSESSMENT PROJECT
COF Contract No. 2016-0316**

THIS AMENDMENT is made and entered into on this the Ninth day of May, 2017, by and between the **City of Franklin, Tennessee** ("City") and **Hazen and Sawyer** ("Consultant").

WITNESSETH:

WHEREAS, City and Consultant entered into a Professional Services Agreement ("Agreement") entitled 54-inch Harpeth River Interceptor Sewer Assessment Project; and

WHEREAS, said Agreement stipulated that the Consultant would be paid a not-to-exceed fee of **TWENTY-FOUR THOUSAND SEVEN HUNDRED FIFTY AND NO/100 DOLLARS (\$24,750.00)**; and

WHEREAS, the Harpeth River Interceptor in the area from Pinkerton Park to the Water Reclamation Facility was installed approximately 16 years ago with an expected service life to exceed 50 years; and

WHEREAS, in 2014 the City experienced a line failure of the 54" Harpeth River interceptor in the area of Pinkerton Park which at the time was attributed to an underground spring; and

WHEREAS, in February 2017 the City experienced a line failure of the 54" Harpeth River interceptor behind Chestnut Bend, the failure of which is still being repaired and investigated; and

WHEREAS, on April 24, 2017, the City experienced a second line failure of the 54" Harpeth River interceptor behind Chestnut Bend; and

WHEREAS, the nature of the two 2017 failures and observations during the execution of the most recent repair causes staff to question the longevity of the installation performed just 16 years ago; and

WHEREAS, the Consultant has provided a Proposal for an increase in engineering services for Core Tasks, as described in Exhibit A dated May 7, 2017, in the amount of **FIVE HUNDRED FIFTY-FIVE THOUSAND AND NO/100 DOLLARS (\$555,000.00)**; and

WHEREAS, the Consultant has provided a Proposal for an increase in engineering services for Additional Work that may be required based on findings of Core Tasks, as described in Exhibit A dated May 7, 2017, in the amount of **THREE HUNDRED FORTY-TWO THOUSAND FIVE HUNDRED AND NO/100 DOLLARS (\$342,500.00)** for a total of **EIGHT HUNDRED NINETY-SEVEN THOUSAND FIVE HUNDRED AND NO/100 DOLLARS (\$897,500)**; and

WHEREAS, the City has reviewed the Proposal and desires to enter into an agreement for the Project as proposed.

NOW, THEREFORE, in consideration of these premises and the mutual promises contained herein, it is agreed by and between the parties as follows:

1. The foregoing recitals are incorporated by reference as if fully stated herein.
2. Consultant's Responsibilities and Duties. Consultant agrees to perform the work as proposed in their May 8, 2017, letter of proposal (**Exhibit A**) which includes the Scope of Services for this Amendment, all of which shall be considered as an integral part hereof.
3. City's Responsibilities and Duties. City shall pay Consultant for the cost of the work as described in Exhibit A an amount not to exceed **EIGHT HUNDRED NINETY-SEVEN THOUSAND FIVE HUNDRED AND NO/100 DOLLARS (\$897,500)**.

The City reserves the right to issue any payments jointly to the Consultant and Sub-Consultant when the City receives information that the Consultant has not paid its Sub-Consultant.

4. Waiver. Neither party's failure nor delay to exercise any of its rights or powers under this Amendment will constitute or be deemed a waiver or forfeiture of those rights or powers. For a waiver of a right or power to be effective, it must be in writing signed by the waiving party. An effective waiver of a right or power shall not be construed as either (a) a future or continuing waiver of that same right or power, or (b) the waiver of any other right or power.
5. Severability. If any term or provision of the Amendment is held to be illegal or unenforceable, the validity or enforceability of the remainder of the Amendment will not be affected.
6. Precedence. In the event of conflict between this Amendment and the provisions of the previous Agreement(s), or any other contract, agreement or other document to which this Amendment may accompany or incorporate by reference, the provisions of this Amendment will, to the extent of such conflict

(or to the extent the Agreement is silent), take precedence unless such document expressly states that it is amending this Amendment.

7. Entire Agreement. The Amendment between the parties supersedes any prior or contemporaneous communications, representations or agreements between the parties, whether oral or written, regarding the subject matter of the entire Amendment. The terms and conditions of this Amendment may not be changed except by an amendment expressly referencing this Amendment by section number and signed by an authorized representative of each party.

8. Additions/Modifications. If seeking any addition or modification to the Amendment, the parties agree to reference the specific paragraph number sought to be changed on any future document or purchase order issued in furtherance of the Amendment; however, an omission of the reference to same shall not affect its applicability. In no event shall either party be bound by any terms contained in any purchase order, acknowledgement, or other writings unless: (a) such purchase order, acknowledgement, or other writings specifically refer to the Amendment or to the specific clause they are intended to modify; (b) clearly indicate the intention of both parties to override and modify the Amendment; and (c) such purchase order, acknowledgement, or other writings are signed, with specific material clauses separately initialed, by authorized representatives of both parties.

9. Breach. Upon deliberate breach of the Amendment by either party, the non-breaching party shall be entitled to terminate the Amendment without notice, with all of the remedies it would have in the event of termination, and may also have such other remedies as it may be entitled to in law or in equity.

10. Survival. This Amendment shall survive the completion of or any termination of the original contract, revised contract, or agreement or other document to which it may accompany or incorporate by reference.

All other provisions of the original Agreement, are unchanged and remain in full force and effect.

(See page 4 for signatures)

IN WITNESS WHEREOF, the parties have executed this Amendment.

The CITY OF FRANKLIN, TENNESSEE

HAZEN AND SAWYER

By: _____
Dr. Ken Moore
Mayor
Date: _____

By: _____
Print: _____
Title: _____
Date: _____

Attest:

Eric S. Stuckey
City Administrator
Date: _____

Approved as to form:

Shauna R. Billingsley, City Attorney

May 7, 2017

Mr. Mark Hilty
Assistant City Administrator
City of Franklin
109 3rd Avenue South
Franklin, TN 37064

Re: Proposal
54-Inch Harpeth River Interceptor Sewer Assessment – Amendment 1
Polymer Mortar Pipe Evaluation and Rehabilitation Program

Dear Mr. Hilty:

We appreciate the opportunity to submit this proposal to expand the project to incorporate the balance of all fiberglass reinforced polymer mortar pipe (FRPM) installed in the City of Franklin sewer collection system. It is estimated that approximately 25,000 linear feet of FRPM pipe were installed in the collection system. This pipe ranges from 18” to 54” in diameter.

Until recent years the pipe has operated as anticipated by the City. During the past three years, several major deficiencies were discovered, such as cracks in the crown, separation from manholes, separation at pipe joints, and deflection, and three structural failures occurred. The most recent failure occurred on April 25 and resulted in the full collapse of the pipe, which again will require emergency contractor procurement to repair the pipe failure. The amendment will expand services to include tasks to manage and oversee the inspection and subsequent repair, where necessary, of all remaining FRPM pipe. The goal of the project is to restore the reliability of the FRPM installed in the City's collection system and mitigate the risk of future pipe failures and the resulting costly emergency repairs.

The project will include the following Tasks.

- **Task 1 - Program Management and Coordination:** Hazen will provide the City with a single point of contact for the management and oversight of all aspects of the FRPM assessment and repair Program. Hazen will provide management and coordination services for all tasks. Mike Orr will be the Program Manager and single point of contact. Mike will coordinate all Hazen efforts as well as all subconsultant services and will provide regular updates to the City's assigned Project Manager. Hazen will develop a SharePoint project site to house all Program-related information. This site will provide the City with a single site to access all Program-related data and progress reports. Mike will also provide a monthly Program summary report detailing the progress made during the previous month related to inspections, condition reports, design services and any required construction activities.
 - **Estimated Cost: \$87,000**
- **Task 2 - On-Call Contractor Selection:** Hazen will prepare bid documents for the purpose of procuring a group of On-Call Contractors to perform emergency services for the City. This package

will contain a scope detailing the services the contractor is expected to provide, along with necessary technical specification and a time and materials breakdown form for personnel, equipment, small tools, insurance, profit, and overhead that could be utilized for any given situation. Hazen will assist the City with the evaluation, selection and procurement process.

The selected Contractor will be responsible for all emergency repair activities including the acquisition, setup, and maintenance of any bypass pumping system required for repairs. The Contractor will also be responsible for backfill compaction testing to ensure bedding and backfill is installed per the program specification and pipe manufacturer's recommendations.

- **Estimated Cost: \$22,000**
- **Task 3 - Pipeline Multisensor Inspection (MSI):** Hazen will hire a specialty sewer inspection subconsultant that specializes in MSI to investigate the internal condition of all FRPM pipe currently in service, ranging from 18-inches to 54-inches diameter using NASSCO PACP V7. The subconsultant will use a combination of CCTV, Sonar, Laser, and LIDAR to adequately determine the condition of the pipe. Hazen will have a PACP trained staff member on site while the investigation is performed. This is to ensure that the inspection is done properly and any emergency needs can be immediately identified and addressed.

If the flow in the pipe is too high to perform a proper inspection, Hazen will hire a specialty bypass pumping services provider to reduce the flow enough to allow proper internal inspection. Approximately \$60,000 of this task's fee has been allocated for MSI bypass pumping. Should a failed pipe condition be observed that is deemed an emergency, Hazen will initiate the design/repair/replace sequence with one of the selected contractors.

Hazen will review the twenty-four (24) previously-recorded CCTV videos by First Response in 2015 and will compare them to the new MSI.

- **Estimated Cost: \$417,000**
- **Task 4 - Data Management:** Hazen will collect all inspection data as well as the final construction data and format it in a manner to be entered into the City's GIS system.
 - **Estimated Cost: \$16,000**
- **Task 5 - Program Report:** Hazen will prepare a draft and final report summarizing the assessment and all findings and actions taken and areas that should be re-investigated in the future. Hazen will also develop a database that can be utilized to update the City's GIS with inspection, condition and repair activities performed under the contract.
 - **Estimated Cost: \$13,000**

Tasks 1 – 5 represent the Core Tasks of the Evaluation and Rehabilitation Program. These tasks are the minimum needed to investigate all 25,000 linear feet of FRPM pipe in Franklin's sewer system and provide the necessary condition assessment information to address other potential issues proactively.

Sub-total fee for Tasks 1 - 5: \$555,000

- **Task 6 - Design Services for Repair/Replacement:** Hazen will provide design services to address pipe deficiencies discovered during the project. These services will fall under two categories: emergency repair and non-emergency repair.

Emergency Repair: If a defect is discovered that is believed to be at high risk of imminent failure or a failure has already occurred, Hazen will initiate emergency repair services to identify the extent of the repair required and develop any drawings and/or specifications required to select one of the on-call contractors. In cooperation with the City, Hazen will select one of the approved Contractors who's proposal best fits the project's need. Depending on the location of the issue, Hazen will also prepare and submit permitting documents to the appropriate agency.

Non-Emergency Repair: Defects discovered that are deemed not at high risk of imminent failure and risk to public health and safety will be grouped together into up to three (3) design packages suitable for bidding. The bid documents will include necessary plan and profile drawings in accordance with City Standards. Hazen will prepare 50%, 90% and Final bid documents to the City. Hazen will provide permitting and Bid Phase services as required and supply temporary easement documents to the City.

- **Estimated Cost: \$156,500**

- **Task 7 - Construction Administration/RPR Services:** Hazen will provide the following construction phase services for all construction work associated with the Program
 - Attend and lead Pre-Construction meetings,
 - Hazen will, for each project, conduct a Pre-Construction meeting, provide a Resident Project Representative (RPR) Perform periodic site inspections by an Engineer,
 - Review shop drawings,
 - Review requests for payment and record quantities,
 - Respond to RFI's,
 - Review/recommendation of the contractors time and materials,
 - Prepare a record of the work performed by the contractor to be entered into the City's GIS system,
 - Prepare record drawings,
 - Thoroughly document materials, condition of the pipe removed, laying condition, backfill, and look for other anomalies that are industry standard for this type of work, and
 - Document new pipe installation means and methods to insure they conform to the construction documents.
- **Estimated Cost: \$160,000**
- **Task 8 - Salvaged Pipe Materials Testing:** Hazen will collect specimens of the failed pipe and will coordinate with the City to acquire the services of a Third Party testing facility to determine if material properties are outside manufacturer's standards. Test specimens will also be provided to the pipe manufacturer for their own testing.
 - **Estimated Cost: \$16,000**

- **Task 9 - Supplemental Services:** Supplemental services will be provided on an as-needed basis. These services could include corridor survey, geotechnical exploration, permanent easement document preparation, or other related services not specifically included in the previous tasks. A not-to-exceed ceiling budget has been included for these services. No work will be performed under Task 9 without written authorization from the City of Franklin.
 - **Estimated Cost: \$10,000**

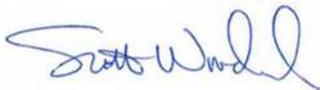
Tasks 6 – 9 represent Additional Work that may be required based on the findings of Core Tasks. These tasks provide for development of solutions to defects discovered and management of the construction of repairs.

Sub-total fee for Tasks 6 – 9: \$342,500

The extent of the repairs required cannot be known until the pipeline inspections are completed. Therefore, the full scope of the work associated with the project is unknown at this time. Hazen proposes that a not-to-exceed fee ceiling be established for the services to be provided. The fee will be utilized on an as-needed basis within the established budget. Hazen proposes to establish a not-to-exceed fee of **\$897,500** based on the anticipated scope and our estimated level of effort. Hazen will utilize standard hourly rates identified in the attached rate table. Subconsultant services will include a 10% markup for related contract administrative services. Hazen will begin work immediately upon notice to proceed.

As always we appreciate the opportunity and look forward to working with the City to complete the project. Please contact Michael Orr or me if you have questions or require additional information.

Sincerely,



Scott Woodard, P.E.
Vice President

cc: Mike Orr, P.E. (Program Manager)