

**REQUEST FOR PROPOSALS  
FOR  
Sanitary Sewer System Maintenance**

Contract #10

June 3, 2019

**Western Townships Utilities Authority  
40905 Joy Road  
Canton, MI 48187**

# TABLE OF CONTENTS

1.BACKGROUND .....	1
1.1 PURPOSE .....	1
1.2 JOB SITE AND SEWER INVENTORY .....	1
1.3 DESCRIPTION OF WORK.....	2
2.PROPOSAL REQUIREMENTS .....	2
2.1 PROPONENT QUALIFICATIONS .....	2
2.2 EXAMINATION OF SITE .....	3
2.3 PRICING SCHEDULES .....	3
2.4 SUBMITTAL OF PROPOSALS .....	3
2.5 REFERENCES.....	4
2.6 PROPOSAL DEADLINE .....	4
2.7 PROPOSAL EVALUATION.....	4
2.8 AWARD OF CONTRACT .....	5
3.GENERAL TERMS.....	5
3.1 TERM.....	5
3.2 TIME FOR PERFORMANCE AND LIQUIDATED DAMAGES .....	6
3.3 INSURANCE .....	6
3.4 COMPLIANCE WITH PERMITS .....	6
3.5 SAFETY.....	7
3.6 SUB-CONTRACTING OF SERVICES .....	7
3.7 EXTRA WORK .....	7
3.8 PERFORMANCE AND PAYMENT BONDS .....	7
3.9 UNIT PRICE INDEXING.....	7
3.10 PROVISION OF EMERGENCY SERVICES .....	8
3.11 SCHEDULE AND PROGRAM.....	8
3.12 PAYMENTS .....	8
3.13 TERMINATION .....	8
3.14 EXTENSION OR MODIFICATION .....	9
3.15 OPTION TO RENEW .....	9
3.16 WARRANTY.....	9
3.17 INDEMNIFICATION AND COMPLIANCE WITH LAW .....	9
3.18 CONFIDENTIALITY .....	10
3.19 FORCE MAJEURE .....	10
3.20 NON-ASSIGNABILITY OF CONTRACT .....	10
3.21 USE OF NAME .....	10
3.22 NO CONTINUING WAIVER .....	10
3.23 PROVISION HELD INVALID.....	11
3.24 OWNERSHIP AND PROPERTY RIGHTS .....	11
3.25 INDEPENDENT CONTRACTOR RELATIONSHIP.....	11
4. TECHNICAL SPECIFICATIONS.....	11
4.1 GENERAL .....	11
4.2 SEWER LINE AND MANHOLE CLEANING SPECIFICATIONS .....	12
4.2.1. SCOPE OF WORK FOR SEWER LINE AND MANHOLE CLEANING .....	12
4.2.2. EQUIPMENT USED FOR SEWER LINE AND MANHOLE CLEANING .....	12

4.2.3. ADDITIONAL REQUIREMENTS FOR SEWER LINE & MANHOLE CLEANING PERFORMANCE.....	13
4.3 CLOSED CIRCUIT TELEVISION (CCTV) INSPECTION SPECIFICATIONS .....	15
4.3.1. SCOPE OF WORK FOR CCTV INSPECTIONS .....	15
4.3.2. EQUIPMENT USED FOR CCTV INSPECTIONS.....	15
4.3.3. ADDITIONAL PERFORMANCE REQUIREMENTS FOR CCTV INSPECTION .....	16
4.4 SEWER FLOW CONTROL SPECIFICATIONS.....	18
4.4.1. SCOPE OF WORK FOR SEWER FLOW CONTROL.....	18
4.4.2. EQUIPMENT USED FOR SEWER FLOW CONTROL.....	19
4.4.3. ADDITIONAL PERFORMANCE REQUIREMENTS FOR SEWER FLOW CONTROL.....	19
4.5 WET WELL CLEANING AND GRIT REMOVAL SPECIFICATIONS.....	19
4.6 PAYMENTS .....	21
4.7 INCIDENTAL WORK AND COSTS.....	21
4.8 PAY REQUESTS.....	21
4.9 PROGRAM.....	21

## APPENDICES

- Appendix A – Indemnity and Insurance Requirements
- Appendix B – Job Site and Sewer Inventory
- Appendix C – Grit Disposal Permit
- Appendix D – Proponent Pricing Schedule
- Appendix E – Reduced Plan and Profile Drawings

## **1. BACKGROUND**

The Western Townships Utilities Authority (WTUA) owns and operates a sanitary sewer collection, pumping and transmission system servicing the Townships of Canton, Northville and Plymouth in southeast Michigan.

The two primary pumping stations in the system are located in Canton Township. The Middle Rouge Lift Station (Middle Rouge) is situated at the southeast corner of Joy Road at Haggerty Road. The Lower Rouge Pump Station (Lower Rouge) is located at the northeast corner of Michigan Avenue at Haggerty Road.

WTUA also has two smaller, secondary pumping stations. The Eckles Road pump station is located at the south-west corner of Joy Road at Eckles Road. The Hines Drive pump station is located west of I-275 along Hines Drive.

In addition, WTUA owns and operates a 27 mile long system of regional interceptors that collect sanitary sewage, from the member communities, for transport to the pump stations and onto the wastewater treatment plants.

Presentation, image and maintenance of the WTUA collection system facilities are key to the residents of the member communities, whose funds enabled their construction.

### **1.1 PURPOSE**

This Request for Proposal (RFP) by WTUA is for the regular preventive and emergency maintenance services needed to ensure continuous flow of wastewater in the WTUA system in compliance with the Sanitary Sewer Operations & Maintenance (SSOM) Work Plan that WTUA files with the State MDEQ. The Authority has chosen to receive formal proposals in order to accomplish this purpose.

The Contractor (successful proponent) is to provide the necessary labor, materials and equipment in order to undertake all of the required work.

The proposals received will be evaluated by WTUA on the basis of cost, qualifications and the experience of the Contractor.

### **1.2 JOB SITE AND SEWER INVENTORY**

This project includes the entire WTUA interceptor system as well as the cleaning and grit removal of the wet well at each of the five (5) WTUA pump stations (the Lower Rouge Pump Station has two independent wet wells, the North and the South). Approximately one-fifth of the entire interceptor system will be completed each year. The wet wells will be cleaned according to the schedule provided in the Appendices. In addition, the Michigan Avenue Interceptor (MI) is to be cleaned every second year. The detailed scope and location of work are set forth in following sections as well as the Appendices of this document. AppendixB includes the detailed system inventory for the interceptor system.

### **1.3 DESCRIPTION OF WORK**

The Contractor shall provide all of the labor, materials and equipment necessary to complete, in its entirety, all of the work described below in accordance with the General Terms (Section 3) and Technical Specifications (Section 4).

The general Scope of Work shall include the following minimum elements:

1. Cleaning of the interceptor pipe and manholes;
2. Closed Circuit Television (CCTV) inspection of the Interceptor Pipes;
3. Supervision and Project Management for the Work;
4. By-pass pumping of any existing flows (as required) for duration of the Work;
5. Visual inspection of all manholes;
6. Cleaning of the siphons, including CCTV inspection;
7. Cleaning of pump station wet wells;
8. Cleaning and CCTV inspection of primary pump station yard piping;
9. Debris removal, dewatering and haulage to the disposal site;
10. Work site safety and traffic control;
11. Comprehensive digital report preparation on work performed and defects found;
12. Emergency maintenance services to remove interceptor stoppages;
13. Restoration of all disturbed grassed areas with topsoil & seed; and
14. Miscellaneous other elements incidental to this work.

The detailed specifications for the work are described in more detail in Section 4 of this document as well as the Appendices.

The MDEQ requires that WTUA maintain its entire interceptor system over a five (5) year program (with portions requiring more frequent cleaning and/or inspection). The current program is depicted in Appendix G and explained further in Section 4 of this document.

## **2. PROPOSAL REQUIREMENTS**

The following sub-sections identify the general requirements of the proponents in preparing and executing the work.

### **2.1 PROPONENT QUALIFICATIONS**

No proposal will be considered from any proponent unless known to be skilled and regularly engaged in work of a character similar to that covered by the proposal documents. In order to aid the OWNER in determining the responsibility of any proponent, the proponent shall furnish evidence, satisfactory to the OWNER, of the proponent's experience and familiarity with work of the character specified, and its financial ability to properly execute the proposed work to completion within the specified time. The evidence requested may, without being limited thereto, include the following:

- 1) The address and description of the Proponent's plant or permanent place of business.
- 2) The Proponent's performance records for all work awarded to or started by him/her within the

- past three years, including but not limited to, performance on all past work for the OWNER.
- 3) A list of all available equipment to be used in carrying out this work, including traffic control and confined space entry equipment.
  - 4) The Proponent's financial statement, including statement of ownership of equipment necessary to be used in executing work under Contract.
  - 5) Evidence that the Proponent is licensed to do business in the State of Michigan, or elsewhere in case of a corporation organized under the laws of any other state.
  - 6) Sample of sewer pipe and manhole condition report format to be used.
  - 7) Sample of photographs, which will be taken of all major defects and all laterals during inspection.
  - 8) Sample video reports on electronic media, still photographs, data disk, manhole report.
  - 9) Names and years of experience of all employees to be used on this work.
  - 10) Company Safety Plan including proof of confined space training of all employees used on this work.
  - 11) Such additional information as will satisfy the OWNER that the Proponent is adequately prepared to fulfill the Contract.

## **2.2 EXAMINATION OF SITE**

Significant portions of the work are located in remote areas with limited or difficult access. Therefore, it is the responsibility of each proponent to (a) examine the proposal documents thoroughly, (b) examine the site to familiarize himself/herself with the local conditions that may in any manner affect cost, progress or performance of the work, (c) consider federal, state and local laws and regulations that may affect cost, progress, performance or furnishing of the work, (d) study and carefully correlate the Proponent's observations with the proposal documents.

On request, WTUA will provide each Proponent access to the site to conduct such investigations and tests as each Proponent deems necessary for submission of his/her proposal.

The submission of a proposal will constitute an incontrovertible representation by the Proponent that he/she has complied with every requirement of this Article and that the proposal documents are sufficient in scope and detail to indicate and convey understanding of all terms and conditions for performance of the work.

The WTUA interceptor sewers and manholes, along with limited details about these facilities, can be viewed on a Google map, accessible via the following web address:

<https://drive.google.com/open?id=1sL69zuZ3ouuT4Fzqr0I8GMIIQceRm3wL&usp=sharing>

## **2.3 PRICING SCHEDULES**

The Proponent shall use the forms in Appendix D supplied by WTUA to indicate the costs for cleaning, inspection, exposing buried manholes, bonds and insurance and any other major components of work for the various segments of the WTUA system. Unit cost pricing provided shall be based on 2019 costs.

## **2.4 SUBMITTAL OF PROPOSALS**

Proponents will submit their proposals, including prices, covering all the work identified in this document and any addenda received. The pricing shall depict a detailed breakdown of the unit costs for

each segment of the interceptors and the pump station wet wells and any other major elements, using the forms provided by WTUA.

Each Proponent will furnish detailed information on its experience in the maintenance and inspection of sanitary sewer interceptors, such as those found on this project. This information shall include, but not be limited to, the number of continuous years the proponent's firm has maintained and inspected sewer systems as well as the number of continuous years the individuals for this project have done the same.

Proponents will furnish sufficient detailed financial information on its firm to permit the Authority to assess the financial viability of the proponent in undertaking this project.

Proponents shall furnish warranty information on any relevant work to be performed.

All of the above information shall be provided, in addition to the references requested below, at the time of proposal submission.

Proposals shall be submitted in sealed envelopes as detailed in Section 2.7 of this document.

## **2.5 REFERENCES**

Included in the proposal submission shall be a list of recent references (ten minimum) for similar work that WTUA may contact before recommending award. In this information the proponent shall include the municipality and/or agency contacts, phone numbers, date of project, length, and diameter of pipe and any other pertinent data to assist the Authority with understanding the project scope.

## **2.6 PROPOSAL DEADLINE**

The deadline for submission of proposals is July 10, 2019 at 1:30 p.m. (E.D.T.). All proposals submitted shall be in a sealed envelope labeled "Sanitary Sewer System Maintenance – Contract #10" with the name of the proponent's firm clearly marked. The proposals must be received before the deadline at our Middle Rouge Administrative offices located at 40905 Joy Road, Canton, Michigan 48187.

A public opening of the proposals will immediately follow the closing time. Any proposals received after the deadline will be rejected and returned unopened to the proponent.

## **2.7 PROPOSAL EVALUATION**

An evaluation team comprised of the Authority staff will evaluate all the proposals received by the deadline.

The proposals will likely be graded based on the following components and weights.

- Price (weight=35%)
- Proponent Qualifications (weight=20%)
- Reporting Capability (weight=10%)
- Financial Resources (weight=10%)

- Related Projects Experience (weight=15%)
- Subcontracting of Services (weight=5%)
- Other Factors (weight=5%)

The Authority reserves the right to modify either one or both of the components and weights following submission and evaluation of the proposals. Proponents will not be able to make claims against the Authority should it decide to alter the evaluation system.

The Authority and its evaluation team may request additional information from proponents after the closing to assist in the evaluation process. Proponents shall furnish any requested information to the Authority within three (3) business days of the date of the report; otherwise, the Authority will disregard the additional information.

## **2.8 AWARD OF CONTRACT**

WTUA reserves the right to reject any and all proposals, to waive any and all irregularities, technicalities, or informalities and to negotiate Contract terms with the successful proponent. Further, WTUA reserves the right to disregard all non-conforming, non-responsive, unbalanced or conditional proposals.

In evaluating the proposals, WTUA shall consider, amongst other criteria, the information specified in Section 2.5 of this document.

Subject to agreement on Contract terms and approval by the WTUA Board of Commissioners, the Contract will be awarded and a formal Notice of Award will be served by WTUA within thirty (30) calendar days after the receipt of proposals. The format of Contract to be used will be the WTUA standard form of contract that is available upon request.

The Contract will be executed by the Contractor and WTUA within fourteen (14) calendar days of the issuance of the Notice of Award.

## **3. GENERAL TERMS**

The following sub-sections identify the desired terms of the contract with the successful proponent.

### **3.1 TERM**

While the proponents are submitting proposals for the full five (5) year program, the initial term for the contract will cover the first two (2) phases of the work. All the work described in this Request for Proposal for the first two (2) phases will be completed before October 1<sup>st</sup>, 2020. In addition, WTUA desires to have all of the work for the first phase completed by October 1<sup>st</sup>, 2019; however, given the timing of the award and execution of the contract, this is somewhat negotiable. As such, each proponent is to submit, in its proposal, an achievable completion date for the first phase, assuming a start date of August 15, 2019.

It is WTUA's intent to extend the contract for the additional phases of work, to the completion of the entire five (5) year program. This extension will be based on WTUA's satisfaction with the work

provided by the successful proponent, and will be at the sole discretion of WTUA.

### **3.2 TIME FOR PERFORMANCE AND LIQUIDATED DAMAGES**

The Contractor and WTUA will meet by February of each year to establish the schedule for each segment of work to be completed that year. The Contractor shall mobilize its equipment to the site and work however many consecutive working days (excluding weekends & holidays) that are necessary to complete any listed segment of work in its entirety (i.e. each listed segment of work is a separate line item in Appendix G). All segments of work listed in Appendix G in connection with a specified year must be completed by September 30 of the indicated year. No planned commencement of work on a given segment will be delayed by more than two (2) weeks from the scheduled start date (established at the annual meeting) without prior written authorization of WTUA's Director of Operations. No disruption in the completion of a listed segment of work (except for severe weather) will be allowed without prior written authorization of WTUA's Director of Operations.

For any delay in commencement of scheduled work (in excess of two weeks), unexcused disruption in a listed segment of work, or for any segments which have not been completed by September 30 of the indicated year, liquidated damages will be assessed at \$400 per day until the work is substantially complete.

The parties agree that time is of the essence with respect to this contract.

### **3.3 INSURANCE**

Contractor shall take out and maintain, at Contractor's sole expense:

- 1) Contract as required by the State of Michigan and shall ensure that any and all subcontractors Statutory workers' compensation insurance for all the employees utilized in connection with the retained by the Contractor have the requisite and necessary Workers' Compensation coverage for all of subcontractor's employees.
- 2) Contractor and any subcontractors utilized by it shall each maintain comprehensive general liability, product liability and completed operations insurance in an amount not less than \$2,000,000 for single and \$3,000,000 for combined limits for bodily injury and/or property damage.

Such insurance must be with companies, and in a form, satisfactory to WTUA and Certificates of Insurance must be provided by Contractor and any subcontractor to be utilized by it prior to execution of the contract and will be attached to each executed copy of the Contract. These Certificates shall contain a provision, if available, that coverage afforded under the policies will not be canceled or materially changed unless thirty (30) calendar days prior written notice has been given to WTUA. In no event shall Contractor cancel any policies required hereunder that are claims-made policies before the date that is three (3) years from the completion or termination of the Contract.

### **3.4 COMPLIANCE WITH PERMITS**

The Contractor shall obtain and comply with all required state and local maintenance, construction and safety permits and shall insure that any and all of its subcontractors do the same. The cost for obtaining

all permits shall be incidental to the work. The current Disposal Permit to be utilized in connection with the Contract is attached as Appendix C. This project will have coverage under the existing Wayne County C Permit and the MDoT Annual Construction Permit, each held by WTUA and renewed annually. Contractor shall be responsible for compliance with such Permits and the coordination of scheduling with each Permit Office.

### **3.5 SAFETY**

Contractor shall provide a company safety plan to WTUA. The Contractor, and any and all of its subcontractors, shall supply all necessary equipment and training to comply with the Michigan Occupational Safety and Health (MIOSHA) regulations. Contractor and its subcontractors shall supply WTUA with a copy of all Material Safety Data Sheets (MSDS) for any regulated product used in conjunction with the work at the WTUA facilities.

Contractor shall also comply with all MDoT regulations on traffic control while engaged in work on the public right-of-way. The Contractor shall strictly observe any frost laws in effect on county roads.

### **3.6 SUB-CONTRACTING OF SERVICES**

The Authority will carefully examine any proponent's request to subcontract any portion of the work. The reason for this is that the Authority wants to ensure all work is of the highest possible quality and performed on a timely basis, meeting the Authority's goals. No subcontractors will be permitted without the prior written approval of WTUA. Contractor shall remain fully responsible for the actions or inactions of any approved subcontractors, and for timely completion of all of the requirements of the Contract.

### **3.7 EXTRA WORK**

WTUA reserves the right to ask Contractor for pricing for extra work (e.g. grouting and minor repairs and/or additional cleaning and/or inspection not scheduled for the current phase). However, WTUA is not obligated to do so or to ultimately use Contractor for any such extra work.

Contractor and WTUA may agree to perform extra work outside of the scope of this project as an addition. Any additional work over \$5,000 in value must be approved by the WTUA Board of Commissioners.

### **3.8 PERFORMANCE AND PAYMENT BONDS**

The Contractor will be required to furnish a Performance Bond and a Payment Bond in the full amount of the contract. The Bonds must be provided on a form approved by WTUA and all sureties providing such bonds must be listed on the United States Department of Treasury's Listing of Approved Sureties.

### **3.9 UNIT PRICE INDEXING**

The Authority is requesting pricing based on current costs for performance of the work on all system components. The Authority intends to escalate the pricing annually based on the Consumer Price Index (CPI) – All Urban Consumers for Detroit, Ann Arbor, Flint, MI – as published by the Bureau of Labor Statistics of the Department of Labor. Annual cost-price adjustment shall take place during the month of

March for each year of the subject contract. Annual cost-price adjustments shall be done utilizing the 12-month data for the period ending the previous December.

### **3.10 PROVISION OF EMERGENCY SERVICES**

Contractor (successful proponent) shall provide the necessary personnel and equipment for handling of emergency stoppages.

Contractor agrees to charge WTUA for services provided to the nearest half hour on an hourly basis for the equipment and operators necessary to resolve emergency stoppages. The combined hourly rate for the equipment and operators for emergency service calls shall be provided on the forms attached in Appendix D. The rates provided will apply only to time on the job-site and/or travel to and from the disposal site, but do shall not include travel time to and from the job-site. Travel time to and from the job-site shall be incidental to the Contract and provided at no cost to WTUA.

### **3.11 SCHEDULE AND PROGRAM**

The Scope of Work, equipment and performance to be provided by Contractor in accordance with the specifications contained in Section 4 of the Contract shall be carried out by Contractor in accordance with WTUA's schedule and 5-year Sanitary Sewer Cleaning and CCTV Program contained in Appendix G. The Job Site and Sewer Inventory to which the program schedule refers is contained as Appendix B.

The Program represents the minimum level of service and may be subject to change by WTUA and/or the State MDEQ during any phase of the program.

### **3.12 PAYMENTS**

Once all of the planned work listed in Appendix G for a contract year is complete, and any disputes in quantity resolved to the satisfaction of the WTUA Director of Operations, the Contractor will submit an invoice to WTUA. Contractor's invoice shall be paid within forty-five (45) calendar days from receipt, subject to a favorable review by WTUA's Director of Operations.

With respect to any Emergency Services Work provided in accordance with Paragraph 3.10, Contractor shall provide WTUA with a detailed invoice for services rendered, which will include detailed information regarding the number of hours worked on-site, the date of service, the location involved and the equipment utilized.

No claims for additional work shall be made by the Contractor without the prior written consent of WTUA.

### **3.13 TERMINATION**

WTUA reserves the right to terminate the Contract immediately upon written notice to Contractor for failure to perform the services as outlined in the Contract to the satisfaction of WTUA or for any other breach of contract. In addition, WTUA reserves the right to terminate the contract, with or without cause, for any/all subsequent years by providing notice on or before December 31<sup>st</sup>.

To the extent that Contractor is found to have improperly terminated its work under the Contract,

Contractor shall reimburse WTUA for all damages directly resulting from such improper termination.

Contractor may terminate the Contract if both of the following have occurred: (a) WTUA has failed to make timely payment on a valid invoice; and (b) the failure to make payment has not been cured by WTUA within thirty (30) days of receipt of notice from Contractor that timely payment has not been made.

### **3.14 EXTENSION OR MODIFICATION**

No extension or modification of the Contract will be valid without the written approval of the WTUA Board of Commissioners and an amendment signed by both parties.

### **3.15 OPTION TO RENEW**

WTUA shall have the option, at its sole discretion, to renew this contract on an annual basis for a maximum period of five (5) years from its original expiration date. Within ninety (90) days prior to any expiration date of this contract, Contractor shall provide WTUA with a written inquiry as to whether WTUA wishes to exercise its option to renew in accordance with this Paragraph.

### **3.16 WARRANTY**

Contractor will represent and warrant that all services performed under the Contract shall be within the standards of care, skill and diligence normally provided by competent professionals in the performance of services with respect to work similar to that contemplated by the Contract. Contractor will expressly represent and warrant that it, and any subcontractors it may utilize, possess and will provide the professional and technical expertise, equipment and resources necessary to accomplish the services required to be performed under the Contract. Upon reasonable request by WTUA, Contractor shall replace any service personnel assigned by Contractor as soon as possible.

Contractor will further represent and warrant that it guarantees satisfactory performance of all aspects of the contract, at the prices listed, in the event that any subcontractor is not able to perform to the standards expected by Contractor or WTUA. Contractor will specifically assume all financial and other risks associated with obtaining a subcontractor acceptable to WTUA, to provide the services referenced in the Contract at the agreed prices, in the event that any subcontractor becomes unwilling, unqualified or unsatisfactory to WTUA at any point in the future to carry out the agreed upon work.

### **3.17 INDEMNIFICATION AND COMPLIANCE WITH LAW**

- 1) Contractor will agree to and shall defend, indemnify and hold WTUA harmless from any liability for property damages or bodily injury, including actual costs and reasonable attorney fees, which may arise from negligent actions by Contractor, and any subcontractors arising out of or in connection with the Contract.
- 2) Contractor, and its subcontractors, shall comply with all federal, state, and local laws and ordinances. Contractor shall hold WTUA harmless with respect to any claim or liability, including actual costs and reasonable attorney fees, arising from any violations of such laws, ordinances or codes occasioned by Contractor's or its subcontractor's actions or conduct relating to the Contract. Contractor shall be liable for fines or civil penalties which may be imposed by regulatory agencies for violations of any federal or state law or local ordinances that occur as a result of any negligent

acts or breach of the Contract by Contractor or any of its subcontractors. WTUA will assist Contractor in contesting any such fines, administrative proceedings and/or in court prior to any payment by Contractor provided, however, that Contractor reimburses WTUA for actual costs and attorney fees.

- 3) Contractor will agree to and shall defend, indemnify and hold WTUA harmless from any claims made by any approved subcontractor in connection with the Agreement including actual costs and reasonable expenses and attorneys' fees.

### **3.18 CONFIDENTIALITY**

Contractor will acknowledge that during the term of the Contract, Contractor may be exposed to certain Confidential Information regarding WTUA. Any Confidential Information which is disclosed to Contractor and its subcontractors: (a) shall not be used, copied or disseminated by Contractor or its subcontractors for its individual competitive advantage or for any other purpose; (b) shall be kept in confidence by Contractor and its subcontractors; (c) except as otherwise required by law or upon prior written authorization of WTUA, shall not be disclosed by Contractor or its subcontractors to any other person or entity.

For purposes of this paragraph 3.18, "Confidential Information" consists of oral, written or electronic data, source codes, maps or diagrams, equipment or proprietary information lists, or any other such materials related to the business of WTUA that may be obtained from any source by Contractor or its subcontractors as a result of Contractor's relationship with WTUA, and includes, but is not limited to, WTUA's equipment, infrastructure, methods, processes, technical data, financial data, lists, statistics, or related information regarding WTUA or its customers. "Contractor" shall include Contractor's employees, agents, subcontractors and representatives.

### **3.19 FORCE MAJEURE**

Neither party shall be liable for its failure to perform its obligations under the Agreement if any unforeseeable and irremediable circumstance beyond its control, such as war, insurrection, hurricane, earthquake, etc., prevents such performance. The party invoking this Force Majeure clause shall notify the other party immediately by verbal communication and in writing by certified mail of the nature and extent of the circumstance, the anticipated period of delay, and the plan for prompt completion of the project within fourteen (14) calendar days after its occurrence.

### **3.20 NON-ASSIGNABILITY OF CONTRACT**

The rights and duties of Contractor under this Contract shall be neither assignable nor delegable in the absence of the prior written approval of WTUA.

### **3.21 USE OF NAME**

Contractor shall not use the name or photographs of WTUA or any related entity in any advertising or promotional releases, literature, or the like without the express written permission of the entity affected.

### **3.22 NO CONTINUING WAIVER**

No waiver by either party of any breach by the other party of any provision of the Contract shall be

construed as a waiver of any previous or subsequent breach, whether of the same or of a different provision of the Contract.

### **3.23 PROVISION HELD INVALID**

In the event that any of the provisions, or portions or applications thereof, of the Contract are held to be unenforceable or invalid by any court of competent jurisdiction, Contractor and WTUA shall negotiate an equitable adjustment in the provisions of the Contract with a view towards effecting the purpose of the Contract and the validity and enforceability of the remaining provisions, or portions or applications thereof, shall not be affected thereby.

### **3.24 OWNERSHIP AND PROPERTY RIGHTS**

All reports, memoranda, drawings, maps, sketches, or other data published, computed, written, developed, generated, built or acquired in performing the Contract or at the expense of WTUA shall be considered works made for hire and shall be and remain the property of WTUA and shall be turned over by Contractor to WTUA upon the expiration or termination of the Contract within thirty (30) days after such expiration or termination, except as specifically provided by the Agreement.

### **3.25 INDEPENDENT CONTRACTOR RELATIONSHIP**

Contractor is and shall be in the performance of all services and provision of all equipment under the Contract as an independent contractor and not an employee, agent, or servant of WTUA. All persons engaged in any of the services performed pursuant to this Contract shall at all times and all places be subject to the sole direction, supervision and control of Contractor. The relationship between WTUA and Contractor shall in all respects be and remain an independent contractor relationship and not an employer-employee or principal-agent relationship. No actions taken by WTUA or Contractor in connection with the services performed by Contractor, including without limitation actions to comply with any obligations to any governmental authority, shall be deemed to affect, modify, or alter such independent contractor relationship. Contractor shall have no right to enter into any contracts, agreements or other commitments or to make any representations, warranties, guarantees, allowances or adjustments in the name of or on behalf of WTUA. WTUA shall not provide Contractor or Contractor's employees, agents and other representatives with any health, life, disability, vacation, sick leave or other type of "fringe benefits." Contractor shall be responsible for the payment of all taxes, withholding payments, penalties, fees, fringe benefits, including but not limited to worker's compensation benefits, Social Security, federal, state and local income taxes, FICA, FUTA, and MESC obligations, and for the filing of all necessary documents, forms, and returns pertinent to all the foregoing in connection with the services rendered by Contractor and Contractor's employees, agents, and other representatives pursuant to the Contract.

## **4. TECHNICAL SPECIFICATIONS**

The following sub-sections identify the technical requirements of the work.

### **4.1 GENERAL**

This Section specifies the technical details of the work to be performed. It is not all inclusive and proponents should seek clarification on any technical issues with the Authority prior to submitting a

proposal. The general Scope of Work is included in Section 1.3, above.

## **4.2 SEWER LINE AND MANHOLE CLEANING SPECIFICATIONS**

### **4.2.1. SCOPE OF WORK FOR SEWER LINE AND MANHOLE CLEANING**

The Contractor shall furnish all labor, materials, and equipment necessary for the proper cleaning of the sewers, yard piping, siphons and manholes prior to inspection by closed circuit television camera. All references in the Scope of Work to sewers and sewer lines shall be deemed to include the sewers, yard piping and siphons as referenced in Appendices B and G.

Sewer line cleaning will be performed with high-velocity jet (hydro-cleaning) equipment using a stepped cleaning approach. Equipment shall be capable of removing dirt, roots, grease, calcite, rocks, sand, loose and damaged concrete, and other obstructions from the sewer lines and manholes.

Cleaning shall be defined as follows:

- 1) Sewer line cleaning includes a minimum of three passes of the line, or as many as is required to ensure the sewer line is clean.
- 2) Manhole cleaning includes the high velocity jet power washing of the manhole walls, ladders, platforms, drop structures, base and benching prior to the start of cleaning of the sewer line.
- 3) Clean, as used in these specifications, shall be defined as having removed all of the debris in the pipe and no less than ninety-seven (97%) percent of the protruding root masses at pipe joints and connections as certified by WTUA. No additional payments for heavy cleaning and/or root cutting will be allowed.

The sewer lines will be determined as adequately cleaned based on CCTV inspections. The CONTRACTOR will make no additional claims for any re-cleaning requested by WTUA (if required). The interior of all manhole structures along the interceptor will be cleaned. A list of sewer lines and manholes and the current annual cleaning schedule can be found in Appendices B and G.

In the event of any discharge of sewage onto the ground, into a waterway and/or back-up into a basement, the CONTRACTOR will IMMEDIATELY contact the DIRECTOR OF OPERATIONS or his representative. Any fines, penalties or damages (including attorneys' and consultants' fees) incurred by WTUA as a result of any sewage discharge due to the negligence of the Contractor will be the responsibility of the CONTRACTOR. The CONTRACTOR shall be responsible for filing any reports and conducting all testing as required by the MDEQ and/or the Wayne County Department of Health. No additional claim for payment of these costs will be permitted.

### **4.2.2. EQUIPMENT USED FOR SEWER LINE AND MANHOLE CLEANING**

High velocity jet (hydro-cleaning) equipment shall be equipped with the following:

- 1) a minimum of 500 feet of high pressure hose (note that some sections of pipe exceed 1000 feet);
- 2) two or more high velocity nozzles capable of producing a scouring action from 15 degrees to 45 degrees in all size lines to be cleaned;
- 3) a high velocity gun for washing and scouring manhole walls and floor capable of producing

- flows from a fine spray to a long distance solid stream;
- 4) a 2,000 gallon minimum water tank, auxiliary engines and pumps, and a hydraulically driven hose reel;
- 5) equipment operating controls located above ground;
- 6) minimum working pressure of 2,500 pounds per square inch at a 100 gallon per minute rate; and
- 7) a root cutter nozzle attachment (when required).
- 8) a self-propelled easement machine (when required).

All water required for the proposed work shall be paid by WTUA at no additional cost to the Contractor. Transportation of the water to the work site is the Contractors sole responsibility and cost. There are generally two water sources available. On much of the site, the Middle Rouge River likely has sufficient water. Alternatively, proponents may choose to purchase water from the local municipality. Should proponents wish to inquire about the purchase of municipal water, they may contact the Northville Township DPW Manager at 248-348-3820 and/or the Plymouth Township DPW Manager at 734-453-8131 extension #22 and/or Canton Township at 734-397-1011.

### **4.2.3. ADDITIONAL REQUIREMENTS FOR SEWER LINE & MANHOLE CLEANING PERFORMANCE**

#### **(1) Cleaning Precautions**

The Contractor shall supply all necessary equipment to comply with the Michigan Occupational Safety & Health Administration (MIOSHA) regulations regarding confined space entry. Further the contractor shall comply with all Federal, State and local regulations and permits pertaining to this type of work, including but not limited to all requirements for coordination with the Wayne County Permit Office and/or MDOT.

The Contractor shall also comply with all Michigan Department of Transportation (MDOT) regulations on traffic control while engaged in work on the public right-of-way.

During sewer cleaning operations, satisfactory precautions shall be taken in the use of cleaning equipment. When hydraulically propelled cleaning tools which depend upon water pressure to provide their cleaning force, or tools which retard the flow on the sewer line, are used, precautions shall be taken to ensure that the water pressure created does not damage or cause flooding of public or private property being served by the sewer. Care shall be taken to avoid pipe damage, especially in vitrified clay pipes.

#### **(2) Locate & Expose Buried Manholes**

Contractor shall provide all labor, equipment and materials necessary to locate and expose manhole covers which have been covered over with asphalt, topsoil, grass, gravel, muck, etc.

Payment for this item of work shall be at the unit price in the Contractor's proposal and includes restoration of the area around the manhole to existing conditions or better. The work involved in raising any buried manhole covers is not part of this task.

### **(3) Material Removed**

All sludge, dirt, sand rocks, grease and other solid or semisolid material resulting from any part of the cleaning operation shall be removed at the first manhole downstream of the section being cleaned by means of a vacuum truck. Passing material from manhole section to manhole section will not be permitted without the prior consent of WTUA, as this may cause line stoppages, accumulation of sand in pump station wet wells, or damage to pumping equipment.

### **(4) Disposal of Material Removed**

All solids, semi-solid or liquids resulting from any part of the cleaning operations shall be removed from the site and disposed of at a WTUA approved sanitary landfill site or approved wastewater treatment plant. All materials shall be removed from the site at the end of each workday. Under no circumstances will the Contractor be allowed to accumulate debris, etc., on the site of work beyond a single workday, except in totally enclosed containers approved by WTUA.

The Contractor shall provide, at no additional cost, any toxic characteristic leachate protocol (TCLP) testing required by the disposal site to satisfactorily characterize the material removed prior to disposal. If the disposal site will accept WTUA's latest TCLP test results, the contractor will not have to conduct an independent test.

All costs associated with the removal, testing (if necessary) and haulage of material removed shall be incidental to the cleaning operations. WTUA will pay the bill for dewatered solids, disposal costs only, directly to the disposal facility. A copy of WTUA's disposal permit is attached as Appendix C.

### **(5) Working in Private Yard Easements**

The Contractor shall coordinate with WTUA and be responsible for notifying any resident or business as to the work which is contemplated; determining ownership of the property, and obtaining permission for any work which may be done on private property. The Contractor shall make every reasonable attempt to obtain written permission, from the affected property owner (or designated agent), to enter onto any private property impacted by the cleaning operations.

Several manholes are located in areas, which may prevent free and easy access (i.e. rough terrain, bush, swamp areas, landscaped areas, etc.). All work required to obtain access to these manholes shall be incidental to the cleaning operations. Further, any disturbed areas shall be restored to existing or better conditions at no cost to WTUA.

The Contractor agrees to indemnify and hold WTUA harmless from any liability occasioned by the Contractor's failure to comply with the terms of this provision.

### **(6) Manhole Inspections**

In addition to cleaning, each manhole shall be visually inspected for at least the following defects; structural integrity, high sewage level marks, infiltration at connections or riser section joints, depth to invert, number and condition of rungs, condition of benching, sketch of manhole showing all connections and direction of flow. The Contractor shall furnish to WTUA two (2) copies of the written

inspection report for each manhole inspected.

### **4.3 CLOSED CIRCUIT TELEVISION (CCTV) INSPECTION SPECIFICATIONS**

#### **4.3.1. SCOPE OF WORK FOR CCTV INSPECTIONS**

Within 72 hours after any cleaning, the cleaned sewer line shall be CCTV camera inspected. The inspection will be done one sewer line segment at a time, and the segment being done will be suitably isolated from the remainder of the sewer line in accordance with the Sewer Flow Control Specifications.

Color video recordings shall be made of the television inspections, and two (2) copies shall be supplied to WTUA. In addition, two (2) copies of printed inspection reports shall be supplied to WTUA; alternatively, electronic copies of all reports and video recordings may be submitted on portable hard drive or flash drive. The database for the inspections and reports shall be submitted to WTUA on an external hard drive or flash drive.

The CONTRACTOR shall supply WTUA with weekly progress reports during active work. The progress reports shall include footage of sewer cleaned and CCTV inspection performed during previous week. The progress report will also denote any significant problems encountered by the CONTRACTOR, significant pipe defects and any other pertinent information.

#### **4.3.2. EQUIPMENT USED FOR CCTV INSPECTIONS**

##### **CCTV Camera Equipment**

Television equipment shall include a television camera, television monitor, cables, power source, lights, and other equipment. The television camera shall be specifically designed and constructed for operation in connection with sanitary sewer inspection.

The camera, television monitor, and other components of the video system shall be capable of producing a minimum 460 line resolution color video picture. The camera shall be a crawler type or mounted on skids suitably sized for each pipe diameter noted in Appendix B.

The camera shall be operative in 100 percent humidity conditions and shall have a rotary head (Pan and Tilt) enabling a view of 90 degrees to the axis to be inspected so that a lateral connection can be properly inspected. Lighting for the camera shall be adjusted to minimize reflective glare. Lighting and camera quality shall be suitable to provide a clear, in focus picture of the entire periphery of the sewer pipe for all conditions encountered during the work. Focal distance shall be adjustable through a range of 6 inches to infinity.

The remote reading footage counter shall be accurate to two tenths of a foot over the length of the particular section being inspected and shall be mounted over the television monitor.

Ideally the Contractor will have at least one spare camera unit in case the primary unit becomes unusable for whatever reason.

### **4.3.3. ADDITIONAL PERFORMANCE REQUIREMENTS FOR CCTV INSPECTION**

#### **(1) CCTV Camera Inspection**

The camera shall be moved through the line in either direction at a uniform rate, stopping when necessary to ensure proper documentation of the sewer's condition. In no case shall the camera be pulled at a rate greater than 20 feet per minute (i.e. 10 minutes for every 200 feet of sewer line).

The camera shall be stopped at all lateral connections and defects a minimum of 5 seconds. At all lateral connections and defects, the operator shall rotate the camera head and thoroughly examine the connection and defects.

Manual winches, power winches, CCTV cables, and powered rewinds or other devices that do not obstruct the camera view or interfere with proper documentation of the sewer conditions may be used to move the camera through the sewer line.

If, during the inspection operation, the television camera will not pass through the entire section being inspected, The CONTRACTOR will set-up the equipment in a manner so the inspection can be performed from the opposite manhole. If, again, the camera fails to pass through the section, the CONTRACTOR shall record detailed records of the obstruction and immediately notify the DIRECTOR OF OPERATIONS of that section of pipe requiring repair.

In the event the sewer line being televised has substantial flow entering the sewer between manholes, such that inspection of the sewer is impaired, then the CONTRACTOR shall coordinate with the initiator of the flow to have such flow temporarily stopped and/or reschedule television inspection of the particular sewer line to a time when such flow is reduced enough to permit proceeding with the television inspection.

When the sewer line depth of flow at the upstream manhole of the sewer line being televised is above 30% of the downstream pipe diameter, the CONTRACTOR shall reduce the flow in accordance with the Sewer Flow Control Specifications to permit proceeding with the television inspection.

In the event the camera goes under water for a distance greater than 15 feet in a pipe sag, the CONTRACTOR shall provide a floatation device to support the camera so the top of the pipe can be viewed in the sagging section.

Whenever non-remote powered and controlled winches are used to pull the television camera through the line, telephones, radios, or other suitable means of communication shall be set up between the two manholes of the section being inspected to ensure that adequate communication exists between members of the CONTRACTOR'S crew.

The importance of accurate distance measurement is emphasized. Measurement for location of major defects shall be made above ground by means of a meter device. Markings on the cable, or the like, which would require interpolation for depth of a manhole, will not be allowed.

Accuracy of the measurement meters shall be checked daily by use of a walking meter, roll-a-tape, or other suitable device. Footage measurements shall begin at the sewer line point of penetration of the

upstream manhole, unless specific permission is given by the DIRECTOR OF OPERATIONS to do otherwise. Footage shall be shown on the video view at all times.

## **(2) Documentation of the CCTV Inspection Results**

Television inspection results shall be documented on inspection reports. The condition of sewer pipes inspected shall be documented on the inspection reports. The CONTRACTOR is responsible for duplicating the inspection reports providing copies for his/her use. If the CONTRACTOR has his/her own inspection report software, it may be used subject to prior approval from the DIRECTOR OF OPERATIONS.

Television inspection reports shall be provided to WTUA as specified below, shall be in an acceptable format to WTUA, and once copy shall be kept by the Contractor. The CONTRACTOR shall supply WTUA with any necessary software required to view the video reports and/or inspection reports at no additional cost. Printed location reports shall clearly show the location, in relation to adjacent manholes, of each source of infiltration discovered. In addition, other data of significance including the location of building and lateral connections, as well as defects such as roots, offset joints, storm sewer connections, cracks, holes, broken and collapsed pipe sections, presence of scale and corrosion, and other discernible features shall be recorded, utilizing the PACP pipe assessment methods and codes on the printed reports.

Two (2) copies of such records shall be supplied to WTUA. A voice recording on the video portion of the CCTV inspection shall make brief yet informative comments on the hydraulic and structural sewer conditions.

The measurement of distance to defects is critical in confirming the location of areas to be excavated if needed. It is recommended that the CONTRACTOR use the following procedure in performing the television inspection:

1. A marker or flag shall be attached to the top of the camera yoke.
2. The measurements recorded in the log shall be zeroed in alignment with the marker rather than the camera itself, as is the usual practice.

Two (2) copies of the color video recordings of the data on the television monitor shall be made by the CONTRACTOR and shall be provided to WTUA (or electronically per Section 4.3.1).

Video playback shall be at the same speed that it was recorded. Slow motion or stop motion playback features may be supplied at the option of the CONTRACTOR. Title to recordings and electronic reports will remain with WTUA. The CONTRACTOR shall have all video recordings and necessary playback equipment readily accessible for review by the DIRECTOR OF OPERATIONS or his representative on-site during the project. Recording speed shall be noted on the recordings and reports and shall be no greater than the recording speed of the CCTV inspection.

Video recordings shall include the following information:

**1. Video image:**

- a. Report number
- b. Date of CCTV inspection
- c. Upstream and downstream (WTUA assigned) manhole numbers
- d. Current distance along reach (tape counter footage)
- e. Printed labels on compact disc, flash drive or other format, format information, and other descriptive information.
- f. Still capture of defects and lateral connections with PACP severity rating.
- g. Pipe diameter and pipe material type.
- h. Camera travel direction.

**2. Audio:**

- a. Date and time of TV inspection, operator name, and name of adjacent street.
- b. Verbal confirmation of upstream and downstream manhole numbers and TV direction in relation to flow.
- c. Verbal description of pipe diameter, type and joint length.
- d. Verbal description and location of each lateral connection and serious pipe defect.
- e. Type of weather during inspection.
- f. Notation if sewer flow control has been used.

Written inspection reports shall include, but are not limited to, the following information:

- Location and extent of each point of leakage and/or roots.
- Location and direction of each lateral connection.
- Location and extent of any damaged sections, nature of the damage, and location with respect to pipe axis.
- Deflection in alignment or grade of pipe.
- Date, time, Township, street, manhole section (from/to), reference manhole number, name of operator, inspector, and weather conditions.
- Pipe diameter, pipe material, joint spacing, and corresponding video identification.
- Camera travel direction.
- A separate report denoting manhole condition, manhole depth, number and condition of rungs in manhole and overall condition of the manhole, including a sketch showing connections.

The CONTRACTOR shall provide still photos of the monitor image of all lateral connections and serious defects in the sewer line to WTUA.

**4.4 SEWER FLOW CONTROL SPECIFICATIONS**

**4.4.1. SCOPE OF WORK FOR SEWER FLOW CONTROL**

When the depth of flow at the upstream manhole is above 30% of the downstream pipe diameter, sewer flow control is required. The CONTRACTOR shall furnish, install, and operate generators, pumps, plugs, conduits, high velocity jet equipment, and other equipment to divert or reduce the flow of sewage in pipeline reaches in which work is to be performed.

No additional payment will be made for sewer flow control as it will be incidental to the CCTV inspection work.

#### **4.4.2. EQUIPMENT USED FOR SEWER FLOW CONTROL**

The plugs used shall be so designed that all or any portion of the sewage can be released. Plugs shall be provided with a tag line.

Pumping systems shall be of sufficient capacity to handle existing flow plus addition flow that may occur during a rainstorm.

If pumping is required on a 24 hour basis, engines shall be equipped in a manner to keep noise to a minimum.

Standby pumps shall be staffed by and provided by the CONTRACTOR.

The CONTRACTOR shall provide weather-tight hoses, piping and fittings of sufficient capacity and pressure rating to accomplish required flow diversion.

#### **4.4.3. ADDITIONAL PERFORMANCE REQUIREMENTS FOR SEWER FLOW CONTROL**

Depth of flow shall not exceed that of the normal flow depth, while performing various items of work.

When the depth of flow in the pipe upstream of the manhole section being worked is above the 30% maximum allowable, the flow shall be reduced to the required level by plugging or blocking the flow, and/or by pumping the flow around the section being worked.

By-pass pumping shall be done by the CONTRACTOR in such a manner as will not damage public or private property or create a nuisance or health menace.

The pumped sewage shall be conveyed in an enclosed hose or pipe and shall be reinserted into the sanitary sewer system.

Sewage shall not be allowed to overflow in gutters, streets, or over sidewalks, etc., nor shall any sewage be allowed to flow into the storm inlets, conduits, or into any open watercourse.

After the work has been completed, flow shall be restored to normal and the area thoroughly cleaned to existing conditions or better.

All by-pass pumps will be attended at all times by the CONTRACTOR while in operation.

#### **4.5 WET WELL CLEANING AND GRIT REMOVAL SPECIFICATIONS**

The CONTRACTOR shall provide all labor, materials and equipment as to complete, in its entirety, the tasks described below. This task involves considerable coordination with our operations & maintenance staff in advance.

The CONTRACTOR shall thoroughly hose down the wet well walls and promptly remove accumulated

grit and debris from the influent sanitary sewer wet well and dispose of the removed grit at the Advanced Disposal Arbor Hills Landfill (formerly BFI Arbor Hills) and/or another WTUA approved sanitary landfill.

The Middle Rouge Pump Station and both of the Lower Rouge Pump Stations (North and South) shall be cleaned one time during the term of the Five Year Cleaning Schedule as specified in Appendix G. The CONTRACTOR shall remove the accumulated grit from the Eckles Road Pump Station in accordance with Appendix G. The CONTRACTOR shall remove the accumulated grit from the Hines Drive Pump Station at least once per year.

### **Middle Rouge Pump Station**

The bottom of the wet well is approximately 65' below grade with an intermediate wet well deck level and has limited equipment access. Since the amount of debris in the wet well is variable, the CONTRACTOR shall provide a unit cost based on 10 cubic yards of debris at Middle Rouge. Any additional debris removed may be negotiated as a change order to the contract subject to WTUA's approval.

### **Lower Rouge South Pump Station**

The bottom of the wet well is approximately 50' below grade and has somewhat limited access. There is an intermediate wet well deck level approximately 24' below grade and the wet well bottom is approximately 25' below the intermediate level. Since the amount of debris in the wet well is variable, the CONTRACTOR shall provide a unit cost based on the scum layer (in vertical feet) above the water surface. Contractor and WTUA will meet prior to the commencement of the work to verify the depth of the scum layer.

### **Lower Rouge North Pump Station**

The bottom of the wet well is approximately 50' below grade and has limited access. Since the amount of debris in the wet well is variable, the CONTRACTOR shall provide a unit cost based on the scum layer (in vertical feet) above the water surface. Contractor and WTUA will meet prior to the commencement of the work to verify the depth of the scum layer.

### **Hines Drive Pump Station**

The Hines Drive Pump Station is approximately 35 feet deep and has good access. When the wet well is cleaned out the CONTRACTOR must take care to minimize damage to the grass surfaces surrounding the wet well. Any damage to the grass surfaces and/or asphalt bike path must be repaired in a timely manner and to the satisfaction of the Wayne County Parks Department staff.

### **Eckles Road Pump Station**

The Eckles Road Pump Station is approximately 50 feet deep and has very good access. This pump station is presently used as a wet weather pumping station, although it is likely to be abandoned in the near future.

#### **4.6 PAYMENTS**

It is understood that the estimated length and quantities in the proposal documents are estimates only. Actual length will be based on readings of the remote reading footage counter of the camera unit. Any dispute of the actual readings will be field measured with a representative of both Contractor and WTUA.

#### **4.7 INCIDENTAL WORK AND COSTS**

All items of work or costs noted on the Request for Proposals, Scope of Work, plans, appendices or in the Technical Specifications that are not specifically noted on the Itemized Proposal Forms shall be considered as incidental to the work and as such shall be included in the unit prices at no extra cost to WTUA.

All surface restoration work and proper waste disposal shall be included in the CONTRACTOR'S unit prices. WTUA will provide water at no charge (Contractor responsible for coordination with Municipality(s) for acquisition of the water), but transportation of water is incidental to the work and included in the unit prices. WTUA will pay the invoices for disposal costs only for dewatered solids and for grease from wet wells, directly to the disposal facility operator, provided that WTUA has pre-approved the disposal facility . All other disposal fees shall be paid by the Contractor without charge to WTUA.

#### **4.8 PAY REQUESTS**

Once all the work is complete for the year, to the satisfaction of the DIRECTOR OF OPERATIONS, and any disputes in quantity are resolved, the CONTRACTOR will submit an invoice to WTUA.

In the alternative, invoices may be submitted at the completion of individual line items on pages 22-23, if WTUA has given advanced written permission, in its sole discretion, with respect to the separate invoicing of the specified line item.

WTUA pays suppliers and contractors on a once a month basis. As such, the CONTRACTOR'S invoice shall be paid within forty-five (45) calendar days upon receipt subject to favorable review and approval of the DIRECTOR OF OPERATIONS.

#### **4.9 PROGRAM**

On the following two (2) pages is an outline of the current five (5) year cleaning and inspection program of the Authority.

The program represents the minimum level of service and may be subject to change by WTUA and/or the State MDEQ during any phase of the program. It is being provided as a guide to Proponents to gage the resources required to undertake the work under the contract.

# WTUA 5 Year Sanitary Sewer Cleaning and CCTV Program

## Definitions

CCTV	Closed Circuit Television Inspection
MRPI	Middle Rouge Parkway Interceptor
MRVI	Middle Rouge Valley Interceptor
MSI	Mayberry Sanitarium Interceptor
WTUA 1A	Contract 1A Interceptor
WTUA 1C	Contract 1C Interceptor
PLY	Plymouth Road Interceptor
MR	Middle Rouge Lift Station
LR	Lower Rouge Pump Station
MICH	Michigan Avenue Interceptor
HINES	Hines Drive Interceptor
Hines PS	Hines Drive Pump Station
Eckles PS	Eckles Road Pump Station

## Year 1 (2019)

MRVI #11\_29 to #11\_1 (Plymouth)  
MICH #M\_18 to Lower Rouge #1D\_5 (Canton)  
MR Wet Well Cleaning (Canton)  
LR South Wet Well Cleaning (Canton)  
LR North Wet Well Cleaning (Canton)  
Hines Drive Pump Station Wet Well Cleaning (Plymouth)  
Eckles Road Pump Station Wet Well Cleaning (Canton)  
Siphons (3)

## Year 2 (2020)

WTUA 1C Middle Rouge 1B\_5B to Lower Rouge #1D\_1 (Canton)  
Hines Drive Pump Station Wet Well Cleaning (Plymouth)  
Siphon (1)

## Year 3 (2021)

MICH #M\_18 to Lower Rouge #1D\_5 (Canton)  
MRPI #P\_1 to WTUA 1A #1A\_101 (Northville)  
WTUA 1A #1A\_148 to #1A\_76 (Northville)  
Hines Drive Pump Station Wet Well Cleaning (Plymouth)  
Siphons (1)

## Year 4 (2022)

MRPI #P\_70CD to MRVI#11\_1 (Northville & Plymouth)  
WTUA 1A #1A\_#76 to MRVI #11\_29 (Northville & Plymouth)  
Hines Drive Pump Station Wet Well Cleaning (Plymouth)  
Siphons (5)

## **Year 5 (2023)**

MR yard piping (Canton)

LR yard piping (Canton)

MR storm sewer, clean only (Canton)

LR storm sewer, clean only (Canton)

MICH #M\_18 to Lower Rouge #1D\_5 (Canton)

MRVI #11\_1 to Middle Rouge (Plymouth)

PLY #PL10 to MRPI #P\_127A (Plymouth)

HINES #17 to Hines PS (Plymouth)

MSI #MSI\_15 to WTUA 1A #1A\_118

## **Interceptor Descriptions and Site Conditions**

### **Sewer Line Inventory**

The information depicted in Appendix B is to be used as a guideline only together with the following descriptions of the interceptor sewer lines and site conditions. Actual conditions in the field may vary at the time of the proposed work. It is in the best interest of the CONTRACTOR to field visit the work site prior to submitting a proposal for the proposed work.

Most of the manholes along the Maybury Sanitorium (MSI), Middle Rouge Parkway (MRPI) and the Middle Rouge Valley (MRVI) Interceptors do not have bolted and gasketed manhole covers.

Most of the manholes along the WTUA Interceptor do have bolted and gasketed manhole covers. The CONTRACTOR will be responsible for removal and replacement of all bolts and gaskets.

### **Maybury Sanitorium Interceptor (MSI)**

The MSI was constructed in 1939, as part of the Middle Rouge Parkway (MRPI) Interceptor projects. The MSI begins at the intersection of Beck Road at Main Street in Northville Township and runs southeasterly towards the Seven Mile Road and then southerly to the MRPI near the Johnson Drain at a point midway between Six Mile and Seven Mile Roads.

The MSI is 15" in diameter, and it has been lined in its entirety.

In 1990, WTUA assumed ownership of the MSI in Northville Township from Wayne County.

The entire MSI runs through an easement that parallels an unnamed tributary drain, which outlets into the Johnson Drain, between private properties in Northville Township. The terrain varies in this area from uneven swamp like conditions to heavy brush along the banks of the drain.

### **Middle Rouge Parkway Interceptor (MRPI)**

The MRPI was built in 1939, and is the oldest of the Wayne County Interceptors serving the WTUA communities. The MRPI begins at Northville Township's southwest corner near the intersection of Five Mile Road at Ridge Road. From this point, the MRPI runs northeast paralleling the Johnson Drain into the City of Northville. The MRPI in the City is not the responsibility of WTUA. From the southeast City limits, the MRPI turns southerly along the Middle Rouge River in Hines Park until it exits Northville Township near the intersection of Five Mile Road at Phoenix Lake.

At Phoenix Lake the MRPI enters Plymouth Township continuing to generally follow the Middle Rouge River until it reaches Plymouth Road. At this point the MRPI enters the City of Plymouth and continues in a southerly direction along Hines Drive until it enters Plymouth Township again near Haggerty Road where the pipes WTUA owns terminates and the sewage flows are directed into the Middle Rouge Valley Interceptor (MRVI).

The MRPI ranges in size from 15" in diameter at the upstream end to 30" west of Haggerty Road. Approximately 43% of the MRPI has been lined.

In 1990, WTUA assumed ownership of the MRPI in Northville & Plymouth Townships from Wayne County.

Significant portions of the MRPI run through an easement that parallels the Johnson Drain between private properties in Northville Township. The balance generally runs along Hines Park and the Middle Rouge River. The terrain varies in this area from well manicured sod lawns to uneven swamp like conditions through heavy brush along the banks of the drain and river.

### **Middle Rouge Valley Interceptor (MRVI)**

The MRVI was constructed during the 1960s as an additional Wayne County Interceptor was needed. The MRVI starts near Wilcox Road and parallels Hines Drive southerly and easterly to Haggerty Road. The MRVI turns southerly at Haggerty Road and follows Haggerty to Joy Road at the southern boundary of Plymouth Township. From this point the MRVI turns eastward along Joy Road and exits Plymouth Township at the eastern boundary with Livonia.

The MRVI ranges in size from 30" in diameter at the upstream end to 48" at Haggerty Road through to the Township boundary. The downstream end, along Haggerty Road, is approximately fifty (50) feet below grade, with manhole to manhole runs exceeding one thousand (1,000) feet. Approximately 40% of the MRVI has been lined.

In 1990, WTUA assumed ownership of the MRVI in Plymouth Township from Wayne County.

Significant portions of the MRVI generally runs along Hines Park and the Middle Rouge River. The terrain varies in this area from grassy meadows to slightly uneven clear cut paths through brush along the banks of the river.

### **Western Townships Utilities Authority Interceptors (1A and 1C)**

In Northville and Plymouth Townships a parallel WTUA 1A Interceptor (1A) was built in the early 1990s to provide additional capacity above that available in the existing Wayne County Interceptors acquired by WTUA. This parallel pipe begins near the upstream end of the MRPI in Northville Township and continues along the same route as the MRPI into Plymouth Township as far as Wilcox Road. From Wilcox Road southerly, a parallel pipe was not built because the existing MRPI and MRVI provide adequate future capacity for the upstream communities.

The MRVI flows enter the Middle Rouge Lift Station at the intersection of Haggerty Road at Joy Road. These flows are then directed into the WTUA 1C Interceptor (1C) flowing south along Haggerty Road in Canton Township.

The 1C Interceptor continues southerly in Canton Township linking the Middle Rouge Lift Station with the Lower Rouge Pump Station located at the intersection of Haggerty Road at Michigan Avenue.

The 1C Interceptor flows enter the Lower Rouge Pump Station and are then directed into the WTUA Force-mains flowing westerly along Michigan Avenue to the Ypsilanti Community Utilities Authority (YCUA) wastewater treatment plant in Ypsilanti Township.

Since the 1A Interceptor parallels the MRPI, the terrain varies from well manicured sod lawns to uneven swamp like conditions to manholes located in the paved roadways.

The majority of the 1C interceptor parallels Haggerty Road.

The 1A Interceptor ranges in size from 15” to 42” in diameter. The 1C Interceptor ranges in size from 15” to 60” in diameter. Much of the 1C interceptor is approximately fifty (50) feet below grade, with manhole to manhole runs exceeding one thousand (1000) feet.

### **Plymouth Road Interceptor (PLY)**

The Plymouth Road Interceptor was constructed in the late 1990’s to collect flows from several Plymouth Township connections, for delivery to the MRPI. The PLY runs in the Plymouth Road right-of-way, beginning just east of Haggerty Road and ends in Hines Park on the east side of Hines Drive at the MRPI.

The PLY ranges in size from 15” to 18”, and includes one (1) inverted siphon.

### **Michigan Avenue Interceptor (MI)**

The Michigan Avenue Interceptor was constructed in the late 1990’s to collect flows from a few Canton Township connections, for delivery to the Lower Rouge Pump Station. The MI is located in Wayne County Park land adjacent to the Lower Rouge River, beginning at the east end at Hannan Road and ending west of the southbound I-275 exit ramp to Michigan Avenue.

Access to the MI is limited, and much of the area is prone to flooding in the spring. As such, weather conditions need to be taken into consideration when scheduling and performing the work.

The MI ranges in size from 15” to 24” in diameter; because the MI is relatively flat, WTUA is required to have the line cleaned and inspected every second year.

### **Hines Drive Interceptor (HI)**

The Hines Drive Interceptor was constructed in the late 1990’s to collect flows from several Plymouth Township connections for delivery to the Hines Drive Pump Station. The HI runs through Hines Park adjacent to Hines Drive. The Hines Drive Pump Station is located west of I-275. The eastern end of the HI is located east of I-275, and the west end is located east of Haggerty Road.

Hines Park is generally well manicured lawn, and access to the sewers from Hines Drive is relatively good.

## **APPENDIX A**

### **Indemnity and Insurance Requirements**

#### **Section 1:**

Contractor hereby agrees to and shall indemnify, defend hold WTUA harmless from any liability or for property damages or bodily injury, including death, which may arise from claims alleging Contractor's negligent operations under this agreement.

#### **Section 2:**

The Contractor shall comply with all federal, state, and local laws and ordinances. Contractor shall hold Owner harmless with respect to any claim or liability, including actual costs and reasonable attorney fees arising from any violations of such laws or ordinance occasioned by the Contractor's negligence. Contractor shall be liable for fines or civil penalties which may be imposed by regulatory agencies for violations of any federal or state law and local ordinances that occur as a result of the Contractor's negligent operations. WTUA will assist the Contractor in contesting any such fines, administrative proceedings and/or in court prior to any payment by the Contractor provided, however, that the Contractor reimburses WTUA for actual costs and attorney fees.

#### **Section 3:**

The Contractor shall maintain: 1.) Statutory workers' compensation insurance for all the Contractor's employees at the project as required by the State of Michigan, and ensure that any and all subcontractors retained by the Contractor have the requisite and necessary workers' compensation coverage for all of subcontractors' employees.

#### **Section 4:**

Contractor shall maintain comprehensive general liability insurance, including product liability and completed operations, in an amount not less than \$2,000,000 for single and \$3,000,000 for combined limits for bodily injury and/or property damage.

## **APPENDIX B**

### **Job Site & Sewer Inventory**

**Note: pipe lengths, diameter and material are estimates or are based on As-Built drawings and/or previous CCTV inspections.**

## **APPENDIX C**

### **GRIT DISPOSAL PERMIT**

**APPENDIX D**  
**Proponent Pricing Schedule**

## **APPENDIX E**

### **REDUCED PLAN & PROFILE DRAWINGS**