REQUEST FOR PROPOSAL

TO PROVIDE SANITARY SEWER EVALUATION SURVEY SERVICES (SSES)
IN JEFFERSON PARISH

Jefferson Parish
State of Louisiana

RFP No.:0467

Proposal Receipt Date: November 2, 2023

Proposal Receipt Time: 3:30 P.M.

Jefferson Parish
Department of Purchasing
200 Derbigny Street, Suite 4400
Gretna, LA 70053

(504) 364-2678

TABLE OF CONTENTS

PART I – ADMINISTRATIVE AND GENERAL INFORMATION

PART II – SCOPE OF WORK/SERVICES

PART III – FEDERAL CONTRACT PROVISIONS

PART IV – EVALUATION

PART V – PERFORMANCE STANDARDS

PART VI - APPENDICIES

REQUEST FOR PROPOSAL
FOR

SANITARY SEWER EVALUATION SURVEY SERVICES (SSES)
IN JEFFERSON PARISH

1.1 Background

Jefferson Parish provides sewerage services to approximately 160,000 active residential and commercial customers. In addition, the Jefferson Parish Sewerage Department operates and maintains five treatment plants which treat 57,000,000 gallons of wastewater daily, over 500 lift stations which each have from 2-7 pumps, over 1300 miles of gravity pipe and about 100 miles of force main pipe, and approximately 21,120 manholes. Normal sewer pipe service life varies depending on the type of pipe and applications such as gravity or pressure. The integrity of a sewer line depends on the type of pipe material, original installation method, what happened to surrounding pipe envelope & ground over time, and other items surrounding the pipe, amongst other factors. More than 50% of sanitary sewer system pipes in Jefferson Parish are 50 years or older. As the pipes age and are affected by other factors, they become susceptible to corrosion, blockage, tree root intrusion, pipe & joint shifting & breakage, and Inflow and Infiltration (I&I). I&I issues allows undesirable groundwater and stormwater to enter the sewer system, which can lead to damage of the collection system when required to transport more flow than designed to handle. Increased effluent also increases the costs for wastewater treatment facilities from excessive stormwater and groundwater mixing with sewage. Therefore, Jefferson Parish Department of Sewerage would like to move forward with performing a sanitary sewer system inspection & evaluation services program in Jefferson Parish. Once the system assessment is complete the Parish will implement a subsequent sanitary sewer rehabilitation program targeted to reduce Inflow and Infiltration issues and reduce inefficiencies in the sanitary sewer system and extend the life of the sanitary sewer collection system pipes & structures.

1.2 Purpose

The purpose of this Request for Proposal (RFP) is to obtain competitive proposals as allowed by Jefferson Parish Code of Ordinances Section 2-895 et. seq. from bona fide, qualified Proposers who are interested in providing Scope of Work as defined in Part II hereof. By submitting a proposal, Proposer agrees to comply with all provisions of Louisiana law as well as compliance with the Jefferson Parish Code of Ordinances, Louisiana Code of Ethics, applicable Jefferson Parish ethical standards and Jefferson Parish (hereinafter sometimes referred to as the “Parish”) standard terms and conditions as adopted by Jefferson Parish Council Resolution.

1.3 Goals and Objectives

The goal of this project is to inspect & evaluate portions of the existing sanitary sewer collection system in Jefferson Parish to identify aspects of the gravity sewer collection

system with issues leading to inefficiencies in the system due to Inflow and Infiltration (I&I) and in need of rehabilitation. The rehabilitation or repair work will be subsequently performed under sewer rehabilitation packages that will be designed and bid once the SSES work is completed in an area.

The objectives of this project are the following:

1. Perform sanitary sewer evaluation services that include but are not limited to gravity sewer pipe & manhole cleaning, smoke testing, CCTV inspections, dye water testing services and manhole inspections to identify defects in the gravity sewer system leading to inefficiencies in the system due to Inflow and Infiltration (I&I) and in need of rehabilitation.
2. Provide evaluation results that can be utilized to prepare plans and specifications for needed sanitary sewer gravity pipe & manhole structures rehabilitation work, including pipe and manhole lining & point repairs, based on performed evaluation survey and inspection services.

1.4 Proposer Minimum Requirements

The Jefferson Parish Department of Sewerage desires to establish/obtain/receive/etc. the following:

Warranties:
N/A

Proposer Requirements: Proposer must be experienced at providing services similar in nature and complexity to the project outlined in this Request For Proposal; and meet the following criteria:

A. Proposer must be a licensed contractor per LSA-R.S. 37:2150-2163 and furnish current license number with proposal. Classification shall be MUNICIPAL AND PUBLIC WORKS CONSTRUCTION. Proposer must also be an Approved Sewage Sludge Transporter by the Louisiana Department of Environmental Quality and furnish current Approval of Sewage Sludge Transporter Registration certificate. The Proposer's Louisiana Contractor's license number must be specified on the electronic envelope.

B. Failure to provide the proof of prime contractor's license and/or failure to provide the required documentation shall result in your proposal being deemed non-responsive under Code of Ordinances, Parish of Jefferson, State of Louisiana §2-895.

D. Qualifications:

	Preferred Qualifications	Required Documentation
RFP Cover Letter	Cover Letter shall contain the title and number of the RFP that indicates the Proposers' interest in performing the needed services, briefly responds to each of the selection criteria, and includes the Proposers' full legal name, address, license number and primary contact for this RFP (including name(s), telephone number(s), and e-mail address(es)); the structure of the proposed team that will perform the needed services (including the Proposer and all tiers of proposed subcontractors, including DBE subcontractors.	Cover Letter of no more than 2 pages
Proposer	10 years minimum experience conducting Sanitary Sewer System Evaluation Surveys, smoke testing, dye water flooding, pipe cleaning, and CCTV Inspection services.	Complete list of projects involving sewer pipe assessment services, including smoke testing, dye water flooding, pipe cleaning, & CCTV inspection services with a minimum of 20,000 LF per project in the last 10 years.
Project Manager & Key Staff	Project Manager shall have a minimum of 10 years sanitary sewer system evaluation surveys & inspection services experience with at least 1 project of 20,000 LF. Key Staff members shall have at least 5 years of sanitary sewer system assessment & inspection services experience. Proposer shall also have a PACP certified Louisiana licensed Professional Engineer with a minimum of 5 years of experience in providing sewer system rehabilitation recommendations.	Key staff resumes with sanitary sewer system evaluation surveys & inspection services and sewer system rehabilitation recommendations services experience. A list of staff shall be submitted, including the primary function of each key employee. In addition, provide the primary office location for assigned key staff members and their availability for the next year.
Vehicles / Equipment	A list of vehicles & equipment including a description, quantity, make and model and availability date to perform the sewer pipe smoke testing, dye water flooding, cleaning, and CCTV inspection services.	Vehicle and Equipment List

Personnel Training	Provide a description of in-place training program for project safety and confined space entry, and quality control checks utilized to ensure that the field operations are functioning efficiently.	Training program write up of no more than 2 pages.
Data Processing	Provide a description of electronic data processing system which your firm will utilize to record data.	Data processing system write up of no more than 2 pages.

E. Pricing Table:

The quantities in the Appendix " F" Pricing Table will be used for the comparison of pricing proposals only. The OWNER is not obligated to use any of the line items unless it opts to do so.

The Proposer **may not** satisfy the Minimum Requirements through the use of a subcontractor. Louisiana Contractors Licenses **may not** be satisfied through the use of a subcontractor.

1.5 Schedule of Events

	Date	Time (CST)
A. RFP posted online @ www.jeffparishbids.net	10/4/2023	
B. Pre-Proposal Conference (if required)	10/19/2023	10:00 AM
C. Deadline to receive written inquiries	10/27/2023	4:30 PM
D. Proposal Receipt Date and Time	11/2/2023	3:30 PM
E. RFP Evaluation Committee Meeting		To be scheduled

Proposers are encouraged to check the general information board in the General Government Building located at 200 Derbigny St., Gretna and the Joseph S. Yenni Building located at 1221 Elmwood Park Blvd., Jefferson. Additionally, proposers may check for meeting information posted on the Jefferson Parish website, www.jeffparish.net.

F. Council Selection via resolution To be scheduled

G. Contract Ratification via resolution To be scheduled

NOTE: The Parish of Jefferson reserves the right to deviate from these dates.

1.6 Proposal Submittal

All proposals in accordance with Section 2-895 of the Jefferson Parish Code of Ordinances shall be received by the Jefferson Parish Purchasing Department ***no later than date and time shown in the Schedule of Events in order to be considered responsive.***

Important – Clearly mark outside of electronic envelope, with the following information and format:

- Proposal Name: **Sanitary Sewer Evaluation Survey Services in Jefferson Parish**
- Proposal No. 0467
- Proposal Receipt Date and Time: November 2, 2023 @ 3:30 PM

Proposals will only be received online through the Jefferson Parish e-Procurement site, Central Bidding. Central Bidding can be accessed by visiting either www.jeffparishbids.net or www.centralbidding.com. Registration is required and free for Jefferson Parish Proposers by accessing the following link: www.centralauctionhouse.com/registration.php.

Proposer is solely responsible for the **timely submission** of its proposal. Late proposals will not be accepted.

Price Proposals and/or price schedules shall be submitted in a separate electronic sealed envelope as notated on the Central Bidding page as **"Pricing Attachments".** Price Proposals will remain sealed and shall not be read until the completion of the scoring of the Technical Proposal Evaluation during the RFP Evaluation Committee Meeting. Once read, the Price Proposals will be evaluated and scored in accordance with Section 1.31. Price Proposals shall be worth twenty-five percent (25%) of the total scoring points assigned.

RFP Evaluation Committee Meetings are open to the public.

1.7 Proposal Response Format

Proposals submitted for consideration should follow the format and order of presentation described below:

Technical Proposals:

A. Cover Letter: Containing summary of proposer's ability to perform the services described in the RFP and confirms that proposer is willing to perform those services and negotiate a contract with the Parish. The letter shall be signed by a person having authority to negotiate and to commit the proposer to a contract. If proposer is a sole-proprietorship, proposer must include a statement that the company is a sole-proprietorship signed by the owner. If proposer is an agency, corporation, partnership or other legal entity, the president, vice-president, secretary or treasurer, or an authorized agent shall sign the proposal, **and** satisfactory evidence of the authority of the person signing for the agency, corporation, partnership or other legal entity shall be attached to the proposal. A sample corporate resolution may be downloaded from the Purchasing Department webpage of the Jefferson Parish website.

Proposers should exhibit their understanding and approach to the project and address how each element will be accomplished. Proposers are advised that except as otherwise provided by law, all documents submitted to the Parish under this RFP are subject to the Louisiana Public Records Act, LSA-R.S. 44:1 et seq., and may be released when a public records request is made in accordance with the law.

B. Table of Contents: Organized in the order cited in the format contained herein.

C. Technical Proposal Elements: Illustrating and describing compliance with the RFP requirements defined in the Scope of Work/Services (Part II) and Proposer Qualifications. (See Section 2.7.A for further details.)

D. Proposer Qualifications and Experience: History and background of Proposer, including but not limited to status with related services to government entities existing customer satisfaction, demonstrated volume of merchants, etc. (See Section 2.7.B for further details.)

The Proposer shall hold a current Louisiana Contractor's license in MUNICIPAL AND PUBLIC WORKS CONSTRUCTION. The Proposer must also be an Approved Sewage Sludge Transporter by the Louisiana Department of Environmental Quality and furnish current Approval of Sewage Sludge Transporter Registration certificate.

The Proposer shall have 10 years minimum experience conducting Sanitary Sewer System Evaluation Surveys, smoke testing, dye water flooding, pipe cleaning, and CCTV Inspection services.

See **Section 1.4 PROPOSER REQUIREMENTS** for further details regarding the minimum requirements for Proposer.

E. Innovative Concepts: Present innovative concepts, if any, not discussed above for consideration.

F. Project Schedule: Detailed schedule of implementation plan for pilot (if applicable) and full implementation. This schedule is to include implementation actions, timelines, responsible parties, etc.

G. Financial Profile: Proposers are requested to submit documentation from the past three (3) years demonstrating proposer's financial stability. Documentation may include audited financial statements including balance sheets, income statements, documentation regarding retained earnings, assets, liabilities, etc. Such information should be included in the technical portion of the proposal submission and MUST NOT be included with the cost proposals and/or price schedules.

Price Proposal:

Proposer's fees and other costs shall be submitted **in a separate electronic envelope (named "Pricing Attachments")** with proposal submission. This Price Proposal shall include any and all costs the Proposer wishes to have considered in the proposed contractual arrangement with the Parish of Jefferson. The Price Proposal shall be worth twenty-five percent (25%) of the total scoring points assigned. The maximum price proposal points shall be calculated by multiplying the number of price proposal points assigned to price in the evaluation criterion multiplied by the number of evaluators scoring the proposal. Evaluation of Price Proposal shall take place after Technical Proposal Evaluation has been completed.

1.8 Number of Response Copies

Each Proposer shall submit one (1) original **electronic** signed proposal. PDF files are preferred. Price Proposals ***shall not*** be included in the Technical Proposal of the proposal.

1.9 Legibility/Clarity

Proposals submitted in response to the requirements of this RFP in the formats requested are desirable with all questions answered in as much detail as practicable. The proposal shall demonstrate an understanding of the requirements. Proposals shall be prepared simply and economically, providing straightforward, concise descriptions of the Proposer's ability to meet the requirements of the RFP. Each Proposer is solely responsible for the accuracy and completeness of its proposal.

1.10 Pre-proposal Conference

A pre-proposal conference will be held at 10:00AM on October 19, 2023 location: **Jefferson Parish Purchasing Department, 200 Derbigny Street., Suite 4400 Gretna La. 70053** Prospective Proposers may participate in the conference to obtain clarification of the requirements of the RFP and to receive answers to relevant questions thereto. Any Prospective Proposer intending to submit a proposal is encouraged to attend and should have at least one authorized representative attend the pre-proposal conference.

Although impromptu questions will be permitted and spontaneous answers will be provided during the pre-proposal conference, the only official answer or position of the Parish of Jefferson will be stated in writing in response to written questions in the form of addenda provided to all Prospective Proposers.

1.11 Written Inquiries

The Parish shall only consider written and timely communications from Prospective Proposers. No negotiations, decisions, or actions shall be binding as a result of any oral discussions with any Parish employee or Parish consultant. Answers to questions that materially change or substantially clarify the RFP shall be addressed by addendum and provided to all Prospective Proposers.

1.12 Inquiry Periods

An initial inquiry period is hereby firmly set for all Prospective Proposers to perform a detailed review of the RFP documents and to submit any written questions relative thereto. **Without exception, all questions MUST be in** writing (even if an answer has already been given to an oral question during the pre-proposal conference) and received by the close of business on the Inquiry Deadline date set forth in the Schedule of Events. Initial inquiries shall not be entertained thereafter. All official responses to inquiries will be communicated in the form of an addendum.

The Parish of Jefferson shall not and cannot permit an open-ended inquiry period, as this creates an unwarranted delay in the procurement cycle and operations of our agency and departments. The Parish of Jefferson reasonably expects and requires responsible and Prospective Proposers to conduct their in-depth proposal review and submit initial inquiries in a timely manner.

A final 3-day inquiry period may be granted, if additional questions or requests for clarification are received as a result of an addendum. Questions relative to the addendum shall be submitted no later than 3:30 p.m., three (3) full business days from the date the addendum is posted. If necessary, another addendum will be issued to address any final questions received. Thereafter, all proposal documents, including but not limited to the specifications, terms, conditions, plans, etc., will stand as written and/or amended clarified by any addendum issued as a result of the final inquiry period.

Said written inquiries submitted by the Prospective Proposer shall clearly cross-reference the relevant RFP section. The Parish shall only respond to those inquiries received by the established deadline. Answers to questions that change or substantially clarify the solicitation shall be issued by addendum and provided to all Prospective Proposers.

Inquiries in accordance with this section may be delivered by e-mail or **posted on the Central Bidding site**:

Phone: (504)364-2684

Buyer Email: Dreamey@jeffparish.net

Buyer Name: Donna Reamey

1.13 Required Signed and Notarized Affidavits

Affidavits must be completed, signed, properly notarized and submitted in its original format prior to contract approval in accordance with Section 2-895 et. Seq. of the Jefferson Parish Code of Ordinances. For the convenience of proposers, these affidavits have been combined into one form entitled, *Request for Proposal Affidavit.*

All Proposers who submit a proposal with Jefferson Parish or with any of its agencies, divisions or special districts must identify all subcontractors and persons, excluding full time employees of the Proposer, who would assist in providing services or materials under the proposal or who would share in any fees, commissions or other remuneration under the proposal. Substitutions or subsequent addition of subcontractor(s) or other persons to this RFP and any ensuing contract must be requested in writing and approved by Council Resolution. Said written request shall provide the detailed justification of the compelling need for such additional substitution.

1.14 Proposal Guarantee

(NOT REQUIRED FOR THIS RFP)

1.15 Performance Bond

(NOT REQUIRED FOR THIS RFP)

1.16 Fidelity Bond Requirements
(NOT REQUIRED FOR THIS RFP)

1.17 Proposal Validity

All proposals shall be irrevocable and considered valid from the receipt date for acceptance until such time a contract is executed.

1.18 Revisions, Withdrawals, Protest Procedures

Changes or revisions may be made to submitted proposals, prior to the Proposal Receipt Date and Time, through the Jefferson Parish e-Procurement System. All addenda and changes must cross-reference the relevant RFP section.

Proposer(s) request(s) for withdrawal of proposal(s) to this RFP must be submitted in writing and received prior to the Proposal Receipt Date and Time as set forth in Section 1.5, Schedule of Events.

Any Proposer that submitted a proposal in response to this Requests for Proposals may protest in writing to the Director of Purchasing within 48 hours of the evaluation committee meeting. The Purchasing Director will review the complaint in conjunction with the Parish Attorney's Office who will then respond as soon as possible in writing to the Proposer.

1.19 Cost of Offer Preparation

All proposals submitted in response to this RFP shall be at the sole cost and expense of the Proposer and shall not be subject to reimbursement by the Parish of Jefferson.

1.20 Acceptance of Proposal Content

Proposer's submission to this RFP shall be construed as an acceptance to be bound by the terms and conditions stated herein. Any action in contradiction of this acceptance may result in rejection by the Council.

1.21 Written or Oral Discussions/Presentations

The Parish may conduct written or oral discussions with Proposer(s) to clarify and/or enhance the Parish's understanding of submitted material. Any commitments or representations made during these discussions, if conducted, may become formally recorded in the final contract. Conversely, the Parish may make awards based on initial offers. Neither negotiations nor changes to proposals will be allowed during these discussions.

1.22 Standard Terms and Conditions and Non-negotiable Contract Terms

A. The standard general terms and conditions used by the Parish of Jefferson may be found in Resolution No. 136353. A copy may be obtained from the Parish Clerk's Office, 6th Floor, General Government Building, 200 Derbigny Street, Gretna, LA 70053, (504) 364-2626. A copy of the resolution may also be downloaded by viewing the Purchasing Department webpage of Jefferson Parish's website, www.jeffparish.net/departments/purchasing/forms.

B. Non-negotiable contract terms include but are not limited to taxes, assignment of contract, audit of records, EEOC and ADA compliance, record retention, content of contract/order of precedence, contract changes, force majeure, governing law, including ethics statements, claims or controversies, and termination based on contingency of appropriation of funds.

C. It shall be the duty of every Parish officer, employee, department, agency, special district, board, and commission; and the duty of every contractor, subcontractor, and licensee of the Parish and the duty of every applicant for certification of eligibility for a Parish contract or program, to cooperate with the Inspector General in any investigation, audit, inspection, performance review, or hearing pursuant to Jefferson Parish Code of Ordinances Section 2-155.10 (19). By submitting a proposal, proposer acknowledges this and will abide by all provisions of the referenced Jefferson Parish Code of Ordinances.

D. **Inspector General:** It shall be the duty of every parish officer, employee, department, agency, special district, board, and commission and the duty of every contractor, subcontractor, and licensee of the parish, and the duty of every applicant for certification of eligibility for a parish contract or program, to cooperate with the inspector general in any investigation, audit, inspection, performance review, or hearing pursuant to JPCO 2-155.10(19). By signing this document, every corporation, partnership, or person contracting with PARISH, whether by cooperative endeavor, intergovernmental agreement, bid, proposal, application or solicitation for a parish contract, and every application for certification of eligibility for a parish contract or program, attests that it understands and will abide by all provisions of JPCO 2-155.10.

1.23 Taxes

Jefferson Parish is exempt from paying sales taxes under Louisiana State Revised Statute 47:301(8)(c). All prices for purchases of supplies and materials by Jefferson Parish shall be quoted exclusive of State and Parish taxes.

1.24 Selected Proposer's Responsibilities

The Selected Proposer shall be required to provide all items and services offered in their proposal. The Selected Proposer shall be the sole point of contact for all contractual matters, including payment of any and all charges resulting under the contract.

1.25 Sub-Contractor Requirements

If the Proposer intends to subcontract portions of the work or to satisfy any of the Proposer Requirements and/or Scope of Work through the use of a subcontractor, the Proposer shall include the name of the subcontractor and specific designations of the tasks to be performed or Proposer Requirements to be met by respective subcontractor(s). Unless specifically permitted in the contract with the Parish of Jefferson, the Selected Proposer(s) shall not contract with any other party for furnishing any of the work herein requested in the Scope of Work without the ratification by Jefferson Parish Council Resolution.

1.26 Insurance Requirements

Selected Proposer shall furnish the Parish with certificates of insurance evidencing mandated coverage(s) pursuant to Resolution No. 136353, as amended, and Attachment "A". A copy of Resolution No. 136353 may be downloaded from the Purchasing Department webpage on the Jefferson Parish website, www.jeffparish.net/departments/purchasing/forms.

1.27 Subcontractor Insurance

The Selected Proposer shall include all subcontractors as named insured under its policies or shall furnish separate certificates for each subcontractor. All coverages for subcontractors shall be in conformity with Resolution No. 136353, as amended. A copy of Resolution No. 136353 may be downloaded from the Purchasing Department webpage on the Jefferson Parish website, www.jeffparish.net/departments/purchasing/forms.

1.28 No Guarantee of Quantities

The Parish of Jefferson does not guaranty quantity or services required in the Scope of Work defined in Part II. The Proposer shall provide all materials, labor, and equipment, whether specified or not, to provide a complete working system.

The quantities of items or extent of Scope of Work are estimated values. In the event a greater or lesser quantity is required, the Parish reserves the right to increase or decrease said values in accordance with the Price Proposal.

1.29 Contract Negotiations

The Parish administration shall negotiate the details of service delivery, the terms of the contract, and the contract price most advantageous to the Parish with the Proposer(s) selected by the Jefferson Parish Council (sometimes referred to throughout this document as the "Council") and submit the contract, in final form, to the Council for award. Contract negotiations are limited by Section 1.22(B) Non-negotiable Contract Terms in this RFP. In the event a contract cannot be successfully negotiated, the RFP Evaluation Committee shall seek authorization from the Council to negotiate a contract with another Proposer under this RFP.

1.30 Cancellation of RFP or Rejection of Proposals

In accordance with Section 2-895 of the Parish of Jefferson Code of Ordinances, the Parish through its Council may reject any or all proposals received in response to this RFP, or cancel this RFP prior to proposal Receipt Date and Time if in the best interest of the Parish.

1.31 Evaluation and Selection

In conformity with Section 2-895 of the Jefferson Parish Code of Ordinances, all proposals will be evaluated by the RFP Evaluation Committee. Before beginning the evaluation process, the Evaluation Committee must review the RFP concerning not only the task of description, but also the qualifications and the evaluation criteria. The Evaluation Committee shall be comprised of representative from the requesting department(s), a representative from the Council Research and Budget Office, a representative from the Purchasing Department, a representative from the Finance Department and a representative from the Parish Attorney's Office, who will be a non-evaluating member and shall act as secretary of the Evaluation Committee, and is solely responsible for disseminating all information received during the review process. Also, if deemed necessary and duly authorized by Council Resolution, additional employees of Jefferson Parish may be appointed as members of the RFP Evaluation Committee. The maximum Technical Proposal points shall be calculated by multiplying the number of Technical Proposal points assigned to the technical criterion multiplied by the number of evaluators scoring the proposal. After completion and tallying of the Technical Proposal Evaluation scores, each RFP Evaluation Committee member shall sign and date his/her individual score sheet. After the secretary of the Evaluation Committee collects all individual technical score sheets, the Purchasing Department representative and the representative of the requesting department(s) shall tally the individual scores to obtain a total Technical Proposal evaluation score for each Proposer. Following the tabulation of Technical Proposal scores, the Purchasing Department representative shall open the sealed Price Proposals, and shall read the pertinent portions of those Price Proposals aloud. To the

extent necessary, the Evaluation Committee may further review and analyze the Price Proposals and/or request and receive clarification of the pricing information provided by the Proposers for submission to the Council. After discussion of all Price Proposals, the Finance Department representative shall calculate the price proposal evaluation portion of the scoring sheet, using the Price Proposals submitted by Proposers and the formula below. The Price Proposal evaluation shall constitute twenty-five percent (25%) of the total scoring points assigned. The maximum Price Proposal points shall be calculated by multiplying the number of cost points assigned to price in the evaluation criterion multiplied by the number of evaluators scoring the proposal. The Proposer with the lowest price shall receive the highest Price Proposal evaluation score.

Other Proposers will receive a cost evaluation score computed as follows:

CS = (LPC/PC*X)
Where:
CS = Computed cost score for Proposer
LPC = Lowest proposed cost submitted
PC = Proposer's cost
X = Maximum combined cost points available.

After the Finance Department representative completes the cost evaluation scores, the Purchasing Department representative and the requesting department representative shall each add the cost evaluation scores for each Proposer to the tabulated technical scores of each Proposer, totaling the final number of points assigned to each Proposer. The tabulated score sheet shall be signed and dated by the Purchasing Department representative, the Finance Department representative and the requesting department representative. The secretary of the Evaluation Committee shall collect all individual and tabulated score sheets and deliver them to the Council Clerk. The Evaluation Committee shall prepare and forward to the Council a memorandum identifying the qualified Proposers and explaining their rationale. Attached to the memorandum shall be copies of the Price Proposals received in accordance with the RFP, along with any analysis or clarification completed regarding those Price Proposals. A list of names of the responsive and responsible Proposers shall be submitted to the Council along with a list of the non-responsive and non-responsible Proposers. Responsibility of a Proposer shall be determined in accordance with competitive sealed bids in the Revised Statutes of the State of Louisiana. Responsiveness shall be determined considering the materials that the Proposer has submitted and the core requirements of the RFP. Proposers are invited to attend the Evaluation Committee Meeting(s) and are encouraged to check the Jefferson Parish website, www.jeffparish.net, for meeting details.

Upon completion of its analysis, the Council may either (i) adopt the resolution selecting the Proposer(s) to supply the non-standard item(s) or perform the statement of work or scope of services; or (ii) reject all proposals. The Council shall select the proposal which received the highest cumulative score from the Evaluation Committee; except that the Council may select a Proposer or multiple Proposers other than the highest-ranked Proposer provided that Proposer selected has been given a cumulative score by the

committee that received a total maximum score of at least eighty percent (80%). There are times when selection of multiple Proposers to provide the same services in in the best interest of the Parish. If multiple Proposers are selected, the Parish administration is to negotiate favorable contract terms which are to include identical pricing for all Selected Proposers.

Award of the contract may be made without discussions after proposals are received and evaluated. Proposals should, therefore, be submitted on the most favorable terms which the Proposer can submit, from a technical standpoint; and from a price standpoint. If the Evaluation Committee determines that discussions are necessary, written submissions or oral discussions/presentations may be required from all Proposers.

1.32 Indemnification

Selected Proposer shall agree to indemnify and hold harmless the Parish of Jefferson, its departments, agencies, boards and commissions, officers, agents, servants and employees, including volunteers, against any and all claims, demands, suits, costs, liabilities or judgments for sums of money, and fines or penalties asserted by any party, firm or organization for loss of life or injury or damages to person or property, growing out of, resulting from, or by reason of any negligent acts, errors, and/or omissions by Selected Proposer, its agents, servants or employees, while engaged upon or in connection with the services required to be performed by Selected Proposer under this RFP.

Further, Selected Proposer shall agree to indemnify the Parish of Jefferson, its departments, agencies, boards and commissions, officers, agents, servants and employees, including volunteers for all reasonable expenses and attorney's fees incurred by or imposed in connection therewith for any loss, damage, injury or other casualty pursuant to the services required to be performed by Selected Proposer under this RFP. Selected Proposer additionally shall agree to pay all reasonable expenses and attorney's fees incurred by the Parish of Jefferson, its departments, agencies, boards and commissions, officers, agents, servants and employees, including volunteers in establishing the right to indemnity pursuant to the provisions stated herein.

1.33 Payment for Services

The proposer shall address the invoice to the Jefferson Parish Department of Sewerage pursuant to the payment terms negotiated in the contract. The invoice shall be submitted to the Engineer for review and agreement on quantities. The Engineer will forward the invoice to the Jefferson Parish Department of Sewerage with a recommendation of payment. Payments will be made by the Jefferson Parish Department of Sewerage no earlier than thirty (30) days after receipt of a properly executed invoice, and approval by the Engineer and Jefferson Parish Department of Sewerage. Invoices shall include the contract and order number, using department and product or service purchased. Invoices submitted without the referenced documentation will not be approved for payment until the required information is provided.

With each invoice submitted, the Selected Proposer holding said non-bid contract shall acknowledge that no subcontractors or other persons have been added to the contract without prior Council approval by resolution. Failure to comply with this section shall result in penalties imposed upon the Selected Proposer under contract as set forth in section 2-935.1 of the Code of Ordinances for professional service providers.

Successful proposers submitting payment requests for services in connection with pre-placed emergency contracts shall provide a list of all sub-contractors used in the performance of the pre-placed emergency contracts prior to payment on the contract.

1.34 Termination

The Proposer affirmatively acknowledges and agrees that the terms of any ensuing contract shall be binding upon the parties thereto until the work has been completed and accepted by the Parish; but said contract may be terminated under any or all of the following conditions:

A. By mutual agreement and consent of the parties thereto.

B. By the Parish as a consequence of the failure of Selected Proposer(s) to comply with the terms or quality of work in a satisfactory manner, proper allowance being made for circumstances beyond the control of Selected Proposer(s) provided the Parish will give Selected Proposer(s) written notice of any such failure and ten (10) days (or more if authorized in writing by the Parish) to cure any such failure.

C. By either party upon failure of the other party to fulfill its obligation as set forth in the contract.

D. By the Parish for convenience by issuing Selected Proposer(s) thirty (30) days written notice.

E. By the Parish for any act of discrimination committed by the Proposer, or failure to comply with the statutory obligations, when applicable, of Title VI and VII of the Civil Rights Act of 1964, as amended by the Equal Opportunity Act of 1972, Federal Executive Order 11246, the Federal Rehabilitation Act of 1973, as amended, the Vietnam Era Veteran's Readjustment Assistant Act of 1974, Title IX of the Education Amendments of 1972, the Age Discrimination in Employment Act of 1972, and the Contracting Party agrees to abide by the requirements of the American with Disabilities Act of 1990.

The continuance of the contract is contingent upon the appropriation of funds to fulfill the requirements of the contract by the Council. If the Council fails to appropriate sufficient monies to provide for the continuation of the contract, or if such appropriation is reduced

by the veto of the Parish President to prevent the total appropriation for the year from exceeding revenues for that year, or for any other lawful purpose, and the effect of such reduction is to provide insufficient monies for the continuation of the contract, the contract shall terminate on the date of the beginning of the first fiscal year for which funds are not appropriated.

1.35 Assignment

The Proposer affirmatively acknowledges and agrees that any ensuing contract shall be binding upon the successors and assigns for the parties thereto. The ensuing contract being for the personal services of the Selected Proposer(s) shall not be assigned or subcontracted in whole or in part by said Selected Proposer(s) as to the services to be performed hereunder without the written consent of the Parish by Council Resolution, in the Parish's sole discretion.

1.36 EEOC and ADA Compliance

The Proposer agrees to abide by the requirements of the following as applicable: Title VI and VII of the Civil Rights Act of 1964, as amended by the Equal Opportunity Act of 1972, Federal Executive Order 11246, the Federal Rehabilitation Act of 1973, as amended, the Vietnam Era Veteran's Readjustment Assistant Act of 1974, Title IX of the Education Amendments of 1972, the Age Discrimination in Employment Act of 1972, and the Contracting Party agrees to abide by the requirements of the American with Disabilities Act of 1990.

The Proposer shall keep informed of and comply with all federal, state and local laws, ordinances and regulations which affect their employees or prospective employees.

Any act of discrimination committed by the Proposer, or failure to comply with these statutory obligations, when applicable, shall be grounds for termination of the contract.

1.37 Audit of Records

A. Proposer(s) affirmatively acknowledges and agrees that pursuant to any ensuing contract, Selected Proposer shall maintain adequate books of account with respect to its services, in accordance with generally accepted accounting principles (GAAP) in a form and method acceptable to the Parish. Selected Proposer(s) shall permit Parish and Parish's agents from time-to-time within forty-eight (48) hours written notice, to inspect, copy and audit during Selected Proposer(s) normal business office hours, the books and records pertaining to the services provided under the contract. Parish's right to audit, inspect, and make copies of Selected Proposer's records shall be at the sole expense of Parish.

B. Periodic and/or Annual Reports. At any time, the Parish may request that the Selected Proposer(s) with the minimum of thirty (30) days written notice, prepare

and/or produce a report of the results of operations, as it pertains to any ensuing contract, in the previous fiscal year prepared in accordance with generally accepted accounting principles (GAAP). The report must be prepared and certified by an independent certified public accounting firm. (For purposes of said contract, each “fiscal year” begins on January 1 and ends on December 31 of the same year.)

1.38 Record Retention

The Selected Proposer shall maintain all records in relation to the proposed contract at its location for a period of at least five (5) years upon expiration or earlier termination of the contract or for a period stipulated by the governing State and Federal regulations, whichever is longer.

1.39 Record Ownership

The Proposer acknowledges and agrees that all records, reports, documents, or other material(s) developed or resulting from this RFP shall be the sole property of the Parish of Jefferson, and shall be returned to the Parish by Proposer upon request at expiration or earlier termination of a contract.

1.40 Content of Contract/Order of Precedence

In the event of a conflict among documents, the order of precedence which shall govern is as follows: 1) the final contract; and, 2) the Request for Proposal (RFP) and addenda (if any); and, 3) the Proposer’s proposal; and, 4) Resolution No. 136353 and any amendments thereto.

1.41 Contract Changes

Upon negotiation of a bona-fide contract between the parties, no additional changes, amendments, or modifications may be completed without the prior ratification of the Council.

1.42 Substitution of Personnel

Substitution of personnel shall be approved by the Council, prior to any replacements. In addition to the foregoing, if during the term of the contract, the Selected Proposer cannot provide the personnel or subcontractor as stated in its proposal, Selected Proposer shall submit a written request for substitution supported by resume of qualifications and written certification that said substitution shall meet or exceed the requirements stated herein. Said substitution shall be at the Parish’s sole discretion.

1.43 Force Majeure

The Selected Proposer or Parish of Jefferson shall be exempted from performance under the terms and conditions of the negotiated contract if the Selected Proposer or Parish is prevented from performing any services in whole or in part as a result of any act of God, strike, war, civil disturbance, or court order; provided the Selected Proposer or Parish of Jefferson has prudently and promptly acted to undertake any and all corrective steps that the respective parties can perform. Subject to this provision, such nonperformance shall not be construed as cause or grounds for early termination of the contract.

1.44 Governing Law

All activities associated with this RFP process shall be interpreted under the laws of the State of Louisiana. All proposal submissions shall be governed in accordance with provisions of Louisiana State laws and Jefferson Parish Code of Ordinances; standard terms and conditions; Resolution No. 136353.

1.45 Claims or Controversies

Proposer, as evidenced by his/her signature, agrees that the ensuing contract shall be made in accordance with the laws of the State of Louisiana. The Proposer hereby agrees to the exclusive jurisdiction and venue of the 24th Judicial District Court for the Parish of Jefferson, State of Louisiana.

PART II – SCOPE OF WORK/SERVICES

2.1 Scope of Work/Services

The scope of work for this project is to inspect & evaluate portions of the existing sanitary sewer collection system in Jefferson Parish to identify defects in the gravity sewer system leading to inefficiencies in the system due to Inflow and Infiltration (I&I) and in need of rehabilitation. The rehabilitation or repair work will be subsequently performed under sewer rehabilitation packages that will be designed and bid once the SSES work is completed in an area.

Technical project specifications are attached to this RFP in Attachment “E” for additional project details. Proposers shall comply with the technical specifications in Attachment “E”.

2.2 Period of Agreement

The term of any resulting contract shall be for three years.

2.3 Price Proposal (Price Schedule)

Price proposals and/or price schedules shall be submitted in a separate electronic sealed envelope as notated on the Central Bidding page as **"Price Attachment".** Price Proposals will remain sealed and shall not be read until the completion of the scoring of the Technical Proposal Evaluation during the RFP Evaluation Committee Meeting. Price Proposals shall not be included in the Technical Proposal evaluation criteria. Once read, the Price Proposals will be evaluated and scored in accordance with Section 1.31. Price Proposals shall be worth twenty-five percent (25%) of the total scoring points assigned.

Pricing **must** be submitted on the Price Proposal (Price Schedule) furnished in Attachment "F". All proposed pricing shall be inclusive of all additional costs and expenses, including shipment. Prices submitted shall remain firm for the term of the contract, unless otherwise negotiated.

2.4 Deliverables

The deliverables listed in this section are the minimum desired from the successful proposer. Every proposer must describe what deliverables will be provided per their proposal, and how the proposed deliverables will be provided.

2.5 Location

The location where services are to be performed is Parish Wide, which includes the incorporated town of Lafitte, as well as the unincorporated areas of Avondale, Barataria, Bridge City, Crown Point, Harvey, Marrero, Metairie, Nine Mile Point, River Ridge, Terrytown, and Waggaman.

2.6 Financial Profile

Proposers are requested to submit documentation from the past three (3) years demonstrating proposer's financial stability. Documentation may include audited financial statements including balance sheets, income statements, documentation regarding retained earnings, assets, liabilities, etc.

Proposer must include information demonstrating the proposer's financial stability and ability to obtain and maintain bonding and insurance requirements in order to be eligible to be assigned a higher score. Proposals which lack the description of the proposer's financial status or the required certification of bonding and insurance requirements may be assigned a lower score.

2.7 Technical Proposal Elements

A. Technical

1. Each Proposer shall address how the Proposer will achieve/meet the Scope of Work as stated in Section 2.1. Technical approach shall detail the following: Plans and/or schedule of implementation, orientation, and/or installation, etc. (whichever is relevant to the RFP requirements).

2. Plans for necessary training, where applicable. Information demonstrating an affirmative statement shall be required that the Proposer has reviewed the Scope of Work, understands the nature thereof and is willing and capable of providing the services thereof.

3. Proposer shall likewise include any information concerning any innovative concepts pursuant to this RFP and terms and conditions that the proposer desires consideration by the Parish.

B. Qualifications and Experience

1. Proposers shall provide a detailed statement of related services to government entities or private entities which identifies customer satisfaction, demonstrated volume of merchants, etc. Proposer must provide a detailed description of customer service capabilities, including resumes of personnel assigned, total number of personnel and timeline of customer inquiries and complaints, as applicable.

2. Proposer shall provide resumes for account manager(s), designated customer service representative(s) and any and all key personnel anticipated to be assigned to this project, in addition to resumes of any and all subcontractors.

PART III – FEDERAL CONTRACT PROVISIONS

3.1 Federal Contract Provisions
(NOT APPLICABLE FOR THIS RFP)

PART IV – EVALUATION

4.1 Evaluation Criteria

The proposed evaluation criteria shall be looked upon as standards which measure how well a Proposer's approach meets desired performance requirements, and which permit an evaluation of the differences between desired performance characteristics and what the Proposer proposes to do.

The proposed evaluation criteria shall measure how well a Proposer's approach meets desired minimum performance standards defined in the RFP, and shall allow for the quantification of the differences between those stated minimum standards and what the Proposer intends to do. In accordance with Section 2-895 of the Code of Ordinances for Jefferson Parish a scoring system must be devised and impartially applied to each proposal to assure objectivity and thoroughness in comparative analysis.

Price Proposal Evaluation shall constitute twenty-five percent (25%) of the total scoring points assigned. Price Proposal Evaluation shall take place after Technical Proposal Evaluation has been completed.

A. TECHNICAL PROPOSAL (Maximum of 75 Points per Evaluator)

The following criteria shall measure the qualifications, technical capabilities and core competency of the proposers and their submissions:

i. Scope of Services	30
ii. Project Schedule	5
iii. Specific Experience – similar or larger scope of services currently being provided	15
iv. Personnel- experience of management staff, experience in similar projects, etc.	15
v. Responsiveness to the RFP	5
vi. Financial Profile of Company	5

B. PRICE PROPOSAL

The proposer with the lowest price shall receive the highest Price Proposal Evaluation score (twenty-five (25) points per member)

Other proposers will receive a cost score computed as follows:

CS = (LPC/PC*X)
Where:
CS = Computed cost score for Proposer
LPC = Lowest proposed cost submitted
PC = Proposer's cost
X = Maximum combined cost points available — Maximum # of Points 25 per Evaluator

TOTAL MAXIMUM POINTS FOR THIS RFP 100 PER EVALUATOR.

PART V – PERFORMANCE STANDARDS

5.1 Performance Requirements

- Proposer's timely submission of reports
- Proposer's submission of accurate and itemized invoices
- Proposer's adherence to project schedule/meet completion date
- Proposer's ability to provide key personnel with knowledge and technical expertise

5.2 Performance Measurement/Evaluation

- Did the proposer finish ahead of schedule?
- Did the proposer respond to Parish correspondence in a timely manner?
- Were complaints/problems resolved in a reasonable and cooperative manner?
- Was the proposer reasonable and responsive to Parish needs?
- Was the final product usable for the purpose intended?
- Were changes in key personnel made? How often? With or without notice?

PART VI - APPENDICIES

ATTACHMENT "A"

INSURANCE REQUIREMENTS

All insurance requirements shall conform to Jefferson Parish Resolution No. 136353 (previously 113646).

The proposer shall not commence work under this contract until it has obtained all insurance and complied with the insurance requirements of the specifications and Resolution No. 136353 (amends Resolution No. 113646), as amended.

Proposers must provide with proposal submission a current (valid) insurance certificate evidencing required coverages. The current insurance certificate will be used for proof of insurance at time of evaluation. Thereafter, and prior to contract execution, the selected proposer will be required to provide final insurance certificates to the Parish which shall name **the Jefferson Parish, its Districts Departments and Agencies under the direction of the Parish President and the Parish Council** as additional insureds regarding negligence by the contractor for the Commercial General Liability, Workmen's Compensation Insurance and the Comprehensive Automobile Liability policies. Additionally, said certificates should reflect the name of the Parish Department receiving goods and services and reference the respective Jefferson Parish RFP solicitation number

WORKER'S COMPENSATION INSURANCE

As required by Louisiana State Statute, exception; Employer's Liability, Section B shall be $1,000,000 per occurrence when Work is to be over water and involves maritime exposures to cover all employees not covered under the State Worker's Compensation Act, otherwise this limit shall be no less than $500,000 per occurrence.

COMMERCIAL GENERAL LIABILITY

Shall provide limits not less than the following: $1,000,000.00 Combined Single Limit per Occurrence for bodily injury and property damage.

COMPREHENSIVE AUTOMOBILE LIABILITY

Bodily injury liability $1,000,000.00 each person; $1,000,000.00 each occurrence. Property Damage Liability $1,000,000.00 each occurrence.

DEDUCTIBLES

No insurance required shall include a deductible greater than $10,000.00. The cost of the deductible is borne by the proposer.

UMBRELLA LIABILITY COVERAGE

An umbrella policy or excess may be used to meet minimum requirements.

ATTACHMENT "B"

Request for Proposals #0467

Technical Assistance with Sanitary Sewer Evaluation Survey Services

SIGNATURE PAGE

The Jefferson Parish Department of Purchasing is soliciting Request for Proposals (RFP'S) from qualified proposers who are interested in providing Technical Assistance with Sanitary Sewer Evaluation Survey Services for the for the Jefferson Parish Capital Project Department.

Request for Proposals will be received until 3:30 p.m. Local Time on: November 2, 2023

Acknowledge Receipt of Addenda: Number: _____
Number: _____
Number: _____
Number: _____
Number: _____
Number: _____

Name of Proposer: _____

Address: _____

_____

Phone Number: _____Fax Number_____

Type Name of Person Authorized to Sign: _____

Title of Person Authorized to Sign: _____

Signature of Person Authorized to Sign: _____

Email Address of Person Authorized to Sign: _____

Date: _____

This RFP signature page must be signed by an authorized Representative of the Company/Firm for proposal to be valid. Signing indicates you have read and comply with the Instructions and Conditions.

ATTACHMENT "C"

CORPORATE RESOLUTION

EXCERPT FROM MINUTES OF MEETING OF THE BOARD OF DIRECTORS OF _____ INCORPORATED.

AT THE MEETING OF DIRECTORS OF _____ INCORPORATED, DULY NOTICED AND HELD ON _____, A QUORUM BEING THERE PRESENT, ON MOTION DULY MADE AND SECONDED. IT WAS:

RESOLVED THAT _____, BE AND IS HEREBY APPOINTED, CONSTITUTED AND DESIGNATED AS AGENT AND ATTORNEY-IN-FACT OF THE CORPORATION WITH FULL POWER AND AUTHORITY TO ACT ON BEHALF OF THIS CORPORATION IN ALL NEGOTIATIONS, BIDDING, CONCERNS AND TRANSACTIONS WITH THE PARISH OF JEFFERSON OR ANY OF ITS AGENCIES, DEPARTMENTS, EMPLOYEES OR AGENTS, INCLUDING BUT NOT LIMITED TO, THE EXECUTION OF ALL PROPOSALS, PAPERS, DOCUMENTS, AFFIDAVITS, BONDS, SURETIES, CONTRACTS AND ACTS AND TO RECEIVE ALL PURCHASE ORDERS AND NOTICES ISSUED PURSUANT TO THE PROVISIONS OF ANY SUCH PROPOSAL OR CONTRACT, THIS CORPORATION HEREBY RATIFYING, APPROVING, CONFIRMING, AND ACCEPTING EACH AND EVERY SUCH ACT PERFORMED BY SAID AGENT AND ATTORNEY-IN-FACT.

I HEREBY CERTIFY THE FOREGOING TO BE A TRUE AND CORRECT COPY OF AN EXCERPT OF THE MINUTES OF THE ABOVE DATED MEETING OF THE BOARD OF DIRECTORS OF SAID CORPORATION, AND THE SAME HAS NOT BEEN REVOKED OR RESCINDED.

_____

SECRETARY-TREASURER

_____

DATE

ATTACHMENT "D"

Request for Proposal
Affidavit Instructions

- **Affidavit is supplied as a courtesy to Affiants, but it is the responsibility of the affiant to insure the affidavit they submit to Jefferson Parish complies, in both form and content, with federal, state and Parish laws.**
- **Affidavit must be signed by an authorized representative of the entity or the affidavit will not be accepted.**
- **Affidavit must be notarized or the affidavit will not be accepted.**
- **Notary must sign name, print name, and include bar/notary number, or the affidavit will not be accepted.**
- **Affiant MUST select either A or B when required or the affidavit will not be accepted.**
- **Affiants who select choice A must include an attachment or the affidavit will not be accepted.**
- **If both choice A and B are selected, the affidavit will not be accepted.**
- **Affidavit marked N/A will not be accepted.**
- **It is the responsibility of the Affiant to submit a new affidavit if any additional campaign contributions are made after the affidavit is executed but prior to the time the Council acts on the matter.**
- **RFP Affidavit must be submitted in its original format prior to approval in accordance with Sec. 2-895(b) of the Jefferson Parish Code of Ordinances.**

Instruction sheet may be omitted when submitting the affidavit.

Request for Proposal

AFFIDAVIT

STATE OF _____

PARISH/COUNTY OF _____

BEFORE ME, the undersigned authority, personally came and appeared: _____

_____, (Affiant) who after being by me duly sworn, deposed and said that he/she is the fully authorized _____of _____(Entity), the party who submitted a proposal in response to RFP Number _____, to the Parish of Jefferson.

Affiant further said:

Campaign Contribution Disclosures

(Choose A or B, if option A is indicated please include the required attachment):

Choice A _____ Attached hereto is a list of all campaign contributions, including the date and amount of each contribution, made to current or former elected officials of the Parish of Jefferson by Entity, Affiant, and/or officers, directors and owners, including employees, owning 25% or more of the Entity during the two-year period immediately preceding the date of this affidavit or the current term of the elected official, whichever is greater. Further, Entity, Affiant, and/or Entity Owners have not made any contributions to or in support of current or former members of the Jefferson Parish Council or the Jefferson Parish President through or in the name of another person or legal entity, either directly or indirectly.

Choice B _____ there are **NO** campaign contributions made which would require disclosure under Choice A of this section.

Affiant further said:

Debt Disclosures

(Choose A or B, if option A is indicated please include the required attachment):

Choice A _____ Attached hereto is a list of all debts owed by the affiant to any elected or appointed official of the Parish of Jefferson, and any and all debts owed by any elected or appointed official of the Parish to the Affiant.

Choice B _____ There are **NO** debts which would require disclosure under Choice A of this section.

Affiant further said:

Solicitation of Campaign Contribution Disclosures

(Choose A or B, if option A is indicated please include the required attachment):

Choice A _____ Attached hereto is a list of all elected officials of the Parish of Jefferson, whether still holding office at the time of the affidavit or not, where the elected official, individually, either by **telephone or by personal contact,** solicited a campaign contribution or other monetary consideration from the Entity, including the Entity's officers, directors and owners, and employees owning twenty-five percent (25%) or more of the Entity, during the two-year period immediately preceding the date the affidavit is signed. Further, to the extent known to the Affiant, the date of any such solicitation is included on the attached list.

Choice B _____ there are **NO** solicitations for campaign contributions which would require disclosure under Choice A of this section.

Affiant further said:

That Affiant has employed no person, corporation, firm, association, or other organization, either directly or indirectly, to secure the public contract under which he received payment, other than persons regularly employed by the Affiant whose services in connection with the construction, alteration or demolition of the public building or project or in securing the public contract were in the regular course of their duties for Affiant; and

That no part of the contract price received by Affiant was paid or will be paid to any person, corporation, firm, association, or other organization for soliciting the contract, other than the payment of their normal compensation to persons regularly employed by the Affiant whose services in connection with the construction, alteration or demolition of the public building or project were in the regular course of their duties for Affiant.

Affiant further said:

Subcontractor Disclosures

(Choose A or B, if option A is indicated please include the required attachment):

Choice A _____ Affiant further said that attached is a listing of all subcontractors, excluding full time employees, who may assist in providing professional services for the aforementioned RFP.

Choice B _____ There are **NO** subcontractors which would require disclosure under Choice A of this section.

_____
Signature of Affiant

_____
Printed Name of Affiant

SWORN AND SUBSCRIBED TO BEFORE ME

ON THE _____DAY OF _____, 20___.

_____
Notary Public

_____
Printed Name of Notary

_____
Notary/Bar Roll Number

My commission expires _____.

ATTACHMENT "E" – TECHNICAL SPECIFICATIONS

TABLE OF CONTENTS

Jefferson Parish
Sewerage Department
Sanitary Sewer System Evaluation Services (SSES)
Request for Proposals
2023

Technical Specifications

SECTION 0010
SUMMARY OF WORK

PART 1 – GENERAL

1.01 SUMMARY OF WORK

The work to be performed under this contract shall consist of flow monitoring, cleaning, television (CCTV) inspection, smoke testing, dye testing, root / grease removal, protruding tap removal, debris removal & disposal, pipe & structure condition assessments, data management, and other means of inspection & miscellaneous services required to evaluate lines, manholes and wet wells which comprise the Parish sanitary sewer system.

The objective of this project is to perform sanitary sewer evaluation services that include but are not limited to gravity sewer pipe & manhole cleaning, smoke testing, CCTV inspections, dye water testing services and manhole inspections to identify defects in the gravity sewer system leading to inefficiencies in the system due to Inflow and Infiltration (I&I) and in need of rehabilitation. The aforementioned services will be performed in approximately thirty (30) identified sewer service areas, with approximately six (6) sewer service areas in each of the five (5) Council Districts, separated in two (2) Phases over the two (2) year contract term. The approximate fifteen (15) sewer service areas planned under Phase I is comprised of approximately 280,000 LF of gravity sewer main and 1,100 sewer manholes. Phase 2 includes approximately (15) sewer service areas planned under Phase I is comprised of approximately 160,000 LF of gravity sewer main and 625 sewer manholes

PART 2 – PRODUCTS

Not Used.

PART 3 – EXECUTION

Not Used.

SECTION 0025
MEASUREMENT AND PAYMENT

PART 1 – GENERAL

A. Refer to the Pricing Schedule.

B. Payment for the various items of the Pricing Schedule, as further specified herein, shall include all compensation to be received by the CONTRACTOR for furnishing all tools, equipment, supplies, and manufactured articles, and for all labor, operations, and incidentals appurtenant to the items of work being described, as necessary to complete the various items of the work in accordance with the requirements of the Contract Documents, including all appurtenances thereto, and including all costs of compliance with the regulations of public agencies having jurisdiction. No separate payment will be made for any item that is not specifically set forth in the Pricing Table, or as otherwise specified herein. Therefore, all costs must be included in the prices named in the Pricing Table for the various appurtenant items of work. Pricing for other services will be negotiated between the CONTRACTOR and OWNER as needed.

PART 2 – PRODUCTS

Not Used.

PART 3 – EXECUTION

Not Used.

PART 4 – MEASUREMENT AND PAYMENT

4.01 ESTIMATED QUANTITIES

A. This is a unit price contract. The quantities shown on the "Pricing Table" are for comparison of cost proposals only. Items of work performed under this contract will be on an as needed basis. Actual quantities may vary significantly from the quantities stated on the Pricing Table. Quantities shown may be increased, decreased, or not used at all.

4.02 MEASUREMENT AND PAYMENT (UNIT PRICE ITEMS)

1000.01 Mobilization / Demobilization of Equipment & Crews

A. Measurement for payment of Mobilization / Demobilization of Equipment & Crews will be made on a per each basis.

B. Payment for Mobilization / Demobilization of Equipment & Crews will be made on a per each basis. Payment shall constitute full compensation for all labor, materials, and equipment necessary to complete this item of work, as specified herein, and shall include all costs associated with the initial and subsequent mobilizations / demobilizations of equipment & crews, as defined herein.

2000.01-.08 Temporary Flow Monitoring

A. Measurement for payment of Temporary Flow Monitoring will be made based on the number of meters installed and the number of days each meter is installed (per “meter days”).

B. Payment for Temporary Flow Monitoring will be made based on the number of meters installed and the number of days each meter is installed (per “meter days”). Payment shall constitute full compensation for all labor, materials, and equipment necessary to complete this item of work, as specified herein, and shall include all costs for temporary flow monitoring, documentation and preparation and delivery of data including but not limited to labor, equipment, transportation, tools and all other related procedures and materials necessary to produce the results in the form, format and of the quality specified in the flow monitoring section.

2000.09 Long-Term Flow Monitoring

A. Measurement for payment of Long-Term Flow Monitoring will be made based on the number of meters installed and the number of months each meter is installed (per “meter months”), with a 1-year minimum.

B. Payment for Long-Term Flow Monitoring will be made based on the number of meters installed and the number of months each meter is installed (per “meter months”). Payment shall constitute full compensation for all labor, materials, and equipment necessary to complete this item of work, as specified herein, and shall include all costs for long term flow monitoring, documentation and preparation and delivery of data including but not limited to labor, equipment,

transportation, tools and all other related procedures and materials necessary to produce the results in the form, format and of the quality specified in the flow monitoring section.

2000.10 Temporary Rain Gauges

A. Measurement for payment of Temporary Rain Gauges will be made based on the number of rain gauges installed and the number of days each gauge is installed (per “gauge days”).

B. Payment for Temporary Rain Gauges will be made based on the number of rain gauges installed and the number of days each gauge is installed (per “gauge days”). Payment shall constitute full compensation for all labor, materials, and equipment necessary to complete this item of work, as specified herein, and shall include all costs for rain gauges, documentation and preparation and delivery of data including but not limited to labor, equipment, transportation, tools and all other related procedures and materials necessary to produce the results in the form, format and of the quality specified in the flow monitoring section.

2000.11 Long-Term Rain Gauges

A. Measurement for payment of Long-Term Rain Gauges will be made based on the number of rain gauges installed and the number of months each gauge is installed (per “gauge months”).

B. Payment for Long-Term Rain Gauges will be made based on the number of rain gauges installed and the number of months each gauge is installed (per “gauge months”). Payment shall constitute full compensation for all labor, materials, and equipment necessary to complete this item of work, as specified herein, and shall include all costs for rain gauges, documentation and preparation and delivery of data including but not limited to labor, equipment, transportation, tools and all other related procedures and materials necessary to produce the results in the form, format and of the quality specified in the flow monitoring section.

2000.12 Night Flow Isolation

A. Measurement for payment of Night Flow Isolation will be made per each night flow isolation setup utilized.

B. Payment for Night Flow Isolation will be made will be made per each night flow isolation setup utilized. Payment shall constitute full

compensation for all labor, materials, and equipment necessary to complete this item of work, as specified herein, and shall include all costs for night flow isolation, documentation and preparation and delivery of data including but not limited to labor, equipment, transportation, tools and all other related procedures and materials necessary to produce the results in the form, format and of the quality specified in the flow monitoring section.

2000.13-.14 Pump Station Draw/Fill Test

A. Measurement for payment of Pump Station Draw/Fill Test will be made per each draw/fill test completed.

B. Payment for Pump Station Draw/Fill Test will be made per each draw/fill test completed. Payment shall constitute full compensation for all labor, materials, and equipment necessary to complete this item of work, as specified herein, and shall include all costs for pump station draw/fill tests, documentation and preparation and delivery of data including but not limited to labor, equipment, transportation, tools and all other related procedures and materials necessary to produce the results in the form, format and of the quality specified in the flow monitoring section.

2000.15 Force Main Monitoring (Clamp-On Meters)

A. Measurement for payment of Force Main Monitoring (Clamp-On Meters) will be made based on the number of meters installed and the number of days each meter is installed (per “meter days”).

B. Payment for Force Main Monitoring (Clamp-On Meters) will be made based on the number of meters installed and the number of days each meter is installed (per “meter days”). Payment shall constitute full compensation for all labor, materials, and equipment necessary to complete this item of work, as specified herein, and shall include all costs for force main monitoring, documentation and preparation and delivery of data including but not limited to labor, equipment, transportation, tools and all other related procedures and materials necessary to produce the results in the form, format and of the quality specified in the flow monitoring section.

3000.01 360 Degree Manhole Condition Assessment (Less Than or Equal to 4-Ft Diameter)

A. Measurement for payment of 360 Degree Manhole Condition Assessment (Less Than or Equal to 4-Ft Diameter) will be made per each manhole inspected.

B. Payment for 360 Degree Manhole Condition Assessment (Less Than or Equal to 4-Ft Diameter) will be made per each manhole inspected. Payment shall constitute full compensation for all labor, materials, and equipment necessary to complete this item of work, as specified herein, and shall include all costs associated with inspecting all designated manholes and documentation including but not limited to labor, equipment, transportation, tools, GPS data collection and all other related procedures and materials necessary to produce the results in the form, format and of the quality specified in the 360 degree manhole condition assessment section.

3000.02 360 Degree Manhole Condition Assessment (Greater Than 4-Ft Diameter)

A. Measurement for payment of 360 Degree Manhole Condition Assessment (Greater Than 4-Ft Diameter) will be made per each manhole inspected.

B. Payment for 360 Degree Manhole Condition Assessment (Greater Than 4-Ft Diameter) will be made per each manhole inspected. Payment shall constitute full compensation for all labor, materials, and equipment necessary to complete this item of work, as specified herein, and shall include all costs associated with inspecting all designated manholes and documentation including but not limited to labor, equipment, transportation, tools, GPS data collection and all other related procedures and materials necessary to produce the results in the form, format and of the quality specified in the 360 degree manhole condition assessment section.

3000.03 360 Degree Wet Well Condition Assessment (Less Than or Equal to 8-Ft Diameter)

A. Measurement for payment of 360 Degree Wet Well Condition Assessment (Less Than or Equal to 8-Ft Diameter) will be made per each wet well inspected..

B. Payment for 360 Degree Wet Well Condition Assessment (Less Than or Equal to 8-Ft Diameter) will be made per each wet well

inspected. Payment shall constitute full compensation for all labor, materials, and equipment necessary to complete this item of work, as specified herein, and shall include all costs associated with inspecting all designated wet wells that are less than or equal to 8-ft. diameter and documentation including but not limited to labor, equipment, transportation, tools, GPS data collection and all other related procedures and materials necessary to produce the results in the form, format and of the quality specified in the 360 degree wet well condition assessment section.

3000.04 360 Degree Wet Well Condition Assessment (Greater Than 8-Ft Diameter)

A. Measurement for payment of 360 Degree Wet Well Condition Assessment (Greater Than 8-Ft Diameter) will be made per each wet well inspected.

B. Payment for 360 Degree Wet Well Condition Assessment (Greater Than 8-Ft Diameter) will be made per each wet well inspected. Payment shall constitute full compensation for all labor, materials, and equipment necessary to complete this item of work, as specified herein, and shall include all costs associated with inspecting all designated wet wells that are greater than 8-ft. diameter and documentation including but not limited to labor, equipment, transportation, tools, GPS data collection and all other related procedures and materials necessary to produce the results in the form, format and of the quality specified in the 360 degree wet well condition assessment section.

3000.05 Structural Manhole Condition Assessment with Internal Images

A. Measurement for payment of Structural Manhole Condition Assessment with Internal Images will be made per each manhole inspected.

B. Payment for Structural Manhole Condition Assessment with Internal Images will be made per each manhole inspected. Payment shall constitute full compensation for all labor, materials, and equipment necessary to complete this item of work, as specified herein, and shall include all costs associated with performing a manhole condition assessment with a pole-mounted viewing camera with lighting to obtain internal images, and other specified information including but not limited to labor, equipment, transportation, tools, GPS data collection and all other related procedures and materials necessary to produce the results in the form, format and of the

quality specified in the structural manhole condition assessment with internal images section.

3000.06 Uncover Buried Manholes Less than 12” Deep

A. Measurement for payment of Uncover Buried Manholes Less than 12” Deep will be made per each.

B. Payment for Uncover Buried Manholes Less than 12” Deep will be made per each. Payment shall constitute full compensation for all labor, materials, and equipment necessary to complete this item of work, as specified herein, and shall include all costs associated with uncovering of buried manholes in less than 12” of soil. Uncovering of manholes in concrete, asphalt, or any other material besides soil will not be performed.

3000.07 Removal of Stabilized Debris in Manhole Inverts

A. Measurement for payment of Removal of Stabilized Debris in Manhole Inverts will be made for each manhole that stabilized debris is removed from.

B. Payment for Removal of Stabilized Debris in Manhole Inverts will be made for each manhole that stabilized debris is removed from. Payment shall constitute full compensation for all labor, materials, and equipment necessary to complete this item of work, as specified herein, and shall include all costs associated with confined space entry into manhole and removal of stabilized debris from manhole inverts.

3000.08 Manhole / Wet Well Inspection Data Management

A. Measurement for payment of Manhole / Wet Well Inspection Data Management will be made per each manhole inspected.

B. Payment for Removal of Manhole / Wet Well Inspection Data Management will be made per each manhole inspected. Payment shall constitute full compensation for all software licenses, labor, materials, and equipment necessary to complete this item of work, as specified herein, and shall include all costs associated with the preparation and delivery of manhole inspection data, videos files, photographs, and other information as specified in the manhole and wet well inspection section.

3000.09 Manhole / Wet Well Rehabilitation Recommendations

A. Measurement for payment of Manhole / Wet Well Rehabilitation Recommendations will be made per each manhole / wet well inspected.

B. Payment for Removal of Manhole / Wet Well Rehabilitation Recommendations will be made per each manhole / wet well inspected. Payment shall constitute full compensation for all labor, materials, and equipment necessary to complete this item of work, as specified herein, and shall include all costs associated with the preparation and delivery of manhole / wet well rehabilitation recommendations.

4000.01 Smoke Testing

A. Measurement for payment of Smoke Testing will be made for the actual linear footage of pipe smoke tested.

B. Payment for Smoke Testing will be made for the actual linear footage of pipe smoke tested. Payment shall constitute full compensation for all labor, materials, and equipment necessary to complete this item of work, as specified herein, and shall include all costs associated with the procedures and materials necessary to produce the results in the form, format and of the quality specified in the smoke testing section.

4000.02 Smoke Testing Data Management

A. Measurement for payment of Smoke Testing Data Management will be made for the actual linear footage of pipe smoke tested.

B. Payment for Smoke Testing Data Management will be made for the actual linear footage of pipe smoke tested. Payment shall constitute full compensation for all labor, materials, and equipment necessary to complete this item of work, as specified herein, and shall include all costs associated with the preparation and delivery of smoke testing data and reports in the form, format and quality specified in the smoke testing section.

5000.01-.24 Standard and Heavy Pipe Cleaning

A. Measurement for payment of Standard and Heavy Pipe Cleaning will be made at the unit price per linear foot based on the pipe size being cleaned, whether or not the line is in the easement, with

measurement being made between centerlines of consecutive manholes for the line segments being cleaned.

B. Payment for Standard and Heavy Pipe Cleaning will be made at the unit price per linear foot based on the pipe size being cleaned, whether or not the line is in the easement, with measurement being made between centerlines of consecutive manholes for the line segments being cleaned. Payment shall constitute full compensation for all labor, materials, and equipment necessary to complete this item of work, as specified herein, and shall include all costs associated with standard and heavy pipe cleaning. Heavy pipe cleaning will be charged in addition to the standard cleaning rate when applicable.

5000.25 Sewer Debris Disposal Offsite

A. Measurement for payment of sewer debris disposal will not be measured for payment if disposed of at the Bridge City Wastewater Treatment Plant. If the Bridge City Wastewater Treatment Plant is not available for the disposal of sewerage debris, sewer debris disposal will be measured per ton of debris disposed of at an OWNER approved landfill facility.

B. Payment for sewer debris disposal will be at no direct cost if disposed of at the Bridge City Wastewater Treatment Plant. If the Bridge City Wastewater Treatment Plant is not available for the disposal of sewerage debris, sewer debris disposal will be made at the unit price per ton of debris disposed under the Sewer Debris Disposal Offsite pay item. Payment shall constitute full compensation for all labor, materials, and equipment necessary to complete this item of work, as specified herein, for the disposal of removed sewer debris.

6000.01-.04 Root / Grease Cutting

A. Measurement for payment of Root / Grease Cutting will be made per linear foot based on the pipe size requiring root and/or grease cutting services.

B. Payment for Root / Grease Cutting will be made per linear foot based on the pipe size requiring root and/or grease cutting services. Payment shall constitute full compensation for all labor, materials, and equipment necessary to complete this item of work, as specified herein, and shall include all costs associated with the root / grease cutting services.

6000.05-.09 Chemical Root Control

A. Measurement for payment of Chemical Root Control will be made per linear foot based on the pipe size that chemical root control is applied to.

B. Payment for Chemical Root Control will be made per linear foot based on the pipe size that chemical root control is applied to. Payment shall constitute full compensation for all labor, materials, and equipment necessary to complete this item of work, as specified herein, and shall include all costs associated with applying chemical root control.

6000.10 Removal of Protruding Taps By Internal Cutting

A. Measurement for payment of Removal of Protruding Taps By Internal Cutting will be made per tap cutting performed.

B. Payment for Removal of Protruding Taps By Internal Cutting will be made per tap cutting performed. Payment shall constitute full compensation for all labor, materials, and equipment necessary to complete this item of work, as specified herein, and shall include all costs associated with internal cutting & removal of protruding taps.

7000.01-.03 Video Inspection / Radial View Camera

A. Measurement for payment of Video Inspection / Radial View Camera will be made per the actual linear footage of pipe inspected at the unit rates specified based on pipe size.

B. Payment for Video Inspection / Radial View Camera will be made per the actual linear footage of pipe inspected at the unit rates specified based on pipe size. Payment shall constitute full compensation for all labor, materials, and equipment necessary to complete this item of work, as specified herein, and shall include all costs associated with the CCTV inspection of sanitary sewer lines.

7000.04 Additional Setup of CCTV Inspection Equipment

A. Measurement for payment of Additional Setup of CCTV Inspection Equipment will be made per each additional setup performed.

B. Payment for Additional Setup of CCTV Inspection Equipment will be made per each additional setup performed. Payment shall

constitute full compensation for all labor, materials, and equipment necessary to complete this item of work, as specified herein, and shall include all costs associated with the additional setup performed during CCTV. This will occur when the CCTV camera is unable to traverse the line segment from one manhole and must be setup again at the opposite or connecting manhole to attempt the inspection.

7000.05 CCTV Inspection of Service Laterals (Lateral Launching From Mainline)

A. Measurement for payment of CCTV Inspection of Service Laterals (Lateral Launching From Mainline) will be made per each service lateral inspected..

B. Payment for CCTV Inspection of Service Laterals (Lateral Launching From Mainline) will be made per each service lateral inspected. Payment shall constitute full compensation for all labor, materials, and equipment necessary to complete this item of work, as specified herein, and shall include all costs associated with the CCTV inspection of sanitary sewer service laterals from the mainline towards the cleanout.

7000.06 CCTV Inspection of Service Laterals (Push Camera From Cleanout)

A. Measurement for payment of CCTV Inspection of Service Laterals (Push Camera From Cleanout) will be made per each service lateral inspected.

B. Payment for CCTV Inspection of Service Laterals (Push Camera From Cleanout)will be made per each service lateral inspected.. Payment shall constitute full compensation for all labor, materials, and equipment necessary to complete this item of work, as specified herein, and shall include all costs associated with the CCTV inspection of sanitary sewer service laterals from the cleanout towards the mainline.

7000.07 CCTV Inspection Data Management

A. Measurement for payment of CCTV Inspection Data Management will be made per linear footage of pipes and service laterals CCTV inspected.

B. Payment for CCTV Inspection Data Management will be made per linear footage of pipes and service laterals CCTV inspected. Payment shall constitute full compensation for all labor, materials, and equipment necessary to complete this item of work, as specified herein, and shall include all costs associated with CCTV inspection data collection and management utilizing the Parish collection software as specified in the CCTV inspection section.

7000.08 Sewer Pipe Rehabilitation Recommendations

A. Measurement for payment of Sewer Pipe Rehabilitation Recommendations will be made per linear footage of pipes and service laterals CCTV inspected.

B. Payment for Sewer Pipe Rehabilitation Recommendations will be made per linear footage of pipes and service laterals CCTV inspected. Payment shall constitute full compensation for all labor, materials, and equipment necessary to complete this item of work, as specified herein, and shall include all costs associated with the preparation and delivery of sewer pipe rehabilitation recommendations.

8000.01 Cleaning Wet Wells

A. Measurement for payment of Cleaning Wet Wells will be made per hour, with a 4-hour minimum, for each OWNER approved wet well location cleaned.

B. Payment for Cleaning Wet Wells will be made per hour for each wet well cleaned. Payment shall constitute full compensation for all labor, materials, and equipment necessary to complete this item of work, as specified herein, and shall include all costs associated with the cleaning of wet wells to include operators, combination truck, hoses, pipe, and confined space entry equipment shall be billed at the proposed unit rate. A 4-hour minimum will be charged anytime this item is utilized.

8000.02-.05 Dye Testing In Conjunction with CCTV Inspection

A. Measurement for payment of Dye Testing In Conjunction with CCTV Inspection will be made per each dye testing setup performed based on the pipe size.

B. Payment for Dye Testing In Conjunction with CCTV Inspection will be per each dye testing setup performed based on the pipe size. Payment shall constitute full compensation for all labor, materials, and equipment necessary to complete this item of work, as specified herein, and shall include all costs associated with the dye testing of sewer lines in conjunction with CCTV inspection and preparation and delivery of data.

8000.06 Dye Testing NOT In Conjunction with CCTV Inspection

A. Measurement for payment of Dye Testing NOT In Conjunction with CCTV Inspection will be made per each dye testing setup performed.

B. Payment for Dye Testing NOT In Conjunction with CCTV Inspection will be made per each dye testing setup performed. Payment shall constitute full compensation for all labor, materials, and equipment necessary to complete this item of work, as specified herein, and shall include all costs associated with the dye testing of sewer lines NOT in conjunction with CCTV inspection and preparation and delivery of data.

8000.07 Sonar Inspection of Sewer Pipe

A. Measurement for payment of Sonar Inspection of Sewer Pipe will be made per the actual linear footage of pipe sonar inspected with measurement being made between centerlines of consecutive manholes for the line segments being assessed at the unit rate(s) specified.

B. Payment for Sonar Inspection of Sewer Pipe will be made per the actual linear footage of pipe sonar inspected with measurement being made between centerlines of consecutive manholes for the line segments being assessed at the unit rate(s) specified. Payment shall constitute full compensation for all labor, materials, and equipment necessary to complete this item of work, as specified herein, and shall include all costs associated with the sonar inspection of sewer lines and preparation and delivery of data.

8000.08 Multi-Sensor Inspection of Sewer Pipe

A. Measurement for payment of Multi-Sensor Inspection of Sewer Pipe will be made per the actual linear footage of pipe inspected with measurement being made between centerlines of consecutive manholes for the line segments being assessed at the unit rate(s) specified.

B. Payment for Multi-Sensor Inspection of Sewer Pipe will be made per the actual linear footage of pipe inspected with measurement being made between centerlines of consecutive manholes for the line segments being assessed at the unit rate(s) specified. Payment shall constitute full compensation for all labor, materials, and equipment necessary to complete this item of work, as specified herein, and shall include all costs associated with the multi-sensor inspection of sewer lines and preparation and delivery of data.

8000.09 Accurate Measuring Probe Pipe Assessment

A. Measurement for payment of Accurate Measuring Probe Pipe Assessment will be made per the actual linear footage of pipe assessed with measurement being made between centerlines of consecutive manholes for the line segments being assessed at the unit rate(s) specified.

B. Payment for Accurate Measuring Probe Pipe Assessment will be made per the actual linear footage of pipe assessed with measurement being made between centerlines of consecutive manholes for the line segments being assessed at the unit rate(s) specified. Payment shall constitute full compensation for all labor, materials, and equipment necessary to complete this item of work, as specified herein, and shall include all costs associated with the AMP assessment of sewer lines and preparation and delivery of data. AMP will be paid for in addition to CCTV and cleaning when necessary.

8000.10 Zoom Camera Pipe Assessment

A. Measurement for payment of Zoom Camera Pipe Assessment will be made per each pipe assessed.

B. Payment for Zoom Camera Pipe Assessment will be made per each pipe assessed. Payment shall constitute full compensation for all labor, materials, and equipment necessary to complete this item of work, as specified herein, and shall include all costs associated with

inspecting all designated pipes and documentation including but not limited to labor, equipment, transportation, tools and all other related procedures and materials necessary to produce the results in the form, format and of the quality specified in the structure and pipe condition assessment section.

8000.11 Acoustic Pipe Assessment

A. Measurement for payment of Acoustic Pipe Assessment will be made per the actual linear footage of pipe assessed with measurement being made between centerlines of consecutive manholes for the line segments being assessed at the unit rate(s) specified.

B. Payment for Acoustic Pipe Assessment will be made per the actual linear footage of pipe assessed with measurement being made between centerlines of consecutive manholes for the line segments being assessed at the unit rate(s) specified. Payment shall constitute full compensation for all labor, materials, and equipment necessary to complete this item of work, as specified herein, and shall include all costs associated with the acoustic pipe assessment of sewer lines and preparation and delivery of data.

8000.12 Remote Illumination of 15 Inch thru 60 Inch Pipe

A. Measurement for payment of remote illumination pipe inspection will be made per each pipe section inspected. This item will typically be performed on pipe sections of less than fifty (50) feet in length.

B. Payment for remote illumination pipe inspection will be made at the unit price for each pipe section inspected.

8000.13 Combination Cleaning Truck with Operator and Helper (Min. 8 Hours) < 10,000 LF

A. Measurement for payment of Combination Cleaning Truck with Operator and Helper (Min. 8 Hours) < 10,000 LF be made per hour, with an 8-hour minimum, for each OWNER approved mobilization/demobilization of one (1) combination cleaning truck with operator and helper for projects of less than 10,000 LF.

B. Payment for Combination Cleaning Truck with Operator and Helper (Min. 8 Hours) < 10,000 LF will be made per hour, with an 8-hour minimum, for each OWNER approved mobilization/demobilization of one (1) combination cleaning truck with operator and helper for

projects of less than 10,000 LF. Payment shall constitute full compensation for all labor, materials, and equipment necessary to complete this item of work, as specified herein, and shall include all costs associated with the port-to-port mobilization/demobilization of one (1) combination cleaning truck with operator and helper.

8000.14 CCTV Inspection Unit with Operator and Helper (Min. 8 Hours) < 10,000 LF

A. Measurement for payment of CCTV Inspection Unit with Operator and Helper (Min. 8 Hours) < 10,000 LF be made per hour, with an 8-hour minimum, for each OWNER approved mobilization/demobilization of one (1) CCTV inspection unit with operator and helper for projects of less than 10,000 LF.

B. Payment for Combination Cleaning Truck with Operator and Helper (Min. 8 Hours) < 10,000 LF will be made per hour, with an 8-hour minimum, for each OWNER approved mobilization/demobilization of one (1) CCTV inspection unit with operator and helper for projects of less than 10,000 LF. Payment shall constitute full compensation for all labor, materials, and equipment necessary to complete this item of work, as specified herein, and shall include all costs associated with the port-to-port mobilization/demobilization of one (1) CCTV inspection unit with operator and helper.

8000.15 Combination Cleaning Truck with Operator and Helper AND CCTV Inspection Unit with Operator and Helper (Min. 8 Hours) < 10,000 LF

A. Measurement for payment of CCTV Inspection Unit with Operator and Helper (Min. 8 Hours) < 10,000 LF be made per hour, with an 8-hour minimum, for each OWNER approved mobilization/demobilization of one (1) combination cleaning truck with operator and helper and one (1) CCTV inspection unit with operator and helper for projects of less than 10,000 LF.

B. Payment for Combination Cleaning Truck with Operator and Helper (Min. 8 Hours) < 10,000 LF will be made per hour, with an 8-hour minimum, for each OWNER approved mobilization/demobilization of one (1) combination cleaning truck with operator and helper and one (1) CCTV inspection unit with operator and helper for projects of less than 10,000 LF. Payment shall constitute full compensation for all labor, materials, and equipment necessary to complete this item of work, as specified herein, and shall include all costs associated with the port-to-port mobilization/demobilization of one (1) combination

cleaning truck with operator and helper and one (1) CCTV inspection unit with operator and helper.

8000.16 Easement Machine with Operator (Min. 8 Hours) < 10,000 LF

A. Measurement for payment of Easement Machine with Operator (Min. 8 Hours) < 10,000 LF be made per hour, with an 8-hour minimum, for each OWNER approved emergency port-to-port mobilization/demobilization of one (1) easement machine with operator for projects of less than 10,000 LF.

B. Payment for Combination Cleaning Truck with Operator and Helper (Min. 8 Hours) < 10,000 LF will be made per hour, with an 8-hour minimum, for each OWNER approved emergency port-to-port mobilization/demobilization of one (1) easement machine with operator for projects of less than 10,000 LF. Payment shall constitute full compensation for all labor, materials, and equipment necessary to complete this item of work, as specified herein, and shall include all costs associated with the emergency port-to-port mobilization/demobilization of one (1) easement machine with operator.

8000.17-.38 Set-Up and Operation of By-Pass Pumps and Extension of By-Pass Force Main Piping

A. Measurement: Separate measurement will be made for set-up and operation of by-pass pumps. These items are in addition to the minimum by-pass pumping requirements of other pay items and will only be allowed upon prior approval of the Director of the Department of Sewerage. Each set-up will be measured separately and will be made for each by-pass pump set up, by size of pump, and subsequent removal. This shall include all level controls, installation of up to 100 feet of discharge force main piping, up to 60 feet of suction piping, and a full tank of fuel. If additional force main piping is required to reach the designated discharge point, this additional force main piping will be measured by the linear foot, based on pipe diameter, and be paid for at the appropriate “Extension of By-Pass Pump Force Main Piping” pay item for the pump size.

Operation of by-pass pumps will be measured for the operation of each size of by-pass pump and will be made in accordance with the following schedules:

1 Day (DY) = 24 hours
1 Week (WK) = 3 days through 7 days

B. Payment: Payment for set-up of the by-pass pumps will be at the unit price per each for each size required. The item will only be used for pumping beyond the minimum requirements of other pay items. Payment for operation of each size pump shall be at the daily or weekly unit prices. Payment for operation of by-pass pumping will constitute full payment for the day-to-day operation of each pump, including fueling and daily checks on operation. Payment for extension of by-pass pump force main piping shall be per linear foot as measured above.

8000.39-.40 Traffic Control

A. Measurement for payment of Traffic Control will be measured for payment as stipulated herein.

B. Payment for all costs associated with the development and implementation of site-specific traffic control device plans, traffic control device set-up & removal, including cones, signs, & other necessary devices, etc., and traffic control device operation & maintenance are considered incidental to the other work and provided at no additional cost to the Owner. In high traffic volume areas & other instances the assessment work cannot be safely performed, flagman or law enforcement services can be utilized as needed upon approval by the OWNER. When flagman or law enforcement services are utilized the CONTRACTOR shall be compensated on an hourly basis.

SECTION 0052
REQUESTS FOR PAYMENT

PART 1 – GENERAL

1.01 REQUIREMENTS INCLUDED

Submit applications for payment to the Engineer in accordance with the schedule established by Conditions of the Contract.

1.02 RELATED WORK SPECIFIED ELSEWHERE

A. Agreement between Owner and Contractor: Total Proposal Price.

B. Conditions of the Contract: Progress Payments, Retainages and Final Payment.

C. Section 0700: Contract Closeout.

1.03 FORMAT AND DATA REQUIRED

A. Submit payment requests in the form required by Owner with itemized data typed on 8 ½ x 11 white paper continuation sheets.

B. Provide itemized data on continuation sheet: format, schedules, line items and values.

1.04 SUBSTANTIATING DATA FOR PROGRESS PAYMENTS

A. All payment requests must be accompanied by a short progress narrative describing work performed since previous payment submittal, current project schedule and invoices for any stored materials billed.

B. When the Owner or the Engineer requires additional substantiating data and backup documentation, the Contractor shall submit suitable information, with a cover letter.

C. Submit one copy of all data and backup documentation required with a cover letter for each monthly pay request. Any additional substantiating data requested shall also be submitted as required in Part B above.

D. Quantities of “Stored Materials” must be approved by the Engineer

prior to purchase of materials. Contractor shall submit invoices and delivery statements with pay requests.

1.05 PREPARATION OF APPLICATION FOR FINAL PAYMENT

A. Fill in the application form as specified for progress payments.

1.06 SUBMITTAL PROCEDURE

A. Submit applications for payment to the Engineer at the times stipulated in the Agreement.

B. Number: Two copies of each application.

C. When the Engineer finds the application properly completed and correct, the Engineer will transmit certificate for payment to the Owner.

PART 2 – PRODUCTS

Not Used.

PART 3 – EXECUTION

Not Used.

END OF SECTION

SECTION 0053
CHANGE ORDER PROCEDURES

PART 1 – GENERAL

1.01 REQUIREMENTS INCLUDED

A. Promptly implement change order procedures.

1. Provide full written data required to evaluate changes.
2. Maintain detailed records of work done on a time-and-material/force account basis.
3. Provide full documentation to Engineer on request.

B. Designate in writing the member of Contractor's organization.

1. Who is authorized to accept changes in the Work.
2. Who is responsible for informing others in the contractors employ of the authorization of changes in the Work.

C. Owner will designate in writing the person who is authorized to execute Change Orders.

1.02 PRELIMINARY PROCEDURES

A. Owner or Engineer may initiate changes by submitting a Proposal Request to Contractor. Request will include:

1. Detailed description of the Change, Products, and location of the change in the Project.
2. Supplementary or revised Drawings and Specifications.
3. The projected time span for making the change, and a specific statement as to whether overtime work is, or is not, authorized.
4. A specific period of time during which the requested price will be considered valid.
5. Such request is for information only, and is not an instruction to execute the changes, nor to stop work in progress.

B. Contractor may initiate changes by submitting a written notice to Engineer, containing:

1. Description of the proposed changes.
2. Statement of the reason for making the changes.
3. Statement of the effect on the Contract Sum and the Contract Time.
4. Statement of the effect on the work of separate contractors.

5. Documentation supporting any change in Contract Sum or Contract Time, as appropriate.

1.03 DOCUMENTATION OF PROPOSALS AND CLAIMS

A. Support each quotation for a lump-sum proposal, and for each unit price which has not previously been established, with sufficient substantiating data to allow Engineer to evaluate the quotation.

B. On request, provide additional data to support time and cost computations:

1. Labor required.
2. Equipment required.
3. Products required.
    a. Recommended source of purchase and unit cost.
    b. Quantities required.
4. Taxes, insurance and bonds.
5. Credit for work deleted from Contract, similarly documented.
6. Overhead and profit.
7. Justification for any change in Contract Time.

C. Support each claim for additional costs, and for work done on a time-and- material/force account basis, with documentation as required for a lump-sum proposal, plus additional information.

1. Name of the Owner's authorized agent who ordered the work, and date of the order.
2. Dates and times work was performed, and by whom.
3. Time record, summary of hours worked, and hourly rates paid.
4. Receipts and invoices for:
    a. Equipment used, listing dates and times of use.
    b. Products used, listing of quantities.
    c. Subcontracts.

1.04 PREPARATION OF CHANGE ORDERS

A. Engineer will prepare each Change Order.

B. Form: Owner's Form, to be provided to the Contractor.

C. Change Order will describe changes in the Work, both additions and deletions, with attachments of revised Contract Documents to define details of the change.

D. Change Order will provide an accounting of the adjustment in the Contract Sum and in the Contract Time.

1.05 LUMP SUM/FIXED PRICE CHANGE ORDER

A. Content of Change Orders will be based on, either:

1. Engineer's Proposal Request and contractor's responsive Proposal as mutually agreed between Owner and Contractor.
2. Contractor's Proposal for a change, as recommended by Engineer.

B. Owner and Engineer will sign and date the Change Order as authorization for the Contractor to proceed with the changes.

C. Contractor may sign and date the Change Order to indicate agreement with the terms therein.

1.06 UNIT PRICE CHANGE ORDER

A. Content of Change Orders will be based on, either:

1. Engineer's definition of the scope of the required changes.
2. Contractor's Proposal for a change, as recommended by Engineers.
3. Survey of completed work.

B. The amounts of the unit prices to be:

1. Those stated in the Agreement.
2. Those mutually agreed upon between Owner and Contractor.

C. When quantities of each of the items affected by the Change Order can be determined prior to start of the work:

1. Owner and Engineer will sign and date the Change Order as authorization for Contractor to proceed with the changes.
2. Contractor may sign and date the Change Order to indicate agreement with the terms therein.

D. When quantities of the items cannot be determined prior to start of the work:

1. Engineer or Owner will issue a construction change authorization directing Contractor to proceed with the change on the basis of unit prices, and will cite the applicable unit prices.
2. At completion of the change, Engineer will determine the cost of such work based on the unit prices and quantities used.
    a. Contractor shall submit documentation to establish the

number of units of each item and any claims for a change in Contract Time.

3. Engineer will sign and date the Change Order to establish the change in Contract Sum and in Contract Time.
4. Owner and contractor will sign and date the change Order to indicate their agreement with the terms therein.

1.07 CORRELATION WITH CONTRACTOR'S SUBMITTALS

A. Periodically revise Schedule of Values and Application for Payment forms to record each change as a separate item of work, and to record the adjusted unit price items and Contract Sum.

B. Periodically revise the Construction Schedule to reflect each change in Contract Time.

1. Revise sub-schedules to show changes for other items of work affected by the changes.

PART 2 – PRODUCTS

Not Used.

PART 3 – EXECUTION

Not Used.

END OF SECTION

SECTION 0200
PROJECT MEETINGS

PART 1 – GENERAL

1.01 REQUIREMENTS INCLUDED

A. Engineer shall schedule and administer kickoff meeting, periodic progress meetings, and specially called meetings throughout progress of the work. At a minimum, Engineer shall perform the following duties:

1. Prepare agenda for meetings.
2. Make physical arrangements for meetings.
3. Preside at meetings.
4. Record the minutes; include significant proceedings and decisions.
5. Reproduce and distribute copies of minutes within three days after each meeting.
    a. To participants in the meeting
    b. To parties affected by decisions made at the meeting

B. Representative of contractors, subcontractors and suppliers attending meetings shall be qualified and authorized to act on behalf of the entity each represents.

C. The Contractor shall attend and identify at the meetings the actual status of the Contract Work. When the Work is not being performed consistently with the Contract Documents and construction schedules, the Contractor shall identify at the meetings the steps being taken to resolve the inconsistency.

1.02 RELATED REQUIREMENTS

N/A

1.03 KICKOFF MEETING

A. The Contractor shall participate in a kickoff meeting to be held after the effective date of the Agreement and prior to the date of Notice to Proceed.

B. Location: A central site, convenient for all parties, designated by the Engineer.

C. Attendance:

1. Owner's Representative and other staff as appropriate.
2. Engineer and his professional consultants as appropriate.
3. Resident Project Representative.
4. Contractor's Representative and Superintendent.
5. Subcontractors as appropriate.
6. Major suppliers as appropriate.
7. Others as appropriate.

D. The following matters are expected to be addressed:

1. Distribution and discussion of:
    a. List of major subcontractors and suppliers.
    b. Projected Schedules.
    c. Values for progress payment purposes.
2. Critical work sequencing.
3. Major equipment deliveries and priorities.
4. Project Coordination:
    a. Designation of responsible personnel.
5. Procedures and processing of:
    a. Field decisions.
    b. Proposal requests.
    c. Submittals.
    d. Change Orders.
    e. Applications for Payment.
6. Adequacy of distribution of Contract Documents.
7. Procedures for maintaining Record Documents.
8. Use of premises:
    a. Work and storage areas.
    b. Owner’s requirements.
9. Facilities, controls and project aids.
10. Temporary utilities.
11. Security procedures.
12. Housekeeping procedures.
13. Insurance certificates.
14. Liquidated damages for delay (if applicable).
15. Notice to Proceed and Final Completion Date.

1.04 PROGRESS MEETINGS

A. Progress meetings will be held monthly with the first meeting 30 days or less after the date of Notice to Proceed.

B. Special progress meetings will be held as required by progress of the Work.

C. Location of the meetings: As designated by the Engineer.

D. Attendance:

1. Owner Representative and other staff as appropriate.
2. Engineer, and his professional consultants, as appropriate.
3. Contractor.
4. Subcontractors, as appropriate.
5. Suppliers, as appropriate.
6. Others.

E. The following matters are expected to be addressed:

1. Review, approval of minutes of previous meeting.
2. Review of work progress.
3. Field observations, problems, conflicts.
4. Problems which impede Schedule.
5. Review of off-site fabrication, delivery schedules.
6. Corrective measures and procedures to regain projected schedule.
7. Revisions to Schedule.
8. Progress, schedule, during succeeding work period.
9. Coordination of schedules.
10. Review submittal schedules; expedite as required.
11. Maintenance of quality standards.
12. Pending changes and substitutions.
13. Review proposed changes for:
    a. Effect on Schedule and on completion date.
    b. Effect on other contracts of the project.
14. Other business.

PART 2 – PRODUCTS

Not Used.

PART 3 – EXECUTION

Not Used.

END OF SECTION

SECTION 0700
CONTRACT CLOSEOUT

PART 1 - GENERAL

1.01 REQUIREMENTS INCLUDED

The Contractor must comply with the requirements stated in the Conditions of the Contract, and with the specifications for administrative procedures in closing out the work.

1.02 FINAL DELIVERABLES / SUBMITTALS

A. Contractor to notify the project Engineer & Owner in writing once all authorized work is complete.

B. Contractor to provide all remaining project data, logs, reports, and other submittals in accordance with the Contract documentation and as required in the specifications.

C. Engineer and/or Owner will notify the contractor of any incomplete or insufficient work, data, reports, and other submittals.

D. Contractor shall take steps to perform any work and provide any remaining data, logs, reports, and other submittals for any incomplete or insufficient.

E. When the Engineer finds that the work is acceptable under the Contract Documents, he shall request the Contractor to make closeout submittals.

1.03 FINAL ADJUSTMENT OF ACCOUNTS

A. Submit a final statement of accounting to the Project Manager.

B. Statement shall reflect all adjustments to the Contract Sum:
   1. The original Contract Sum
   2. Additions and deductions resulting from:
      a. Cap Increases
      b. Previous change orders
      c. Other adjustments
   3. Total Contract Sum, as adjusted
   4. Previous payments
   5. Sum remaining due

1.04 FINAL APPLICATION FOR PAYMENT:

The Contractor must submit the final application for payment, in accordance with the procedures and requirements stated in the conditions of the contract.

1.05 CONTRACTOR'S CLOSEOUT SUBMITTALS TO PROJECT ENGINEER:

A. Project Record Documents

B. Warranties and Bonds

C. Evidence of Payment and Release of Liens

D. Certificate of Insurance for Products and Completed Operations

PART 2 – PRODUCTS
Not Used.

PART 3 – EXECUTION
Not Used.

END OF SECTION

SECTION 0900
CLEAN-UP, DRESSING, & SODDING

PART 1 – GENERAL

1.01 DESCRIPTION

This work consists of furnishing, hauling, planting, rolling, watering, and maintaining live grass sod at disturbed locations during the course of work. This work shall be done in accordance with sections 714 of the Louisiana Standard Specifications for Road and Bridges, 2016 Edition and its latest revisions. All areas disturbed by the contractor as a result of their operations shall be restored to pre-existing conditions or better to the satisfaction of the Owner. All associated necessary labor, equipment, and material costs shall be at no direct pay.

This work also consists of clean-up of all surplus material and debris resulting from the Contractor's operation and dressing & sodding of all applicable areas within the project limits.

END OF SECTION

SECTION 1000
MOBILIZATION / DEMOBILIZATION

A. Mobilization and demobilization consist of the preparatory work and operations including, but not limited to the movement of supplies, equipment, personnel and incidentals to and from the project location. For the purposes of this work a project location will be defined as a lift station service area as determined by the OWNER.

B. Equipment includes, but is not limited to CCTV inspection units, combination vacuum trucks, smoke testing units, sonar inspection units, multi-sensor inspection units, acoustic pipe assessment units, flow monitoring units, manhole condition assessment units or any other equipment necessary to complete the project.

SECTION 2000
FLOW MONITORING SERVICES

TEMPORARY FLOW MONITORING

A. The objective of temporary flow monitoring is to quantify high groundwater, dry weather base flows, rainfall dependent inflow/infiltration and wet weather peak flows to support extraneous flow quantification and decision making and hydraulic modeling.

B. The Work includes:
    a. Investigating proposed monitoring sites and confirming suitability.
    b. Installing, calibrating, and monitoring temporary flow monitors for a minimum of 60 days (up to a maximum of 120 days) at each site.
    c. Visiting each meter location once per week to enter the confined space to perform depth and velocity sensor calibrations, collect data and verify monitor operation.
    d. Installing, calibrating, and maintaining temporary rain gauges, for a minimum of 60 days (up to a maximum of 120 days) at each site.
    e. Visiting each rain gauge once per week to collect data and ensure synchronization with the temporary flow meters.
    f. Evaluating the collected data, performing the required QA/QC of the data and providing electronic data delivery and written reports and analysis of the temporary flow monitoring results/rain gauge data.

C. The temporary flow monitor, as manufactured by ADS, FloWav, Hach, ISCO or equal, shall be equipped with a pressure and area velocity sensors. Accuracy shall be demonstrated from the manufacturer of the meter to be +/- 5 percent of actual flow, recorded in time intervals as short as 5 minutes or other specified interval. The CONTRACTOR shall submit certification results for each meter proposed to be used in the project of the date of the most recent manufacturer or field calibration and results.

D. Rainfall data shall be collected by the CONTRACTOR by means of tipping bucket rain gauges. Each unit shall be approved by the OWNER, shall provide real time synchronized to computer type memory bank, and shall be of the solid-state type. Whenever 0.01-inch of rain is collected, the tipping bucket shall empty, triggering an electronic counter. At the agreed upon time interval, the timer shall activate the computer and the number of counts shall be recorded on the memory bank.

E. The flow meter and rain gauge data storage and clocks shall be compatible so each time interval of data shall be recorded synchronously with respect to each other meter and rain gauge deployed during the project.

F. OWNER will select and propose initial locations for the flow meters and rain gauges. OWNER will provide maps of the initial meter site selections to the CONTRACTOR. The CONTRACTOR will perform field investigations and evaluate the proposed sites for the meters (those manholes with the best hydraulic characteristics) and rain gauges (clear, open, and secure areas that are protected from vandalism).

G. Laminar flow is desired with little evidence of backwater and/or surcharging conditions. Meter locations upstream of pumping stations shall get particular attention to ensure a minimum impact from the wet well operating levels. Should a proposed meter or rain gauge site not be suitable, the CONTRACTOR shall propose and document alternate sites that still meet the general criteria of the collection system area identified for metering.

H. The CONTRACTOR will develop and submit detailed site reports, including upstream pipe photos, for the proposed meter or rain gauge locations. The manhole meter and rain gauge site reports will be submitted to the OWNER for review and confirmation of the site before the meters are installed.

I. Following OWNER's approval of the site(s), the CONTRACTOR will install the flow meters and rain gauges in the selected locations. CONTRACTOR will initially calibrate the meters at each installation. The meters will be set up to record flow data (depth, velocity, and flow) at 5 to 15-minute intervals unless otherwise requested and the sensor calibrations confirmed in the pipe. The tipping bucket rain gauges, recording rainfall in depths of 0.01-inch increments, will also be set up to record every 15 minutes synchronously with the flow monitors.

J. The CONTRACTOR will maintain the flow meters throughout minimum 60-day metering period. CONTRACTOR will visit each meter a minimum of one time per week to download the data, to perform any necessary meter maintenance (e.g. scrubbing sensors, removing debris, etc.) and to field calibrate and confirm the meter sensor firings. Manual depth and velocity confirming measurements will be made weekly during each visit. Data collection routes, time of data collection and calibrations should be staggered, as practical, to ensure a reasonable calibration across the full range of diurnal flows for each meter site. One calibration point each, generally at the dry-weather peak diurnal flow and the minimum diurnal flow, is required over the minimum 60-day metering and data collection period.

K. Data will be reviewed on-site for overall data quality and any problems will be immediately addressed by the CONTRACTOR. A documentation log will be maintained by the CONTRACTOR of each meter visit and calibration and a copy of the entries provided to the OWNER on a bi-weekly basis. The manhole number (meter location), date, time on meter, and the time of manual depth verification will be indicated on the log. A written record will be maintained by

field personnel for each monitoring point for each site inspection. The data will also be reviewed in the CONTRACTOR's office by engineering staff. Field crews will return to the site as necessary if the engineering staff identifies any additional issues.

L. The CONTRACTOR shall maintain spare meters, parts, and testing equipment to permit replacement of defective meters to ensure a reasonably continuous metering period.

M. After the 60-day minimum monitoring period, the OWNER has the option to direct the additional data collection and field calibration on a weekly basis for up to an additional 60 days. The OWNER will determine when to pull the meters and rain gauges and advise the CONTRACTOR of that decision at least 7 days in advance of the meter data collection termination date. The CONTRACTOR can then begin removing meters subsequent to the meter termination data.

Analysis & Deliverables

Preliminary Data Review and Submittal:

A. Preliminary data (site logs, initial raw meter and rain gauge data) will be delivered for the OWNER's review following the initial 30 days of data collection. This data will be submitted no later than 45 days after the start of the data collection period. This data and any contemporary rain and flow data collected in the remaining period will be the basis for extending the meters on a weekly basis beyond the minimum 60-day flow-metering period.

Final Data Submission:

A. The CONTRACTOR will submit a letter report summarizing the data collected (statistical wastewater flow summaries, rainfall data, hydrographs and tabularized formats); and will perform analyses associated with the data including an estimate of base sanitary flow and an assessment of I/I quantities tributary to each meter. CONTRACTOR will also submit meter data to OWNER in electronic Excel format. Final calibrated data and letter report will be delivered no later than 30 calendar days following the termination of the flow-monitoring period.

A. The report shall include, but not be limited to the following:
    a. Executive Summary
    b. Field procedures used for data collection and calibration
    c. Site location information and reports
    d. Hydrographs of depth, velocity, flow, and rain.
    e. Graphs of dry and wet weather analysis.
    f. Results of the dry and wet weather analysis. Prioritized areas shall be ranked by the amount of extraneous (I/I) flow tributary to each meter.
    g. Electronic data (rain, depth, velocity & flow ASCII or CSV format)

LONG TERM FLOW MONITORING

A. The objectives of establishing a long-term flow network are to track the effectiveness of the sewer system rehabilitation, evaluate system performance over time and establish an event notification network.

B. CONTRACTOR will install wireless wastewater flow monitors within the collection system. Each of the flow monitors will be networked into a system and provide the OWNER with vital information (including alarming) on the hydraulic performance of the wastewater. CONTRACTOR will deliver, install and maintain flow monitors for the aforementioned flow monitoring program. CONTRACTOR shall supply all hardware for each monitoring location as specified.

    a. Data Analysis

        i. The OWNER understands that flow data collected from a wastewater environment requires review for accuracy, issuing of work orders to maintain equipment, and identification and editing of data irregularities.

Site Selection, Investigation, and Installation

A. CONTRACTOR shall work with the OWNER to select sites for the installation of all equipment.

B. Each site shall be inspected to determine hydraulic suitability. This shall require a full manhole descent to ensure an adequate inspection. A topside inspection alone shall not be satisfactory.

C. CONTRACTOR shall install equipment in optimum locations for best accuracy and reliability. A site report for each installed location shall be provided for approval by the OWNER.

D. The site report should include, but not be limited to the following:
    a. The initials of the person who performed the inspection
    b. The Parish and project name
    c. The model of flow monitor recommended
    d. A placeholder for the serial number of flow monitor
    e. Numerical designation for the manhole
    f. House address or a short description of the site location indicating the map page number and grid number, if available
    g. The measured height and width of the pipe to be monitored
    h. A copy of an electronic, small-scale, detailed map with street names and house numbers (if possible) of the immediate area where you will locate the monitor

i. A road or landmark from the access map and upstream and downstream manholes with the sewer line and flow direction
j. The date and time the site inspection was performed
k. A topside inspection of each upstream and downstream manhole location with any hydraulic inconsistencies recorded on the inspection form
l. Recorded depth of flow, velocity and silt at time of inspection
m. The depth from the manhole rim to the invert
n. The type of manhole material indicating whether loose bricks, broken rungs, cracked rim or cover, or slippery walls exist on the invert or apron
o. The presence of all drop or side connections
p. The type of pipe material
q. Digital photos shall be taken of each selected site and alternate sites. One photo shall be taken of the area where the manhole is located. One photo shall be a planar view of the manhole invert showing the flow through the manhole from a north orientation. In addition, in-line photos shall be taken of all contiguous lines.

E. CONTRACTOR may recommend that a designated monitoring location be changed to take advantage of more favorable hydraulics at upstream or downstream locations.

F. Site inspections shall include the accurate measurement of the pipe or channel geometry, silt and the recommended location for the installed equipment for use in flow calculations. The CONTRACTOR shall not rely on as-built drawings for the determination of pipe geometry.

G. CONTRACTOR shall submit one (1) copy of Site Reports to OWNER for review and comment. If requested, CONTRACTOR shall provide comments to the initial submittal.

Wireless Access

A. CONTRACTOR shall provide a method for wireless access to the flow monitors and install all wireless equipment and ensure it is operational.

B. CONTRACTOR shall pay all charges for wireless service.

Confirmation of Data Accuracy

A. The OWNER will require the CONTRACTOR to perform bi-weekly manual depth and velocity measurements/confirmations at each site in order to confirm that the sensors are accurately recording depths and velocities.

B. A valid confirmation is where the field accuracy of a given depth measurement and average velocity is within two standard deviations of the final data set.

C. CONTRACTOR shall maintain at least three (3) valid confirmations at all times at each site during the term of the contract.

D. As a minimum requirement, confirmation of sensor accuracy shall be measured in the sewers at every site on a yearly basis.

E. The OWNER will not accept any options or proposals from the CONTRACTOR to waive confirmations.

F. Method of confirmation:

   a. Initial confirmation of the flow monitors shall involve a minimum of three (3) manhole measurements taken on different days. Attempts shall be made to have these measurements done at flow levels that span typical dry daily flows.

   b. The instantaneous depth of flow measurement shall be taken from the bottom of the pipe to the top of the flow.

   c. There will be a manual depth reading for silt which will be recorded on the confirmation report.

Operation and Maintenance Services

A. CONTRACTOR will notify the OWNER upon completion of the initial installations. The OWNER will notify the CONTRACTOR in writing of acceptance of installations which will provide a start date of the maintenance.

B. CONTRACTOR shall provide all spare parts at the CONTRACTOR's expense to maintain the equipment. Spare parts shall be maintained at the CONTRACTOR's closest office to the project site. A minimum of 10% of major hardware component spare parts must be available and ready to use.

Monitoring System Uptime

A. CONTRACTOR shall provide a system-wide uptime of 90% or greater. Uptime is defined as number of valid 15-minute flow data points divided by total number of 15-minute intervals in the month.

Data Analysis

A. Backup copies of raw data shall be maintained and delivered to the OWNER by the CONTRACTOR for the duration of the contract.

B. Twice-weekly data review shall be performed by the CONTRACTOR to ensure that the equipment is operational and properly logging data. CONTRACTOR shall be responsible for issuing maintenance work orders based on this review.

C. Finalization of data shall be completed according to the specification for information deliverables.

Data Viewing

A. The software system shall have the ability, at a minimum, to display data for each site in the following formats:

   a. Hydrograph – a time series graph of multiple data types with the ability to segment data based on intervals (e.g. “weekly”) over the user specified time period

   b. Scattergraph – a depth to velocity graph for the specified time period with the ability to select a data point to see the actual value for that data point

   c. Tabular – both tables for viewing and a CSV format for download shall be available.

Telecommunications

A. The software system shall allow an authorized user to collect data directly from wireless monitors via the Internet. The software system shall automatically collect data from all telemetered sites at a minimum each day and whenever an alarm occurs.

Multiple Data Type Support

A. Final and Original Data: The software system shall allow for the upload of final edited data and shall maintain a copy of both the final and the original data after upload.

Data Exports

A. The software system shall allow the user to export data to an Excel/CSV format.

Flow Information Deliverables

A. Dry Day Analysis

a. Dry days used for this analysis will be days that are not affected by recent rainfall. Selected dry days shall be grouped into week days and weekend days and analyzed separately.

B. Rainfall Analysis

a. Rainfall data shall be reported in tabular form with the depth of rain for each storm. A storm will consist of any event in which half the rain gauges in the network record at least 0.5-inch of rainfall.

C. Wet Weather Analysis

a. Rainfall Dependent Infiltration and Inflow (RDII) shall be calculated for each monitor and every qualifying storm for the period. The objective is to quantify both the peak rate and volume of RDII. If there are upstream monitors, the peak and volume of Net RDII is also to be determined.

b. RDII shall be determined after the dry day hydrograph is adjusted either higher or lower to match the actual flow rate immediately prior to the storm. It is intended to compensate for periods of high ground water causing the dry weather flow to be temporarily higher that the average dry weather flow.

c. RDII values are to be normalized by dividing the net RDII by both the area (acres) of the basin and/or the LF of sewers in the basin. A ranking of the basins will be based on normalized values of RDII. As rehabilitation projects are completed, each report shall RDII to show it has been reduced.

D. Hydraulic Capacity Analysis

a. Depth and velocity data will be plotted in a scatter graph format.

b. The report shall include an evaluation of silt or blockages present at each site.

c. The report shall include a statistical evaluation of hydraulic performance indicators for each monitoring point; to include evaluations of depth capacity, flow capacity, backwater, surcharge, velocity and silt.

NIGHT FLOW ISOLATION

A. The purpose of flow isolation is to identify localized areas of likely sources of infiltration to specific reaches of sewer where flow monitors have indicated specifically high levels of flow relative to base flow. Measurements

are typically taken between 12:00 a.m. and 5:00 a.m. when base flows are minimal.

B. Graduated V-notch weirs or depth/velocity measurements shall be used to determine flow rate during flow isolation. Floating objects are not acceptable to estimate mean flow velocity. Computation of mean velocity using sewer slope and measured depth of flow is not acceptable.

C. All flow isolation field measurements shall be conducted between 12:00 A.M. and 5:00 A.M. local time on a micro-system of sewers with a total length of approximately 1,000 linear feet. CONTRACTOR will plug all pipes upstream of the test segment or differentially isolate the segments.

D. The CONTRACTOR shall document all observations regarding each flow isolation test in a report. The report shall include the following information at a minimum:

    a. Date and time
    b. Location, including reference to the manhole numbering system and street address
    c. Testing personnel
    d. Schematic layout of the manholes and sewer lines under testing, showing location of the weir.
    e. Pipe sizes and lengths

E. Prior to measuring flows, CONTRACTOR will perform an area survey to identify and document businesses and/or institutions that typically have high discharge rates to the sewer, such as hospitals, laundries/cleaners, food establishments, bars, etc.

F. Public notification is critical and compliance with the public notification criteria is a prerequisite for conducting flow isolation, when conducting flow isolation tests on sewers in easements which pass through private property. The following steps shall be taken but not limited to:

    a. Residential/commercial: Distribute advance notice flyers between 24 and 72 hours before flow isolation commences for each section of pipe.
    b. Emergency response agency (fire/police): Set up contact person and notify daily as to area, start time, and ending time.
    c. Schools, hospitals, and nursing homes: Distribute advance notice flyers between 24 and 72 hours before flow isolation.
    d. The CONTRACTOR shall keep a daily log of his/her contact with all affected agencies and institutions.

G. Electronic database of flow isolation data and digital photographs of results shall be submitted to the OWNER. The electronic database using the required file format in Microsoft Access®.

SECTION 3000
MANHOLE / WET WELL SERVICES

A. The CONTRACTOR shall provide all labor, material, supplies, equipment, and transportation necessary to complete the 360 degree manhole condition assessments, 360 degree wet well condition assessments, structural manhole assessments with internal images, uncovering of buried manholes, removal of stabilized debris, and cleaning of manholes.

B. All manholes and wet wells must be inspected according to NASSCO Manhole Assessment Certification Program (MACP) standards. All field inspectors and data management personnel must be MACP certified.

C. The CONTRACTOR shall perform manhole and wet well assessments at each location within the sewer lift station subbasins identified by the OWNER to determine general location, depth, and dimensional configuration information; assess the physical condition of the wall(s), bench, trough, riser, cone, ring(s), frame, and cover, etc. to determine if there is evidence of condition issues, defects, and sources of Inflow/Infiltration (I&I).

D. For the 360 degree manhole condition assessments and structural manhole condition assessments the CONTRACTOR will be required to provide specific data and information obtained in the field utilizing an ArcGIS Field Maps application and mapping system created by the Jefferson Parish Sewerage Capital Improvement Program ("JPSCIP") team. A subscription to ArcGIS Professional will be required, which will grant access to one field assessment team initially. After ArcGIS Professional is purchased, additional inspection teams can be added via a "Mobile Worker" license. See *https://www.esri.com/en-us/arcgis/products/arcgis-pro/buy* for details and current pricing. The JPSCIP Program Management team will provide technical assistance for the use of the developed ArcGIS application platform. Any specific software or license issues will need to be addressed directly with the ArcGIS software developer ESRI.

E. The ArcGIS application is to be run on an IOS device with cellular and WiFi capabilities such as an I-phone or I-Pad. The CONTRACTOR will be responsible for providing and maintaining the IOS devices and have spare devices available if needed.

F. The locations of sewer lift station subbasins, wet wells, manholes, and sewer pipes in the project areas will be geolocated in the ArcGIS Field Maps application by the JPSCIP team. Individual symbols / location dots for the known manholes and wet wells located within the assigned sewer lift station subbasin areas for this project will appear in the ArcGIS mapping system indicating its unique ID number and some basic general information.

G. The CONTRACTOR field personnel performing the 360 degree condition assessment and/or structural manhole condition assessments will be able to click on the location dot of the structure to enter the general information and complete the general assessment form fields into the ArcGIS system, in addition to taking and attaching digital photograph & image files. Any digital photographs / images too large to upload into the ArcGIS shall be provided on an external device as stipulated elsewhere herein. Refer to the "Manhole Condition Assessment / Field Documentation" section later in this specification for a summary of the basic data and information to be obtained during the 360 degree and structural manhole condition assessments and entered in the ArcGIS system. *Appendix A contains some basic instructional information for the ArcGIS Field Maps application and sample screen shots and photographs*.

H. Once a manhole has been assessed the Contractor's field inspector shall change the status box of each pin to show "Requires Project Manager Review" to notify the JPSCIP Project Management team the field assessment is complete and ready for review. If the JPSCIP Project Management team reviewer adds any comments in the ArcGIS platform, the location dot status will be changed to "Requires Additional Feedback". Once the JPSCIP Project Management team reviewer has approved the assessment work, the location dot status box will be changed to "Inspection Completed". Digital color photos shall be submitted in the with the description of view, date taken, and nearest address (if applicable).

I. For the 360 degree manhole condition assessments and the 360 degree wet well condition assessments, the digital video files created from the combination of the multiple assessment photographic images with overlapping fields of view to produce a high-resolution image will need to be provided in MP4 file format on an USB drive and/or via an online repository. The file names for the digital video files and images must include its unique assigned "Manhole TE" or Lift Station (LS) ID number in the ArcGIS system.

J. The CONTRACTOR will be responsible for all data management services associated with the manhole and wet well assessments. All costs associated with providing manhole and wet well data management services, including providing and completing the assessment form data in the ArcGIS system and providing the assessment field photographs & 360 degree digital video files, shall be included in price for item 3000.07 "Manhole / Wet Well Inspection Data Management". The costs associated with the ArcGIS system software and licensing shall also be included in the price for the "Manhole / Wet Well Inspection Data Management" item.

K. The CONTRACTOR shall also provide a computer generated summary report with repair / rehabilitation recommendations for the identified structural issues & defects and to eliminate sources of Inflow & Infiltration (I&I) identified during the manhole and wet well assessments. All associated costs associated with

the rehabilitation recommendations services, including furnishing the reports, shall be included in the price for item 3000.09 “Manhole / Wet Well Rehabilitation Recommendations”.

L. All costs associated with providing and maintaining the assessment equipment, including IOS devices, cameras, scanners, lighting, etc. shall be considered incidental to the overall project and included in the other item prices.

360 DEGREE MANHOLE CONDITION ASSESSMENTS & 360 DEGREE WET WELL CONDITION ASSESSMENTS

A. The purpose of the 360-degree manhole condition assessment and wet well condition assessment is to assess the structure using a panoramic camera with 360-degree capability, such as a GoPro Max, or approved equivalent, sufficient to obtain and document location & other general information, determine the physical / structural condition, and determine if there is evidence of Inflow & Infiltration issues. Given the working environment camera equipment should be waterproof. 360 degree manhole and 360 degree wet well assessments shall be performed only if authorized by the OWNER.

B. The camera equipment shall have the capability to optically scan the entire interior of the manhole / wet well in one single vertical run and produce a high-resolution, distortion-free digital film file in MP4 format viewable using an open-source, portable, cross-platform media player software such as the VLC media player by VideoLAN or approved equivalent. The digitally transmitted image data should be viewable by the operator as if it were a live picture. The electronic video media files and images must be provided to the OWNER and Project Manager on a USB drive or via an online repository. The structure ID must be clearly visible at the start of the video media file and included in the digital film file / video file name.

C. The media player to view the digital film file must allow the OWNER to view the file in the way that the CONTRACTOR can view them, including full control of the distortion-free virtual pan and tilt allowing the review of the structure from any angle at any depth. The virtual pan and tilt must consist of views from all camera angles. Any virtual pan and tilt that artificially creates a view from a single camera will be deemed unacceptable due to distorted images on the direct side view. The virtual pan and tilt and up/down direction of the view must be able to be controlled from a computer mouse. The virtual pan and tilt and views must be able to be viewable by the OWNER without the need for any third-party data logging software.

STRUCTURAL MANHOLE CONDITION ASSESSMENT WITH INTERNAL IMAGES

A. The purpose of the structural manhole condition with internal images assessment is to manually inspect / assess the structure using an IOS devices or a WiFi hot spot capable outdoor viewing camera mounted to a level rod or pole sufficient to obtain and document location & other general information, determine the physical / structural condition, and determine if there is evidence of Inflow & Infiltration issues.

B. The manhole interior structure shall be manually inspected while being illuminated using uniformly diffused, high-intensity LED lighting. High-resolution digital photographs with approved picture quality shall be taken to document and provide a full illustration of the condition of the manhole interior, depict identified structural issues and other defects, and document other relevant features. All condition assessment images / photographs shall be digital with a minimum resolution of 72 dpi x 72 dpi and minimum dimensions of 640 x 480 pixels and produced by individuals competent in photography using the devices and/or camera equipment acquired by the CONTRACTOR.

Manhole Condition Assessment / Field Documentation

A. The following information is to be collected and documented in the applicable ArcGIS system form fields for 360-degree manhole condition assessments and structural manhole condition assessments:

1. Inspection status.
2. Structure ID number (aka “Manhole TE”).
3. GPS coordinates (latitude & longitude) in decimal format.
4. Lift Station Subbasin ID.
5. Inspection date.
6. A/E firm name.
7. Inspector initials.
8. General manhole location information - street name (or nearest intersection) & nearest municipal address number.
9. Manhole location surface / area type (roadway, gutter, alley, easement, sidewalk, driveway, grass, gravel, other)
10. Manhole material type (brick, block, concrete, lined, fiberglass, other)
11. Manhole shape (concentric, eccentric).
12. Manhole Cone & Riser Condition.
13. Estimated manhole depth (in decimal feet).
14. Estimated manhole diameter (in decimal feet).
15. Document if structural work required (Y/N)
16. Document if Inflow & Infiltration issues evident (Y/N).

17. Document if lining work required (Y/N).Document of cleaning required (Y/N).
18. Document if safety issues evident (Y/N).
19. Document if odor issue evident (Y/N).
20. Document if a Rainstopper or other type of I&I insert device installed (Y/N.)
21. Document corrosion level (none, low, medium, high)
22. Document manhole moisture state (dry, wet, surcharged, low flow, high flow).
23. Document if grease, debris, silt or other evident (Y/N).
24. Document Cover Condition (serviceable, loose, damaged, unable to open, replace). Add field notes as needed.
25. Document Frame condition (serviceable, loose, displaced, missing grout, leaking). Add field notes as needed.
26. Document Bench & Trough condition (serviceable, cracked/broken, bad base joint, roots).
27. Document Cover Grade (good, below, above).
28. Document if there are indications of surcharge (Y/N).

Photographic Documentation Procedures

A. For the structural manhole condition assessments high-resolution digital color photographs shall be taken for each manhole assessed and shall show the following:
    a. The general surrounding view(s) of the above ground features and conditions in the vicinity of the structure to be assessed and identifying landmarks to locate above ground location of the manhole. (*Note: this is crucial for verification of buried structures located and uncovered in the field.)*
    b. Elevation view of each incoming and outgoing sewer pipe.
    c. All observed physical / structural condition issues, identified structural issues & other defects, and identified potential sources of I&I, etc.
    d. Manhole assessment photographs shall include a description of view.

B. For the 360 degree manhole condition assessments & 360 degree wet well condition assessment, the electronic digital film / video media files shall be provided to the OWNER and Project Manager on a USB drive or via an online repository. The unique manhole or wet well ID must be clearly visible at the start of the video media file and included in the video file name. The digital film / video files shall be provided in MP4 format.

C. For manholes with stabilized debris, pre- & post- digital photographs shall be taken to illustrate and document the debris prior to removal and after the debris

was successfully removed. Refer to the section contained in this specification titled “REMOVAL OF STABILIZED DEBRIS IN MANHOLE INVERTS”. The removal of stabilized debris will be paid under the respective pay item 3000.07 Removal of Stabilized Debris in Manhole

Deliverables

A. All assessment digital film / video files, photographs, and other images not taken or uploaded to the ArcGIS system shall be provided on a USB, or via an online repository, following the completion of each assigned work order, unless otherwise directed. All digital photographs / images shall be in JPEG file format and all videos shall be in MP4 format.

B. Any corrections to the provided ArcGIS mapping system documented in the field shall be clearly marked on a printed map and shall be illustrated with red markings. The marked printed maps shall be provided at the completion of each assigned work order in an electronic format, and hard copies provided and reviewed with the JPSCIP Project Management team at the next scheduled progress meeting. Supplemental sketches shall also be provided, as necessary, to clearly depict actual site conditions.

C. A computer generated summary report with repair / rehabilitation recommendations for the identified structural issues & defects and to eliminate sources of Inflow & Infiltration (I&I) identified during the manhole and wet well assessments.

UNCOVER BURIED MANHOLES LESS THAN 12” DEEP

A. CONTRACTOR shall provide all labor, materials, and equipment necessary to uncover sewer manholes less than 12” deep requiring access for sewer line inspection on this project. CONTRACTOR will uncover only those manholes approved by the OWNER.

B. CONTRACTOR will not be required to uncover manholes covered in asphalt, concrete or any other permanent or semi-permanent material.

C. After inspection is complete, the CONTRACTOR shall close the lid and re-cover the manhole only with the material removed to access the manhole. The CONTRACTOR will not be required to seal manhole lid or replace any gasket material that may have been removed or damaged during the opening of the manhole.

REMOVAL OF STABILIZED DEBRIS IN MANHOLE INVERTS

A. CONTRACTOR shall provide all labor, materials, and equipment necessary to remove stabilized debris from manhole inverts on this project. CONTRACTOR will only remove stabilized debris from manhole inverts approved by the OWNER.

B. All debris removed from sewer manholes shall be drained of water and transported for disposal at the Bridge City Wastewater Treatment Plant. Sewer debris disposed of at the Bridge City Wastewater Treatment Plant will be at no direct cost. If the Bridge City Wastewater Treatment Plant is not available for the disposal of sewerage debris, the Contractor shall dispose sewer debris at an OWNER approved landfill facility. Sewer debris disposed of at an OWNER approved landfill facility will be paid under the 5000.25 “Sewer Debris Disposal Offsite” item.

SECTION 4000
SMOKE TESTING

A. The CONTRACTOR shall provide all labor, material, supplies, equipment, and transportation necessary to complete the smoke testing work.

B. Smoke testing work shall be conducted on pipes in areas of the system as selected and approved by the OWNER.

C. Caution should be taken in assessing storm drainage connections. Once smoke enters a storm sewer, many inlet structures may exhibit smoke exiting. The possible cause for smoke exiting the storm sewer may be due to poor joints, in both the storm and sanitary sewer, broken service lateral crossing the storm sewer, directional drilling that damaged storm or sewer pipe, direct connection, etc. Additional investigation, which may include dye flooding and CCTV, will be required to determine the exact location of the source and establish the repair method.

D. Smoke testing provides detailed information on wet weather inflow sources, cross-connections with storm sewers, odor complaints and service connection confirmation, etc. However, soils that are saturated may not allow smoke to exit and limit the usefulness of the testing. Therefore, smoke testing must be scheduled during dry weather to optimize the effectiveness of the test. Local conditions will dictate the time required after a rainfall event that will allow for smoke testing to be optimally effective.

E. The CONTRACTOR shall test the gravity sanitary sewer system using high-capacity blower(s). The smoke blower will be suitable for the anticipated testing and generate non-toxic smoke. The CONTRACTOR will visually identify and document each defect location. The CONTRACTOR shall provide safety equipment suitable for the anticipated field and traffic conditions. Digital camera(s) will be used for documentation of observations. GPS units shall be used to log locations for leaks and manholes. All inspections shall be entered into an electronic database.

    a. The CONTRACTOR shall provide a portable blower designed and built specifically for the use of smoke testing. The blower shall be self-contained and capable of producing a minimum of 4,000 cubic feet of air per minute (cfm). Blowers with less cfm may be approved by the OWNER provided it is demonstrated that sufficient pressure is generated for the testing. If inadequate pressure is being generated, then additional blowers (dual blowers) or larger blowers may be required. Adequate pressure is being provided when smoke is exiting the vent stacks as a plume or, where no vent stacks are present, smoke is exiting the upstream/downstream manhole casting/vent hole/pick hole, etc. In general, the larger the pipeline diameter being tested, the higher the smoke blower capacity required.

b. The base of the blower shall have appropriate adapters and seals to make a good connection to the manhole without excessive loss of smoke.

c. Smoke fluid shall produce continuous smoke that can be controlled by the CONTRACTOR's field crew for the duration of the test. The smoke generated shall be white to gray in color, leave no residue, and shall be non-toxic and non-explosive.

d. The CONTRACTOR shall supply the smoke Material Safety Data Sheet (MSDS) sheet to the OWNER.

F. Field documentation of smoke leaks is extremely important and will include GPS data collection of manholes and smoke leaks and color photographs will be taken to document each defect during the smoke test.

G. The CONTRACTOR'S smoke testing field crew will be of sufficient size to properly operate the smoke generation machine and provide full coverage of the area to visually locate smoke discharged from defects. This must include personnel for traffic control.

a. The CONTRACTOR'S smoke testing field crew shall be properly trained and thoroughly experienced in the use of the equipment and procedures.

b. The CONTRACTOR shall take appropriate action to ensure that his/her employees are polite to the public in all aspects of the work and that immediate assistance is provided to property owners if needed.

H. The work shall generally progress as follows:

a. The CONTRACTOR shall apply for and obtain work permits for all work to be performed in State and/or County Highways if applicable. All required insurances, traffic control measures and other terms of the permit shall be provided to the satisfaction of the OWNER.

b. The OWNER will provide the CONTRACTOR with the procedure that should be followed regarding notification of fire department, police department, emergency personnel, etc.

i. The CONTRACTOR shall submit field inspection forms and database deliverable to the OWNER for review and acceptance.

ii. The CONTRACTOR shall notify, by hand delivery of approved door hangers to all residences and businesses in the study area. All notification door hangers shall be approved by the OWNER before printing and distribution. The CONTRACTOR shall place door

hangers on all residences and business in the area of smoke testing at least 24 hours prior to smoke testing at those specific addresses. Notification shall be an ongoing process throughout the project and shall be limited to the area provided in the look ahead schedule. Door hangers shall not be placed for areas which will not be tested within 7 days. If smoke testing is delayed for more than 7 days due to rain, wind, etc., the area shall be re-notified. Logs will be maintained to document notification of hospitals, nursing homes, schools, high rise buildings, etc. The logs will include the facility name, notification date, time and individual notified. Notification of sensitive locations such as hospitals, nursing homes, day care, schools and the like must be completed in person.

iii. The CONTRACTOR shall check with all residents who expressed special concerns or special needs/notification prior to testing.

iv. Notification of emergency services and dispatch centers will be completed each morning prior to testing that day. OWNER will provide the required contact information for notifications by the CONTRACTOR.

v. It shall be the CONTRACTOR's responsibility to keep adequate records of all notifications and to produce them upon OWNER's request. Failure to comply with this requirement may result in temporary suspension of the field work until compliance is achieved.

c. A work schedule shall be submitted to the OWNER for review and approval. No field testing or notification may proceed until the schedule has been approved by the OWNER. After approval of the work schedule, the CONTRACTOR shall not make any revisions or modifications to it without the OWNER's written approval.

i. The work schedule shall consist of a study area map showing the anticipated area(s) to be tested each day, week or month (depending on project size and duration.

l. Work hours must be approved by the OWNER. However, the CONTRACTOR shall not typically commence testing before 7:00 a.m. local time and shall terminate testing no later than 5:00 p.m. Monday through Friday. If the CONTRACTOR wishes to test outside these times or days for commercial areas or high traffic areas, such testing shall be shown on the submitted work schedule and is subject to the OWNER's approval.

a. Smoke testing shall not be performed on weekends or on holidays without the prior approval of the OWNER.

b. CONTRACTOR shall not perform smoke testing on days that, in the opinion of the OWNER, will hinder the results of the test. (For example, when heavy rains, or excessively saturated soil conditions would interfere with the effectiveness of the testing). CONTRACTOR may provide soil moisture or segment re-testing data as evidence that soil conditions are favorable for smoke testing.

J. The CONTRACTOR shall be aware of and follow all Federal, State, and Local safety laws and regulations.

a. No entry into any part of the collection system shall be permitted until the CONTRACTOR has demonstrated that on-site personnel has been trained in applicable confined space safety procedures and has the equipment on-site to allow those procedures to be followed.

b. The CONTRACTOR shall minimize the physical entry of personnel into sanitary sewer facilities. If required, manhole entry shall be in accordance with Federal, State, and local regulations for confined space entry and other regulations that may apply. The CONTRACTOR shall provide all safety equipment required for manhole entry operations, including harnesses, ventilation equipment, etc.

c. Traffic Control. The area of work shall be protected by means of an adequate number of cones, barricades, flags, or by other means necessary to properly and safely protect both vehicular and pedestrian traffic.

d. Any condition deemed to be an unsafe by the CONTRACTOR shall be reported to the OWNER. It is further understood that the CONTRACTOR shall not be required to work where, in the opinion of the CONTRACTOR, conditions would not be safe for the public, company personnel, equipment, etc.

K. Unless otherwise approved by the OWNER, the sections of sewer subject to testing shall typically:

a. Consist of a central manhole, where the blower will be positioned, and an upstream and downstream manhole and the sewer pipe between them. With three (3) manholes and two pipe sections, lengths should not exceed 1,000 feet. The blower capacity and/or number of blowers necessary will be determined by the adequacy of pressure as observed at the vent stack or downstream/upstream manholes.

b. Upon approval of the OWNER, longer sections may be tested provided good pressure, as evidenced by smoke plume, is observed at the vent stacks or downstream/upstream manholes.

L. The walk through for locating defects will not begin until smoke is highly visible with a smoke plume emanating from the plumbing vents of houses or downstream/upstream manholes at the end of the setup location (maximum 500 ft radius) from the smoke testing machine. A red (heavy smoke), yellow (medium smoke) or blue (light smoke) flag will be placed at the location of the smoke leak depending on the amount of smoke visible. Walkers shall traverse not only the sidewalk but between all homes and in back yards looking for illegal connections including patio, pool drains, roof drain connections and buildings where vent stacks do not exhibit smoke.

M. Flow Control - It is the intent of this specification that the smoke testing be accomplished without the need for bypass pumping. The CONTRACTOR shall provide temporary plugs, sandbags or flow barriers as required to contain an adequate volume of smoke within the section of sewer being tested. The CONTRACTOR shall monitor the resulting surcharged sewer at the manhole upstream of the tested section of sewer and prevent overflow conditions from occurring by removing the flow barriers or removing sewage by vacuum trucks.

N. All smoke testing information shall conform to the smoke testing codes and database.

   a. Each smoke defect shall include an address, be referenced by sketch, and dimensioned to permanent landmarks.

   b. Two photographs of all leaks using a digital camera shall be included in the field log. Photographs of smoke leaks shall have a location indicated in the photograph using a red, yellow or blue flag where possible. All photographs shall be clearly cross-referenced to the typed and/or computer-generated log indicating the location of the leak.

   c. An up-close photograph shall be taken once the defect has been flagged. The digital picture shall show the smoke exiting from the defect.

   d. An area photographs should include sufficient field of view so that drainage patterns can be discerned.

O. The following data will be recorded on a paper form and entered into a database by the CONTRACTOR, using the required file format in Microsoft Access. Data will be recorded using the approved smoke test form. The smoke test database shall include the following information at a minimum:

   a. Description of the smoke return (“leak”), including intensity;
   b. Date and time;

c. Location, including reference to the relevant manhole segment (upstream and downstream manhole incorporating the manhole numbering system) and the nearest street address;
d. Area and type of surface drained by the smoke return (“leak”);
e. Testing personnel; and
f. Digital color photographs and filenames of the results of each smoke test
g. GPS X & Y location of the leak location

P. The standard electronic deliverable (all inspection images, database containing line segment information and leak details, coding information, shapefiles containing the coordinates of leaks and manholes, and a map created from the GPS collection of manholes and leaks points) will be submitted on an external USB drive for each basin as it is completed. The smoke testing report will consist of a report for each segment smoked (imagery from ArcMap) leak detail with two digital photographs of each leak and one aerial imagery shot (collected from ArcMap). A final report will be provided for all basins upon completion of the entire project.

SECTION 5000
SANITARY SEWER LINE CLEANING

A. Standard line cleaning shall be performed to remove foreign material and restore pipe capacity to 95%. Standard cleaning shall be defined as three (3) complete passes of the sewer line with the cleaning equipment. The term "complete passes" shall mean cleaning from the upstream manhole all the way to the downstream manhole.

B. Heavy line cleaning shall be performed to remove foreign material and restore pipe capacity to 95%. Heavy line cleaning shall be defined as four (4) or more complete passes of the cleaning equipment. The term "complete passes" shall mean cleaning from the upstream manhole all the way to the downstream manhole.

C. The location of manholes and line segments which require additional equipment and manpower to access and perform cleaning operations are considered to be in the easement. Additional equipment includes, but is not limited to an easement machine, additional vacuum hose, additional manpower, etc. If the need arises for clearing and/or matting in order to access manholes, a price for clearing and/or matting will be negotiated by CONTRACTOR and OWNER.

D. Conditions such as broken pipe and major blockages may prevent cleaning from being accomplished, especially where additional damage would result if cleaning were attempted or continued. Should such conditions be encountered, the CONTRACTOR shall not be required to clean those specific pipe sections unless the apparent obstruction is removed.

E. During sewer cleaning operations, satisfactory precautions shall be taken by the CONTRACTOR in the use of cleaning equipment. Precautions shall be taken to ensure that damage to, or flooding of public or private property does not occur during the cleaning procedure.

F. Selection of the equipment shall be the sole discretion of the CONTRACTOR and based on the conditions of lines at the time the work commences. The equipment shall be capable of removing dirt, grease, rocks, sand, and other materials and obstructions from the sewer lines and manholes.

G. If cleaning of an entire section cannot be successfully performed from one manhole, the equipment shall be set up at the other manhole and cleaning again attempted. If successful cleaning still cannot be performed or the equipment fails to traverse the entire manhole-to-manhole pipe segment it will be assumed that a major blockage exists and the cleaning operation will be abandoned. The cleaning operator will note these occurrences in his daily

cleaning log. The CONTRACTOR will be compensated for cleaning the entire length of sewer should this occur.

H. All sludge, dirt, sand, rocks, grease, and other solid or semi-solid materials resulting from the cleaning operation shall be removed at the downstream manhole of the section being cleaned. Passing materials from pipe segment to pipe segment, which could cause line stoppages, accumulations of debris in wet wells, interference with in-line long term flow monitoring equipment or damage to pumping equipment will not be permitted. Under no circumstances shall sewage or solids removed during the cleaning operation be dumped onto the streets or in ditches, catch basins or storm drains.

I. If the CCTV inspection shows the cleaning to be unsatisfactory, the CONTRACTOR shall re-clean and re-inspect the sewer line at his sole expense until the cleaning is shown to be satisfactory.

J. All sludge, dirt, sand, rocks, grease, and other solid or semisolid materials removed from the sewer pipes, wet wells, and/or manholes during cleaning operations shall be drained of water and transported for disposal at the Bridge City Wastewater Treatment Plant. Sewer debris disposed at the Bridge City Wastewater Treatment Plant will be at no direct cost. If the Bridge City Wastewater Treatment Plant is not available for the disposal of sewerage debris, the CONTRACTOR shall dispose sewer debris at an OWNER approved landfill facility. Sewer debris disposed of at an OWNER approved landfill facility will be paid under the 5000.25 “Sewer Debris Disposal Offsite” item.

   The Contractor will need to provide satisfactory evidence to the Parish of the amount of material removed from sewer pipes, wet wells, and/or manholes. These quantities will be subjected to certification, as deemed necessary by the Engineer and/or Director of the Department of Sewerage. Prior to disposing of debris at the Bridge City Wastewater Treatment Plant site the CONTRACTOR must first contact either the Superintendent, or the operator on duty, before disposal. The telephone number is (504) 731-4490. Any damage caused by improper disposal or use of the drying beds, including roadways damaged by disposal activities, shall be repaired by the CONTRACTOR at his own expense. The CONTRACTOR shall adhere to all local, state, and federal guidelines in disposal of this material.

K. When water from the public water supply is to be utilized for the cleaning process, the Contractor shall obtain the number of needed water meters from the Jefferson Parish Water Department and responsible for paying all associated fees & costs. The Contractor will be billed directly by the Parish and responsible for reimbursing the Parish on a monthly basis, or as otherwise determined. As a general rule, prior written approval from the Parish is not needed to use fire hydrants located within the project area(s) under this contract. The Contractor will be responsible to reimburse the Parish for any

damaged or lost meters not returned at the completion of the project and any other associated fines.

L. In the event the cleaning equipment nozzle or any other components is lodged in a sewer service lateral or mainline the Contractor is responsible for all work and costs associated with the retrieval of lodged equipment and for full restoration of all impacted areas equal to or better than the pre-existing condition at no direct cost.

The Contractor shall provide all necessary labor, material, equipment, supervision, other incidentals, etc. necessary to repair the sewer mainline or service line and for all other associated necessary restoration activities, including but not limited to excavation, roadway/street surface, parking areas, drives, walks, ADA ramps, curbs & gutters, backfill, base material, engineering fabrics, signage, landscaping, sodding, temporary bracing, by-pass pumping, traffic control, erosion control, disposal of waste material or debris, etc. All associated costs, including overhead, taxes, fees, etc. shall be included at no direct cost.

All restoration shall be in-kind unless otherwise authorized by the Owner or Engineer. The minimum pipe repair length, pipe trench limits, and pavement restoration limits shall be in accordance with the applicable Parish standards and other requirements, or as otherwise directed by the Owner or Engineer.

Pipe repairs and other restoration activities shall only be addressed if it is located in an easement or right- of-way. No construction activities shall be made on private property without obtaining authorization from the Parish and property owner, including being granted a temporary right of entry if required. The location of the pipe repairs shall be determined by the location where the equipment is lodged. Timely excavation is necessary to maintain project schedules and to eliminate the possibility of overflows resulting from the lodged equipment creating a blockage. The Contractor shall notify the Director of Sewerage when the pipe repairs and other restoration work will occur. It shall be the Contractor's responsibility to accurately field locate the exact point of pipe repair and the limits of any other associated restoration work.

All work shall be in accordance with the latest applicable Jefferson Parish Standard Specifications, Standard Plans, General Standard Notes, and any other applicable manuals and guidelines, which are accessible from the Jefferson Parish Engineering Department (504-736-6500) located at 1221 Elmwood Pk. Blvd., Suite 802; Jefferson, LA 70123 or by visiting the website (https://www.jeffparish.net/departments/engineering/public-works-standard-details).

The Contractor shall also be responsible for applying for and obtaining any required permits and all associated costs thereto.

The above requirements apply to pipe and structure cleaning, camera/video (CCTV) inspection, smoke testing, root/grease cutting, protruding tap cutting, and other pipe assessment methods for which the Contractor is responsible for performing whether or not it may be specifically called for in other sections of these specifications.

SECTION 6000
ROOT / GREASE / TAP CUTTING

A. The CONTRACTOR shall furnish all labor, equipment, supplies, and supervision and shall perform all work required in accordance with these specifications.

B. Roots, grease and/or taps that can be removed by conventional means, such as cutting, shall be removed by the CONTRACTOR at the rate specified for that line item.

C. The cutting of roots, grease and or taps will occur during CCTV inspection.

D. Roots, grease and/or taps will only be removed if they do not allow the passage of the CCTV inspection camera, are obscuring the view of potential defects or could cause a potential blockage and overflow.

E. When root, grease and/or tap cutting occurs, roots, grease and/or taps shall be cut to clear the pipe for flow and to allow for the proper viewing of defects.

CHEMICAL ROOT CONTROL

A. CONTRACTOR will apply EPA registered root-control agents to various main line sanitary sewers, as selected by OWNER in order to kill the root growth present in the lines and to control root re-growth.

B. CONTRACTOR will apply the chemical, as a foam, directly to the roots via a hose that extends throughout the entire length of each sewer section. The material will be applied evenly and uniformly, so as to completely fill the sewer pipe. CONTRACTOR will not use "pour down" products or utilize high pressure application equipment. CONTRACTOR will pump the chemical foam under low pressure to assure that the sewer section is completely filled with foam, and to ensure that foam penetrates "wye" connections. The chemical agent will contain a herbicide to destroy root tissue and a foaming surfactant to deliver the herbicide to the targeted roots.

C. The root control materials will be EPA registered, labeled for the intended use in sewer lines, and registered with the Department of Agriculture & Forestry.

D. CONTRACTOR will comply with all applicable federal, state and local requirements and ordinances relative to this type of material and usage thereof (OSHA, EPA, DOT and the Department of Agriculture & Forestry). Chemical handling and treatments will be applied by trained, professional applicators that are certified by the Department of Agriculture & Forestry, as required by law.

E. CONTRACTOR will keep complete and accurate records of each day's operation. Records shall show the date of treatment, the sections of line treated, pipe size and distance, and other pertinent information.

F. The OWNER will provide water for root control operations from any fire hydrant at no cost to CONTRACTOR.

G. CONTRACTOR guarantees to kill all the roots in every sewer it treats in order to eliminate main line sewer stoppages caused by live tree roots. CONTRACTOR will apply this guarantee for a period of two (2. years, beginning on the date of treatment and ending 2 (two) years after the date of treatment. If a treated sewer plugs up due to live tree roots during the guarantee period, CONTRACTOR will re-treat the sewer line at his sole expense. CONTRACTOR will provide a three (3) year guarantee on any paid repeat applications that are performed within six (6) months of the expiration date of the previous guarantee period. Re-treatments performed at no charge in honor of the guarantee do not extend the expiration date of the guarantee. This guarantee applies only to main line sewer stoppages caused by live tree roots. The guarantee does not apply to stoppages caused by grease or other foreign matter; flat, collapsed or deformed pipe or flooding caused by a surcharged or plugged sewer section downstream from a guaranteed sewer section.

SECTION 7000
CLOSED CIRCUIT TELEVISION (CCTV) INSPECTION

A. The CONTRACTOR shall furnish all labor, equipment, supplies, and supervision and shall perform all work required in accordance with these specifications. CCTV inspection shall be performed in the areas selected and approved by the OWNER.

B. It shall be the responsibility of the CONTRACTOR to schedule and perform investigations to prevent system overflows. If flows are such that they interfere with the CONTRACTOR's ability to collect accurate data, then the CONTRACTOR shall be responsible to schedule his work during low flow periods or to request written permission to perform by-pass pumping around the site. The CONTRACTOR may provide by-pass pumping only with specific approval from the OWNER. OWNER will reimburse CONTRACTOR for all costs associated with bypass pumping.

C. Inspection of sewer infrastructure by means of CCTV equipment shall be performed to determine the location and extent of any obstructions and defects such as offset joints, protruding tees, broken pipe, and other pipe defects that may permit groundwater infiltration. Logs shall note the existence of any significant defects. Cleaning by the CONTRACTOR shall be performed prior to each CCTV inspection on each pipeline to be inspected.

D. CCTV inspections shall be performed on one manhole-to-manhole pipe segment at a time. The inspection shall be performed by moving the CCTV camera through the line along the axis of the pipe at a rate not to exceed 30 feet per minute. Any means of propelling the camera through the sewer that would exceed this rate of speed or produce non-uniform or jerky movements shall not be acceptable. The camera shall be stopped for a minimum of 5 seconds at each identifiable defect to ensure proper documentation of the lines condition. In addition, the camera shall be stopped at each service connection, and the camera shall pan the service connection to video inside the service line. CCTV inspection is performed from the upstream manhole to the downstream manhole when the conditions allow. If conditions do not allow an upstream to downstream inspection, the inspection will be performed in reverse (from the downstream to the upstream manhole).

E. The CCTV inspection equipment shall have the ability to provide lighting during the CCTV inspection that fully illuminates, but does not overly illuminate the entire pipe, as needed to adequately inspect the pipes and identify defects as specified herein. The lighting system shall be adequate to illuminate a pipe based on the pipe size. The equipment light head shall also include a high-intensity side viewing lighting system to allow illumination of internal sections of lateral sewer connections.

F. A log shall be made by the CONTRACTOR when each manhole-to-manhole pipe segment is televised. The log shall include at a minimum:

   a. Location of each point of leakage
   b. Location of each service connection or other pipe entering the televised line
   c. Location and degree of offsets
   d. Location of any damaged sections, and nature of damage
   e. Location of buried structures or blind junctions
   f. Location and amount of any deflection in alignment or grade of pipe; also the total length of pipe sag
   g. Pipe materials, diameter, and distance between pipe joints
   h. Date, city, manhole-to-manhole segment, reference manhole number, name of operator, and inspector
   i. Video Filename

G. The pipe segment length, with respect to the referenced manhole, shall be determined with a meter device, accurate to within ±2%. Markings on the cable, instruments requiring observation inside a manhole, or correction of each reading for the depth of the reference manhole shall 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.

H. A header screen showing video number, segment number, and manhole number shall be videoed for 10 seconds at the beginning of each televised line segment. All header information shall be recorded on the log forms.

I. The CCTV camera and equipment shall have the capability to be stopped or backed up to view and analyze conditions that appear to be unusual or uncommon for a sound sewer line. At all times, the operating technician shall be able to move the camera through the line in either direction without loss of quality in the video presentation on the monitor. The picture shall be free of electrical interference and provide a clear, stable image of the specified resolutions at all times. The camera lens shall be cleaned, as required, to provide a clear image within the sewer lines.

J. In the event the inspection equipment camera or any other components is lodged in a sewer service lateral or mainline the Contractor is responsible for all work and costs associated with the retrieval of lodged equipment and for full restoration of all impacted areas equal to or better than the pre-existing condition at no direct cost.

   The Contractor shall provide all necessary labor, material, equipment, supervision, other incidentals, etc. necessary to repair the sewer mainline or service line and for all other associated necessary restoration activities, including but not limited to excavation, roadway/street surface, parking areas,

drives, walks, ADA ramps, curbs & gutters, backfill, base material, engineering fabrics, signage, landscaping, sodding, temporary bracing, by-pass pumping, traffic control, erosion control, disposal of waste material or debris, etc. All associated costs, including overhead, taxes, fees, etc. shall be included at no direct cost.

All restoration shall be in-kind unless otherwise authorized by the Owner or Engineer. The minimum pipe repair length, pipe trench limits, and pavement restoration limits shall be in accordance with the applicable Parish standards and other requirements, or as otherwise directed by the Owner or Engineer.

Pipe repairs and other restoration activities shall only be addressed if it is located in an easement or right- of-way. No construction activities shall be made on private property without obtaining authorization from the Parish and property owner, including being granted a temporary right of entry if required. The location of the pipe repairs shall be determined by the location where the equipment is lodged. Timely excavation is necessary to maintain project schedules and to eliminate the possibility of overflows resulting from the lodged equipment creating a blockage. The Contractor shall notify the Director of Sewerage when the pipe repairs and other restoration work will occur. It shall be the Contractor's responsibility to accurately field locate the exact point of pipe repair and the limits of any other associated restoration work.

All work shall be in accordance with the latest applicable Jefferson Parish Standard Specifications, Standard Plans, General Standard Notes, and any other applicable manuals and guidelines, which are accessible from the Jefferson Parish Engineering Department (504-736-6500) located at 1221 Elmwood Pk. Blvd., Suite 802; Jefferson, LA 70123 or by visiting the website (https://www.jeffparish.net/departments/engineering/public-works-standard-details).

The Contractor shall also be responsible for applying for and obtaining any required permits and all associated costs thereto.

The above requirements apply to pipe and structure cleaning, camera/video (CCTV) inspection, smoke testing, root/grease cutting, protruding tap cutting, and other pipe assessment methods for which the Contractor is responsible for performing whether or not it may be specifically called for in other sections of these specifications.

K. If during the inspection the camera cannot pass through the entire pipe segment, the CONTRACTOR shall set up his equipment so that the inspection can be performed from the opposite manhole. Should this occur, CONTRACTOR will be paid for an additional set-up. If the camera again fails to pass through the entire pipe segment, the inspection shall be abandoned and considered complete. The CONTRACTOR will be paid for the actual

footage inspected, and no additional inspection work shall be required in that pipe segment until the pipe has been rehabilitated. CONTRACTOR will be paid for the actual footage inspected during each subsequent attempt.

CCTV INSPECTION OF SERVICE LATERALS

A. CONTRACTOR will use a lateral launch inspection system, consisting of a robotic tractor and a lateral launch CCTV camera, to remotely deploy a pan & rotate camera into lateral pipes connected to a mainline sewer pipe. Should CONTRACTOR encounter multiple laterals converging in a single tap, CONTRACTOR shall utilize a steerable lateral camera with guide pin to inspect the adjoining laterals separately. Each pipe shall be identified as an independent inspection for data submittal and invoicing purposes.

B. A main sewer television camera is used to position the lateral camera launcher. The lateral sewer camera is used to inspect each lateral from the mainline towards the cleanout.

C. The television inspection of the lateral will be attempted from inside the mainline sewer up into the lateral or attempted from the cleanout towards the sewer main. Lateral sewers inspected from the cleanout towards the mainline will be attempted by using a mini push camera if necessary.

D. In the event a lateral pipe segment cannot be fully inspected after reasonable attempts, CONTRACTOR shall provide all the information to the OWNER and the OWNER will determine alternate possible solutions.

Submittals

A. Copy of completed CCTV log.

B. Schedule for cleaning and inspecting each sewer reach.

C. Daily report form.

D. Confined space entry form.

Data Submittals

A. CCTV inspection video acquisition and data collection must be performed utilizing the Parish collection software Infrastructure Technologies (IT Pipes Software Suite) compliant with applicable NASCO & PACP requirements.

B. All videos will be digital .mp4 files, clear, legible and free of "snow" or haze.

C. Electronic copies (data files) shall be submitted in a PACP Exchange Database.

D. The CONTRACTOR shall prepare and submit a list of defects, which appear to require immediate corrective action, based on their size and/or type, on a daily and weekly basis. This submittal is not a final deliverable.

E. To establish the working criteria for video picture quality which must be maintained throughout the project, the CONTRACTOR shall furnish a USB drive with .mp4 video footage of an actual sewer line inspection that is satisfactory to the OWNER, and meets the job specifications for CCTV inspection. The USB drive shall become the property of the OWNER and shall be used throughout the project as a standard that the CONTRACTOR's video picture quality must meet.

F. The CONTRACATOR shall furnish the OWNER a USB drive that contains both data files and video files. The data files shall be able to upload into a PACP Exchange Database. Once downloaded by the OWNER, the hard drive will be returned to the CONTRACTOR. OWNER shall provide labeling and file naming standards at the pre-construction meeting.

G. All inspections shall be made by PACP certified operators and data shall be documented using NASSCO's Pipeline Assessment and Condition Program.

H. Once the CCTV inspection data has been obtained and analyzed and professional reports compiled, a recommended protocol for repairs will be recommended by the CONTRACTOR.

I. All CCTV sanitary sewer system evaluation surveys & inspection services personnel must be supervised by a Project Manager with a minimum of 10 years' experience and with at least 1 project with a minimum of 20,000 LF and Key Staff members shall have at least 5 years of sanitary sewer system assessment & inspection services experience. All rehabilitation recommendations must be approved by a Louisiana registered licensed engineer with a minimum of 5 years of experience analyzing sanitary sewer line inspection data. Engineer must be PACP certified.

SECTION 8000
MISCELLANEOUS SERVICES

CLEANING WET WELLS

A. The CONTRACTOR shall scour debris or grease-laden wet well walls with a high-velocity water gun. If the impact of the high-velocity water appears to be weakening the structural integrity of the wet well wall or any internal components of the wet well, the CONTRACTOR shall discontinue the scouring on the wet well and notify the OWNER.

B. Wet well cleaning shall be conducted on wet wells in areas of the system as selected and approved by the OWNER.

C. Upon request from CONTRACTOR, OWNER shall provide CONTRACTOR with adequate access to the wet wells requiring cleaning.

D. All debris removed from wet wells shall be drained of water and transported for disposal at the Bridge City Wastewater Treatment Plant. Sewer debris disposed at the Bridge City Wastewater Treatment Plant will be at no direct cost. If the Bridge City Wastewater Treatment Plant is not available for the disposal of sewerage debris, the CONTRACTOR shall dispose sewer debris at an OWNER approved landfill facility. Sewer debris disposed of at an OWNER approved landfill facility will be paid under the 5000.25 “Sewer Debris Disposal Offsite” item.

E. Upon request from CONTRACTOR, OWNER shall draw down the water level in the wet well within a reasonable time and to a reasonable water level to facilitate the cleaning.

DYE TESTING

A. The objective of dye water testing, when used in conjunction with CCTV, is to pinpoint specific points of entry of inflow into the sanitary sewer system, such as direct and indirect connections of storm drains, yard drain inlets and pipes, sinkholes, leaking manholes in unpaved areas and leaking manhole covers and rings. Dye water testing without CCTV shall also be used to trace line segments during sewer map updating, locate cross connections, and co-relationship of individual properties to sewer lines.

B. At a minimum, CONTRACTOR should flood the area over the suspected leak with dyed water and check for dye at 5-minute intervals for up to 30 minutes, noting positive or negative each time checked at the downstream manhole. Two photographs will be taken: one when dyed water is applied and a second when positive results are noted, or at the 30-minute check if results are negative.

C. The following data shall be recorded by the CONTRACTOR using the required file format in Microsoft Access. Data, where specified, will be recorded using codes provided by the OWNER. A hard copy and electronic diskette shall be submitted to

the OWNER. The dye test database shall include the following information at a minimum:

a. Date and time
b. Location, including reference to the relevant manhole segment (upstream and downstream manhole incorporating the manhole numbering system) and the nearest street address
c. Testing personnel
d. Schematic layout of the manholes and sewer lines under test — noting location of sandbags and/or plugs
e. Precise location of the site of confirmed source of inflow or leak, as determined by the dye testing, keyed to the relationship to appropriate manhole and pipe numbers from the OWNER's GIS mapping system and street address, and confirmation of any negative results of dye testing
f. Digital color photographs filenames of the results of each dye test

D. Digital photographs shall be provided in jpeg (.jpg) format. Resolution of photographs shall be a minimum of 72 dpi x 72 dpi and minimum dimensions of 640 X 480 pixels. The CONTRACTOR shall document each dye leak or series of dye tests by high-resolution digital photograph. The photographs shall be included in the database along with the location of the dye test defect.

E. Groups of digital photographs orientated so that the long side of the photograph is horizontal and that 3"x 5" printed copies shall be incorporated in the hard copy of the dye testing report and supplied on a USB drive incorporated for each work order issued by the OWNER, unless otherwise directed.

Deliverables

A. Electronic database of dye test data and digital photographs of results shall be submitted to the OWNER. The electronic database using the required file format in Microsoft Access, shall be tied to the OWNER's GIS sewer maps through the manhole numbers. If no GIS sewer maps are available, the CONTRACTOR will be responsible for providing an applicable numbering system for manholes.

B. Dye test reports, location sketches, and digital photographs shall be submitted to the OWNER on USB drives.

C. The photographs shall be digital pictures in both hard copy and electronic format.

SONAR INSPECTION

A. SONAR Inspection shall be performed only if authorized by the OWNER and upon prior approval by the Director of the Department of Sewerage.

B. The CONTRACTOR shall determine the inspection technology method or combination of methods to be utilized in each pipeline segment. Generally, sonar

alone will be used where the depth of fluid in the pipeline is greater than 75% of the full diameter of the pipe. CCTV and sonar will be used together when the fluid levels are between 25% and 75% of the full pipe diameter. Sonar will not be used where the fluid depth is generally less than 25% of the pipe diameter or more specifically where there is insufficient depth to pass the sonar gear on the float or crawler.

C. The speed of the crawler or float shall not be greater than 20 feet per minute when the scanning sonar is in use either alone or in combination with the CCTV camera.

D. The sonar equipment shall be purpose built for use in the inspection of sewer system pipelines and shall be operative in totally submerged conditions. It shall be capable of being traversed by crawler tractor, float or other suitable means through the pipeline on a stable vehicle constructed to situate the sonar inspection equipment below the water level.

E. The maximum beam width of the sonar energy pulse will be no greater than 2 degrees from the center of the transducer. The transducer will be of the continuous scanning type. The sonar image will be in full color during the inspection.

F. The sonar survey will include complete structural and service assessment of the equivalent PACP standard as that obtained through the CCTV survey. The sonar survey will include measurement of fluid depth and silt depth.

G. The sonar survey will be continuously recorded and saved on USB drives in .mp4 format, supported by complete defect inspection logs and summary reports.

H. A color high resolution sonar still image of cross-sections of the pipeline must be taken and recorded every 50 feet or more frequently should the internal profile of the pipeline change and at every defect. These images are to be cross referenced to the reports and databases for ease of reference.

MULTI-SENSOR INSPECTION OF SEWER PIPE

A. Multi-Sensor inspection of sewer pipe services, including the combination of the below referenced technologies, shall be performed only if authorized by the OWNER and upon prior approval by the Director of the Department of Sewerage.

Profiling LIDAR

A. The Light Detection And Ranging (LIDAR) must be specifically configured as a pipe profiling LIDAR that uses time-of-light ranging principle. Specifically excluded is Structured Light (SL) ranging systems that use a camera and laser wand/light ring or other types of scanner with degrading z-axis accuracy as the pipe diameter increases. In addition, the pipe profiling LIDAR must have the following characteristics:

a. The LIDAR unit (sensor that is placed within the pipeline) must be protected by a mechanical housing that is specifically designed to survive the rigors of the sewer environment.
b. The LIDAR housing shall have IP 67 or better.
c. The LIDAR unit shall be “fog” resistance by providing at least 3 multi-echo distance measurements per step. (Note this is an essential feature for obtaining accurate LIDAR data in cold weather, hot condensing, or high humidity conditions where the tendency to induce fog into the pipeline or condensation on the sensor is the greatest.)

B. The LIDAR system shall be capable of transmitting continuous, multi-echo range and bearing data from the LIDAR unit within the pipeline to topside viewing station.

a. The transmission of the LIDAR data shall be digital.
b. The transmission of the LIDAR data shall be continuous.
c. The transmitted data shall be logged in digital format for subsequent viewing and analysis operations.

C. The LIDAR unit shall have the following properties:

a. The range estimation mode of the LIDAR unit shall be time-of-flight.
b. The LIDAR unit shall be capable of scanning at least 40 times per second.
c. The Near Field Ranging Limit shall not exceed 0.1 meters.
d. The Far Field Ranging Limit shall be at least 30 meters.
e. The LIDAR sensor Field of View shall be 270 degree arch.
f. The Operating Wavelength shall be near infrared range (not visible to the naked eye) with a nominal value of 905 nm.
g. The Angular Resolution shall be 0.25 degrees or better.
h. The Accuracy shall be at least +- 30mm at 10 meters.

Profiling SONAR

A. The SONAR system must be specifically designed as a sewer pipe profiling system that uses high frequency sound waves to obtain profiles from the submerged section of the pipes. In addition, the pipe profiling sonar must have the following general characteristics:

a. The SONAR unit (sensor that is placed within the pipeline) must be protected by a mechanical housing that is specifically designed to survive the rigors of the sewer environment.
b. The SONAR unit shall be depth rated to at least 1000m.
c. The SONAR unit shall have integrated pitch and roll sensing.

B. The SONAR system shall be capable of transmitting continuous SONAR data from the SONAR unit within the pipeline to topside viewing station.

a. The transmission of the SONAR data shall be digital.
b. The transmission of the SONAR data shall be continuous.

c. The transmitted data shall be logged in digital format for subsequent viewing and analysis operations.

C. The SONAR unit shall have the following properties:

a. The Near Field Ranging Limit shall be at least 0.125 meters.
b. The Far Field Ranging Limit shall be at least 6 meters.
c. The Min Detectable Range shall be at least 50 millimeters.
d. The SONAR unit shall support the following Variable Range Scales:
    i. 0.125 m, 0.25m , 0.5 m, 0.75 m, and [1-6] m.
e. The SONAR unit Step Size shall be at least 0.9 degrees.
f. The SONAR unit shall support continuous Train Angles, e.g. Continuous Rotation.
g. The SONAR unit shall have an unobstructed Field of View: of 360 degree.
h. The SONAR unit shall support a Scanning Speed no smaller than 360 degrees in 1.3 sec.
i. The SONAR unit Frequency shall be at least 2.25 Mhz. to ensure the highest possible resolution of resultant data.
j. The SONAR unit Transducer Beam Width shall not exceed 1.4 degree conical.
k. The SONAR unit Range Resolution shall be at least 1/250 (e.g. 1mm at 250 mm).

HD CCTV Camera

A. The CCTV camera system must be waterproof, corrosion resistant, and have a protective enclosure specifically designed to survive the rigors of the sewer environment.

B. The CCTV camera system must operate over the temperature range -10 C to 50 C.

C. The CCTV camera system shall contain an imaging sensor that has full resolution color.

a. The imaging sensor shall have selectable automatic or manual exposure.
b. The imaging sensor shall have a dynamic range of 55db.
c. The imaging sensor shall have sensitivity of 1.5 lux at F1.0.
d. The imagine sensor shall have selectable automatic or manual white balance.

D. The CCTV System shall be capable of transmitting live video from the CCTV camera within the pipeline to the topside viewing station.

a. The transmission of the video signal from the CCTV camera to the topside viewing station shall be digital.
b. The digital video signal must be capable of transporting full frame rate video at distances of at least 2,000 linear feet (600 linear meters) without distortion of the topside video image.

ACCURATE MEASURING PROBE (AMP) PIPE ASSESSMENT

A. Accurate Measuring Probe (AMP) Pipe Assessment services shall be performed only if authorized by the OWNER and upon prior approval by the Director of the Department of Sewerage.

B. The as-builts location of the pipe shall be determined by use of the AMP that measures up to 100 angular and linear velocity changes, in multiple gyroscopic orientation measurement units per second as the AMP moves through the pipeline structure. The changes shall be stored within the AMP and be able to be downloaded to plot the pipeline location in both a plan (X, Y) and profile (X, Z) view. Additionally, the location of the pipeline in both the plan and profile dimensions will be tied to an approved and reproducible coordinate system accepted within the State that the project is being performed.

C. Application of the AMP within a pipeline/conduit structure will be performed under the following procedures:

    a. Surveyed coordinates and elevations from both access points of the pipeline/conduit collected from the top, center, or invert portion of the pipeline material will be provided by the OWNER to the CONTRACTOR.

    b. Inside and outside diameters will be recorded and input into the software under the appropriate fields.

    c. The appropriate wheel sets will be affixed to the AMP body via threaded ends.

    d. The AMP along with the wheels sets will be sized accordingly to the inside diameter of the pipeline/conduit.

    e. The AMP will then be attached to the tag line that has been previously installed.

    f. The AMP will be turned on and placed within the pipeline/conduit for a period of 1-minute to allow for the AMP sensors to calibrate.

    g. The AMP will then be advanced within the pipeline/conduit via the aid of mechanical or manual reels/winches and will be collecting 3D positional measurements.

    h. Once the AMP has arrived at the other end of the pipeline/conduit it will again rest within the pipeline for a period of 1-minute for calibration purposes, and then it will be advanced back to its original starting position.

    i. The AMP will calibrate for a final time and then be removed from the pipeline/conduit and the unit will be turned off.

    j. Once the AMP is connected to the field laptop then the 3D positional measurement data will be uploaded to the computer.

k. The software on the computer provides the analyst diagnostic analysis via reviewing information on the AMP's linear measurements, velocity, roll, pitch, and heading.

l. The CONTRACTOR will then review all positional measurements in determining that the positional measurements are within the tolerance specification for the AMP. Note: additional positional measurement runs maybe required based on this review.

D. Upon collection of the positional 3D positional measurements with the AMP and processing of the positional measurement data, the resulting positional data can be exported to as-built file(s) for record keeping purposes.

Deliverables

A. As-built map (plan and profile view) in .PDF format of pipe segment

B. Horizontal (x,y) and vertical (z) coordinates of the as-built in .CSV format

C. Bending radius analysis and inclination report of the as-built in .XLS format

D. ESRI shape file and Google Earth in .KML format of the pipe segment

ACOUSTIC PIPE ASSESSMENT

A. Acoustic Pipe Assessment services shall be performed only if authorized by the OWNER and upon prior approval by the Director of the Department of Sewerage.

B. The CONTRACTOR shall furnish all labor, equipment, supplies, and supervision and shall perform all work required in accordance with these specifications. Acoustic pipe assessment shall be performed in the areas selected and approved by the OWNER.

C. The purpose of the acoustic pipe assessment is to identify blockages in sewer lines.

D. The acoustic pipe assessment system shall be capable of inspecting 6"-12" lines using active acoustic transmission (transmit on one end of the pipe, receive on the other end of the pipe). Active transmission of sound for an individual inspection should be limited to no more than four (4. minutes of transmission time.

E. The system shall be capable of inspecting an individual pipe length up to 800 linear feet.

F. The device shall contain a USB connection or similar to allow for downloading of inspection data to a computer.

G. Acoustic inspection results shall be provided on the device within three (3) minutes of completion of each individual inspection.

H. The device(s) shall not need to come into contact with the waste flow and shall not require penetration of more than two (2. feet into the manhole or access point.

I. The device(s) shall be battery-powered with the capability of performing at least 35 measurements on a fully charged battery.

REMOTE ILLUMINATION OF 15 INCH THRU 60 INCH PIPE

A. Remote Illumination Assessment services shall be performed only if authorized by the OWNER and upon prior approval by the Director of the Department of Sewerage.

B. At the request of the OWNER, the CONTRACTOR shall provide remote illumination pipe inspection services. The camera equipment shall have LED lighting capability to adequately illuminate the inside the pipe based on the pipe size to provide a visual inspection and document the condition of the pipe interior and to detect defects. This item will typically be performed on pipe sections of less than fifty (50) feet in length on as needed basis.

C. The pipe segment to be accessed shall accessed from the nearest manhole, wet well structure, or other suitable pipe opening.

D. High-resolution color digital photographs with approved picture quality shall be taken of the pipe interior to adequately document the condition of the pipe segment and to observe defects as well as all other relevant features.

E. Digital photographs shall be provided in jpeg (.jpg) format. Resolution of photographs shall be a minimum of 72 dpi x 72 dpi and minimum dimensions of 640 X 480 pixels. The photographs shall be digital pictures in both hard copy and electronic format.

F. The CONTRACTOR will develop and submit detailed site reports, including pipe photos, for the approved pipe locations. The site reports shall be submitted to the OWNER for review.

G. The CONTRACTOR shall furnish the OWNER with a USB drive that contains both data files and photographs.

BY-PASSING PUMPING

A. The CONTRACTOR shall furnish all labor, equipment, supplies, and supervision and shall perform all work required in accordance with these specifications. Bypassing sewerage shall only be performed in the areas or pipe segments approved by the OWNER.

B. The CONTRACTOR, when required, shall provide for the flow of sewage around the section or sections of mainline pipe where the services required to perform the work under this Contract, or as needed to avoid damages due to sewer spills or overflows, or otherwise authorized by the OWNER. By-pass pumping shall be made by plugging a line as needed at an existing upstream manhole and pumping the flow into a downstream manhole or adjacent system. By-passed sewerage shall be NOT into the storm drainage system.

C. When pumping/by-passing is required, the Contractor shall supply the necessary pumps, conduits, controls, pipe bends, pipe/hoses, and other equipment required to divert the flow of wastewater around the work site and/or the pipe segments requiring by-pass pumping services. The by-pass system shall be of sufficient capacity to handle existing flows, plus additional flow, that may occur during periods of rain, as determined by the Department of Sewerage.

D. For laterals it is required that the service lateral be inactive during the time of installation. This is normally accomplished by turning off the property owner's services, or by requesting that the property owner refrain from using his services during the required period of installation. No private property services shall be turned off without prior written notice between 24 and 72 hours before services are to be turned off.

E. For projects which are considered to last longer than one normal workday, only submersible or above ground pumps with electric motors will be acceptable without prior approval of the Director of Sewerage. The Contractor shall be responsible for supplying the required electrical feeds, electrical power, labor, and supervision to set up and operate the pumping and by-pass system.

F. The Contractor must take every precaution to ensure that the plugging and by-passing of sewer flow does not cause flooding or damage to public or private property being served by the sewers involved

TRAFFIC CONTROL

A. CONTRACTOR will be responsible to provide standard traffic control services if needed to safely perform the scope of work included in the project. Any costs associated with the development and implementation of site-specific traffic control device plans, traffic control device set-up & removal, including cones, signs, & other necessary devices, etc., and traffic control device operation & maintenance are considered incidental to the other work and provided at no additional cost.

B. In high traffic volume areas & other instances the assessment work cannot be safely performed, flagman or law enforcement services can be utilized as needed upon approval by the OWNER. When flagman or law enforcement services are utilized the CONTRACTOR shall be compensated on an hourly basis.

C. The CONTRACTOR shall notify the local fire department, police department, engineering department, sewerage department and all other necessary authorities to

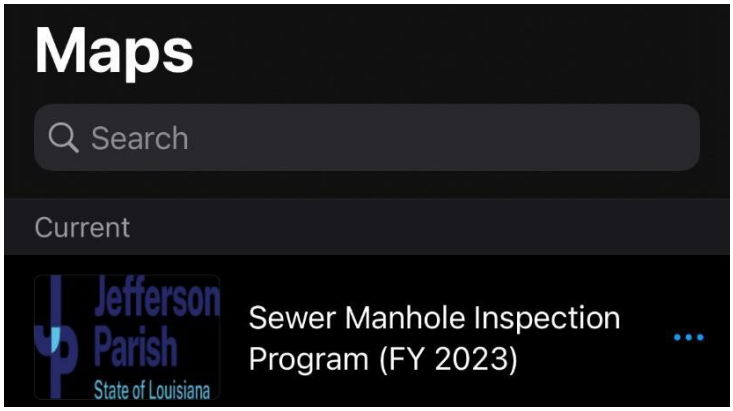
carry out the requirements of the scope of work. All investigation work shall be coordinated with these authorities on a daily basis to avoid any conflict.

Appendix A ArcGIS Field Maps Application Information

Step 1: Download ArcGIS Field Maps Application on Apple or Android Device.

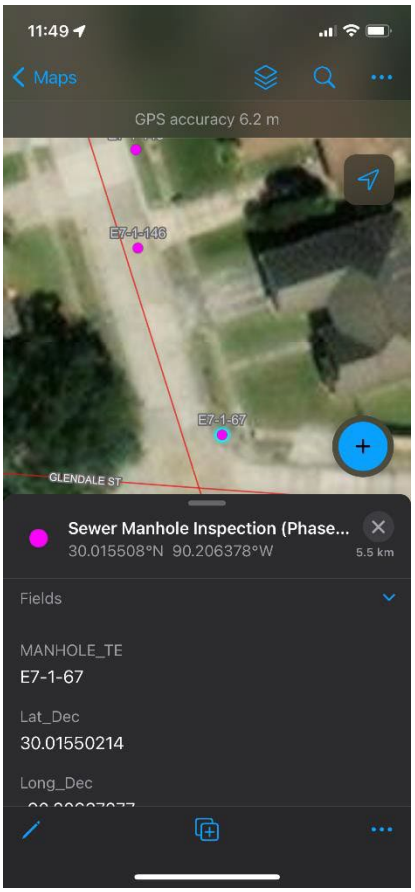
Step 2: Login to your ArcGIS Online Account and search for map in search bar.

Map Name: JP SCIP – SSES Sewer MH Inspections (FY 2023)



Step 3: The Map should show up.

Step 4: Zoom in closer to any lift station sub-basin area for sewer manholes to show up on map.



Step 5: Click the location dot for the appropriate sewer manhole.

Note: Colors refer to status of inspection (See Below)

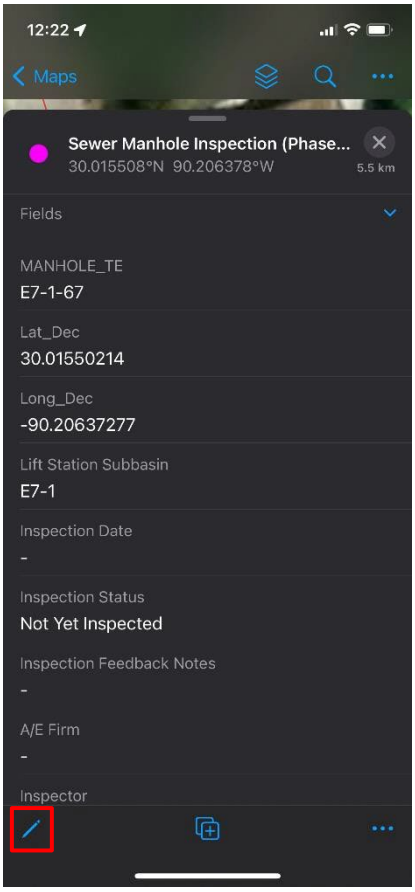
Legend

Purple Dot – Inspection Not Yet Complete

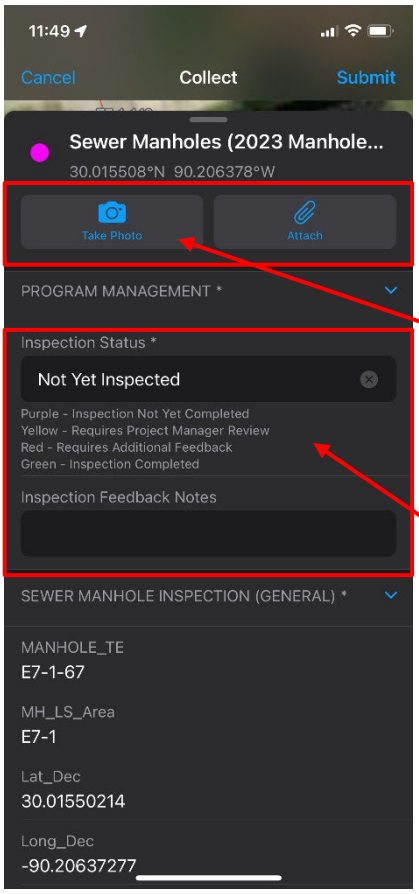
Yellow Dot – Requires Project Manager Review

Red Dot – Requires Additional Feedback

Green Dot – Inspection Completed



Step 6: Existing information will pop up. Click the Edit Button Below.



Step 7: Inspectors will fill out sewer manhole inspection questions here. Once finished with inspection, inspector must click Submit to complete and store the inspection of the sewer manhole.

Inspectors can click Take Photo to take any photos of the conditions of the sewer manhole, which will attach the photos to the location dot for that appropriate sewer manhole.

When finished with inspection, inspectors must fill out the Inspection Status field with “Requires Project Manager Review”. Please do **not** fill out Inspection Feedback Notes; if further feedback is required by inspector, a JPSCIP team member will provide comments in this field.

ATTACHMENT "F" - Jefferson Parish Sanitary Sewer Evaluation Survey Services (SSES) RFP
Pricing Table

Proposer Name: _____

Note: The proposer shall provide pricing and requested information for all listed items. Pricing for these items cannot be left blank.

ITEM NO.	SERVICE DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	EXTENDED PRICE
SECTION 1000 MOBILIZATION DEMOBILIZATION					
1000.01	MOBILIZATION / DEMOBILIZATION OF EQUIPMENT & CREWS	30	EA	$	$
SECTION 2000 FLOW MONITORING SERVICES					
2000.01	TEMPORARY FLOW MONITORING (1-10 METERS)	60	MD	$	$
2000.02	TEMPORARY FLOW MONITORING (1-10 METERS) - AFTER 60 DAYS	30	MD	$	$
2000.03	TEMPORARY FLOW MONITORING (11-24 METERS)	60	MD	$	$
2000.04	TEMPORARY FLOW MONITORING (11-24 METERS) - AFTER 60 DAYS	30	MD	$	$
2000.05	TEMPORARY FLOW MONITORING (25-49 METERS)	60	MD	$	$
2000.06	TEMPORARY FLOW MONITORING (25-49 METERS) - AFTER 60 DAYS	30	MD	$	$
2000.07	TEMPORARY FLOW MONITORING (50 OR MORE METERS)	60	MD	$	$
2000.08	TEMPORARY FLOW MONITORING (50 OR MORE METERS) - AFTER 60 DAYS	30	MD	$	$
2000.09	LONG-TERM FLOW MONITORING - 1 YEAR MINIMUM	12	METER/ MONTH	$	$
2000.10	TEMPORARY RAIN GAUGES	60	GD	$	$
2000.11	LONG-TERM RAIN GAUGES	12	GAUGE/ MONTH	$	$
2000.12	NIGHT FLOW ISOLATION	10	EA	$	$
2000.13	PUMP STATION DRAW/FILL TEST (1-2 PUMPS)	10	EA	$	$
2000.14	PUMP STATION DRAW/FILL TEST (3-4 PUMPS)	10	EA	$	$
2000.15	FORCE MAIN MONITORING (CLAMP-ON METERS)	60	MD	$	$
SECTION 3000 MANHOLE / WET WELL SERVICES					
3000.01	360 DEGREE MANHOLE CONDITION ASSESSMENT (LESS THAN OR EQUAL TO 4-FT DIAMETER)	100	EA	$	$
3000.02	360 DEGREE MANHOLE CONDITION ASSESSMENT (GREATER THAN 4-FT DIAMETER)	50	EA	$	$
3000.03	360 DEGREE WET WELL CONDITION ASSESSMENT (LESS THAN OR EQUAL TO 8-FT DIAMETER)	25	EA	$	$

3000.04	360 DEGREE WET WELL CONDITION ASSESSMENT (GREATER THAN 8-FT DIAMETER)	5	EA	$	$
3000.05	STRUCTURAL MANHOLE CONDITION ASSESSMENT WITH INTERNAL IMAGES	1750	EA	$	$
3000.06	UN-COVER BURIED MANHOLES LESS THAN 12" DEEP	250	EA	$	$
3000.07	REMOVAL OF STABILIZED DEBRIS IN MANHOLE INVERTS	500	EA	$	$
3000.08	MANHOLE/WET WELL INSPECTION DATA MANAGEMENT	1780	EA	$	$
3000.09	MANHOLE/WET WELL REHABILITATION RECOMMENDATIONS	1780	EA	$	$
SECTION 4000 SMOKE TESTING					
4000.01	SMOKE TESTING	380000	LF	$	$
4000.02	SMOKE TESTING DATA MANAGEMENT	380000	LF	$	$
SECTION 5000 SANITARY SEWER LINE CLEANING					
5000.01	STANDARD CLEANING 6" - 10" SANITARY SEWER IN RIGHT OF WAY	90000	LF	$	$
5000.02	HEAVY CLEANING 6" - 10" SANITARY SEWER IN RIGHT OF WAY	30000	LF	$	$
5000.03	STANDARD CLEANING 6"-10" SANITARY SEWER NOT IN RIGHT OF WAY	7000	LF	$	$
5000.04	HEAVY CLEANING 6" - 10" SANITARY SEWER NOT IN RIGHT OF WAY	7000	LF	$	$
5000.05	STANDARD CLEANING 11" - 15" SANITARY SEWER IN RIGHT OF WAY	120000	LF	$	$
5000.06	HEAVY CLEANING 11” - 15" SANITARY SEWER IN RIGHT OF WAY	35000	LF	$	$
5000.07	STANDARD CLEANING 11”-15" SANITARY SEWER NOT IN RIGHT OF WAY	9000	LF	$	$
5000.08	HEAVY CLEANING 11” - 15" SANITARY SEWER NOT IN RIGHT OF WAY	9000	LF	$	$
5000.09	STANDARD CLEANING 16" - 18" SANITARY SEWER IN RIGHT OF WAY	45000	LF	$	$
5000.10	HEAVY CLEANING 16" - 18" SANITARY SEWER IN RIGHT OF WAY	13000	LF	$	$
5000.11	STANDARD CLEANING 16"-18" SANITARY SEWER NOT IN RIGHT OF WAY	3500	LF	$	$
5000.12	HEAVY CLEANING 16" - 18" SANITARY SEWER NOT IN RIGHT OF WAY	3500	LF	$	$
5000.13	STANDARD CLEANING 19" - 24" SANITARY SEWER IN RIGHT OF WAY	42000	LF	$	$
5000.14	HEAVY CLEANING 19" - 24" SANITARY SEWER IN RIGHT OF WAY	12000	LF	$	$
5000.15	STANDARD CLEANING 19"-24" SANITARY SEWER NOT IN RIGHT OF WAY	3000	LF	$	$
5000.16	HEAVY CLEANING 19" - 24" SANITARY SEWER NOT IN RIGHT OF WAY	3000	LF	$	$
5000.17	STANDARD CLEANING 25" - 30” SANITARY SEWER IN RIGHT OF WAY	10000	LF	$	$
5000.18	HEAVY CLEANING 25" - 30” SANITARY SEWER IN RIGHT OF WAY	3000	LF	$	$

5000.19	STANDARD CLEANING 25" - 30" SANITARY SEWER NOT IN RIGHT OF WAY	1000	LF	$	$
5000.20	HEAVY CLEANING 25" - 30" SANITARY SEWER NOT IN RIGHT OF WAY	1000	LF	$	$
5000.21	STANDARD CLEANING >31" SANITARY SEWER IN RIGHT OF WAY	5000	LF	$	$
5000.22	HEAVY CLEANING >31" SANITARY SEWER IN RIGHT OF WAY	1500	LF	$	$
5000.23	STANDARD CLEANING >31" SANITARY SEWER NOT IN RIGHT OF WAY	1000	LF	$	$
5000.24	HEAVY CLEANING >31" SANITARY SEWER NOT IN RIGHT OF WAY	1000	LF	$	$
5000.25	SEWER DEBRIS DISPOSAL OFFSITE	25000	TON	$	$
SECTION 6000 ROOT / GREASE / TAP CUTTING					
6000.01	ROOT / GREASE CUTTING IN 6" - 15" PIPE	30000	LF	$	$
6000.02	ROOT / GREASE CUTTING IN 16" - 21" PIPE	9000	LF	$	$
6000.03	ROOT / GREASE CUTTING IN 22" - 30" PIPE	5500	LF	$	$
6000.04	ROOT / GREASE CUTTING IN >31"" PIPE	1000	LF	$	$
6000.05	CHEMICAL ROOT CONTROL IN 6" - 9" SEWER PIPE	20000	LF	$	$
6000.06	CHEMICAL ROOT CONTROL IN 10" - 12" SEWER PIPE	25000	LF	$	$
6000.07	CHEMICAL ROOT CONTROL IN 13" - 18" SEWER PIPE	15000	LF	$	$
6000.08	CHEMICAL ROOT CONTROL IN 19" - 30" SEWER PIPE	7500	LF	$	$
6000.09	CHEMICAL ROOT CONTROL IN >31" SEWER PIPE	1000	LF	$	$
6000.10	REMOVAL OF PROTRUDING TAPS BY INTERNAL CUTTING	2000	EA	$	$
SECTION 7000 CLOSED CIRCUIT TELEVISION INSPECTION					
7000.01	VIDEO INSPECTION / RADIAL VIEW CAMERA IN 6" – 21" PIPE	400000	LF	$	$
7000.02	VIDEO INSPECTION / RADIAL VIEW CAMERA IN 22" – 30" PIPE	55000	LF	$	$
7000.03	VIDEO INSPECTION / RADIAL VIEW CAMERA IN >31" PIPE	7000	LF	$	$
7000.04	ADDITIONAL SETUP OF CCTV INSPECTION EQUIPMENT	325	EA	$	$
7000.05	CCTV INSPECTION OF SERVICE LATERALS (LATERAL LAUNCHING FROM MAINLINE)	10000	EA	$	$
7000.06	CCTV INSPECTION OF SERVICE LATERALS (PUSH CAMERA FROM CLEANOUT)	10000	EA	$	$
7000.07	CCTV INSPECTION DATA MANAGEMENT	462000	LF	$	$
7000.08	SEWER PIPE REHABILITATION RECOMMENDATIONS	462000	LF	$	$

SECTION 8000 MISCELLANEOUS FIELD SERVICES					
8000.01	CLEANING WET WELLS	200	HR	$	$
8000.02	DYE TESTING - IN CONJUNCTION WITH CCTV INSPECTION OF 6"-10" PIPE	150	EA	$	$
8000.03	DYE TESTING - IN CONJUNCTION WITH CCTV INSPECTION OF 11"-21" PIPE	150	EA	$	$
8000.04	DYE TESTING - IN CONJUNCTION WITH CCTV INSPECTION OF 22"-30" PIPE	30	EA	$	$
8000.05	DYE TESTING - IN CONJUNCTION WITH CCTV INSPECTION OF >31" PIPE	5	EA	$	$
8000.06	DYE TESTING - NOT IN CONJUNCTION WITH CCTV INSPECTION	20	EA	$	$
8000.07	SONAR INSPECTION OF SEWER PIPE	1000	LF	$	$
8000.08	MULTI-SENSOR INSPECTION OF SEWER PIPE	1000	LF	$	$
8000.09	ACCURATE MEASURING PROBE (AMP) PIPE ASSESSMENT	1000	LF	$	$
8000.10	ZOOM CAMERA PIPE ASSESSMENT	100	EA	$	$
8000.11	ACOUSTIC PIPE ASSESSMENT	1000	LF	$	$
8000.12	REMOTE ILLUMINATION OF 15 INCH THRU 60 INCH PIPE	50	EA	$	$
8000.13	COMBINATION CLEANING TRUCK WITH OPERATOR AND HELPER < 10,000 LF (MIN. 8 HRS)	2000	HR	$	$
8000.14	CCTV INSPECTION UNIT WITH OPERATOR AND HELPER < 10,000 LF (MIN. 8 HRS)	2000	HR	$	$
8000.15	COMBINATION CLEANING TRUCK WITH OPERATOR AND HELPER AND CCTV INSPECTION UNIT WITH OPERATOR AND HELPER < 10,000 LF (MIN. 8 HRS)	2000	HR	$	$
8000.16	EASEMENT MACHINE WITH OPERATOR < 10,000 LF (MIN. 8 HRS)	1000	HR	$	$
8000.17	SETP-UP 3" BY-PASS PUMP	10	EA	$	$
8000.18	SETP-UP 4" BY-PASS PUMP	10	EA	$	$
8000.19	SETP-UP 6" BY-PASS PUMP	10	EA	$	$
8000.20	SETP-UP 8" BY-PASS PUMP	10	EA	$	$
8000.21	SETP-UP 10" BY-PASS PUMP	5	EA	$	$
8000.22	SETP-UP 12" BY-PASS PUMP	5	EA	$	$
8000.23	OPERATION OF 3" BY-PASS PUMP	24	HR	$	$
8000.24	OPERATION OF 3" BY-PASS PUMP	1	WK	$	$
8000.25	OPERATION OF 4" BY-PASS PUMP	48	HR	$	$
8000.26	OPERATION OF 4" BY-PASS PUMP	1	WK	$	$
8000.27	OPERATION OF 6" BY-PASS PUMP	48	HR	$	$
8000.28	OPERATION OF 6" BY-PASS PUMP	1	WK	$	$
8000.29	OPERATION OF 8" BY-PASS PUMP	48	HR	$	$
8000.30	OPERATION OF 8" BY-PASS PUMP	1	WK	$	$
8000.31	OPERATION OF 10" BY-PASS PUMP	48	HR	$	$

8000.32	OPERATION OF 10” BY-PASS PUMP	1	WK	$	$
8000.33	OPERATION OF 12” BY-PASS PUMP	48	HR	$	$
8000.34	OPERATION OF 12” BY-PASS PUMP	1	WK	$	$
8000.35	EXTENSION OF 6” BY-PASS DISCHARGE FORCE MAIN PIPING	200	LF	$	$
8000.36	EXTENSION OF 8” BY-PASS DISCHARGE FORCE MAIN PIPING	200	LF	$	$
8000.37	EXTENSION OF 10” BY-PASS DISCHARGE FORCE MAIN PIPING	200	LF	$	$
8000.38	EXTENSION OF 12” BY-PASS DISCHARGE FORCE MAIN PIPING	200	LF	$	$
8000.39	TRAFFIC CONTROL (FLAGMAN)	1000	HR	$	$
8000.40	TRAFFIC CONTROL (POLICEMAN)	200	HR	$	$
				TOTAL:	