



INVITATION FOR BID #2017-028

INSPECTION, PRE-CLEANING, AND CLOSED CIRCUIT TELEVISION
FOR SANITARY SEWER BASINS.

DUE: 4:00 PM, November 3rd, 2016

Invitation for Bid Prepared By:
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www.lynchburgva.gov

THE CITY OF LYNCHBURG
LYNCHBURG, VIRGINIA

GENERAL CONDITIONS AND INSTRUCTIONS TO BIDDERS

(Bidder: The general rules and conditions that follow apply to all purchases by the City of Lynchburg, through its Procurement Division and become a definite part of each formal solicitation, purchase order or other award issued by the Procurement Division, unless otherwise specified. Bidders or their authorized representatives are expected to fully inform themselves as to the conditions, requirements and specifications before submitting bids. Failure to do so will be at the bidder's own risk, and a bidder cannot secure relief from the conditions on the plea of error.)

Subject to all applicable laws, ordinances, policies, resolutions, regulations and all limitations imposed thereby, bids on all solicitations issued by the Procurement Division will bind bidders to the conditions and requirements herein set forth unless otherwise specified in the solicitation.

1. DEFINITIONS: The definitions in the Virginia Public Procurement Act and Lynchburg Public Procurement Code apply. In addition, the following definitions apply to these General Conditions and Instructions to Bidders:
 - a. BID: The written offer of a bidder to the City, submitted in response to a solicitation by the City, to provide the City specific goods or services at specified prices and/or other conditions specified in the solicitation, unless indicated to the contrary, as used herein, bid includes a bid submitted in response to an Invitation for Bid.
 - b. BIDDER: Any person who submits a bid to the City.
 - c. CITY: The City of Lynchburg, Virginia
 - d. CONTRACTOR: Any person, including without limitation, any company, individual, firm, corporation, partnership joint venture, or other organization with which the City contracts.
 - e. INVITATION FOR BID (IFB): A written request made to prospective vendors (bidders) for their bids on goods or services desired by the City when initiating Contractor selection by means of Competitive Sealed Bidding.
 - f. NON-PROFESSIONAL SERVICES: Any services not specifically identified as professional services in the definition of professional services
 - g. PROCUREMENT MANAGER: The Procurement Manager employed by the City.
 - h. SOLICITATION: The document published by the City notifying the public and prospective bidders that the City is seeking vendors to submit bids to provide goods or services to the City and providing information regarding the procurement process, the City's requirements, and terms and conditions of any resulting contract.
 - i. STATE: Commonwealth of Virginia.

SPECIFICATIONS

2. QUESTIONS OR COMMENTS: For City solicitations done through the Procurement Division, all contact between bidders or prospective bidders and the City shall be only with the Procurement Division. Any questions which may arise as a result of this solicitation may be addressed to Tomek Kruszec, Buyer at 434-455-4233, or by email to Tomek.Kruszec@lynchburgva.gov. Inquiries must be received at least 7 business days prior to the due date in order to be considered. Contact initiated by a bidder concerning this solicitation with any other City representative, not expressly authorized elsewhere in this document, is

prohibited. No bidder or potential bidder shall initiate or engage in any discussions with any other employee of the City or any member of the City Council while a solicitation is outstanding concerning the contents of such solicitation or with the intent to influence or interfere with the contract award authorized by and described in such solicitation. A violation hereof may result in the disqualification of such bidder.

3. ADDENDA: Any changes or supplemental instructions to this Invitation for Bid shall be in the form of written addenda. All addenda are downloadable from the Procurement web site at <http://www.lynchburgva.gov/current-solicitations>. Each bidder is responsible for determining that all addenda issued have been received and shall acknowledge receipt of all addenda in the space provided or by returning a copy of each signed addendum. Failure to do so may result in rejection of the bid. All addenda so issued shall become part of the IFB and any resulting contract documents. Oral answers shall not be authoritative and shall not provide any basis for reliance by a bidder.
4. BRAND NAME OR EQUAL ITEMS: Unless otherwise provided in the Invitation for Bid, the name of a certain brand, make or manufacturer does not restrict bidders to the specific brand, make or manufacturer named. Such a brand name conveys the general style, type, character and quality of the article desired, and any article which the City, in its sole discretion, determines to be the equal of that specified, considering quality, workmanship, economy of operation, and suitability for the purpose intended shall be accepted.
5. FORMAL SPECIFICATIONS: When an Invitation for Bid indicates that it is a "formal specification" (no substitute), or otherwise states that the article specified, and no other, shall be provided, then the bidder shall furnish the article in strict conformity with the specification and may not offer a purported equal or substitute. The bidder shall abide by and comply with the true intent of the specifications and not take advantage of any unintentional error or omission. The bidder shall fully complete every part as the true intent and meaning of the specifications and drawings. Whenever a specification requires articles, materials, or workmanship to conform to laws, ordinances, regulations, building codes, underwriter laboratory standards, ASTM standards, or similar law or standards, the specification shall be construed to require at least the minimum acceptable standard allowed by the cited law or standard under the circumstances unless otherwise indicated.
6. OMISSIONS AND DISCREPANCIES: Unless otherwise indicated, any specification for an item of equipment shall be interpreted to include not only the item of equipment specified, but also those parts, items, appurtenances and accessories reasonably necessary to make the equipment complete and working.

BID PROCESS

7. TIME FOR RECEIVING BIDS: All sealed bids will be received in the Procurement Division Office, Third Floor, City Hall. It is the responsibility of the bidder to ensure bids are received by Procurement Staff and time stamped prior to the deadline for bids. Bids received prior to the time of opening will be securely kept unopened. No responsibility will be attached to the Procurement Division for the premature opening of a bid not properly addressed, received, and identified. Any bid opened prematurely will be resealed and kept securely until the time of opening. Bids, to include addenda or changes to a response, shall not be accepted via a FAX machine or by Internet E-mail. Late bids will not be accepted and will be returned unopened.
8. SIGNATURE: All bids shall be signed on the Terms and Signature Sheet in order to be considered. Bids submitted without a signature shall be rejected. If the Bidder is a partnership or corporation, the Bidder shall show the title of the individual signing the bid, and if the individual is not an officer of the partnership or corporation, if requested, the Bidder shall submit proof that the individual has the authority to bind the partnership or corporation.
9. BID BONDS: Only when specifically requested in the bid documents shall each bid be accompanied by a bid bond with surety satisfactory to the City or a Cashier's or a Certified Check, made payable to the City of Lynchburg. In the event of default by the Bidder, the deposit shall be and represent liquidated damages

to the City. Bids received without a bid bond, when specifically requested, shall be rejected.

10. **BID MODIFICATION AND WITHDRAWAL**: Any bidder may withdraw or modify its bid, in writing containing the original signature of the bidder, which writing must be received by the City prior to the date and time set for submission of bids. Withdrawal or modification must be in writing and be delivered by one of the following means: (i) hand delivery by the bidder itself, a courier, or other delivery service; (ii) by mail (no consideration shall be given to any postmark); or (iii) by marking(s) on the exterior of the bid submission envelope, but only if the marking is dated and includes the original signature of the bidder. Written modifications of bids should not reveal the bid price contained in the previously submitted sealed bid, but should simply provide the desired addition, subtraction or modification, so that the final price or terms of the bid will not be known to the City until the sealed bids are opened. Modifications shall be on the interior envelope and sealed prior to submittal. No bid shall be altered or amended after the specified time for opening.
11. **BIDDERS PRESENT**: At the time fixed for the opening of sealed bids, their contents will be made public for the information of bidders and other interested parties who may be present either in person or by representative. All bids will be opened at the time and place specified and read publicly and remain available for inspection in the Procurement Division during regular City business hours by bidders prior to award (unless a determination is made not to make an award) and by the general public after an award is made. The City will post all notices of award to the Procurement Website.
12. **WITHDRAWAL OF BIDS**: A bidder may withdraw its bid from consideration if the price bid was substantially lower than the other bids due solely to a mistake therein, provided the bid was submitted in good faith, and the mistake was a clerical mistake, as opposed to a judgment mistake, and was actually due to an unintentional arithmetic error or an unintentional omission of a quantity of work, labor or material made directly in the compilation of a bid, which can be clearly shown by objective evidence drawn from inspection of original working papers, documents and materials used in the preparation of the bid sought to be withdrawn. The following procedure as stated in Section 18.1-11 of the Lynchburg Procurement Code shall be used to request withdrawal of a bid:
 - a. To withdraw a bid after bid opening due to error, a bidder must satisfy the substantive requirements of Va. Code §2.2-4330. In addition, the following procedures shall apply:
 1. The bidder shall give notice in writing of his claim of right to withdraw his bid within two business days after the conclusion of the bid opening procedure and shall submit original work papers with such notice.
 2. The mistake may be proved only from the original work papers, documents and materials delivered as required herein.
 - b. This section shall be deemed to be incorporated automatically into all invitations to bid issued by the city pursuant to the Lynchburg public procurement code. Nonetheless, the city manager or his designee(s) should ensure that this section is set out in all invitations to bid.

If a bid is withdrawn under the authority of this section and the solicitation is not cancelled, the lowest responsive and responsible remaining bid shall be deemed to be the low bid. No bidder who is permitted to withdraw a bid shall, for compensation, supply any materials or labor to or perform any contract or other work agreement for the person or firm to whom the contract is awarded or otherwise benefit, directly or indirectly, from the performance of the project for which the withdrawn bid was submitted.
13. **ERRORS IN BID**: When an error is made in extending the total prices, the unit bid price will govern. Erasures in bids must be initialed by the bidder. Carelessness in quoting prices or in preparation of the bid otherwise will not relieve the bidder. Bidders are cautioned to recheck their bids for possible errors. Errors discovered after public opening cannot be corrected, and the bidder will be required to perform if his bid is accepted, unless the bidder successfully withdraws its bid in accordance with paragraph 12, Withdrawal of Bids.

14. **BIDDERS INTERESTED IN MORE THAN ONE BID:** If more than one bid is offered by any one person, by or in the name of their clerk, partner, firm, or corporation, all such bids may be rejected. A contractor who has quoted prices on work or supplies to a bidder is not thereby disqualified from quoting prices to other bidders or firms submitting a bid directly for the work, material or supplies.
15. **TAX EXEMPTION:** The City of Lynchburg is exempt from payment of Federal Excise Tax and State and Local Sales and Use Tax on all tangible personal property purchased or leased by the City for its use or consumption. Tax exemption certification will be furnished upon request. Sales tax, however, is paid by the City on materials and supplies that are installed by a contractor and become a part of real property. Contractors are not exempt from paying taxes on these categories, as they are considered to be a cost of doing business and should be considered in pricing when preparing a bid.
16. **PROPRIETARY INFORMATION:** Section 2.2-4342-F of the Code of Virginia states: “Trade secrets or proprietary information submitted by a bidder, offeror, or contractor in connection with a procurement transaction or prequalification application submitted pursuant to subsection B of 2.2-4317 shall not be subject to the Virginia Freedom of Information Act (2.2-3700 et seq.); however, the bidder, offeror, or contractor shall (i) invoke the protections of this section prior to or upon submission of the data or other materials, (ii) identify the data or other materials to be protected, and (iii) state the reasons why protection is necessary.” Bids not in compliance with section 2.2-4342F will be subject to disclosure.
17. **GOVERNING LAW:** Any contract resulting from this Invitation for Bid shall be governed by the provisions hereof and by the laws of the Commonwealth of Virginia. Any dispute arising out of this Contract shall be resolved in the Courts of the Commonwealth of Virginia, in and for the City of Lynchburg.

AWARD

18. **AWARD DECISION:** Before the Contract is awarded, the bidder submitting the lowest responsive bid must satisfy the City that it has the requisite organization, capital, equipment, ability, resources, personnel, management, business integrity, and experience in the type municipal work for which it has submitted a bid. The bidder shall verify to the City that it has the sufficient and qualified personnel to provide for the Contract Work. Failure by the lowest responsive bidder to sufficiently satisfy the City of its ability to meet any of the above requirements may serve as grounds for rejection of the bid.

The Owner reserves the right to cancel the Advertisement for Bids, reject any and all bids, waive any and all informalities, and disregard all conforming, nonconforming, conditional bids or counterproposals.
19. **FACTORS OTHER THAN PRICE IN AWARD DECISION:** The following factors in addition to price (as they apply) shall be a consideration in the award decision:
 - a. The ability to provide references which may substantiate past work performance and experience in the type of work required for the contract. The lowest responsive bidder(s) may be required to furnish a contractor qualifications statement, to include references, prior to any such award. The City may contact all references furnished by bidders. The right is further reserved by the City to contact references other than, and/or in addition to, those furnished by the bidder. If, in the sole opinion of the City, a bidder is determined to be non responsible as a result of any investigation conducted by or for the City, award will not be made to that bidder.
 - b. The previous and existing compliance by the bidder with laws and ordinances relating to the contract or services.
 - c. Whether the bidder is in arrears on a debt or contract or is in default on a security to the City or whether the bidder's county taxes or assessments are delinquent.
 - d. The quality of performance/workmanship of previous contracts for goods and/or services delivered to or performed for the City.

- e. The timely completion of previous contracts for services or the timely delivery of past orders for goods.
 - f. The sufficiency of financial resources and its impact on ability of the bidder to perform the contract or provide the services.
 - g. The City reserves the right, at its option, to conduct on-site inspections of any bidder's facilities prior to award. The results of any such inspection will be considered by the City in determining bidder's capabilities of successfully administering the contract.
 - h. The ability and availability of the bidder to provide both quality and timely maintenance, service, and/or parts.
 - i. The resale value, life cycle costing and value analysis of a product.
 - j. The availability and capability of local and regional vendor support as it affects the quantity, quality, and timeliness of the goods and/or services.
 - k. Timely delivery of goods or timely completion of services as stated by bidder.
 - l. Substantial compliance or noncompliance with specifications set forth in bid as determined by the City.
 - m. Inventory capability as it relates to a particular bid.
 - n. Results of product testing.
 - o. Such other information as may be secured by the Procurement Manager having a bearing on the decision to award the contract.
20. AVAILABLE FUNDS: If the bid from the lowest responsible, responsive bidder exceeds available funding, pursuant to Section 18.1-9 of the Lynchburg Public Procurement Code, the Owner may negotiate with the apparent low bidder to obtain a contract price within available funds.
21. NOTICE OF AWARD/CONTRACT DOCUMENTS: A Notice of Award will be posted to the City's Procurement website within the time for acceptance specified in the solicitation shall be deemed to result in a contract binding on the bidder. To the extent they are included in or incorporated by the solicitation, the following documents are hereby incorporated in and shall form a part of the resulting contract:
- a. City Solicitation Form/Award Notice and other documents which may be incorporated by reference, if applicable.
 - b. General Conditions and Instructions to Bidders.
 - c. Special Provisions.
 - d. Pricing Schedule.
 - e. Any Addenda/Amendments.
 - f. Purchase Order.
22. TIE BIDS: In the case of a tie bid, the City may give preference to goods, services, and construction produced in the City or provided by persons, firms or corporations having principal places of business in the City. If such choice is not available, preference shall then be given to goods and services produced in the Commonwealth pursuant to Section 2.2-4324 of the Code of Virginia. If no City or Commonwealth choice is available, the tie shall be decided by lot.
23. PROMPT PAYMENT DISCOUNT: If discounts for prompt payment are offered by the bidder, it is required that a minimum of twenty (20) days be allowed for payment. Discounts for prompt payment will not be considered in the evaluation of bids. Discounts for prompt payment will be shown on the purchase order/contract and taken if invoices are processed and payment made within the stipulated time frame. If discounts are not offered, payment shall be made thirty (30) days after receipt of an approved invoice by the City.

24. INSPECTION-ACCEPTANCE: The goods and/or services delivered as a result of this bid shall remain the property of the seller until a physical inspection is made, and thereafter accepted to the satisfaction of the City. In the event the goods and/or services supplied to the City are found to be defective or do not conform to specifications, the City reserves the right to cancel the order upon notice (verbal or in writing) to the seller and return goods to seller at the seller's expense.
25. DEFINITE BID QUANTITIES: Subject to the City's right to termination for convenience, where quantities are specifically stated, acceptance will bind the City to order quantities specified and to pay for, at contract prices, all such supplies or services delivered that meet specifications and conditions of the contract. However, the City will not be required to accept delivery of any balances unordered, as of the contract expiration date, unless the Contractor furnished the Procurement Manager with a statement of unordered balances not later than ten (10) days after the termination date of the contract.
26. REQUIREMENTS BID QUANTITIES: On "Requirement" bids, acceptance will bind the City to pay for, at unit bid prices, only quantities ordered and delivered.
- a. Whenever a bid is sought seeking a source of supply for a requirements contract for goods and/or services, the quantities or usage shown are estimates only. No guarantee or warranty is given or implied by the City as to any minimum or total amount that may or may not be purchased from any resulting contracts.
 - b. The City reserves the right, at its sole option, to renew the contract for consecutive terms.
 - c. The City reserves the right to award bids for requirements contracts based on the pricing of the initial term of the contract or any combination of initial and renewal terms.
 - d. The City may award a bid to a single contractor or to multiple contractors.
 - e. The City reserves the right not to renew the contract at the end of the initial term or any subsequent term.
 - f. The City reserves the right to terminate the contract upon written notice to the contractor(s).
 - g. In the event that a requirements contract is awarded for goods and/or services, the City reserves the right to bid individual purchases if the City deems it will best serve their interest.
 - h. It is understood and agreed to between the parties in a resulting contract that the City shall not be obligated to purchase or pay for materials under such contract unless and until they are ordered and delivered.
 - i. Bids based on a firm price or those including a "downward escalator" clause for a requirements contract term may be given preference over lower ones bearing an "escalator" clause.
 - j. The City has the right to extend this contract up to and not to exceed one hundred eighty (180) days following any term of the contract.
27. SCHOOL BOARD: When goods and/or services are for the benefit of Lynchburg City Schools, the contract shall be entered into on behalf of the Lynchburg City School Board.

CONTRACT PROVISIONS

28. TERMINATION OF CONTRACTS: Contracts will remain in force for full periods specified and/or until all articles ordered before date of termination shall have been satisfactorily delivered and accepted and thereafter until all requirements and conditions shall have been met unless:
- a. Terminated prior to expiration date by satisfactory deliveries of entire contract requirements, or upon termination by the City for convenience or cause, or upon termination by Contractor for material breach by the City.

- b. Extended upon written authorization of the Procurement Manager and accepted by Contractor, to permit ordering of unordered balances or additional quantities at contract prices and in accordance with contract terms.
29. TERMINATION FOR CONVENIENCE: A contract may be terminated by the City in accordance with this clause in whole or in part whenever the Procurement Manager shall determine that such a termination is in the best interests of the City. Any such termination shall be effected by delivery to the Contractor at least (5) working days prior to the termination date of a Notice of Termination specifying the extent to which performance shall be terminated and date upon which such termination becomes effective. An adjustment in the contract price shall be made to compensate the contractor for his/her actual costs incurred in performance prior to termination that, as determined in the City's discretion, are reasonable, allocable, and allowable, plus a reasonable amount of profit on such costs. In no event shall the City be liable to the contractor for anticipated profits for unperformed work or undelivered goods or for any consequential, special, incidental, or punitive damages of any kind. In no event shall the City be liable for any amount over the contract price.
30. TERMINATION OF CONTRACT FOR CAUSE:
- a. The City may, by written notice of termination to the Contractor specifying a termination date at least five days thereafter, terminate this contract for cause in whole or in part if the Contractor (1) fails to deliver the goods or perform the services this contract requires within the time this contract specifies, or (2) fails to perform any of its other obligations under this contract or violates any provision of this contract.
- b. If this contract is terminated for cause, the Procurement Manager may require the Contractor to transfer title and deliver to the City, as directed by the Procurement Manager, any completed or partially completed goods and documents, data, studies, surveys, drawings, maps, models and reports ("deliverables") prepared by the Contractor under the contract. The City shall pay the contract price for such completed goods and deliverables. The Contractor and Procurement Manager shall agree on the amount of payment for partially-completed goods and deliverables the City requires the Contractor to transfer and deliver to it. If the parties fail to agree, then the Contractor may present a claim to the City for its reasonable costs for the partially-completed goods and deliverables. Costs recoverable shall be limited to those that, as determined in the City's discretion, are reasonable, allocable, and allowable. Such costs in no event shall exceed the contract price for the goods and deliverables if completed.
- c. Notwithstanding the above, the Contractor shall not be relieved of liability to the City for damages sustained by the City by virtue of any breach of contract by the Contractor for the purpose of setoff until such time as the exact amount of damages due to the City from the Contractor is determined.
- d. If the City terminates this contract for cause when cause, in fact, does not exist, then the termination shall for all purposes be deemed a termination for convenience under this contract, and the termination for convenience clause shall apply for all purposes.
- e. If Contractor properly terminates this contract for material breach by the City, Contractor's damages shall be limited to the amounts recoverable by Contractor for a termination for convenience.
31. CONTRACT MODIFICATIONS: No modifications in the terms of a contract shall be valid or binding upon the City unless made in writing, signed, and duly authorized by the City.
32. FUNDING: The continuation of the terms, conditions, and provisions of any resulting contract beyond June 30 of any year, the end of the City's fiscal year, are subject to approval and ratification by Lynchburg City Council and appropriation by them of the necessary money to fund said contract for each succeeding year.
33. NEW GOODS, FRESH STOCK: Unless otherwise specifically stated, the Contractor shall provide new rather than used goods, fresh stock, and the latest model, version, design or pack of any item specified.

34. NON-DISCRIMINATION: During the performance of this contract the Contractor agrees as follows:
- a. The Contractor will not discriminate against any employee or applicant for employment because of race, religion, color, sex, national origin, age, disability or other basis prohibited by state law relating to discrimination in employment except where there is a bona fide occupational qualification reasonably necessary to the normal operation of the Contractor. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this non-discrimination clause.
 - b. The Contractor, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, will state that such Contractor is an Equal Opportunity Employer.
 - c. Notices, advertisements and solicitations placed in accordance with federal law, rule or regulation shall be deemed sufficient for the purpose of meeting the requirements of this section.
 - d. The Contractor will include the provisions of the foregoing paragraphs a, b, and c above in every subcontract or purchase order of over ten thousand dollars so that the provisions will be binding upon each subcontractor or vendor.
35. DRUG FREE WORKPLACE: Section 2.2-4312 Code of Virginia. For the purposes of this section, “drug-free workplace” means a site for the performance of work done in connection with a specific contract awarded to a contractor in accordance with this chapter, the employees of whom are prohibited from engaging in the unlawful manufacture, sale, distribution, dispensation, possession or use of any controlled substance or marijuana during the performance of the contract.

During the performance of this contract, the contractor agrees to:

- a. Provide a drug-free workplace for the contractor’s employees
 - b. Post in conspicuous places, available to employees and applicants for employment, a statement notifying employees that the unlawful manufacture, sale, distribution, dispensation, possession, or use of a controlled substance or marijuana is prohibited in the contractor’s workplace and specifying the actions that will be taken against employees for violations of such prohibition
 - c. State in all solicitations or advertisements for employees placed by or on behalf of the contractor that the contractor maintains a drug-free workplace
 - d. Include the provisions of the foregoing clauses in every subcontract or purchase order over \$10,000, so that the provisions will be binding upon each subcontractor or vendor
36. MINORITY AND WOMEN OWNED BUSINESS ENTERPRISES: It is the policy of the City to undertake every effort to increase opportunity for utilization of small, minority-owned, and women-owned businesses in all aspects of procurement to the maximum extent feasible.
- a. In connection with the performance of this contract, the Contractor agrees to use his/her best effort to carry out this policy and ensure that Small, minority-owned, and women-owned businesses shall have the maximum practicable opportunity to compete for subcontract work under this contract consistent with the efficient performance of this contract.
 - b. As used in this contract, the term "Small Business" is defined as a business, independently owned and controlled by one or more individuals who are U.S. citizens or legal resident aliens, and together with affiliates, has 250 or fewer employees, or average annual gross receipts of \$10 million or less averaged over the previous three years. One or more of the individual owners shall control both the management and daily business operations of the small business. (Code of Virginia 2.2-4310)
 - c. As used in this contract, the term “Minority-Owned Business” is defined as a business that is at least 51% owned by one or more minority individuals who are U.S. citizens or legal resident aliens, or in the case of a corporation, partnership, or limited liability company or other entity, at least 51% of the equity ownership interest in the corporation, partnership, or limited liability company or other entity is owned by one or more minority individuals who are U.S. citizens or legal resident aliens, and both the management and daily business operations are controlled by one or more minority individuals. (Code of Virginia 2.2-4310)

- d. As used in this contract, the term “Woman-Owned Business” is defined as a business that is at least 51% owned by one or more women who are U.S. citizens or legal resident aliens, or in the case of a corporation, partnership, or limited liability company or other entity, at least 51% of the equity ownership interest is owned by one or more women who are U.S. citizens or legal resident aliens, and both the management and daily business operations are controlled by one or more women. (Code of Virginia 2.2-4310)
 - e. Where federal grants or monies are involved, it is the policy of the City through its agents and employees to comply with the requirements set forth - Standards Governing State and Local Grantee Procurement - of the U.S. Office of Management and Budget Circular N. A-102, Uniform Administrative Requirements for Grants-in-Aid to State and Local Governments, as they pertain to small and minority business utilization.
37. **GUARANTEES & WARRANTIES:** Unless otherwise specifically indicated in the solicitation, by entering into the contract, the Contractor itself warrants and guarantees all goods and services furnished (1) in accordance with the General Guaranty and Service Contract Guaranty paragraphs herein, and (2) in accordance with the provisions of the Uniform Commercial Code. In addition, the Contractor shall properly transfer to the City all standard warranties given by the manufacturer(s) of any goods furnished. The Contractor shall deliver all manufacturers' warranties to the Procurement Manager before final payment on the contract.
38. **PRICE REDUCTION:** If any time after the date of the bid the Contractor makes a general price reduction in the comparable price of any material covered by the contract to customers generally, an equivalent price reduction based on similar quantities and/or considerations shall apply to the contract for the duration of the contract period (or until the price is further reduced). Such price reduction shall be effective at the same time and in the same manner as the reduction in the price to customers generally. For purpose of this provision, a "general price reduction" shall mean any horizontal reduction in the price of an article or service offered (1) to contractor's wholesalers, jobbers, retailers, etc., which was used as the basis for bidding on this solicitation. An occasional sale at a lower price, or sale of distressed merchandise at a lower price, would not be considered a "general price reduction" under this provision. The Contractor shall submit invoices at such reduced prices indicating on the invoice that the reduction is pursuant to the "Price Reduction" provision of the contract documents. The Contractor in addition will, within ten (10) days of any general price reduction, notify the Procurement Division of such reduction by letter. **FAILURE TO DO SO WILL BE A BREACH OF THE CONTRACT AND MAY REQUIRE TERMINATION OF THE CONTRACT.** Upon receipt of any such notice of a general price reduction, all ordering offices will be duly notified by Procurement.
39. **CHANGES:** The City may, at any time, without notice to any sureties, by written order indicated to be a change order, make changes within the general scope of the contract, including without limitation, changes in (1) specifications (including drawings and designs), (2) method of packing and shipment, (3) method or manner of performance, (4) place of delivery, and (5) time for performance and completion.
- a. Within fifteen (15) days of receipt of a change order, the Contractor shall submit a written proposal for any equitable adjustment to the contract price, delivery schedule, or both, that should in fairness be made due to the change order. The parties shall then agree to and sign a modification to the contract that makes an equitable adjustment to the contract price, delivery schedule, or both.
 - b. If the parties cannot agree to a modification to the contract, then the City may either cancel the change order at no expense to the City or order in writing that the Contractor proceed with the change order.
 - c. If the City orders in writing that the Contractor proceed with the change order and no adjustment is agreed upon, then the Contractor or City may submit a claim for an equitable adjustment to the contract price, delivery schedule, or both, due to the change order. Any equitable adjustment as to contract price shall be limited to the increase or decrease in cost reasonably attributable to the change order that, as determined in the City's discretion, are reasonable, allocable, and allowable. Any

equitable adjustment as to delivery schedule shall be limited to an increase or decrease in schedule reasonably attributable to the change order.

- d. Nothing shall excuse the Contractor from proceeding with the contract as changed by written change order.
 - e. No payment shall be made to the Contractor for any extra material or services or for any greater amount of money than the written contract stipulates unless the procedures of this clause have been strictly followed.
40. PLACING OF ORDERS: Orders against contracts will be placed with the Contractors on a Purchase Order executed and released by the Procurement Division. The Purchase Order must bear the appropriate contract number and date. Where Blanket Purchase Agreements (BPAs) have been executed and a Purchase Order has been released by Procurement, telephonic orders may be placed directly with the Contractor by the ordering office. Such agreements (BPA) are normally reserved for the purchase of highly repetitive items on a day-to-day basis.

DELIVERY PROVISIONS

41. SHIPPING INSTRUCTIONS-CONSIGNMENT: Unless otherwise specified in the solicitation, each case, crate, barrel, package, etc., delivered under the contract must be plainly stenciled or securely tagged, stating the Contractor's name, purchase order number, and delivery address as indicated in the order. Where shipping containers are to be used, each container must be marked with the purchase order number, contract number, name of the Contractor, the name of the item, the item number, and quantity contained therein. In case of carload lots, the Contractor shall tag the car, stating Contractor's name and purchase order number. Any failure to mark items as required by the instructions will cause the Contractor to bear the risk of any resulting loss of or damage to material, or late delivery or misdelivery of material and any damages resulting therefrom. Deliveries must be made during the City's normal business day (Monday to Friday, except holidays, from 9:00 A.M. to 4:00 P.M.) and sufficiently before closing time to permit unloading, inspection, and storage, unless specific arrangements have previously been agreed upon with the City's storekeeper at the delivery point. The Contractor shall ensure compliance with these instructions for items that are drop-shipped.
42. RESPONSIBILITY FOR SUPPLIES TENDERED: The Contractor shall be responsible for the materials or supplies covered by the contract until they are delivered at the designated point, but the Contractor shall bear all risk on rejected materials or supplies after notice of rejection. Rejected materials or supplies must be removed by and at the expense of the Contractor promptly after notification of rejection, unless public health and safety require immediate destruction or other disposal of rejected delivery. If rejected materials are not removed by the contractor within ten (10) days after date of notification, the City may return the rejected materials or supplies to the Contractor at Contractor's risk and expense or dispose of them as its own property.
43. INSPECTIONS: Inspection and acceptance of materials or supplies will be made after delivery at destination herein specified unless otherwise stated. If inspection is made after delivery at destination herein specified, the City will bear the expense of inspection except for the value of samples used in case of rejection. Final inspection shall be conclusive except in regards to latent defects, fraud, or such gross mistakes as amount to fraud. Final inspection and acceptance or rejection of the materials or supplies will be made as promptly as practicable, but failure to inspect and accept or reject materials or supplies shall not impose liability on the City for such materials or supplies as are not in accordance with the specifications.
44. COMPLIANCE: Delivery must be made as ordered and in accordance with the solicitation or as directed by the Procurement when not in conflict with the bid. The decision of Procurement as to reasonable compliance with delivery terms shall be final. Burden of proof of delivery in receipt of goods by the purchaser shall rest with the Contractor. Any request for extension of time of delivery from that specified

must be approved by Procurement, such extension applying only to the particular item or shipment affected.

45. DELAY: Should the Contractor be delayed by the City, there shall be added to the time of completion a time equal to the period of such delay caused by the City. However, the Contractor shall not be entitled to claim damages or extra compensation for such delay or suspension. This provision does not apply to public construction contracts.
46. METHOD AND CONTAINERS: Unless otherwise specified, goods shall be delivered in commercial packages in standard commercial containers, so constructed as to ensure acceptance by common or other carrier for safe transportation to the point of delivery. Containers become property of the City unless otherwise specified by bidder.
47. REPLACEMENT: Materials or components that have been rejected by the City in accordance with the terms of this contract shall be promptly replaced by the Contractor at no cost to the City.
48. PACKING SLIPS OR DELIVERY TICKETS-All shipments shall be accompanied by Packing Slips or Delivery Tickets, and shall contain the following information for each item delivered:
 - (1) The Purchase Order Number
 - (2) The Name of the Article and Supplier's Stock Number
 - (3) The Quantity Ordered
 - (4) The Quantity Shipped
 - (5) The Quantity Back Ordered
 - (6) The Name of the Contractor

Bidders are cautioned that failure to comply with these conditions shall be considered sufficient reason for refusal to accept the goods.

PAYMENTS

49. PAYMENT: Payment shall be made after satisfactory performance of the contract, in accordance with all of the provisions thereof, and upon receipt of a properly completed invoice. The City reserves the right to withhold any or all payments or portions thereof for Contractor's failure to perform in accordance with the provisions of the contract or any modifications thereto.
50. PARTIAL PAYMENTS-Unless otherwise specified, partial payments will be made upon acceptance of materials or services so invoiced if in accordance with completion date. However, 10 percent (10%) of the value of the entire order may be retained until the completion of the contract.
51. PAYMENTS FOR EQUIPMENT, INSTALLATION, AND TESTING: When equipment involves installation (which shall also be interpreted to mean erection and/or setting upon or placing in position, service or use) and test, and where such installation or testing is delayed, payment may be made on the basis of fifty percent (50%) of the contract price when such equipment is delivered on the site. A further allowance of twenty five percent (25%) may be made when the equipment is installed and ready for test. The balance shall be paid after the equipment is tested and found to be satisfactory. If the equipment must be tested, but installation is not required to be made by the Contractor or if the equipment must be installed but testing is not required, payment may be made on the basis of seventy five percent (75%) at the time of delivery and the balance shall be paid after satisfactory test or installation is completed.
52. PAYMENTS TO SUBCONTRACTORS: Within seven (7) days after receipt of amounts paid to the Contractor by the City for work performed by subcontractor under that contract, the Contractor shall either (a) pay the subcontractor for the proportionate share of the total payment received from the City attributable to the work performed by the subcontractor under that contract; or (b) notify the City and subcontractor, in writing, of Contractor's intention to withhold all or a part of the subcontractor's payment with the reason for nonpayment. The Contractor must pay interest at the rate of one percent per month

unless provided otherwise to the subcontractor on all amounts owed by the Contractor that remain unpaid after seven days following receipt by the Contractor of payment from the City for work performed by the subcontractor under that contract, except for amounts withheld as allowed in (b) above. The Contractor's obligation to pay an interest charge to a subcontractor may not be construed to be an obligation of the City.

In order to receive payment, individual Contractors must provide their social security numbers; and proprietorships, partnerships, limited liability companies, and corporations must provide their federal employer identification numbers on a completed Federal W-9 form.

GENERAL

53. GENERAL GUARANTY: Contractor agrees to:

- a. Indemnify and save the City, its agents and employees harmless from any claim or liability of any nature or kind for unauthorized use of any copyrighted or un-copyrighted compositions, secret process, patented or unpatented invention, article or appliance furnished or used in the performance of the contract.
- b. Protect the City against latent defective materials or workmanship and to repair or replace any damages or marring occasioned in transit or delivery.
- c. Furnish adequate protection against damage to all work and to repair damages of any kind, to the building or equipment, to his/her own work or to the work of other contractors, for which his/her workers or those providing work through Contractor are responsible.
- d. Pay for all permits, licenses and fees and give all notices and comply with all laws, ordinances, rules and regulations of the United States, State, County, and City.
- e. Protect the City from loss or damage to City-owned property while it is in the custody or control of the Contractor.

54. SERVICE CONTRACT GUARANTY: Contractor agrees:

- a. To furnish services described in the solicitation at the times and places and in the manner and subject to conditions therein set forth, provided, however, that the City may reduce the said service at any time.
- b. To enter upon the performance of services with all due diligence and dispatch; assiduously press to its complete performance and exercise therein the highest degree of skill and competence.
- c. All work performed and services rendered shall strictly conform to all laws, statutes, regulations, and ordinances and the applicable rules, regulations, methods and procedures of all government boards, bureaus, offices, and other agencies.
- d. Said services may be inspected by an employee of the City at any reasonable time and place selected by the City. The City shall be under no obligation to compensate Contractor for any services not rendered in strict conformity with the contract.
- e. The presence of a City/County/State Inspector shall not lessen the obligation of the Contractor for performance in accordance with the contract requirements or be deemed a defense on the part of the Contractor for infraction thereof. The Inspector is not authorized to revoke, alter, enlarge, relax, or release any of the requirements of the contract documents. Any omission or failure on the part of the Inspector to disapprove or reject any work or material shall not be construed to be an acceptance of any such defective work or material.

55. INDEMNIFICATION: Contractor shall indemnify, keep and save harmless the City, its agents, officials, employees, and volunteers against all injuries, death, loss, damage, claims, patent claims, suits, liabilities, judgements, costs and expenses, (collectively "Losses") which may or otherwise accrue against the City in consequence of the granting of a contract or which may or otherwise result therefrom, if it shall be determined that the Loss was caused through negligence or omission by the Contractor or its employees,

of any subcontractor of Contractor or its employees, if any, or providing goods or services through Contractor, and the Contractor shall, at his own expense, appear, defend and pay all charges of attorneys and all costs and other expenses arising therefrom or incurred in connection therewith. If any judgment shall be rendered against the City in any such action, the Contractor shall at his own expense, satisfy and discharge the same. Contractor expressly understands and agrees that any performance bond or insurance protection required by this contract, or otherwise provided by Contractor, shall in no way limit the Contractor's responsibility to indemnify, keep and save harmless and defend the City as herein provided.

56. OFFICIALS NOT TO BENEFIT: Each bidder shall certify, upon signing a bid, that to the best of his or her knowledge no City official or employee having official responsibility for the procurement transaction, or member of his or her immediate family, has received or will receive any financial benefit relating to the award of this contract. If such a benefit has been received or will be received, this fact shall be disclosed with the bid or as soon thereafter as it appears that such a benefit will be received. Failure to disclose the information prescribed above may result in suspension or debarment or rescission of the contract made, or could affect payment pursuant to the terms of the contract.

Whenever there is reason to believe that benefit of the sort described in paragraph a has been or will be received in connection with a bid or contract, and that the Contractor has failed to disclose such benefit or has inadequately disclosed it, the City, as a prerequisite to payment pursuant to the Contractor, or at any time, may require the Contractor to furnish, under oath, answers to any questions related to such possible benefit.

In the event the bidder has knowledge of benefits as outlined above, this information should be submitted with its bid. If the above does not apply at time of award of contract and becomes known after inception of a contract, the bidder shall address the disclosure of such facts to the Procurement Manager. The relevant Invitation for Bid Number (see cover sheet) should be referenced in the disclosure.

57. CITY LICENSE: All firms doing business in the City are required to be licensed in accordance with the City's Business, Professional, and Occupational Licensing Tax Ordinance. Wholesale and retail merchants without a business location in Lynchburg are exempt from this requirement. Questions concerning the BPOL tax should be directed to the Office of the Commissioner of Revenue, phone: 434-455-3880.
58. REGISTERING OF CORPORATIONS: In accordance with the Code of Virginia, any foreign corporation, partnership or limited liability company transacting business in Virginia is required to secure a certificate of authority from the Virginia State Corporation Commission. Contractor shall ensure it is duly registered in Virginia and such status shall be maintained during the term of the contract
59. COVENANT AGAINST CONTINGENT FEES: The Contractor warrants that no person or selling agent has been employed or retained to solicit or secure this contract upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, except bona fide employees or bona fide established commercial or selling agencies maintained by the contractor for the purpose of securing business. For violation of this warranty, the City shall have the right to terminate or suspend this contract without liability to the City, or in its discretion, to deduct from the contract price or consideration, or otherwise recover, the full amount of such commission percentage, brokerage, or contingent fee.
60. VIRGINIA FREEDOM OF INFORMATION ACT: All proceedings, records, contacts and other public records relating to procurement transactions shall be open to the inspection of any citizen, or any interested person, firm or corporation, in accordance with the Virginia Freedom of Information Act, except as provided in Virginia Code § 2.2-4342 and paragraph 16 of this bid document.
61. SECTION 2.2-4311.1 CODE OF VIRGINIA – ILLEGAL ALIENS: The Contractor agrees that he does not, and shall not during the performance of this contract knowingly employ an unauthorized alien as defined in the federal Immigration Reform and Control Act of 1986.
62. COOPERATIVE PROCUREMENT: This procurement is being conducted by the City of Lynchburg in

accordance with the provisions of 2.2-4304 CODE OF VIRGINIA. Except for contracts for architectural and engineering services, if agreed to by the contractor, other public bodies may utilize this contract. The Contractor shall deal directly with any public body it authorizes to use the contract. The City, its officials and staff are not responsible for placement of orders, invoicing, payments, contractual disputes, or any other transactions between the Contractor and any other public bodies, and in no event shall the City, its officials or staff be responsible for any costs, damages or injury resulting to any party from use of a City Contract. The City assumes no responsibility for any notification of the availability of the contract for use by other public bodies, but the Contractor may conduct such notification.

63. **PRECEDENCE OF TERMS AND CONDITIONS:** Any and all Special Terms and Conditions contained in this Invitation for Bid that may be in variance or conflict with these General Terms, Conditions, and Instructions shall have precedence over these General Terms, Conditions, and Instructions. If no changes or deletions to General Terms, Conditions, and Instructions are made in the Special Terms and Conditions, then the General Terms, Conditions, and Instructions shall prevail in their entirety.

64. **INSURANCE:**

a. The contractor/vendor shall procure, maintain and provide proof of insurance coverage for injuries to persons or damages to property which may arise from or in connection with the work performed on behalf of the City by the contractor, his agents, representatives, employees or subcontractor. Such coverage shall be maintained by the contractor/vendor for the duration of the contract period.

1. **Broad Form Commercial General Liability:** (Occurrence Form CG0001, Ed. 11/88): \$1,000,000 CSL, BI & PD.

2. **Automobile Liability:** Code 1 “ANY AUTO” (Form CA0001 Ed. 6/92): \$1,000,000 CSL, BI & PD.

3. **Workers’ Compensation:** Statutory Amount.

4. The insurance policies shall include or be endorsed to include the following provisions:

(1) The City of Lynchburg, Virginia, its officers/officials, employees, agents and volunteers (the City) shall be endorsed as “insureds” under the terms and conditions of the policies for liabilities which may arise out of the contractor/vendor’s operations or activities in these projects.

(2) The contractor/vendor shall send an **actual copy of the policy endorsement document** from the insurance carrier that provides this coverage (ISO Form CG20100704 or similar); **OR**, send an **actual copy of the policy endorsement** that provides blanket additional insured coverage when required by a written agreement (ISO Form CG20331001 or similar), to: Risk Management, 900 Church Street, Lynchburg, VA 24504, Phone: (434) 455-3815; Fax: (434) 847-1684.

(3) In addition to #2, above, the contractor/vendor shall provide the City with a certificate of insurance with applicable endorsements effecting coverages, signed by a person authorized by the insurance company to bind coverage on its behalf. Certificates of insurance shall be received by the City within 5 days of notice of intent to award.

(4) Any deductibles or self-insured retentions applicable to required coverages shall be paid by the contractor/vendor, and the City shall not be required to participate therewith.

(5) The contractor/vendor shall agree to provide the City with 30 days written notice of any cancellation of or reduction in the required coverages.

- (6) The insurance required hereunder shall be primary and any insurance or self-insurance maintained by the City shall be excess of the contractors/vendors insurance and shall not contribute therewith.
- (7) Failure of the contractor/vendor to comply with any reporting provisions of the insurance policies required hereunder shall not affect coverage provided to the City.
- (8) All rights of subrogation against the City shall be waived.
- (9) All coverages for subcontractors of the contractors/vendors, if any, shall be subject to all of the requirements stated herein.

BIDDER/CONTRACTOR REMEDIES

65. PROTEST OF AWARD OR DECISION TO AWARD: The following are the exclusive procedures for a bidder or offeror to protest the City's award or decision to award a contract. A protest may not be based upon the alleged non-responsibility of a person to whom the City awards or makes a decision to award a contract.
- a. Any protest to award a contract shall be in writing and shall be delivered so that it is received by the City Manager not later than five (5) business days after announcement of the award or decision to award, whichever comes first. Otherwise any such protest shall be deemed to be waived.
 - b. Except for a protest of an emergency or sole source procurement, a protest of a City award or decision to award a contract may only be made by a person who submitted a bid or proposal for the procurement at issue and who was reasonably likely to have its bid or proposal accepted but for the City's decision. In the case of an emergency or sole source procurement, a protest may only be made by a person who can show that he was reasonably likely to have submitted a successful bid or proposal if the procurement had been other than emergency or sole source.
 - c. Protests shall only be granted if (1) the protester has complied fully with Sec. 18.1-6 of the Lynchburg Public Procurement Code and there has been a violation of law, the Lynchburg Public Procurement Code, or mandatory terms of the solicitation that clearly prejudiced the protestor in a material way, or (2) a statute requires voiding of the decision.
 - d. The City Manager shall issue a written decision on a protest within ten (10) days of its receipt by the City Manager.
 - e. If the protest is denied, the protestor may only appeal the denial or otherwise contest or challenge the procurement by then filing suit in the Lynchburg Circuit Court, Lynchburg, Virginia, and serving the city with such suit within ten (10) days of such denial. Otherwise, the City Manager's decision shall be final and conclusive, and the protestor's right to appeal the denial or to otherwise contest or challenge the procurement shall be deemed to be waived.
 - f. Strictly following these procedures shall be a mandatory prerequisite for protest of the City's award or decision to award a contract. Failure by a bidder to follow these procedures strictly shall preclude that bidder's protest and be deemed to constitute a waiver of any protest.
66. EXHAUSTION OF ADMINISTRATIVE REMEDIES: No bidder, offeror, potential bidder or offeror, or Contractor shall institute any legal action against the City until all administrative remedies available under the above paragraphs have been exhausted and until all requirements of the Lynchburg Public Procurement Code, and, to the extent applicable, the Virginia Public Procurement Act, have been met.
67. CONTRACTUAL CLAIMS AND DISPUTES: Any claim by a Contractor shall be resolved in accordance with the Lynchburg Public Procurement Code.

68. INSPECTION AND REVIEW OF RECORDS: The City reserves the right to perform or have performed inspections and reviews of the records of the Contractor for any service contract with the City and to have copies made of such records. Contractor shall maintain and preserve all such records, at its own expense, during contract performance and for a period of at least three years after the contract has terminated. At the City's request at any time during contract performance or within a period of three years after the contract has terminated, the Contractor shall promptly make all records available, at a location within the City of Lynchburg, to the City or those retained by the City, for inspection, review and copying.

INSTRUCTIONS TO BIDDERS

Sealed bids, subject to the specifications and conditions contained herein and attached hereto, will be received in the Procurement Division Office, Third Floor City Hall, 900 Church Street, Lynchburg, Virginia, 24504, until, but no later than 4:00 p.m. Local Time Prevailing, November 3rd, 2016, and then publicly opened and read aloud in the Bidder's Room.

An optional pre-bid meeting will be held October 18th, 2016 at 11am in the Bidders Room, located across the Hall from the Procurement Division, Third Floor City Hall, 900 Church Street, Lynchburg, Virginia 24504.

Any questions which may arise as a result of this solicitation may be addressed to Tomek Kruszec at 434-455-4233, or by email to Tomek.Kruszec@lynchburgva.gov. Inquiries must be received at least 7 business days prior to the due date in order to be considered. Contact initiated by a bidder concerning this solicitation with any other City representative, not expressly authorized elsewhere in this document, is prohibited. Any such unauthorized contact may result in disqualification of the bidder.

To be considered, your bid must be submitted on a copy of this Invitation for Bid. Bidders shall sign in the space provided on the Terms and Signature Sheet and return all required documents with bid. Mark outside of your envelope with Invitation for Bid # 2017-028 and opening date of bid. Bids, to include addenda or changes to a response, shall not be accepted via Fax machine or by Internet E-mail. Any bid received after the announced time and date for submittal, whether by mail or otherwise, will be rejected. The time of receipt shall be determined by the time clock stamp in the Procurement Division. Bidders are responsible for ensuring that their bids are stamped by Procurement personnel before the deadline indicated.

Nothing herein is intended to exclude any responsible vendor, his product or service or in any way restrain or restrict competition. All responsible vendors are encouraged to bid.

For information pertaining to this solicitation, including bid documents, addenda, bid tabulation and notice of award, bidders may access public notification electronically on the Procurement website: <http://www.lynchburgva.gov/current-solicitations>.

PURPOSE

The Lynchburg Department of Water Resources (hereinafter referred to as the Department) is seeking qualified companies to perform pre-cleaning and closed circuit television (CCTV) inspection services in support of their Sanitary Sewer Evaluation Survey (SSES) program. As part of this program, they have selected several priority areas within the collection system that require CCTV inspection services from a qualified contractor.

Cleaning and inspection work will be required in several priority sanitary sewer basins. The work will primarily consist of conducting pre-cleaning and CCTV inspection of pipelines located in off-road easement areas. It is intended that all information will be captured electronically utilizing a National Association of Sewer Service Companies (NASSCO) certified Pipeline Assessment and Condition Program (PACP) software package and trained and certified operators.

TERM OF CONTRACT

The initial term of this contract shall be from date of award through December 1, 2017 with an option to renew for an additional one (1) year. The City reserves the right to extend this contract for up to (180) days following any term on the contract.

BASIS OF AWARD

Award will be made to the lowest responsive and responsible bidder based on the total base bid.

SPECIFIC REQUIREMENTS

Section 33 01 30.16

Close Circuit TV Inspection of Existing Underground Sewer Pipelines

Part 1 General

1.01 Scope

The work covered by this Section includes furnishing all labor, materials, equipment and services required to perform the closed circuit television (CCTV) inspection of the specific sewer pipelines authorized by the Engineer.

1.02 Definition

"Internal inspection" shall consist of using a closed circuit television within a designated sewer pipeline segment to detect point sources of infiltration/inflow or exfiltration and to determine the physical condition of the sewer pipeline.

The term "In-Road" shall be applied to all sewers located within the right-of-way of a road or to any sewer line which a CCTV inspection can be feasibly setup, started, and completed from the roadway / right-of-way.

The term "Off-Road" shall be applied to any sewer main that cannot be directly or feasibly accessed from a road or road right-of-way which requires the contractor to leave the roadway and setup all inspection equipment off-road to complete a run.

1.03 CCTV Camera Operator Certification Requirements

- A. The Contractor will provide current certification that operators conducting CCTV inspections have undergone National Association of Sewer Service Companies (NASSCO) Pipeline Assessment and Certification Program (PACP[®]) training prior to commencement of inspection activities. All operators shall have been certified through NASSCO for a minimum of two (2) years. Defect coding, as well as material, shape, and lining coding used throughout the project will conform to NASSCO PACP standards version 6.0.
- B. Each operator must have at least two (2) years of experience in the encoding of PACP CCTV inspections, having also catalogued more than 250,000 linear feet of PACP data. The Contractor must use NASSCO certified data collection software (PACP version 6.0), capable of cataloging all codable defects and observations in the field at the time of inspection. The contractor's software shall be subject to final approval by the Engineer prior to the start of the Contract.

Part 2 Products

2.01 Television Equipment

- A. The camera unit shall be a color pan and tilt unit with autofocus and zoom features. The

Close Circuit TV Inspection of Existing Underground Sewer Pipelines

television camera shall have a resolution of 570 lines minimum and shall have a source of illumination attached to it. With the monitor adjusted for correct saturation, the six colors plus black and white shall be clearly resolved with the primary and complementary colors in order of decreasing luminance. The gray scale shall appear in contrasting shades of gray with no tint. In order to ensure color constancy, no variation in illumination shall take place while the camera or transporter is in motion. The televised image shall be displayed on a monitor, located in an enclosed space in the television inspection vehicle.

- B. **CCTV Focus/Iris/Illumination:** The adjustment of focus and iris shall allow optimum picture quality to be achieved and shall be remotely operated. The adjustment of focus and iris shall provide a minimum focal range from 6 inches in front of the camera's lens to infinity. The distance along the sewer in focus from the initial point of observation shall be a minimum of twice the vertical height of the sewer. The illumination must allow an even distribution of the light around the sewer perimeter without the loss of contrast or flare out of picture shadowing. The lighting for the camera shall also be adjusted as needed to minimize glare.
- C. The camera shall be self-propelled or mounted on skids and drawn through the sewer by winches for pipelines with an equivalent diameter from 6 to 36 inches. The use of winches and skids shall be approved by the Engineer prior to CCTV inspection services. The inspecting equipment shall be capable of inspecting a length of sewer up to at least 1,000 ft. when entry into the sewer may be obtained at each end and up to 750 feet where a self-propelled unit is used, where entry is possible at one end only. The Contractor shall maintain this equipment in full working order.
- D. Each inspection unit shall contain a means of transporting the CCTV camera equipment in a stable condition through the sewer under inspection. Such equipment shall ensure the maintained location of the CCTV camera on or near to the central axis of a circular shaped sewer when required in the prime position.
- E. Where the CCTV camera head is towed by winch and bond through the sewer, all winches shall be stable with either lockable or ratcheted drums. All bonds shall be steel or of an equally non-elastic material to ensure the smooth and steady progress of the CCTV camera and/or Sonar equipment. All winches shall be inherently stable under loaded conditions.
- F. Each unit shall carry sufficient numbers of guides and rollers such that, when inspecting, all bonds are supported away from pipe and manhole structures and all CCTV cables and/or lines used to measure the CCTV camera's head location within the sewer are maintained in a taut manner and set at right angles where possible, to run through or over the measuring equipment.
- G. The Contractor shall use a suitable metering device, which enables the cable length to be accurately measured; this shall be accurate to within +/- 2 inches.
- H. The in-sewer photographic/video camera system and suitable illumination shall be capable of providing an accurate, uniform and clear record of the sewer's internal condition. In-sewer lighting standards shall meet the satisfaction of the designated Engineer and the requirements of applicable codes regarding safety and power.
- I. A reserve television camera shall be available to replace the regular television camera in the

event of a breakdown. Should the reserve equipment malfunction, another camera shall be provided within 48 hours.

- J. Contractor shall have all equipment and devices necessary to access all manholes and pipelines that are to be surveyed. Additional specialized equipment may be required to access off-road pipelines located in easement areas.
- K. The Contractor shall be responsible for complying with all local, State and Federal laws and regulations required for confined space entry and shall maintain, utilize and be trained and certified in the use of all necessary equipment required to comply with these regulations.

2.02 Television Equipment Operation

Operation of the television inspection equipment shall be controlled from above ground, with a skilled technician at the control panel in the television inspection van controlling the movement of the television camera. The technician shall have the capability to: adjust the brilliance of the built-in lighting system; change the focus of the television camera by remote control; control the pan, tilt, and zoom features of the camera; control the forward and reverse motion of the camera; and determine the camera's position, at any time. Operators of the television inspection equipment shall meet the requirements stated in Section 1.03 of this Specification.

Part 3 Execution

3.01 Procedure

Prior to starting each inspection, the operator shall pan then tilt the surrounding above ground area of the entrance manhole. The CCTV video shall include the view of the camera as it is placed within the manhole and shall show which pipe in which the CCTV camera is inserted. Any notable defects present within the manhole are to be coded as General Observations (MGO's) and to be catalogued only after the initial access point and water level observations have been coded. The television inspection shall be performed in one section of the sewer pipeline at a time, between adjacent manholes. The inspection shall be performed by pulling or propelling the television camera through the section of the sewer along the centerline axis of the pipeline. A position tolerance of $\pm 10\%$ of the vertical sewer pipeline diameter dimension will be allowed (i.e. for an 8-inch diameter pipeline the camera shall be centered within +/- 0.8-inches of the center of the pipeline). The inspection shall be performed with the camera traveling in a forward direction. The camera shall only travel backward as needed to allow a fuller view of a defect or observation. While in motion, the CCTV camera is to be fully zoomed out and fixed to the "home position" where the camera head is kept at the level horizon and is centered and pointed true down the alignment of the pipe for the duration of each CCTV survey that provides an accurate and undistorted view of the entire pipe. Only when necessary to fully capture defects/observations or to avoid getting the camera lens dirty should the camera be allowed to leave the home position or use the zoom, pan, or tilt features. Excessive use of the pan, tilt, or zoom features, including using any of the features simultaneously, shall be avoided. The operator shall also refrain from using the pan, tilt, or zoom features of the camera until the camera tractor is at a full and complete stop. During the CCTV inspection, lighting intensity shall be adjusted as necessary to minimize glare and maximize viewing ability to provide an in-focus picture of the entire periphery of the pipeline for all conditions encountered. Every possible means shall be taken to ensure total viewing of the inside periphery of the pipeline. The inspection shall be

Close Circuit TV Inspection of Existing Underground Sewer Pipelines

conducted in such a manner as to determine that the line is clean and to locate all leaking joints, breaks, defects and faults in the pipeline. Upon reaching any possible defect/observation, the operator shall bring the camera tractor to a complete stop and the television camera movement shall be temporarily halted. The operator shall pan then tilt the camera head and adjust the tractor position as necessary to observe the full extent of the defect/observation. To catalogue the defect, the operator shall adjust the camera back to the "home position" as best as possible while showing the defect/observation in its entirety in relation to the pipe. The operator shall cease all movements of the camera head and tractor to allow for a clear photograph of the defect. Camera movement will not resume with visible point sources of infiltration/inflow until the leakage rate from the source is quantified. The camera shall also be stopped at service connections where flow is discharging. Upon reaching an end point manhole, the camera should be maneuvered to the center of the manhole and tilted upward and slowly panned for a minimum of 5 seconds in order to view the interior of the manhole in full detail. Any notable defect observed within the manhole shall be coded as a General Observation (MGO) and be catalogued prior to coding the manhole (AMH) to close out the inspection.

3.02 Provisions

- A. All mainline CCTV surveys must be full PACP surveys, continuous from a starting manhole or access point to a finishing manhole, access point, or utility feature where possible. Any line that is not televised from a starting manhole, access point, or utility feature to a finishing manhole, access point, or ending utility feature will be considered as a partial or incomplete survey and will be rejected unless specified to do so otherwise or if the camera cannot not pass through the entire line due to an obstacle or other defect.
- B. All CCTV surveys are to be televised and recorded in color. The operator shall insure the camera and video display correctly reflect the true colors within the pipe and on the video display.
- C. The Contractor shall maintain on site at all times a competent field supervisor in charge of the inspection. The field supervisor shall be responsible for the safety of all site workers and site conditions as well as ensuring that all work is conducted in conformance with these specifications and to the level of quality specified.
- D. Each length of sewer shall be cleaned pursuant to Specification 33 01 30.14 no less than thirty (30) minutes and no more than twelve (24) hours prior to conducting the inspection so that any dips or sags are refilled and clearly visible, to not contaminate possible infiltration and inflow sources, and to ensure that new debris will not accumulate in the system. All inspected pipe should be free of debris to allow for a complete, unobstructed view of the pipe. If upon viewing a final inspection the Engineer deems that the view is obstructed, the pipe will be cleaned and re-televised at no cost to the Owner. Under no condition shall cleaning or flow control jetting be conducted simultaneously with a CCTV inspection.
- E. For pipe with diameters between 6 and 10 inches - flow control shall be used if the initial depth of flow to pipe diameter ratio is greater than 25%. For pipe with diameters between 12 and 24 inches - flow control shall be used if the initial depth of flow to pipe diameter ratio is greater than 30%. For pipe with diameters greater than 27 inches - flow control shall be used if the initial depth of flow to pipe diameter ratio is greater than 35%.
- F. Acceptable flow control devices, where required or needed, shall include solid plugs, flow

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through plugs, baffling, and televising during low flow conditions. All devices shall be designed and manufactured for use in sanitary sewers. It is not acceptable to use sand bags or jetters to control flows. Care shall be taken to not back up flow into any upstream structure. If this occurs, any required cleanup or damage settlement shall be accomplished at no cost to the Owner.

- G. The Contractor shall provide a pump around (a.k.a. bypass pumping), where necessary, to prevent flooding or sanitary sewer overflows. The Contractor shall provide for the pumping down of any surcharged manhole section, if required, before television inspection commences. Bypass pumping must be approved by the Engineer prior to set up.
- H. All pump arounds (bypass pumping) shall be in accordance with City specification 02770, Sewer Flow Control.
- I. Should a normal flow rate into the pipeline not be achieved after being cleaned or the pipeline is found to be dry or not in service, the Contractor shall add a sufficient volume of water to the upstream manhole or access point at a rate sufficient to mimic normal flow conditions until flow is visible in the next downstream manhole, wet well, or access point prior to initiating CCTV operations.
- J. If during a normal flow CCTV survey the televising camera cannot pass through the entire pipe section due to a defect, anomaly, or obstruction in the pipe, the operator shall perform a reverse set up in order that an inspection can be performed from the opposite manhole, wet well, or access point.
- K. If the camera fails to pass through the entire pipe section due to the pipeline being inadequately or insufficiently cleaned, this section must be re-cleaned having all the debris removed from the system and the entire length re-televised per this specification at no additional cost to the owner.
- L. The Contractor shall furnish, to the Owner, certification of the accuracy of the automatic counter before any work shall begin on the Project. If, at any time, the Engineer has reason to believe that the counter is inaccurate, the calibration of the counter will be checked before any more work progresses.
- M. CCTV Camera Head Speed: The speed of the CCTV camera in the sewer shall be limited to 30 feet per minute (0.5 ft per second) for all inspections in compliance with NASSCO guidelines.
- N. When beginning a CCTV inspection, the operator shall verify the diameter of the pipeline to be inspected by inserting a tape measure or surveying rod into the manhole and measure the pipeline diameter to the nearest 1/10th inch. Video proof of this measurement shall be captured during the CCTV inspection after the camera has been adequately positioned so that this measurement can be clearly read. This measurement is also to be recorded in the "height" field of the inspection database.
- O. At the start of each sewer length being surveyed or inspected and each reverse set- up, the length of pipeline from zero footage (middle of the man) up to the cable calibration point shall be recorded and reported in order to obtain a full record of the sewer length. Only one

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inspection shall be indicated in the final report. All reverse set-ups, blind manholes, and buried manholes shall be logged on a separate log. Each log shall make reference to a start (ST) and finish (FH) manhole unless abandonment took place because of blockage. Distance measurements shall be based from center of start manhole to center of end manhole.

- P. Should the Contractor encounter a buried manhole during the course of inspection that cannot be readily accessed, the Contractor shall notify the Engineer, and shall make note of such in the appropriate field on the inspection header.
- Q. If during the course of CCTV Inspection, a protruding tap is discovered in the pipeline that will not allow the passage of a CCTV inspection camera and a reverse setup cannot be completed, then the Contractor will be required to remove the protruding tap via an approved cutting device. Prior to removing the protruding tap, the Contractor must receive approval from the Engineer.
- R. If for any reason the contractor's equipment becomes disabled or lodged inside the sewer and cannot further proceed, the Contractor shall be responsible for retrieving the equipment and restoring the sewer at no additional cost to the Owner.
- S. All digital video shall be continuous with no evidence of missed footages or "blink-outs." That the entire pipeline segment was traversed and inspected shall be obvious on the final video recording.
- T. If the camera lens becomes covered with sewage, grease, deposits etc. resulting in poor picture quality then the inspection shall be suspended and the camera shall be removed and cleaned. The inspection can then be resumed at the last clear camera location.
- U. CCTV inspections in which the camera lens is or becomes obstructed, dirty, greasy, etc. during the inspection, and remains so for up to two (2) feet, will not be accepted.

3.03 Data Collection

- A. All mainline CCTV surveys must be full PACP surveys, continuous from a starting manhole or access point to a finishing manhole, access point, or utility feature where possible. Any line that is not televised from a starting manhole, access point, or utility feature to a finishing manhole, access point, or ending utility feature will be considered as a partial or incomplete survey and will be rejected unless specified to do so otherwise or if the camera cannot pass through the entire line due to an obstacle or other defect.
- B. The Contractor shall furnish all equipment and software required for taking photographs and videos of the view which appears on the monitor. Digital Video will be used to record all point sources and defects, severe leaks, holes, collapses, misalignments, etc. Still pictures shall be taken of all coded observations. Data logging and defect coding conforming to the NASSCO PACP guidelines will be required as part of all pipeline inspections.
- C. All inspection information shall be captured utilizing NASSCO certified data collection software and following all NASSCO PACP (version 6.0 or greater) standard data fields, formats, and conventions provided in Section 3.04, Part E.
- D. All inspection media file naming formats and folder organizational structures must remain

consistent throughout all internal inspections. See naming conventions in Section 3.04, Part E.

- E. A digital encoded inspection video shall be continuously captured for the entire length of each inspection. All digital encoded inspection video files shall be in MPEG-1 file format. For all digital encoded inspection videos, the file naming format shall be generated using a concatenation of standard PACP database fields in the format "Facility_ID"_"Upstream_MH"_"Downstream_MH"_"Direction"_"Date".
e.g. **GM.5659.04.029_mh.5659.04.007_mh.5659.04.003_D_7122016.mpg**
- F. A digital still image shall be captured for each coded observation. All digital still images shall be in JPEG file format. For all digital still images, the file naming format shall be generated using a concatenation of standard PACP database fields in the format "Facility_ID"_"Upstream_MH"_"Downstream_MH"_"Direction"_"PACP_Code"_"Distance" (multiple digital still images may have "-01", "-02", "-03" at end of file name).
e.g. **GM.5659.04.029_mh.5659.04.007_mh.5659.04.003_D_CM_167.2.jpg**
- G. Each digitally encoded inspection video shall begin with the camera facing towards the bottom of the manhole and oriented so that the outgoing sewer connection is at the 6 o'clock position. This position shall be held during video recording for a minimum of five (5) seconds prior to lowering the camera to the bottom of the manhole. Once the camera has been lowered into the manhole and oriented in its direction of travel, the camera shall be directed towards the top of the manhole, with this position held during video recording for a minimum of five (5) seconds prior to advancement into the sewer.
- H. A comprehensive summary inspection report shall be generated for each inspection, and shall be in Portable Document Format (PDF). The report shall include the findings on major defects, including but not limited to fractures, displaced joints, deformation, corrosion, lateral intrusions, and dominant surface features including encrustation and silt depths. All pdf report files shall be in a dedicated folder called "PACP_Reports".
- I. Each sewer length (the length of the sewer between two (2) consecutive manholes) will be entered into the PACP database field "Total_Length". If field maps are provided for the project area and include a total length, then this value will be entered into the field "Total_Length".
- J. When a length of sewer between two (2) consecutive manholes cannot be inspected for practical reasons, the reason for abandonment shall be described in the PACP database field "Additional_Info". At unmapped manholes, a new inspection will be started and the footage reset to zero (0.0).
- K. When the Contractor elects to "pull through" a manhole during a CCTV and/or Sonar Inspection, a new inspection will be started at the manhole "pulled through", and the footage reset to zero (0.0) at the manhole wall where the pipe exits/enters the manhole. The video shall begin with the camera being centered within the "pull through" manhole looking down the line segment to be televised. The contractor shall begin the inspection by cataloguing the initial PACP access and water level codes followed by slowly panning then tilting the camera around the manhole for no less than 5 seconds. The contractor shall also be required to visually capture and catalogue the field measurement of the pipe size at any "pulled through" manhole location.

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- L. When a reverse or second inspection is required to complete the inspection of a sewer, the PACP database field "Reverse_Setup" shall be populated with corresponding inspection number. The "Reverse_Setup" field shall be null for all inspections that are not reverse or follow-up inspections.
- M. When an unmapped manhole is discovered during an inspection, the Contractor shall assign a temporary field-assigned ID to the manhole. This temporary field ID shall be entered into the appropriate PACP database field (either "Upstream_MH" or "Downstream_MH"), and the comment "Unmapped MH" shall be entered in the PACP database field "Additional_Info". The inspection shall be terminated and a new inspection shall begin, so that the unexpected manhole effectively divides the pipe into two segments. The "Total_Length" field for the terminated inspection shall be populated with the distance in feet at which the unexpected manhole was discovered during inspection. The pipe segment receiving the next inspection shall be assigned a temporary field ID, and the newly-discovered manhole ID shall be entered into the corresponding "Upstream_MH" or "Downstream_MH" field. The proposed naming scheme for unmapped manholes and pipes shall be approved by the Engineer prior to start of inspections. The Contractor shall ensure that each newly-discovered manhole and pipe is given an ID that is not already assigned to another manhole or pipe. The contractor shall also ensure that the field-assigned ID of each newly-discovered manhole is consistent between PACP submittals.
- N. At the start of each sewer length, a data generator shall electronically generate and clearly display on the viewing monitor and subsequently on the final recording a record of data in alpha-numeric form containing the following minimum information:
 - 1. Automatic update of the camera's footage position in the sewer line from adjusted zero.
 - 2. Sewer dimensions in inches
 - 3. Manhole numbers (must conform to Owner's identification number)
 - 4. Date of survey
 - 5. Road name (nearest)/location
 - 6. Direction of survey, i.e., downstream or upstream
 - 7. Time of start of survey
 - 8. Material of construction of the pipe
 - 9. Contractor
 - 10. Engineer
- O. The size and position of the data display shall be such as not to interfere with the main subject of the picture.
- P. Once the survey of the pipeline is under way, the following minimum information shall be continually displayed:
 - 1. Automatic update of the camera's footage position in the sewer line from adjusted zero.
 - 2. Sewer dimensions in inches
 - 3. Manhole numbers (must conform to Owner's identification number)
 - 4. Direction of survey, i.e., downstream or upstream
- Q. At each defect of any kind, the camera movement shall be halted, and the camera shall be tilted and panned as necessary to observe the full extent of the defect before it is electronically coded.
- R. At each coded observation, the following minimum information shall be displayed:

1. The PACP code and/or PACP code description.
 2. The footage position of the defect.
 3. The “Additional_Info” field in any cases where it is utilized.
- S. The actual field work will be monitored by the Engineer. A Project representative will be available during internal television inspection, and no work shall be performed without the Engineer's Project representative present, unless authorized by the Engineer.
- T. The contractor shall take caution to ensure that the pipe ID's and manhole ID's entered into the PACP database are correct, free from typos, and consistent with the data supplied by the Engineer. Databases with substantial rates of error in these fields will not be accepted.
- U. The Contractor must have an internal quality assurance/quality control system (QA/QC) in place, and all inspection data shall be subjected to the procedures prior to submittal to the Engineer. The Engineer will perform QA/QC audits on submitted data. Any data or files not meeting these specifications or NASSCO standards will be returned to the Contractor for correction. Contractor shall present their proposed QA/QC system to the Engineer prior to the start of the Contract.

3.04 CCTV Inspection Deliverables

- A. All the supplied data and information will become the property of the Owner.
- B. Sample Submittal: An example of a typical CCTV Inspection final deliverable will be submitted for approval by the Engineer prior to the start of work. The example deliverable will contain the following:
1. A sample NASSCO PACP Standard Exchange Database, version 6.0 or greater, in Microsoft Access file format (.mdb), as exported from the Contractor's data collection software.
 2. A proprietary database as generated by the Contractor's data collection software.
 3. Example media files, including observation photos, CCTV videos, and reports; with all files consistently utilizing the required file naming conventions and folder structures.
 4. The proposed viewing software to be used with the proprietary inspections database and related media.
 5. NASSCO PACP validation report in PDF format, demonstrating the sample is fully conforming to NASSCO PACP standards and conventions. Validation reports can be obtained by submitting a sample database to: http://nassco.org/training_edu/te_database_upload.aspx
 6. Inspections database(s) shall be fully cross-referenced to the videos, images, and reports.
 7. Example reports will be presented in both hard copy and in PDF format and all other sample data will be presented in digital format on an external hard drive.
- C. Intermediate Submittals: No later than every fourteen (14) days following the completion of a pipeline inspection, the Contractor will submit the following:

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1. Two (2) hard copies of full details report for each inspection, showing the position and full text of each defect encountered and their grades.
 2. An overall summary report detailing major defects and inspections that require attention.
 3. A list of unmapped manholes and/or pipe segments that were identified during inspections but were not shown on field maps. This list shall include the field- assigned ID and a geographic reference or description (street address, intersection, etc.).
 4. A statistical report showing lengths of sewers inspected and a breakdown of sizes and lengths inspected.
 5. Upon request from LDWR staff, interim data on an external hard drive or usb thumb drive will be submitted to the Engineer containing a single NASSCO PACP Standard Exchange Database (version 6.0 or greater) containing all inspections to date, encoded videos, observation photos, inspection reports in PDF format, and support files for the purpose of quality control viewing and acceptance. The supplied data and information will become the property of the Owner.
- D. Final Submittal: At the completion of all inspection work, the Contractor will supply the following to the Engineer on an external hard drive:
1. A single, consolidated NASSCO PACP Standard Exchange Database (version 6.0 or greater) in Microsoft Access file format (.mdb) containing all inspections.
 2. NASSCO PACP validation report for the consolidated database (See Section 3.04.B.5.).
 3. All encoded inspection videos, observation photos, and inspection reports using required file naming formats.
 4. A single, consolidated proprietary database containing all inspections for the Contract, as generated by the Contractor's data collection software that shall include the scores for each defect and tables for linking images and videos to the main inspections and all required tables shown in this specification. The database shall not be password protected and must be in Microsoft Access V. 2007 or 2010 format.
 5. Free-issue software to be used for the viewing of the proprietary inspections database and related media from within the database.
 6. Four (4) hours training in the use of any supplied free-issue software will be included in the rates.
- E. File Formatting and Naming Conventions: All submittals shall have the following file formatting and naming conventions, unless otherwise approved by the Engineer.

SUBMITTAL DESCRIPTION	FILE NAMING CONVENTION	FILE FORMAT
Digital encoded videos	"Facility_ID"_"Upstream_MH"_"Downstream_MH"_"Direction"_"Date"	.mpg

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Digital still images of all Observations	"Facility_ID"_"Upstream_MH"_"Downstream_MH"_"Direction"_"PACP_Code"_"Distance"(multiple digital still images may have "-01", "-02", "-03" at end of file name)	.jpg or .jpeg
Color, Hi-res Laser profiling image of pipe 50' cross-Sections	"Facility_ID"_"Upstream_MH"_"Downstream_MH"_"Direction"_"PACP_Code"_"Distance"	.jpg or .jpeg
Pipe Segment Cleaning Report	CR-"Pipe_Segment_Reference"	.pdf
Pipe Segment Inspection Report	"Facility_ID"_"Upstream_MH"_"Downstream_MH"_"Direction"_"Date"	.pdf
NASSCO PACP Validation Report	"yyyymmdd(date of submittal)"_"Project Name"_"Validation Report"	.pdf
NASSCO PACP Exchange Database	"yyyymmdd(date of submittal)"_"Project Name"_"StandardPACPExchange"	.mdb

1. Accompanying videos for all CCTV surveys shall be of a single line segment, recorded in digital MPEG1 (.MPG) format. Videos shall also be non-proprietary and able to be viewed with Windows Media Player.
2. All observations, conditions, or defects identified & coded during each survey must also be captured and stored as a .jpg media image, linked to the associated PACP coded observation, condition, or defect in the PACP database.

F. External Hard Drive Requirements

External hard drives shall be a minimum of 500 Gigabytes (GB) in capacity, shall have a USB 2.0 compliant connection, and shall be powered either through the host USB connection or have an external power adapter provided. External hard drives will be returned within 5 business days to the Contractor for use on outstanding inspections after download by the Engineer. At the conclusion of the project, the final submittal external hard drive will become the property of the Owner for use in archival of data. The Contractor shall keep a copy of final submitted external hard drives for up to 3 years.

G. NASSCO PACP Compliance

External The submitted database(s) should consist of, at a minimum, the NASSCO PACP standard data fields, formats, and conventions as set forth in this specification and the following Field Data Delivery Format Requirements Tables. **Note: The standard fields shown below in grayed out text are not anticipated to be used during this project however it is expected that they be used for data entry should the need arise. Data entry shall be required on all other listed fields for each inspection undertaken per the field conditions and descriptions outlined below.**

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PACP®"Inspections" Table - Required Fields, Formats, and Conventions All field names, data types, and descriptions are from PACP v6.0 unless otherwise noted.		
Field Name	Data Type	Description of Field
InspectionID	AutoNumber	This field is automatically populated when any inspection information is entered. The number generated must be entered in the InspectionID field of the Conditions table for all conditions recorded during the inspection
Surveyed_By	Text	Name of individual conducting survey
Certificate_Number	Text	NASSCO PACP # of Surveyor
Owner	Text	Owner of collection system surveyed
Customer	Text	Entity commissioning the survey
Drainage_Area	Text	Common name of drainage area - If field maps are provided and include drainage basins, populate this field with the drainage basin name/ID
PO_Number	Text	Customer's Purchase Order Number
Pipe_Segment_Reference	Text	Client provided segment number - If pipe segment number is not provided, use the convention "Upstream Manhole ID_DownstreamManhole ID"
Date	Date/Time	Inspection Date
Time	Date/Time	Time of inspection
Street	Text	Street Name followed by Number
City	Text	City name where sewer located
Location_Details	Text	Descriptive explanation of sewer location
Upstream_MH	Text	Client provided designation for upstream manhole
Up_Rim_to_Invert	Number	Distance (ft and tenths of ft) or (meters to 2 decimal places max) from rim to invert of upstream manhole
Up_Grade_to_Invert	Number	Distance (ft and tenths of ft) or (meters to 2 decimal places max) from average grade to invert of upstream manhole
Up_Rim_to_Grade	Number	Distance (ft and tenths of ft) or (meters to 2 decimal places max) from rim to average grade of upstream manhole
Downstream_MH	Text	Client provided designation for downstream manhole
Down_Rim_to_Invert	Number	Distance (ft and tenths of ft) or (meters to 2 decimal places max) from rim to invert of downstream manhole
Down_Grade_to_Invert	Number	Distance (ft and tenths of ft) or (meters to 2 decimal places max) from average grade to invert of downstream manhole
Down_Rim_to_Grade	Number	Distance (ft and tenths of ft) or (meters to 2 decimal places max) from rim to average grade of downstream manhole
Sewer_Use	Text	Purpose of sewer

PACP®"Inspections" Table - Required Fields, Formats, and Conventions (CONTINUED)

Close Circuit TV Inspection of Existing Underground Sewer Pipelines

Field Name	Data Type	Description of Field
Direction	Text	Direction of survey, Upstream or Downstream
Flow_Control	Text	Type restriction of flow used
Height	Number	Diameter of sewer (or height if non-circular) to nearest inch(999) or nearest mm(99999)
Width	Number	Width of non-circular sewer to nearest inch(999) or nearest mm(99999)
Shape	Text	Sewer shape
Material	Text	Type of pipe material
Lining_Method	Text	Type of process used to line the host pipe (If Lined)
Pipe_Joint_Length	Number	Length of pipe joint sections measured to one decimal place whether in feet or meters
Total_Length	Number	Distance between the exit of the start manhole and the entrance of the finish measured to one decimal place whether it is feet or meters - If field maps are provided for the project area and include a total length, then this value will be entered into the field "Total_Length" .
Length_Surveyed	Number	Enter the actual length surveyed to one decimal place whether it is feet or meters .
Year_Laid	Number	Year sewer surveyed was constructed
Year_Renewed	Number	Year sewer surveyed was renewed
Media_Label	Text	Contractor Name / Company
Purpose	Text	Reason for conducting survey
Sewer_Category	Text	Importance of sewer, to be provided by client
Pre-Cleaning	Text	Type of preparatory cleaning conducted prior to survey
Date_Cleaned	Date/Time	Date when sewer was cleaned prior to survey
Weather	Text	Weather conditions when survey conducted
Location_Code	Text	General description of ground cover of surveyed segment
Additional_Info	Text	Supplemental info regarding survey or segment (As needed)
Reverse_Setup	Number	Specifies that a second survey has been done on the pipe segment--use inspection ID from matching survey
Sheet_Number	Number	Number used to identify individual surveys done within a group -If field maps are provided, this field must be populated with the map number/ID
IsImperial	Yes/No	Used to identify whether units are metric or imperial. Defaults to imperial.
PressureValue	Number	Grouting pressure value
WorkOrder	Text	Work order or Project reference for Asset Management
Project	Text	Project Title or reference for Asset Management
Northing	Text	Northing coordinate of the starting manhole
Easting	Text	Easting coordinate of the starting manhole
Elevation	Text	Rim/top of casting elevation of the of the starting manhole
Coordinate_System	Text	Coordinate system used for Northing, Easting, and Elevation references
GPS_Accuracy	Text	Description as to the accuracy of the starting manhole location

"Inspections Extended" Table		
Field Name	Data Type	Description of Field
Date	Date/Time	Inspection Date
Time	Date/Time	Inspection Time
InspectionID	Number	Software provided designation for the inspection (THIS FIELD USED TO JOIN TABLES)
Pipe_Segment_Reference	Text	Client provided segment number
STRNumber	Number	Number of Pipe Structural Defects
STRPipeRating	Number	Total Sum of all Pipe Structural Defects (Grade x Quantity of Defects with that Grade)
STRIndex	Number	Average Pipe Structural Defect Score (STRPipeRating / STRNumber)
STRQuickRating	Text	4 digit code providing the quick rating
OMNumber	Number	Number of Pipe Operation & Maintenance Defects
OMPipeRating	Number	Total Sum of all Pipe Operation & Maintenance Defects (Grade x Quantity of Defects with that Grade)
OMIndex	Number	Average Pipe Operation & Maintenance Defect Score (OMPipeRating / OMNumber)
OMQuickRating	Text	4 digit code providing the quick rating
CBNumber	Number	Number of Pipe Combined Structural & Operation & Maintenance Defects
CBPipeRating	Number	Total Sum of all Pipe Combined Structural & Operation & Maintenance Defects (Grade x Quantity of Defects with that Grade)
CBIndex	Number	Average Pipe Combined Structural & Operation & Maintenance Score (STRPipeRating / STRNumber)
CBQuickRating	Text	4 digit code providing the quick rating

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PACP® "Conditions" Table - Required Fields, Formats, and Conventions
All field names, data types, and descriptions are from PACP v6.0 unless otherwise noted.

Field Name	Data Type	Description of Field
ConditionID	AutoNumber	This field is automatically populated when any condition information is entered.
InspectionID	AutoNumber	Software provided designation for this inspection (THIS FIELD USED TO JOIN TABLES)
Distance	Number	Distance is measured to one decimal place to feature location whether it is in feet or meters
Counter	Number	Time into the video of the identified condition, in seconds
PACP_Code	Text	Combination of Group/Descriptor and Modifier/Severity in a single data field
Continuous	Text	Continuous defect number with start (S) and finish (F) matching to denote beginning and ending of defect
Value_1st_Dimension	Number	Dimensions of defects to nearest Inch or mm
Value_2nd_Dimension	Number	Used for intrusion of tap or width of non-circular connecting pipe to nearest inch or mm
Value_Percent	Number	Used to express percentage value of defects
Joint	Yes/No	Indicates a defect located near a joint
Clock_At_From	Number	Clock At/From Position of defect/observation
Clock_To	Number	Clock To Position of defect/observation
Remarks	Text	Additional info to describe defect/coding
VCR_Time	Text	Time into the video of the identified condition in HHMMSS format with 0 used as space holder.

PACP® "Conditions Extended" Table - Required Fields, Formats, and Conventions

Field Name	Data Type	Description of Field
ConditionID	Number	Software provided designation for this inspection (THIS FIELD USED TO JOIN TABLES)
Grade	Number	PACP Score or Grade assigned to the Defect (from 0 to 5)
InspectionID	Number	Software provided designation for this inspection (THIS FIELD USED TO JOIN TABLES)

PACP® "Media Inspections" Table - Required Fields, Formats, and Conventions

Field Name	Data Type	Description of Field
MediaID	AutoNumber	This field is automatically populated when any media (picture or movie file) is saved.
InspectionID	Number	Software provided designation for this inspection (THIS FIELD USED TO JOIN TABLES)
Video_Name	Text	The name of the video file corresponding to data file - video file naming format shall be "Facility_ID"_"Upstream_MH"_"Downstream_MH"_"Direction"_"Date"
Video_Location	Text	For digital recordings, path of video file relative to corresponding data file

PACP® "Media Conditions" Table - Required Fields, Formats, and Conventions

Field Name	Data Type	Description of Field
MediaCondID	AutoNumber	This field is automatically populated when any media (picture or movie file) is saved.
ConditionID	Number	Software provided designation for this inspection (THIS FIELD USED TO JOIN TABLES)

PACP® "Media Conditions" Table - Required Fields, Formats, and Conventions (CONTINUED)

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Field Name	Data Type	Description of Field
Image_Reference	Text	The name of the image file corresponding to each coded observation - image file naming format shall be "Facility_ID"_"Upstream_MH"_"Downstream_MH"_"Direction"_"PACP_Code"_"Distance" (multiple digital still images may have "-01", "-02", "-03" at end of file name)
Image_Path	Text	For digital recordings, path of image file relative to corresponding PACP coded observation

Preconditioning and Cleaning of Underground Sewer Pipelines

Part 1 General

1.01 Scope

The work covered by this Section includes furnishing all labor, material, equipment and services required for cleaning all sewer pipelines, prior to inspection of the sewers, by closed circuit television, authorized by the Engineer, as shown on the Drawings and/or specified herein. The objective of preconditioning and cleaning is to maximize sewer and manhole service efficiency and effectiveness. Preconditioning and cleaning involves removal of silt, which is defined as any and all solid or semi-solid materials, including fine and granular material, such as sand, grit, gravel, and rock as well as debris, grease, oil, sludge, slime, or any other loose material or encrustation lodged in the manhole or sewer. Preconditioning and cleaning also involves removal of invading roots, corroded concrete, intruding laterals and any other extraneous debris.

1.02 Definition

The term "clean" as used in this Section, shall mean removing all sand, dirt, roots, grease and all other solid or semi-solid materials from the sewer pipelines, so that a closed circuit television camera can be used in the internal pipeline inspection for the purpose of discerning structural defects, misalignment and infiltration/inflow sources.

“Light Cleaning” shall be defined as the removal of all simply attached and settled deposits. In regards to settled deposits, the threshold for “Light Cleaning” is outlined as follows:

- 6”to12” – Removal of settled deposits at levels less than 25% of the pipe diameter
- 13” to 24” – Removal of settled deposits at levels less than 20% of the pipe diameter
- Greater than 24” – Removal of settled deposits at levels less than 15% of the pipe diameter

“Heavy Cleaning” shall be defined as requiring the use of apparatus other than normal high-pressure jetting equipment (i.e. buckets, “pigs”, power-rod machines, grinders, or dragging devices). “Heavy cleaning” shall also be defined as removing compacted deposits, encrustation deposits, and settled deposits at levels that exceed the percentages listed under light cleaning. The Contractor shall be paid for “Heavy Cleaning” on the basis of the distance all loosened debris and/or cuttings are moved to the nearest point of extrication from the sewer. “Heavy Cleaning” must be pre-approved by the Engineer.

The term “In-Road” shall be applied to all sewers located within the right-of-way of a road or to any sewer line which a cleaning operation can feasibly be setup, started, and completed from the roadway / right-of-way.

The term “Off-Road” shall be applied to any sewer main that cannot be directly or feasibly accessed from a road or road right-of-way which requires the contractor to leave the roadway and setup all cleaning equipment off-road to complete a run.

Part 2 Products

2.01 General

- A. The Contractor shall certify that sufficient cleaning units can be provided, including standby units in the event of breakdown, in order to complete the work within the contract period. Further, the Contractor shall certify that standby or back-up equipment can be delivered to the site within 48 hours in the event of equipment breakdown.
- B. Prior to the commencement of work, the Contractor shall coordinate access to water with the local water utility.
- C. All details of the point of water connection, backflow protection, conveyance methods, draw-off rates, times and all local conditions regarding the use of water shall be approved by the Engineer and the utility providing the water prior to commencement of work. All equipment, labor, and material required for obtaining water for the work shall be provided by the Contractor. The Contractor must ensure that an air gap is maintained at the water supply point on desilting/cleaning/jetting equipment or any other receiving apparatus used to obtain water from the utility's hydrants. The minimum air gap separation must be at least twice the diameter of the water supply outlet and be never less than one inch.
- D. The Contractor shall be responsible for all obeying all local, State and Federal laws and regulations regarding traffic control. The use of all traffic control measures shall be coordinated with the Engineer and be subject to his or her approval.

Part 3 Execution

3.01 Cleaning

- A. Cleaning will be accomplished by utilizing a high pressure, hydraulic sewer pipeline cleaner. Pressure jetting equipment used shall be sufficient for the purposes of attaining the degree of cleanliness in sewers as specified without exceeding the maximum pressures indicated below and damaging the pipelines.
- B. The cleaning unit(s) shall be capable of operating routinely, up to a minimum of 500 feet from the point of access to the sewer; minimal hose diameter shall be 1 inch.
- C. The Contractor's rates specified in the Proposal Forms shall be for jetting in sewers both upstream and downstream.
- D. Successive passes using constantly moving pressure jetting techniques shall be applied to sewers until they are cleaned to the level specified. Nozzle hold-time (stationary time), for any particular location, shall not be more than 60 seconds in order to forestall damage to the pipe being cleaned. Ideally nozzles shall have jet angles of between 30° to 45°. "High efficiency nozzles" (discharging "pencil jets") with jet angles higher than this figure shall not be allowed to be stationary at any time. The maximum pressure applied utilizing a stationary jet nozzles shall not exceed 3,000 psi in PVC and HDPE pipelines and shall not exceed 2,500 psi in vitrified clay pipelines. The maximum pressure applied utilizing rotary jet nozzles shall not exceed 3,500 psi in VCP pipelines, 5,500 psi in PVC pipelines and

Preconditioning and Cleaning of Underground Sewer Pipelines

7,000 psi in HDPE pipelines.

- E. Cleaning shall be done immediately prior to the internal inspection to preclude the build-up of debris from infiltration/inflow sources and upstream manhole sections. Should television inspection reveal that a sewer pipeline is not clean; the cleaning operations shall be repeated until the sewer pipeline is clean. This additional cleaning shall be done at the expense of the Contractor, at no additional cost to the Owner.
- F. During preconditioning and cleaning work and all other associated Contract operations, sewer services shall be maintained at all times. This requirement may be relaxed only with the written approval of the Engineer.
- G. The manholes and sewers to be preconditioned and cleaned convey sanitary sewage or combined sewage. In many instances such sewers are subject to high flows, either continuously or in a periodically varying cycle, due to rainfall, infiltration, and/or pumping operations. The Contractor shall include in his proposal provisions for dealing with such variations, and where necessary, schedule his Work to accommodate such variation in flows.
- H. Cleaning shall include the trapping and removal of all sediments and residual wastes from successive manholes as the cleaning progresses. When hydraulic cleaning equipment is used, a suitable weir or dam shall be constructed in the downstream manhole in such a manner that the solids and water are trapped. The use of cages or baskets to capture the debris shall be allowed provided that all settled debris and deposits found to be in the pipe segment, including all silt and fine debris, will be collected and removed from the system. Under no circumstances shall sewage or solids removed there from, be dumped onto streets, in catch basins or in storm drains. Material which could cause pipeline stoppages, accumulations of sand in wet wells, or damage to pumps, shall not be permitted to pass from manhole section to manhole section or be washed downstream. Under no circumstances shall sewage or solids removed there from be stored or dumped onto streets, in catch basins, storm drains, or the nearby ground. The cost of trapping, removing, hauling and disposing of the residual wastes shall be included in the cost of cleaning. Disposal of residual wastes shall be in accordance with, and at a location approved by the Engineer and the Owner.
- I. The Contractor shall provide for the pumping down of any surcharged manhole section and provide all bypass pumping, if required, during the cleaning operation. All pump arounds (bypass pumping) shall be approved by the Engineer.
- J. The Contractor shall submit a comprehensive equipment list to the Engineer before commencement of the Work. The complete list, which shall include all backup and standby equipment, shall be broken down into the following categories (at a minimum):
 - 1. Safety equipment
 - 2. Manhole preconditioning and cleaning equipment
 - 3. Sewer preconditioning and cleaning equipment
 - 4. Flow diversion and flow control equipment
 - 5. Traffic control equipment

6. All other equipment necessary for the completion of the work.
- K. Blockages in the system shall be reported to the Engineer immediately.
- L. A responsible representative of the Contractor shall be present on the site of the work, or other location approved by the Engineer, to provide supervision of the work. At all times, and especially when a change of work location is underway, the Contractor's representative shall keep the Engineer continuously aware of the location, progress, planned execution of the work, and problems encountered.

3.02 Precautions

- A. The Contractor shall take all necessary precautions to ensure that water used does not flood property or buildings served by the sewer pipeline being cleaned.
- B. No fire hydrant shall be obstructed, in case of a fire in the area served by the hydrant.
- C. The Contractor shall take all necessary precautions to protect the sewer pipelines from damage that might be inflicted by improper use of cleaning equipment and shall repair, at no cost to the Owner, any damage caused by the cleaning operation.
- D. The Contractor shall furnish, to the Owner, certification of the accuracy of the automatic counter before any work shall begin on this Project. If, at any time, the Engineer has reason to believe that the counter is inaccurate; the calibration of the counter will be checked before any more work progresses.
- E. The Contractor shall provide, operate, maintain and subsequently remove on completion, adequate ventilation apparatus in the form of blowers and/or fans. The ventilation apparatus shall introduce a fresh air supply to support a safe environment for Work in sewers, manholes and all other confined spaces, which shall be kept free from dangerous, toxic and/or explosive gases, whether generated from sewage, soil strata or other source.
- F. The Contractor shall employ the "best practicable means" to minimize and mitigate noise as well as vibration resulting from operations. This shall include working at acceptable work hours between 8 AM – 7 P.M or incorporating other acceptable mitigation measures as needed. Acceptable mitigation measures shall include the utilization of sound suppression devices on all equipment and machinery particularly in residential areas and in the near vicinity of hospitals and schools, especially at night.
- G. The Contractor shall inform the Engineer before the commencement of any portion of the work of any significant change in the methods of noise attenuation from those previously approved.
- H. All pumps, generators, combination cleaners or other noise emitting equipment shall be suitably screened to minimize nuisance and noise pollution. This requirement shall not be taken as preventing or prohibiting the execution of work necessary for the saving of life, protection of property, or safety of the personnel and/or facilities. The Contractor shall notify the Engineer of such use of plant or equipment in an emergency situation as soon as practicable.

3.03 Data Collection

- A. The Contractor shall complete a cleaning report for each sewer segment cleaned. A hard copy of this report shall be furnished on a weekly basis to the Engineer. The information required on the cleaning report shall be as follows:
1. Facility ID, Location, size and condition of sewer line. Location will be indicated by road name / intersection(s). Size will be indicated by nominal internal diameter. Condition will be indicated by narrative describing visual observation and the items below, augmented by photos where needed.
 2. Degree and nature of deposits prior to cleaning.
 3. Length of sewer cleaned.
 4. Estimated amount and types of debris and sediment removed. Indicate approximate location
 5. Grease build-ups. Indicate approximate location.
 6. Structural failures. Indicate approximate location.
 7. Blockages. Indicate percent blockage or free area,
 8. Method and man hours actually expended for cleaning.

Bid Pricing Sheet

Item	Description	Estimated Quantity	Unit	Unit Price	Subtotal
Cleaning					
1	Pre-cleaning & Conditioning (6" to 12" Diameter) – In Road	700	LF	\$	\$
2	Pre-cleaning & Conditioning (6" to 12" Diameter) – Off Road	4000	LF	\$	\$
3	Heavy Cleaning (6" to 12" Diameter) – In Road	700	LF	\$	\$
4	Heavy Cleaning (6" to 12" Diameter) – Off Road	9500	LF	\$	\$
5	Pre-cleaning & Conditioning (14" to 18" Diameter) – In Road	400	LF	\$	\$
6	Pre-cleaning & Conditioning (14" to 18" Diameter) – Off Road	1000	LF	\$	\$
7	Heavy Cleaning (14" to 18" Diameter) – In Road	400	LF	\$	\$
8	Heavy Cleaning (14" to 18" Diameter) – Off Road	1600	LF	\$	\$
9	Pre-cleaning & Conditioning (20" to 24" Diameter) – In Road	200	LF	\$	\$
10	Pre-cleaning & Conditioning (20" to 24" Diameter) – Off Road	400	LF	\$	\$
11	Heavy Cleaning (20" to 24" Diameter) – In Road	200	LF	\$	\$
12	Heavy Cleaning (20" to 24" Diameter) – Off Road	800	LF	\$	\$
13	Pre-cleaning & Conditioning (26" to 36" Diameter) – In Road	200	LF	\$	\$
14	Pre-cleaning & Conditioning (26" to 36" Diameter) – Off Road	1700	LF	\$	\$
15	Heavy Cleaning (26" to 36" Diameter) – In Road	200	LF	\$	\$
16	Heavy Cleaning (26" to 36" Diameter) – Off Road	800	LF	\$	\$
17	Pre-cleaning & Conditioning (42" to 54" Diameter) – In Road	1300	LF	\$	\$
18	Pre-cleaning & Conditioning (42" to 54" Diameter) – Off Road	2000	LF	\$	\$
19	Heavy Cleaning (42" to 54" Diameter) – In Road	200	LF	\$	\$
20	Heavy Cleaning (42" to 54" Diameter) – Off Road	500	LF	\$	\$
CCTV					
21	PACP CCTV Inspection (6" to 12" Diameter) – In Road	1400	LF	\$	\$
22	PACP CCTV Inspection (6" to 12" Diameter) – Off Road	13500	LF	\$	\$
23	PACP CCTV Inspection (14" to 18" Diameter) – In Road	800	LF	\$	\$
24	PACP CCTV Inspection (14" to 18" Diameter) – Off Road	2600	LF	\$	\$
25	PACP CCTV Inspection (20" to 24" Diameter) – In Road	400	LF	\$	\$
26	PACP CCTV Inspection (20" to 24" Diameter) – Off Road	1200	LF	\$	\$
27	PACP CCTV Inspection (26" to 36" Diameter) – In Road	400	LF	\$	\$
28	PACP CCTV Inspection (26" to 36" Diameter) – Off Road	2500	LF	\$	\$
29	PACP CCTV Inspection (42" to 54" Diameter) – In Road	1500	LF	\$	\$
30	PACP CCTV Inspection (42" to 54" Diameter) – Off Road	2500	LF	\$	\$
Miscellaneous					
31	CCTV Reverse Set-up	18	EA	\$	\$
32	Mobilization	3	EA	\$	\$
33	Traffic Control and Regulation with Certified Flagman (In "major" roadways where preapproved by the Engineer & LDWR staff)	16	HR	\$	\$

Totals	
	Total Cleaning \$
	Total CCTV \$
	Total Miscellaneous \$
	Total Proposed Bid \$

List of Subcontractors or Other Firms that will be utilized for this work and which line items they will undertake:

Firm Name & Address

Line Item

INSPECTION, PRE-CLEANING, AND CLOSED CIRCUIT TELEVISION
FOR SANITARY SEWER BASINS.

TERMS AND SIGNATURE SHEET

All bids shall be signed on the Terms and Signature Sheet in order to be considered.

In compliance with this Invitation for Bid #2017-028 and subject to all conditions thereof, the undersigned offers and agrees to furnish any or all items and/or services upon which prices are quoted, at the price quoted as specified.

My signature below certifies:

- a. I agree to abide by all conditions of this Bid and that I am authorized to sign this Bid.
- b. The accompanying bid is not the result of or affected by, any act of collusion with another person or company engaged in the same line of business or commerce, or any act of fraud punishable under, Chapter 12, Title 18.2, 498.4 of the Code of Virginia, 1950, as amended. Furthermore, I understand that fraudulent and collusive bidding is a crime under the Virginia Governmental Frauds Act, the Virginia Government Bid Rigging Act, the Virginia Anti-Trust Act, and Federal Law and can result in fines, prison sentences, and civil damage awards.
- c. The accompanying bid is in compliance with the State and Local Government Conflict of Interests Act 2.2-3100, supplemented by Article 6, 2.2-4367-69 of the Code of Virginia. Specifically, no City employee, City employee's partner, or any member of the City employee's immediate family holds a position with the bidder, offeror, or contractor such as an officer, director, trustee, partner or the like, or is employed in a capacity involving personal and substantial participation in the procurement transaction, or owns or controls an interest of more than five percent.

Acknowledge receipt of addenda here: No.____ Date:_____ No.____ Date:_____

Complete Legal Name of Company: _____

Order From Address: _____

Remit To Address: _____

Signature: _____

Email: _____

Name(type/print): _____

Title: _____

Fed ID No.: _____ Phone:_____ Fax: _____

We hereby provide the following information to the City regarding our business. We understand that it is provided for statistical purposes only and all firms submitting bids will receive equal consideration.

Minority-Owned Business: Yes _____ No _____

Women Owned Business: Yes _____ No _____

Lynchburg Business: Yes _____ No _____

Questions to Bidder

Bidders are to respond to the following question: Have the individual(s), owner(s), or principal officer(s) of the firm submitting the bid ever been convicted of a felony or a misdemeanor involving moral turpitude, which would adversely affect the ability to perform the contract?

YES _____ NO _____

If yes, list individual or officer and title and give details.

NOTE: Answering yes to this question will not necessarily exclude your company from consideration but will be used to weigh the relationship between the offense and the contract to be performed.

Is your firm currently involved in litigation which would adversely affect performance on this contract?

YES _____ NO _____

Limited Liability Form

All Prospective Firms Must Respond To The Following

If a limited liability company, limited liability partnership, or a limited partnership indicate below:
Check one:

___ Limited Liability Company

___ Limited liability partnership

___ Limited partnership

Have you registered with the State Corporation Commission, to conduct business in Virginia?

Yes No If yes, State Corporation Commission # _____

Name(s) and address(es) of the individuals that formed the limited liability organization:

List who is authorized to execute contracts: _____

If conducting business under an assumed business name, fill out the following information:

Name of assumed business: _____

Owner's name and address: _____

Registration date: _____ Expires: _____

If conducting business as a sole proprietorship, fill out the following information:

Individual's name liable for all obligations of business: _____

If you are a sole proprietor using an assumed name, please list below:

Registration date: _____ Expires: _____