

This document has important legal consequences; consultation with an attorney is encouraged with respect to its use or modification. This document should be adapted to the particular circumstances of the contemplated Project and the Controlling Law.

# **STANDARD FORM OF AGREEMENT BETWEEN OWNER AND ENGINEER FOR PROFESSIONAL SERVICES**

*Prepared by*

**ENGINEERS JOINT CONTRACT DOCUMENTS COMMITTEE**

and

Issued and Published Jointly By

PROFESSIONAL ENGINEERS IN PRIVATE PRACTICE  
*a practice division of the*  
NATIONAL SOCIETY OF PROFESSIONAL ENGINEERS

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AMERICAN CONSULTING ENGINEERS COUNCIL

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AMERICAN SOCIETY OF CIVIL ENGINEERS

This Agreement has been prepared for use with the Standard General Conditions of the Construction Contract (No. 1910-8, 1996 Edition) of the Engineers Joint Contract Documents Committee. Their provisions are interrelated, and a change in one may necessitate a change in the other. For guidance in the preparation of Supplementary Conditions, see Guide to the Preparation of Supplementary Conditions (No. 1910-17) (1996 Edition). For guidance on the completion and use of this Agreement, see EJCDC Users Guide, No. 1910-50.

EJCDC No. 1910-1 (1996 Edition)  
Revised by City of Killeen 3/03/04

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# STANDARD FORM OF AGREEMENT BETWEEN OWNER AND ENGINEER FOR PROFESSIONAL SERVICES

THIS IS AN AGREEMENT effective as of \_\_\_\_\_ (“Effective Date”) between the CITY OF KILLEEN (“OWNER”) and PIPELINE ANALYSIS LLC (“ENGINEER”).

OWNER intends to continue with this next phase of sanitary sewer condition assessments including manhole inspections, smoke testing, and closed circuit television inspection to locate defects, establish least cost repair cost estimates and prepare a rehabilitation plan. The information gathered during this project will locate system defects, specify the type of repairs to be made, estimate the cost and prioritize the recommended repairs. The final report will then be used by both the City staff and outside contractors to make necessary wastewater collection system improvements to restore wastewater system integrity. The results of this program will extend the useful life of the collection system assets.

OWNER and ENGINEER in consideration of their mutual covenants as set forth herein agree as follows:

## ARTICLE 1 - SERVICES OF ENGINEER

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### 1.01 Scope

A. ENGINEER shall provide the Basic and Additional Services set forth herein and in Exhibit A.

B. Upon this Agreement becoming effective, ENGINEER is authorized to begin Basic Services as set forth in Exhibit A.

C. If authorized by OWNER, ENGINEER shall furnish Resident Project Representative(s) with duties, responsibilities and limitations of authority as set forth in Exhibit D.

## ARTICLE 2 - OWNER'S RESPONSIBILITIES

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### 2.01 General

A. OWNER shall have the responsibilities set forth herein and in Exhibit B.

## ARTICLE 3 - TIMES FOR RENDERING SERVICES

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### 3.01 General

A. ENGINEER's services and compensation under this Agreement have been agreed to in anticipation of the orderly and continuous progress of the Project through completion. Unless specific periods of time or specific dates for providing services are specified in this Agreement, ENGINEER's obligation to render services hereunder will be for a period which may reasonably be required for the completion of said services.

B. If in this Agreement specific periods of time for rendering services are set forth or specific dates by which services are to be completed are provided, and if such periods of time or dates are changed through no fault of ENGINEER, the rates and amounts of compensation provided for herein shall be subject to equitable adjustment. If OWNER has requested changes in the scope, extent, or character of the Project, the time of performance of ENGINEER's services shall be adjusted equitably.

C. For purposes of this Agreement the term "day" means a calendar day of 24 hours.

### 3.02 Suspension

A. If OWNER fails to give prompt written authorization to proceed with any phase of services after

completion of the immediately preceding phase, or if ENGINEER's services are delayed through no fault of ENGINEER, ENGINEER may, after giving seven days written notice to OWNER, suspend services under this Agreement.

B. If ENGINEER's services are delayed or suspended in whole or in part by OWNER, or if ENGINEER's services are extended by Contractor's actions or inactions for more than 90 days through no fault of ENGINEER, ENGINEER shall be entitled to equitable adjustment of rates and amounts of compensation provided for elsewhere in this Agreement to reflect, reasonable costs incurred by ENGINEER in connection with, among other things, such delay or suspension and reactivation and the fact that the time for performance under this Agreement has been revised.

## ARTICLE 4 - PAYMENTS TO ENGINEER

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### 4.01 Methods of Payment for Services and Reimbursable Expenses of ENGINEER

A. *For Basic Services.* OWNER shall pay ENGINEER for Basic Services performed or furnished under Exhibit A, Part 1, as set forth in Exhibit C.

B. *For Additional Services.* OWNER shall pay ENGINEER for Additional Services performed or furnished under Exhibit A, Part 2, as set forth in Exhibit C.

C. *For Reimbursable Expenses.* In addition to payments provided for in paragraphs 4.01.A and 4.01.B, OWNER shall pay ENGINEER for Reimbursable Expenses incurred by ENGINEER and ENGINEER's Consultants as set forth in Exhibit C.

### 4.02 Other Provisions Concerning Payments

A. *Preparation of Invoices.* Invoices will be prepared in accordance with ENGINEER's standard invoicing practices and will be submitted to OWNER by ENGINEER, unless otherwise agreed. The amount billed in each invoice will be calculated as set forth in Exhibit C.

B. *Payment of Invoices.* Invoices are due and payable within 30 days of receipt. If OWNER fails to make any payment due ENGINEER for services and expenses within 30 days after receipt of ENGINEER's invoice therefore, the amounts due ENGINEER will be increased at the rate of 1.0% per month (or the maximum rate of interest permitted by law, if less) from said thirtieth day. In addition, ENGINEER may, after giving seven days written notice to OWNER, suspend services under this Agreement until ENGINEER has been paid in full all amounts due for services, expenses, and other related charges. Payments will be credited first to interest and then to principal.

C. *Disputed Invoices.* In the event of a disputed or contested invoice, only that portion so contested may be withheld from payment, and the undisputed portion will be paid.

D. *Payments Upon Termination.*

1. In the event of any termination under paragraph 6.06, ENGINEER will be entitled to invoice OWNER and will be paid in accordance with Exhibit C for all services performed or furnished and all Reimbursable Expenses incurred through the effective date of termination.

2. In the event of termination by OWNER for convenience or by ENGINEER for cause, ENGINEER, in addition to invoicing for those items identified in subparagraph 4.02.D.1, shall be entitled to invoice OWNER and shall be paid a reasonable amount for services and expenses directly attributable to termination, both before and after the effective date of termination, such as reassignment of personnel, costs of terminating contracts with ENGINEER's Consultants, and other related close-out costs, using methods and rates for Additional Services as set forth in Exhibit C. Engineer shall not incur additional expenses after receipt of notice of termination, and shall make reasonable efforts to minimize costs.

E. *Records of ENGINEER's Costs.* Records of ENGINEER's costs pertinent to ENGINEER's compensation under this Agreement shall be kept in accordance with generally accepted accounting practices. To the extent necessary to verify ENGINEER's charges and upon OWNER's timely request, copies of such records will be made available to OWNER at cost.

F. *Legislative Actions.* In the event of legislative actions after the Effective Date of the Agreement by any level of government that impose taxes, fees, or costs on ENGINEER's services or other costs in connection with this Project or compensation therefor, such new taxes, fees, or costs shall be invoiced to and paid by OWNER as a Reimbursable Expense to which a Factor of 1.0 shall be applied. Should such taxes, fees, or costs be imposed, they shall be in addition to ENGINEER's estimated total compensation.

## **ARTICLE 5 - OPINIONS OF COST**

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### **5.01 Opinions of Probable Construction Cost**

A. ENGINEER's opinions of probable Construction Cost provided for herein are to be made on the basis of ENGINEER's experience and qualifications and represent

ENGINEER's best judgment as an experienced and qualified professional generally familiar with the industry. However, since ENGINEER has no control over the cost of labor, materials, equipment, or services furnished by others, or over the Contractor's methods of determining prices, or over competitive bidding or market conditions, ENGINEER cannot and does not guarantee that proposals, bids, or actual Construction Cost will not vary from opinions of probable Construction Cost prepared by ENGINEER. If OWNER wishes greater assurance as to probable Construction Cost, OWNER shall employ an independent cost estimator as provided in Exhibit B.

### **5.02 Designing to Construction Cost Limit**

A. If a Construction Cost limit is established between OWNER and ENGINEER, such Construction Cost limit and a statement of ENGINEER's rights and responsibilities with respect thereto will be specifically set forth in Exhibit F, "Construction Cost Limit," to this Agreement.

### **5.03 Opinions of Total Project Costs**

A. ENGINEER assumes no responsibility for the accuracy of opinions of Total Project Costs.

## **ARTICLE 6 - GENERAL CONSIDERATIONS**

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### **6.01 Standards of Performance**

A. The standard of care for all professional engineering and related services performed or furnished by ENGINEER under this Agreement will be the care and skill ordinarily used by members of ENGINEER's profession practicing under similar circumstances at the same time and in the same locality. ENGINEER makes no warranties, express or implied, under this Agreement or otherwise, in connection with ENGINEER's services.

B. ENGINEER shall be responsible for the technical accuracy of its services and documents resulting therefrom, and OWNER shall not be responsible for discovering deficiencies therein. ENGINEER shall correct such deficiencies without additional compensation except to the extent such action is directly attributable to deficiencies in OWNER-furnished information.

C. ENGINEER shall perform or furnish professional engineering and related services in all phases of the Project to which this Agreement applies. ENGINEER shall serve as OWNER's prime professional for the Project. ENGINEER may employ such ENGINEER's Consultants as ENGINEER deems necessary to assist in the performance or furnishing of the services. ENGINEER shall not be required to employ any ENGINEER's Consultant unacceptable to ENGINEER.

D. ENGINEER and OWNER shall comply with applicable Laws or Regulations and OWNER-mandated standards. This Agreement is based on these requirements as of its Effective Date. Changes to these requirements after the Effective Date of this Agreement may be the basis for modifications to OWNER's responsibilities or to ENGINEER's scope of services, times of performance, or compensation.

E. OWNER shall be responsible for, and ENGINEER may rely upon, the accuracy and completeness of all requirements, programs, instructions, reports, data, and other information furnished by OWNER to ENGINEER pursuant to this Agreement. ENGINEER may use such requirements, reports, data, and information in performing or furnishing services under this Agreement.

F. OWNER shall make decisions and carry out its other responsibilities in a timely manner and shall bear all costs incident thereto so as not to delay the services of ENGINEER.

G. Prior to the commencement of the Construction Phase, OWNER shall notify ENGINEER of any variations from the language indicated in Exhibit E, "Notice of Acceptability of Work," or of any other notice or certification that ENGINEER will be requested to provide to OWNER or third parties in connection with the Project. OWNER and ENGINEER shall reach agreement on the terms of any such requested notice or certification, and OWNER shall authorize such Additional Services as are necessary to enable ENGINEER to provide the notices or certifications requested.

H. ENGINEER shall not be required to sign any documents, no matter by whom requested, that would result in the ENGINEER's having to certify, guarantee or warrant the existence of conditions whose existence the ENGINEER cannot ascertain. OWNER agrees not to make resolution of any dispute with the ENGINEER or payment of any amount due to the ENGINEER in any way contingent upon the ENGINEER's signing any such certification.

I. During the Construction Phase, ENGINEER shall not supervise, direct, or have control over Contractor's work, nor shall ENGINEER have authority over or responsibility for the means, methods, techniques, sequences, or procedures of construction selected by Contractor, for safety precautions and programs incident to the Contractor's work in progress, nor for any failure of Contractor to comply with Laws and Regulations applicable to Contractor's furnishing and performing the Work.

J. ENGINEER neither guarantees the performance of any Contractor nor assumes responsibility for any

Contractor's failure to furnish and perform the Work in accordance with the Contract Documents.

K. ENGINEER shall not be responsible for the acts or omissions of any Contractor(s), subcontractor or supplier, or of any of the Contractor's agents or employees or any other persons (except ENGINEER's own employees) at the Site or otherwise furnishing or performing any of the Contractor's work; or for any decision made on interpretations or clarifications of the Contract Documents given by OWNER without consultation and advice of ENGINEER.

L. The General Conditions for any construction contract documents prepared hereunder are to be the "Standard General Conditions of the Construction Contract" as prepared by the Engineers Joint Contract Documents Committee (Document No. 1910-8, 1996 Edition) unless both parties mutually agree to use other General Conditions as specifically referenced in Exhibit H.

## **6.02 Authorized Project Representatives**

A. Contemporaneous with the execution of this Agreement, ENGINEER and OWNER shall designate specific individuals to act as ENGINEER's and OWNER's representatives with respect to the services to be performed or furnished by ENGINEER and responsibilities of OWNER under this Agreement. Such individuals shall have authority to transmit instructions, receive information, and render decisions relative to the Project on behalf of each respective party.

## **6.03 Design without Construction Phase Services**

A. Should OWNER provide Construction Phase services with either OWNER's representatives or a third party, ENGINEER's Basic Services under this Agreement will be considered to be completed upon completion of the Final Design Phase or Bidding or Negotiating Phase as outlined in Exhibit A.

B. It is understood and agreed that if ENGINEER's Basic Services under this Agreement do not include Project observation, or review of the Contractor's performance, or any other Construction Phase services, and that such services will be provided by OWNER, then OWNER assumes all responsibility for interpretation of the Contract Documents and for construction observation or review and waives any claims against the ENGINEER that may be in any way connected thereto.

## **6.04 Use of Documents**

A. All Documents are instruments of service in respect to this Project, and ENGINEER shall retain an ownership and property interest therein (including the right of reuse at

the discretion of the ENGINEER) whether or not the Project is completed.

B. Copies of OWNER-furnished data that may be relied upon by ENGINEER are limited to the printed copies (also known as hard copies) that are delivered to the ENGINEER pursuant to Exhibit B. Files in electronic media format of text, data, graphics, or of other types that are furnished by OWNER to ENGINEER are only for convenience of ENGINEER. Any conclusion or information obtained or derived from such electronic files will be at the user's sole risk.

C. Copies of Documents that may be relied upon by OWNER are limited to the printed copies (also known as hard copies) that are signed or sealed by the ENGINEER. Files in electronic media format of text, data, graphics, or of other types that are furnished by ENGINEER to OWNER are only for convenience of OWNER. Any conclusion or information obtained or derived from such electronic files will be at the user's sole risk.

D. Because data stored in electronic media format can deteriorate or be modified inadvertently or otherwise without authorization of the data's creator, the party receiving electronic files agrees that it will perform acceptance tests or procedures within 60 days, after which the receiving party shall be deemed to have accepted the data thus transferred. Any errors detected within the 60-day acceptance period will be corrected by the party delivering the electronic files. ENGINEER shall not be responsible to maintain documents stored in electronic media format after acceptance by OWNER.

E. When transferring documents in electronic media format, ENGINEER makes no representations as to long term compatibility, usability, or readability of documents resulting from the use of software application packages, operating systems, or computer hardware differing from those used by ENGINEER at the beginning of this Project.

F. OWNER may make and retain copies of Documents for information and reference in connection with use on the Project by OWNER. Such Documents are not intended or represented to be suitable for reuse by OWNER or others on extensions of the Project or on any other project. Any such reuse or modification without written verification or adaptation by ENGINEER, as appropriate for the specific purpose intended, will be at OWNER's sole risk and without liability or legal exposure to ENGINEER or to ENGINEER's Consultants. OWNER shall indemnify and hold harmless ENGINEER and ENGINEER's Consultants from all claims, damages, losses, and expenses, including attorneys' fees arising out of or resulting therefrom.

G. If there is a discrepancy between the electronic files and the hard copies, the hard copies govern.

H. Any verification or adaptation of the Documents for extensions of the Project or for any other project will entitle ENGINEER to further compensation at rates to be agreed upon by OWNER and ENGINEER.

## **6.05 Insurance**

A. ENGINEER shall procure and maintain insurance as set forth in Exhibit G, "Insurance."

B. OWNER shall procure and maintain insurance as set forth in Exhibit G, "Insurance." OWNER shall cause ENGINEER and ENGINEER's Consultants to be listed as additional insureds on any general liability or property insurance policies carried by OWNER which are applicable to the Project.

C. OWNER shall require Contractor to purchase and maintain general liability and other insurance as specified in the Contract Documents and to cause ENGINEER and ENGINEER's Consultants to be listed as additional insureds with respect to such liability and other insurance purchased and maintained by Contractor for the Project

D. OWNER and ENGINEER shall each deliver to the other certificates of insurance evidencing the coverages indicated in Exhibit G. Such certificates shall be furnished prior to commencement of ENGINEER's services and at renewals thereafter during the life of the Agreement.

E. All policies of property insurance shall contain provisions to the effect that ENGINEER's and ENGINEER's Consultants' interests are covered and that in the event of payment of any loss or damage the insurers will have no rights of recovery against any of the insureds or additional insureds thereunder.

F. At any time, OWNER may request that ENGINEER, at OWNER's sole expense, provide additional insurance coverage, increased limits, or revised deductibles that are more protective than those specified in Exhibit G. If so requested by OWNER, with the concurrence of ENGINEER, and if commercially available, ENGINEER shall obtain and shall require ENGINEER's Consultants to obtain such additional insurance coverage, different limits, or revised deductibles for such periods of time as requested by OWNER, and Exhibit G will be supplemented to incorporate these requirements.

## **6.06 Termination**

A. The obligation to provide further services under this Agreement may be terminated:

1. *For cause,*

a. By either party upon 30 days written notice in the event of substantial failure by the other party to perform in accordance with the terms hereof through no fault of the terminating party.

b. By ENGINEER:

1) upon seven days written notice if ENGINEER believes that ENGINEER is being requested by OWNER to furnish or perform services contrary to ENGINEER's responsibilities as a licensed professional; or

2) upon seven days written notice if the ENGINEER's services for the Project are delayed or suspended for more than 90 days for reasons beyond ENGINEER's control.

3) ENGINEER shall have no liability to OWNER on account of such termination.

c. Notwithstanding the foregoing, this Agreement will not terminate as a result of such substantial failure if the party receiving such notice begins, within seven days of receipt of such notice, to correct its failure to perform and proceeds diligently to cure such failure within no more than 30 days of receipt thereof; provided, however, that if and to the extent such substantial failure cannot be reasonably cured within such 30 day period, and if such party has diligently attempted to cure the same and thereafter continues diligently to cure the same, then the cure period provided for herein shall extend up to, but in no case more than, 60 days after the date of receipt of the notice.

2. *For convenience,*

a. By OWNER effective upon the receipt of notice by ENGINEER.

B. The terminating party under paragraphs 6.06.A.1 or 6.06.A.2 may set the effective date of termination at a time up to 30 days later than otherwise provided to allow ENGINEER to demobilize personnel and equipment from the Site, to complete tasks whose value would otherwise be lost, to prepare notes as to the status of completed and uncompleted tasks, and to assemble Project materials in orderly files.

## **6.07 Controlling Law**

A. This Agreement is to be governed by the law of the State of Texas and venue shall be in Bell County.

## **6.08 Successors, Assigns, and Beneficiaries**

A. OWNER and ENGINEER each is hereby bound and the partners, successors, executors, administrators and legal representatives of OWNER and ENGINEER (and to the extent permitted by paragraph 6.08.B the assigns of OWNER and ENGINEER) are hereby bound to the other party to this Agreement and to the partners, successors, executors, administrators and legal representatives (and said assigns) of such other party, in respect of all covenants, agreements and obligations of this Agreement.

B. Neither OWNER nor ENGINEER may assign, sublet, or transfer any rights under or interest (including, but without limitation, moneys that are due or may become due) in this Agreement without the written consent of the other, except to the extent that any assignment, subletting, or transfer is mandated or restricted by law. Unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under this Agreement.

C. Unless expressly provided otherwise in this Agreement:

1. Nothing in this Agreement shall be construed to create, impose, or give rise to any duty owed by OWNER or ENGINEER to any Contractor, Contractor's subcontractor, supplier, other individual or entity, or to any surety for or employee of any of them.

2. All duties and responsibilities undertaken pursuant to this Agreement will be for the sole and exclusive benefit of OWNER and ENGINEER and not for the benefit of any other party. The OWNER agrees that the substance of the provisions of this paragraph 6.08.C shall appear in the Contract Documents.

## **6.09 Hazardous Environmental Condition**

A. OWNER represents to Engineer that to the best of its knowledge a Hazardous Environmental Condition does not exist.

B. OWNER has disclosed to the best of its knowledge to ENGINEER the existence of all Asbestos, PCB's, Petroleum, Hazardous Waste, or Radioactive Material located at or near the Site, including type, quantity and location.

C. If a Hazardous Environmental Condition is encountered or alleged, ENGINEER shall have the obligation to notify OWNER and, to the extent of applicable Laws and Regulations, appropriate governmental officials.

D. It is acknowledged by both parties that ENGINEER's scope of services does not include any services related to a Hazardous Environmental Condition. In



the event ENGINEER or any other party encounters a Hazardous Environmental Condition, ENGINEER may, at its option and without liability for consequential or any other damages, suspend performance of services on the portion of the Project affected thereby until OWNER: (i) retains appropriate specialist consultant(s) or contractor(s) to identify and, as appropriate, abate, remediate, or remove the Hazardous Environmental Condition; and (ii) warrants that the Site is in full compliance with applicable Laws and Regulations.

E. OWNER acknowledges that ENGINEER is performing professional services for OWNER and that ENGINEER is not and shall not be required to become an “arranger,” “operator,” “generator,” or “transporter” of hazardous substances, as defined in the Comprehensive Environmental Response, Compensation, and Liability Act of 1990 (CERCLA), which are or may be encountered at or near the Site in connection with ENGINEER’s activities under this Agreement.

F. If ENGINEER’s services under this Agreement cannot be performed because of a Hazardous Environmental Condition, the existence of the condition shall justify ENGINEER’s terminating this Agreement for cause on 30 days notice.

## **6.10 Allocation of Risks**

### **A. Indemnification**

1. To the fullest extent permitted by law, ENGINEER shall indemnify and hold harmless OWNER, OWNER’s officers, directors, partners, and employees from and against any and all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court or arbitration or other dispute resolution costs) caused solely by the negligent acts or omissions of ENGINEER or ENGINEER’s officers, directors, partners, employees, and ENGINEER’s Consultants in the performance and furnishing of ENGINEER’s services under this Agreement.

2. To the fullest extent permitted by law, OWNER shall indemnify and hold harmless ENGINEER, ENGINEER’s officers, directors, partners, employees, and ENGINEER’s Consultants from and against any and all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court or arbitration or other dispute resolution costs) caused solely by the negligent acts or omissions of OWNER or OWNER’s officers, directors, partners, employees, and OWNER’s consultants with respect to this Agreement or the Project.

3. In addition to the indemnity provided under paragraph 6.10.A.2 of this Agreement, and to the fullest extent permitted by law, OWNER shall indemnify and hold harmless ENGINEER and its officers, directors, partners, employees, and ENGINEER’s Consultants from and against all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court or arbitration or other dispute resolution costs) caused by, arising out of or resulting from a Hazardous Environmental Condition, provided that (i) any such cost, loss, or damage is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property (other than completed Work), including the loss of use resulting therefrom, and (ii) nothing in this paragraph 6.10.A.4. shall obligate OWNER to indemnify any individual or entity from and against the consequences of that individual’s or entity’s own negligence or willful misconduct.

4. The indemnification provision of paragraph 6.10.A.1 is subject to and limited by the provisions agreed to by OWNER and ENGINEER in Exhibit I, “Allocation of Risks,” if any.

## **6.11 Notices**

A. Any notice required under this Agreement will be in writing, addressed to the appropriate party at its address on the signature page and given personally, or by registered or certified mail postage prepaid, or by a commercial courier service. All notices shall be effective upon the date of receipt.

## **6.12 Survival**

A. All express representations, indemnifications, or limitations of liability included in this Agreement will survive its completion or termination for any reason.

## **6.13 Severability**

A. Any provision or part of the Agreement held to be void or unenforceable under any Laws or Regulations shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon OWNER and ENGINEER, who agree that the Agreement shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.

## **6.14 Waiver**

A. Non-enforcement of any provision by either party shall not constitute a waiver of that provision, nor shall it

affect the enforceability of that provision or of the remainder of this Agreement.

## **6.15 Headings**

A. The headings used in this Agreement are for general reference only and do not have special significance.

## **ARTICLE 7 - DEFINITIONS**

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### **7.01 Defined Terms**

A. Wherever used in this Agreement (including the Exhibits hereto) and printed with initial or all capital letters, the terms listed below have the meanings indicated, which are applicable to both the singular and plural thereof:

1. *Addenda*--Written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the Bidding Documents.

2. *Additional Services*--The services to be performed for or furnished to OWNER by ENGINEER in accordance with Exhibit A, Part 2 of this Agreement.

3. *Agreement*--This "Standard Form of Agreement between OWNER and ENGINEER for Professional Services," including those Exhibits listed in Article 8 hereof.

4. *Application for Payment*--The form acceptable to ENGINEER which is to be used by Contractor in requesting progress or final payments for the completion of its Work and which is to be accompanied by such supporting documentation as is required by the Contract Documents.

5. *Asbestos*--Any material that contains more than one percent asbestos and is friable or is releasing asbestos fibers into the air above current action levels established by the United States Occupational Safety and Health Administration.

6. *Basic Services*--The services to be performed for or furnished to OWNER by ENGINEER in accordance with Exhibit A, Part 1, of this Agreement.

7. *Bid*--The offer or proposal of the bidder submitted on the prescribed form setting forth the prices for the Work to be performed.

8. *Bidding Documents*--The advertisement or invitation to Bid, instructions to bidders, the Bid form and attachments, the Bid bond, if any, the proposed Contract Documents, and all Addenda, if any.

9. *Change Order*--A document recommended by ENGINEER, which is signed by Contractor and OWNER to authorize an addition, deletion or revision in the Work, or an adjustment in the Contract Price or the Contract Times, issued on or after the Effective Date of the Construction Agreement.

10. *Construction Agreement*--The written instrument which is evidence of the agreement, contained in the Contract Documents, between OWNER and Contractor covering the Work.

11. *Construction Contract*--The entire and integrated written agreement between the OWNER and Contractor concerning the Work.

12. *Construction Cost*--The cost to OWNER of those portions of the entire Project designed or specified by ENGINEER. Construction Cost does not include costs of services of ENGINEER or other design professionals and consultants, cost of land, rights-of-way, or compensation for damages to properties, or OWNER's costs for legal, accounting, insurance counseling or auditing services, or interest and financing charges incurred in connection with the Project, or the cost of other services to be provided by others to OWNER pursuant to Exhibit B of this Agreement. Construction Cost is one of the items comprising Total Project Costs.

13. *Contract Documents*--Documents that establish the rights and obligations of the parties engaged in construction and include the Construction Agreement between OWNER and Contractor, Addenda (which pertain to the Contract Documents), Contractor's Bid (including documentation accompanying the Bid and any post-Bid documentation submitted prior to the notice of award) when attached as an exhibit to the Construction Agreement, the notice to proceed, the bonds, appropriate certifications, the General Conditions, the Supplementary Conditions, the Specifications and the Drawings as the same are more specifically identified in the Construction Agreement, together with all Written Amendments, Change Orders, Work Change Directives, Field Orders, and ENGINEER's written interpretations and clarifications issued on or after the Effective Date of the Construction Agreement. Approved Shop Drawings and the reports and drawings of subsurface and physical conditions are not Contract Documents.

14. *Contract Price*--The moneys payable by OWNER to Contractor for completion of the Work in accordance with the Contract Documents and as stated in the Construction Agreement.

15. *Contract Times*--The numbers of days or the dates stated in the Construction Agreement to: (i) achieve Substantial Completion, and (ii) complete the Work so that it is ready for final payment as evidenced by ENGINEER's written recommendation of final payment.

16. *Contractor*--An individual or entity with whom OWNER enters into a Construction Agreement.

17. *Correction Period*--The time after Substantial Completion during which Contractor must correct, at no cost to OWNER, any Defective Work, normally one year after the date of Substantial Completion or such longer period of time as may be prescribed by Laws or Regulations or by the terms of any applicable special guarantee or specific provision of the Contract Documents.

18. *Defective*--An adjective which, when modifying the word Work, refers to Work that is unsatisfactory, faulty, or deficient, in that it does not conform to the Contract Documents, or does not meet the requirements of any inspection, reference standard, test, or approval referred to in the Contract Documents, or has been damaged prior to ENGINEER's recommendation of final payment.

19. *Documents*--Data, reports, Drawings, Specifications, Record Drawings, and other deliverables, whether in printed or electronic media format, provided or furnished in appropriate phases by ENGINEER to OWNER pursuant to this Agreement.

20. *Drawings*--That part of the Contract Documents prepared or approved by ENGINEER which graphically shows the scope, extent, and character of the Work to be performed by Contractor. Shop Drawings are not Drawings as so defined.

21. *Effective Date of the Construction Agreement*--The date indicated in the Construction Agreement on which it becomes effective, but if no such date is indicated, it means the date on which the Construction Agreement is signed and delivered by the last of the two parties to sign and deliver.

22. *Effective Date of the Agreement*--The date indicated in this Agreement on which it becomes effective, but if no such date is indicated, it means the date on which the Agreement is signed and delivered by the last of the two parties to sign and deliver.

23. *ENGINEER's Consultants*--Individuals or entities having a contract with ENGINEER to furnish services with respect to this Project as ENGINEER's independent professional associates, consultants,

subcontractors, or vendors. The term ENGINEER includes ENGINEER's Consultants.

24. *Field Order*--A written order issued by ENGINEER which directs minor changes in the Work but which does not involve a change in the Contract Price or the Contract Times.

25. *General Conditions*--That part of the Contract Documents which sets forth terms, conditions, and procedures that govern the Work to be performed or furnished by Contractor with respect to the Project.

26. *Hazardous Environmental Condition*--The presence at the Site of Asbestos, PCB's, Petroleum, Hazardous Waste, or Radioactive Materials in such quantities or circumstances that may present a substantial danger to persons or property exposed thereto in connection with the Work.

27. *Hazardous Waste*--The term Hazardous Waste shall have the meaning provided in Section 1004 of the Solid Waste Disposal Act (42 USC Section 6903) as amended from time to time.

28. *Laws and Regulations; Laws or Regulations*--Any and all applicable laws, rules, regulations, ordinances, codes, standards, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.

29. *PCB's*--Polychlorinated biphenyls.

30. *Petroleum*--Petroleum, including crude oil or any fraction thereof which is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute), such as oil, petroleum, fuel oil, oil sludge, oil refuse, gasoline, kerosene, and oil mixed with other non-Hazardous Waste and crude oils.

31. *Radioactive Materials*--Source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954 (42 USC Section 2011 et seq.) as amended from time to time.

32. *Record Drawings*--The Drawings as issued for construction on which the ENGINEER, upon completion of the Work, has shown changes due to Addenda or Change Orders and other information which ENGINEER considers significant based on record documents furnished by Contractor to ENGINEER and which were annotated by Contractor to show changes made during construction.

33. *Reimbursable Expenses*--The expenses incurred directly by ENGINEER in connection with the

performing or furnishing of Basic and Additional Services for the Project for which OWNER shall pay ENGINEER as indicated in Exhibit C.

34. *Resident Project Representative*--The authorized representative of ENGINEER, if any, assigned to assist ENGINEER at the Site during the Construction Phase. The Resident Project Representative will be ENGINEER's agent or employee and under ENGINEER's supervision. As used herein, the term Resident Project Representative includes any assistants of Resident Project Representative agreed to by OWNER. The duties and responsibilities of the Resident Project Representative are as set forth in Exhibit D.

35. *Samples*--Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and which establish the standards by which such portion of the Work will be judged.

36. *Shop Drawings*--All drawings, diagrams, illustrations, schedules, and other data or information which are specifically prepared or assembled by or for Contractor and submitted by Contractor to ENGINEER to illustrate some portion of the Work.

37. *Site*--Lands or areas indicated in the Contract Documents as being furnished by OWNER upon which the Work is to be performed, rights-of-way and easements for access thereto, and such other lands furnished by OWNER which are designated for use of Contractor.

38. *Specifications*--That part of the Contract Documents consisting of written technical descriptions of materials, equipment, systems, standards, and workmanship as applied to the Work and certain administrative details applicable thereto.

39. *Substantial Completion*--The time at which the Work (or a specified part thereof) has progressed to the point where, in the opinion of ENGINEER, the Work (or a specified part thereof) is sufficiently complete, in accordance with the Contract Documents, so that the Work (or a specified part thereof) can be utilized for the purposes for which it is intended. The terms "substantially complete" and "substantially completed" as applied to all or part of the Work refer to Substantial Completion thereof.

40. *Supplementary Conditions*--That part of the Contract Documents which amends or supplements the General Conditions.

41. *Total Project Costs*--The sum of the Construction Cost, allowances for contingencies, the total costs of services of ENGINEER or other design professionals and consultants, cost of land, rights-of-way, or compensation for damages to properties, or OWNER's costs for legal, accounting, insurance counseling or auditing services, or interest and financing charges incurred in connection with the Project, or the cost of other services to be provided by others to OWNER pursuant to Exhibit B of this Agreement.

42. *Work*--The entire completed construction or the various separately identifiable parts thereof required to be provided under the Contract Documents with respect to this Project. Work includes and is the result of performing or furnishing labor, services, and documentation necessary to produce such construction and furnishing, installing, and incorporating all materials and all equipment into such construction, all as required by the Contract Documents.

43. *Work Change Directive*--A written directive to Contractor issued on or after the Effective Date of the Construction Agreement and signed by OWNER upon recommendation of the ENGINEER, ordering an addition, deletion, or revision in the Work, or responding to differing or unforeseen subsurface or physical conditions under which the Work is to be performed or to emergencies. A Work Change Directive will not change the Contract Price or the Contract Times but is evidence that the parties expect that the change directed or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order following negotiations by the parties as to its effect, if any, on the Contract Price or Contract Times.

44. *Written Amendment*--A written amendment of the Contract Documents signed by OWNER and Contractor on or after the Effective Date of the Construction Agreement and normally dealing with the non-engineering or non-technical rather than strictly construction-related aspects of the Contract Documents.

## **ARTICLE 8 - EXHIBITS AND SPECIAL PROVISIONS**

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### **8.01 Exhibits Included**

A. Exhibit A, "ENGINEER's Services," consisting of 10 pages.

B. Exhibit B, "OWNER's Responsibilities," consisting of 1 page.

C. Exhibit C, "Payments to Engineer for Services and Reimbursable Expenses," consisting of 1 page.

D. Exhibit D, "Duties, Responsibilities and Limitations of Authority of Resident Project Representative," consisting of 1 page.

E. Exhibit E, "Notice of Acceptability of Work," consisting of 1 page.

F. Exhibit F, "Construction Cost Limit," consisting of 1 page.

G. Exhibit G, "Insurance," consisting of 1 page.

H. Exhibit H, "Special Provisions," consisting of 1 page.

## 8.02 Total Agreement

A. This Agreement (consisting of pages 1 to 11 inclusive, together with the Exhibits identified above) constitutes the entire agreement between OWNER and ENGINEER and supersedes all prior written or oral understandings. This Agreement may only be amended, supplemented, modified, or canceled by a duly executed written instrument.

By signing this contract, Engineer hereby verifies that it does not boycott Israel and will not boycott Israel during the term of this contract. Boycotting Israel is defined in Texas Government Code section 808.001 to mean refusing to deal with, terminating business activities with, or taking any action that is intended to penalize, inflict economic harm on, or limit commercial relations specifically with Israel, or with a person or entity doing business in Israel or in an Israeli-controlled territory, but does not include an action made for ordinary business purposes.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement, the Effective Date of which is indicated on page 1.

OWNER: City of Killeen

By: Kent Cagle

Title: City Manager

Date Signed: \_\_\_\_\_

Address for giving notices:

P.O. Box 1329

Killeen, TX 76540-1329

Designated Representative (paragraph 6.02.A):

Steve Kana, P.E.,

Title: Assistant City Engineer

Phone Number: 254-501-7623

Facsimile Number: 254-501-7628

E-Mail Address: skana@killeentexas.gov

ENGINEER: Pipeline Analysis LLC

By: James H. Forbes, Jr.

Title: President

Date Signed: April 11, 2024

Address for giving notices:

1115 Main Street

Garland, TX 75040

Designated Representative (paragraph 6.02.A):

Mattie A. Engels, P.E.

Title: Vice President

Phone Number: 800-637-0164

Facsimile Number: 972-479-0659

E-Mail Address: mengels@pipelineanalysis.com

This is **EXHIBIT A**, consisting of 10 pages, referred to in and part of the **Agreement between OWNER and ENGINEER for Professional Services** dated \_\_\_\_\_, \_\_\_\_\_.

Initial:

OWNER \_\_\_\_\_  
ENGINEER JF

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**EXHIBIT A - ENGINEER's Services**

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Article 1 of the Agreement is amended and supplemented to include the following agreement of the parties. ENGINEER shall provide Basic and Additional Services as set forth below.

**PART 1 -- BASIC SERVICES**

The Project Approach to the Killeen Sewer System Evaluation is organized around the objectives for this project:

- Building on Work Completed to Date
- Regulatory compliance
- Attainment of long-term I/I solutions
- Customer satisfaction
- Cost control

Attainment of long-term I/I solutions

The goal of the City and compliance regulators is to develop long-term solutions to infiltration/inflow (I/I) and sanitary sewer overflows (SSO's). The first step in achieving this goal is to establish the magnitude and location of the problem. City-wide temporary flow monitoring was first completed in March 2009 which prioritized areas for subsequent condition assessment and rehabilitation which has been addressed by city staff. Flow monitoring in 2023 established an updated prioritization of Rainfall Dependent Infiltration/Inflow (RDII). Table 1 and Figure 1 present the prioritized ranking of sub-basins.

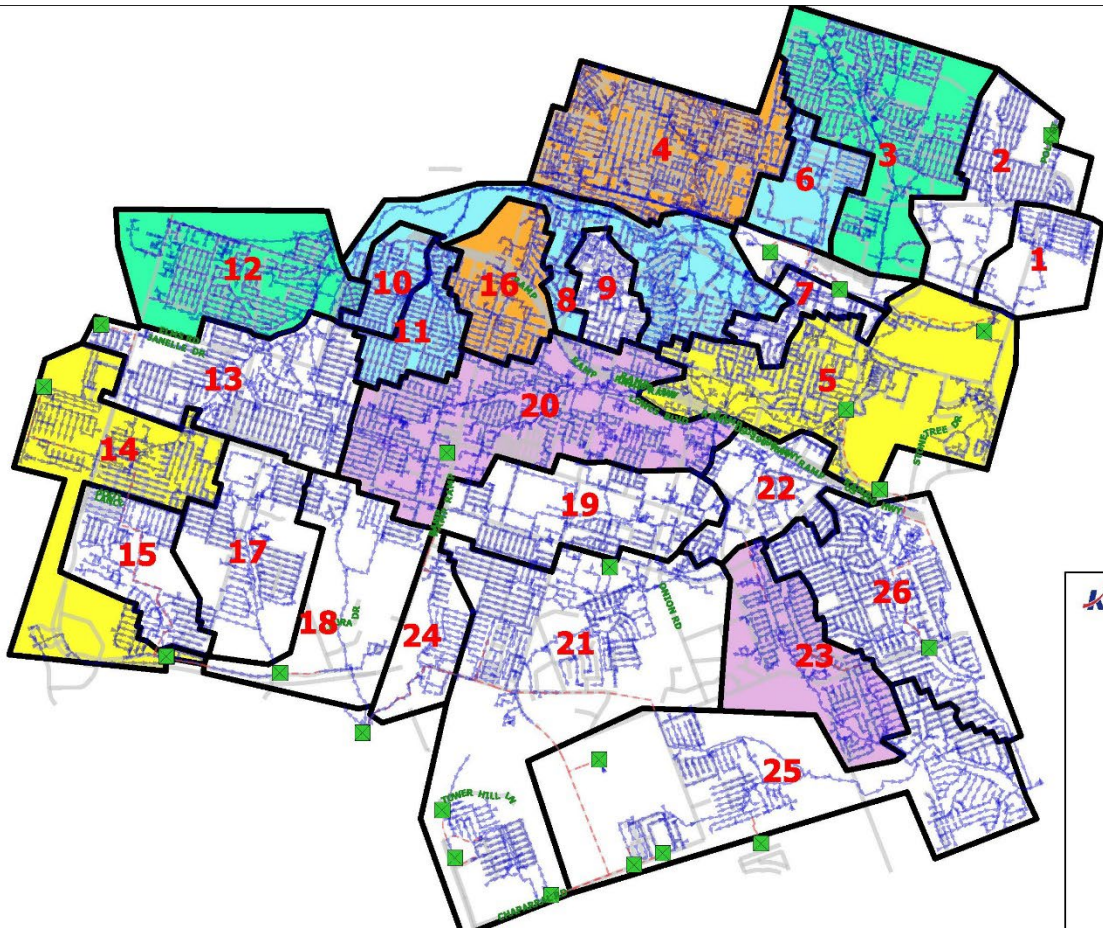
The flow analysis established dry and wet weather flows at key locations across the city. In addition, flow meters isolated the areas of the collection system that contribute to excessive rainfall dependent infiltration/inflow (RDII) that enters through poor fitting manhole castings, vented manhole covers in ponding areas, holes in pipes, open or defective cleanouts, yard drains, storm sewer cross connections, etc. The results of the flow monitoring provides a ranking of basins by priority. This scope of work implements the 2023 flow monitoring recommendations and will locate system defects and establish least cost rehabilitation plans.

The City of Killeen CMOM Plan uses best management practices to facilitate collection system testing and rehabilitation. The schedule for condition assessment of the wastewater collection system is a 10-year cycle. Using the prioritized listing of sub-basins, a plan was developed to evaluate approximately 10% of the system per year. Table 1 summarizes the 10-year condition assessment plan.

**Table 1**  
**Summary**  
**Prioritized Condition Assessment**

	Priority Basin	Study Are Footage - l.f.	Manhole/Cleanout Quantity	System Length %
Year 1	4,16	327,549	1,172	10%
Year 2	5,14	336,213	1,141	10%
Year 3	3,12	336,350	1,150	10%
Year 4	6,8,11,10	340,331	1,295	11%
Year 5	20,23	378,029	1,400	12%
Year 6	26,7,9	311,461	1,146	10%
Year 7	21,2	312,997	1,098	10%
Year 8	13,17	299,945	996	9%
Year 9	1,18,15,22,24	282,811	981	9%
Year 10	19,25	299,724	1,014	9%
	Total	3,225,410	11,393	100%

## Basins 4 and 16





# Sanitary Sewer Evaluation Survey

## Basins 4 and 16 (Year 1)

### Scope of Work

Using the prioritized results of the 2023 wastewater flow monitoring, the condition assessment 10-year plan will identify system defects, determine repair methods, and estimate the costs to remediate the defects. The 10-year plan for system evaluation is industry best practices and follows the City of Killeen Capacity Management, Operation and Maintenance (CMOM) Plan and the TCEQ SSO Initiative guidelines. Field testing and inspection for each priority sub-basin will include the following:

- Manhole Inspection to establish the asset condition and identify any needed repairs or rehabilitation to extend the asset life
- Smoke Testing to locate sources of wet weather inflow on both public and private sewers and develop recommended repair methods and cost estimates
- Clean and CCTV Inspection to establish the asset condition of mainline sewer and identify repairs or rehabilitation needed
- Map Update and GIS attribute data update from inspections
- Final Rehabilitation Plan Report with estimated construction costs

The following are anticipated work tasks necessary to implement each phase of the condition assessment:

#### **TASK 100      MOBILIZATION**

Mobilize project team and coordinate startup. Establish personnel assignments and responsibilities. Inventory equipment needs and order expendable supplies. Review all relevant existing materials, previous reports, etc. developed for or by the City of Killeen concerning this project, including, but not limited to, the following:

- Previous studies and findings for the service areas to be investigated
- Compile current existing sewer maps and asset numbers for each sub-basin.

*Deliverable:*

1. Delivery of equipment and personnel
2. Work maps of Sub-basins with delineated boundaries
3. Identify major defects from previous evaluations to determine if repairs were adequately addressed

#### **TASK 200      MANHOLE/PIPE INSPECTION**

Manholes can be a significant source of extraneous infiltration/inflow and thereby reduce system wet weather capacity. The data gathered during this phase of the project will be used to identify manholes for rehabilitation and establish the base data necessary to accurately determine mainline sewer rehabilitation alternatives and costs. Other important deliverables resulting from this work task are the updating of the collection system map, determination of debris levels in pipes and verification of pipe sizes. This information is critical in preparing subsequent rehabilitation plans, cleaning requirements to restore capacity and updating of the system maps.

Inspection personnel will use digital cameras during the inspection of all manholes on this project. All photographs will be included in the field inspection computer database so that a permanent electronic record can be maintained. During inspection, each of the following types of information will be obtained to establish the condition and prioritize least cost repairs:

- Sub-area Designation
- Manhole/Cleanout ID
- Inspection Status
- Address and GPS coordinate (x,y) of manhole
- Surface cover, grade, type of cover (paved, yard, etc.)
- Material of construction – brick, concrete, etc.
- Area and Internal photo of manhole
- All incoming and outgoing pipe depths from rim to invert
- All incoming and outgoing pipe digital photographs
- Outgoing pipe length
- Defects – Active, Evidence or No Infiltration/Inflow with digital photographs
- Field corrections to collection system map

*Deliverables:*

1. Documentation with summary of field observations
2. Digital photos of assets
3. Documentation for preparing manhole rehabilitation quantities
4. Field updated maps
5. Prioritized Manhole Repair Recommendations and Cost Estimates
6. Comparison of identified major defects with previously completed condition assessments to determine effectiveness of prior repairs

**TASK 300      SMOKE TESTING OF STUDY AREA**

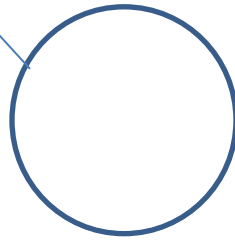
Smoke testing will take place after Task 200 is complete in order to utilize the most updated map of the study area. This work task will provide detailed information on wet weather inflow sources for the study area. In order to identify defects in the lines, non-toxic smoke will be forced into the sewer by high-capacity blowers. Data documentation includes measurements from two permanent points and will be sufficient to establish the location of each defect and determine the best repair method and priority. Color digital photographs will be taken to document each defect during the smoke test.

Forty-eight (48) hours prior to testing, door hangers will be used to notify residents. A telephone number will be provided for those individuals with questions or for anyone requiring special assistance. Each day the fire department will be notified of the crew location since smoke may enter homes through defective plumbing.

Pipeline Analysis will replace missing or broken cleanout caps during smoke testing. If the cleanout is defective and a replacement cap cannot be installed, then crews will document the defect for future action. The address where replacement cap(s) were installed will be documented and crews will leave a door hanger informing the property owner of the repair. The door hanger will be approved by the City of Killeen and include a phone number for residents to call for more information. Since this action will constitute a repair under, documentation will be sufficient to include in the final report.

*Deliverables:*

1. Defect location sketches and listing
2. Digital photographs
3. Smoke Notification Flyers and Notification of Residents
4. Priority ranking of defects (both private and public sector)
5. Repair methods and estimated costs



## SMOKE TESTING NOTICE TO RESIDENT

For the next few days, inspection crews will conduct a physical survey of the wastewater collection system. Pipeline Analysis, LLC will perform this study, which involves opening manholes in the streets and backyard utility easements. Information gained from this study will be used to repair and improve the wastewater collection system.

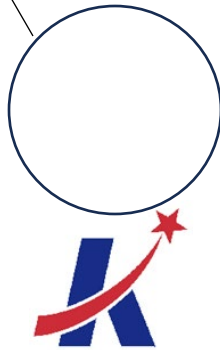
One important task of the survey will be smoke testing of sewer lines to locate breaks and defects in the system. During this testing, white smoke will exit through vent pipes on the roofs of homes and through sewer line breaks. The smoke is non-toxic, leaves no residue, and creates no fire hazard. The smoke should not enter your home unless defective plumbing exists or drain traps are dry.

If you have seldom-used drains, please pour a gallon of water in the drain to fill the drain trap. This procedure will help prevent the possibility of smoke entering your living areas through those drains.

Field crews will perform testing of all sewers in the area. At no time will field crews have to enter your business or residence. Your cooperation is appreciated. Should you have any additional questions concerning this study or if you desire special assistance, please contact:

**254-501-6319 City of Killeen**  
**800-637-0164 Pipeline Analysis, LLC**





## **CLEANOUT REPAIR NOTICE TO RESIDENT**

The City of Killeen has contracted with Pipeline Analysis to repair some private sewer service cleanout caps that are broken or missing. A private lateral is a pipe that takes wastewater from homes, churches, schools and businesses to the public sewer main. Although your private sewer line is your property, and by City Code the responsibility of the property owner, the City has elected to replace broken or missing cleanout caps found while smoke testing the sanitary sewer system. This work is being undertaken to improve the wastewater collection system and prevent rainwater from entering the sewer system.

This notice is to inform you that a defective cleanout cap was replaced on or near your property at no cost to the resident. This repair will not affect your service.

We appreciate your understanding during this process. If you have additional questions or need additional information, contact the City of Killeen or Pipeline Analysis.

**254-501-6319 City of Killeen**

**800-637-0164 Pipeline Analysis, LLC**



#### **Task 400    Dye Flooding**

Dye water testing can be anticipated to assist in locating specific defects during the evaluation. Non-toxic dye will be introduced as a powder or liquid. Cross-connections, roof drains and area drains that are suspected of being connected to the sanitary sewer will be positively identified using the dye tracer procedure. Field documentation and photographs will be used to record all the findings. Internal CCTV inspection may be performed during the dye flooding to locate the cause and repair method of specific defects identified during smoke testing.

#### **TASK 500 & 600    CLEANING AND CCTV**

Preparatory cleaning shall consist of hydraulic jet cleaning to facilitate the internal CCTV inspection. Preparatory cleaning will consist of not more than three passes of the jet hose (normal cleaning). Heavy cleaning and root removal to remove large deposits of debris is not included in this work task. Debris will be removed from the line and transported for disposal. CCTV investigation is found to be critical in establishing mainline sewer condition and best repair methods.

*Deliverables:*

1. Field forms, equipment, supplies and oversight QA/QC
2. Document findings. Data to include:
  - Date inspected
  - Line segment being inspected
  - Project name
  - Location (Address)
  - Footage location from manhole
  - Defect code and/or type and severity rating using the national Pipeline Assessment Certification Program (PACP) codes
  - Pipeline surface cover
3. Review of each video and logs
4. Provide reports on of segments televised in electronic format
5. Summary of line segments cleaned and CCTV'd
6. Results of CCTV inspection provided on printed logs
7. Prepare prioritized mainline rehabilitation plan and cost estimates

#### **TASK 700            ADMINISTRATION AND PROJECT MANAGEMENT**

This task includes internal project administration and oversight including scheduling, budget, quality assurance and control meetings and reporting. The project schedule will be reviewed and milestones for the completion of each task will be assigned. The project schedule will be reviewed and updated to ensure that all tasks are completed in a timely and organized fashion. Management work items include:

- Field crew supervision and project planning
- Obtain initial maps for field use and verification
- Schedule equipment and order supplies

Major system deficiencies that are identified during the field inspections that if corrected would result in significant reduction in I/I or is deemed to be of a safety concern will be recorded and forwarded as soon as possible to City's designated project manager.

*Deliverables:*

1. Status reports
2. Project schedule and updates

#### **TASK 800            DEFECT ANALYSIS/ REHABILITATION**

This project will generate a considerable amount of data that will require proper entry and quality control. Data collection and analysis will include the following:

1. All collected data will be integrated into the project database and will be compatible with the City GIS system.
2. All collected defect data will be correlated between sources to address duplicate defects that were identified by different testing methods. Identifying duplicate defects will ensure multiple rehabilitation methods are not recommended for the same defect.
3. Defect data will be presented graphically and in the project data.
4. Much of the baseline data required for rehabilitation decisions is gathered during the normal course of field investigations. For example, "area photos" are taken of each manhole in the direction of the outgoing pipe. This photograph not only shows the location of the manhole but also provide data on the line cover and easement conditions.
5. Since private sector defects can contribute to excessive inflow, proper documentation for subsequent repair is important. Property owner address, photograph, and sufficient information to document the defect will be recorded and incorporated into the City database. TECQ's SSO Initiative program and EPA's CMOM program both address the need for private sector repairs. Private sector defects will be prioritized, and repair methods/costs established.
6. Rehabilitation recommendations will consider the best repair for the particular asset (manhole, pipeline, etc.) being rehabilitated. A long-term least-cost solution may have an initial higher cost but provide a higher level of service and lower operating and maintenance cost. Supporting data will be provided on accompanying flash drive.
7. Major defects identified from previous condition assessments will be compared to data collected during this project. A technical memorandum will be prepared that will address the effectiveness of repairs. Recommendations may include modifications to the methods or materials used for system repairs and rehabilitation based on the findings.

#### **TASK 900            FINAL REPORT**

Prepare and submit three (3) hard copies of the Condition Assessment Final Report, each with an electronic flash drive containing the report, project files, videos, photographs and summary tables. Report will include:

- Executive Summary
- Description of all tasks
- Manhole and pipe inspection summary/inventory
- Manhole defect summary
- Pipeline defect summary
- Service lateral defect summary
- Smoke test data summary
- Cleaning and CCTV findings
- Rehabilitation Plan and Cost Estimates for Private and Public sector repairs

**FIGURE 2**  
**PROJECT SCHEDULE**

Task	Description	Month									
		1	2	3	4	5	6	7	8	9	10
100	Mobilization										
200	Manhole/Pipe Inspection (100%)										
300	a. Smoke Testing- Testing, Public Awareness, Data Analysis (100%)										
	b. Smoke Testing - Replace Broken/Missing Cleanout Caps										
400	Dye Flooding										
500	Preparatory Cleaning (15%)										
600	CCTV Inspection (15%)										
700	Admin.,Project Mgt.										
800	Defect Analysis/Rehab.										
900	Database, Cost Estimates, Mapping, Final Reports										

**FIGURE 3**  
**FEE**

Task	Description	Estimated Quantity	Unit Price	Total
100	Mobilization	L.S.	L.S.	\$ 6,728.00
200	Manhole/Pipe Inspection (100%)	1,172	\$ 145.00	\$ 169,940.00
300	a. Smoke Testing- Testing, Public Awareness, Data Analysis (100%)	327,549	\$ 0.68	\$ 222,733.32
	b. Smoke Testing - Replace Broken/Missing Cleanout Caps	100	\$ 125.00	\$ 12,500.00
400	Dye Flooding	5	\$ 750.00	\$ 3,750.00
500	Preparatory Cleaning (15%)	49131	\$ 1.95	\$ 95,805.45
600	CCTV Inspection (15%)	49131	\$ 1.70	\$ 83,522.70
700	Admin.,Project Mgt.	L.S.	L.S.	\$ 3,113.00
800	Defect Analysis/Rehab.	L.S.	L.S.	\$ 4,530.00
900	Database, Cost Estimates, Mapping, Final Reports	L.S.	L.S.	\$ 25,670.00
<b>Total Not To Exceed</b>				<b>\$ 628,292.47</b>

**PART 2 -- ADDITIONAL SERVICES**

**A2.01 Additional Services Requiring OWNER's Authorization in Advance**

None Anticipated.

This is **EXHIBIT B**, consisting of 1 page, referred to in and part of the **Agreement between OWNER and ENGINEER for Professional Services** dated \_\_\_\_\_, \_\_\_\_\_.

Initial:

OWNER \_\_\_\_\_  
ENGINEER JF

### **OWNER's Responsibilities**

Article 2 of the Agreement is amended and supplemented to include the following agreement of the parties.

B2.01 In addition to other responsibilities of OWNER as set forth in this Agreement, OWNER shall:

A. Provide ENGINEER with all criteria and full information as to OWNER's requirements for the Project, including design objectives and constraints, space, capacity and performance requirements, flexibility, and expandability, and any budgetary limitations.

B. Furnish to ENGINEER any other available information pertinent to the Project including reports and data relative to previous investigation at or adjacent to the study areas.

C. Following ENGINEER's assessment of initially-available Project information and data and upon ENGINEER's request, furnish or otherwise make available such additional Project related information and data as is reasonably required to enable ENGINEER to complete its Basic and Additional Services. Such additional information or data would generally include the following:

- Access for placement of equipment and personnel
- Copies of all applicable reports, maps and historical data for the study area at no cost to ENGINEER
- As-built drawings, sewer key maps, street plans, electronic aerial photographs if available and if requested at no cost to ENGINEER
- Current collection system map in electronic format
- Access (if requested) to manholes that are buried or could not be opened.
- Assistance in locating assets (if requested)
- Disposal site for any debris removed from the sewer system at no cost to Engineer
- Water for cleaning and dye testing at no cost to Engineer
- Removal of cleaning or CCTV equipment that may become lodged in sewer at no cost, including site restoration, due to no negligence of Pipeline Analysis or subcontractor.
- Provide contact person for coordination of database deliverable
- Review format for data delivery including photographs
- Pipeline Analysis will provide electronic files of the City corrected GIS maps in ArcGIS. The City will have the final authority to accept the changes and update their master GIS map files.
- Review and comment on rehabilitation methods, cost estimates, and alternatives

D. Give prompt written notice to ENGINEER whenever OWNER observes or otherwise becomes aware of a Hazardous Environmental Condition or of any other development that affects the scope or time of performance of ENGINEER's services, or any defect or nonconformance in ENGINEER's services or in the work of any Contractor.

E. Authorize ENGINEER to provide Additional Services as set forth in Part 2 of Exhibit A of the Agreement as required.

F. Arrange for safe access to and make all provisions for ENGINEER to enter upon public and private property as required for ENGINEER to perform services under the Agreement.



This is **EXHIBIT C**, consisting of 1 page, referred to in and part of the **Agreement between OWNER and ENGINEER for Professional Services** dated \_\_\_\_\_, \_\_\_\_\_

Initial:

OWNER \_\_\_\_\_  
ENGINEER GF

Payments to ENGINEER for Services and Reimbursable Expenses

Article 4 of the Agreement is amended and supplemented to include the following agreement of the parties:

**ARTICLE 4 -- PAYMENTS TO THE ENGINEER**

**C4.01 For Basic Services Having A Determined Scope**

A. OWNER shall pay ENGINEER for Basic Services set forth in Exhibit A, except for services of ENGINEER's Resident Project Representative and Post-Construction Phase, services, if any, as follows:

1. ENGINEER may alter the distribution of compensation between individual phases noted
2. herein to be consistent with services actually rendered, but shall not exceed the total amount unless approved in writing by the OWNER.

3. The amount includes compensation for ENGINEER's services and services of ENGINEER's Consultants, if any. Appropriate amounts have been incorporated to account for labor, overhead, profit, and Reimbursable Expenses.

4. The portion of the amount billed for ENGINEER's services will be based upon ENGINEER's estimate of the proportion of the total services actually completed during the billing period.

5. If more prime contracts are awarded for work designed or specified by ENGINEER for this Project than identified in Exhibit A, the ENGINEER shall be compensated an additional amount to be negotiated; however, in no case shall the amount of compensation exceed eighteen percent (18%) of the Project's estimated construction costs for all Basic Services for each prime contract added.

Task	Description	Estimated Quantity	Unit Price	Total
100	Mobilization	L.S.	L.S.	\$ 6,728.00
200	Manhole/Pipe Inspection (100%)	1,172	\$ 145.00	\$ 169,940.00
300	a. Smoke Testing- Testing, Public Awareness, Data Analysis (100%)	327,549	\$ 0.68	\$ 222,733.32
	b. Smoke Testing - Replace Broken/Missing Cleanout Caps	100	\$ 125.00	\$ 12,500.00
400	Dye Flooding	5	\$ 750.00	\$ 3,750.00
500	Preparatory Cleaning (15%)	49131	\$ 1.95	\$ 95,805.45
600	CCTV Inspection (15%)	49131	\$ 1.70	\$ 83,522.70
700	Admin., Project Mgt.	L.S.	L.S.	\$ 3,113.00
800	Defect Analysis/Rehab.	L.S.	L.S.	\$ 4,530.00
900	Database, Cost Estimates, Mapping, Final Reports	L.S.	L.S.	\$ 25,670.00
<b>Total Not To Exceed</b>				<b>\$ 628,292.47</b>

This is **EXHIBIT D**, consisting of 1 page, referred to in and part of the **Agreement between OWNER and ENGINEER for Professional Services** dated \_\_\_\_\_, \_\_\_\_\_.

Initial:

OWNER \_\_\_\_\_  
ENGINEER \_\_\_\_\_

*JF*

**Duties, Responsibilities, and Limitations of Authority of Resident Project Representative**

Paragraph 1.01C of the Agreement is amended and supplemented to include the following agreement of the parties:

D6.02      *Resident Project Representative*

*Resident Project Representative – Not anticipated in this project.*

This is **EXHIBIT E and F**, consisting of 1 page, referred to in  
and part of the **Agreement between OWNER and**  
**ENGINEER for Professional Services** dated  
\_\_\_\_\_, \_\_\_\_\_.

Initial:

OWNER \_\_\_\_\_  
ENGINEER \_\_\_\_\_

*JF*

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**Exhibit E - NOTICE OF ACCEPTABILITY OF WORK NOT APPLICABLE**

**Exhibit F - CONSTRUCTION COST LIMIT – NOT APPLICABLE**

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This is **EXHIBIT G**, consisting of 1 page, referred to in and part of the **Agreement between OWNER and ENGINEER for Professional Services** dated \_\_\_\_\_, \_\_\_\_\_.

Initial:

OWNER \_\_\_\_\_  
ENGINEER JF

## **Insurance**

Paragraph 6.05 of the Agreement is amended and supplemented to include the following agreement of the parties.

### **G6.05 Insurance**

A. The limits of liability for the insurance required by paragraph 6.05.A and 6.05.B of the Agreement are as follows:

1. By ENGINEER:

- |   |              |
|---|--------------|
| a. Workers' Compensation:                               | Statutory    |
| b. Employer's Liability --                              |              |
| 1) Each Accident:                                       | \$ 500,000   |
| 2) Disease, Policy Limit:                               | \$ 500,000   |
| 3) Disease, Each Employee:                              | \$ 500,000   |
| c. General Liability --                                 |              |
| 1) Each Occurrence (Bodily Injury and Property Damage): | \$ 1,000,000 |
| 2) General Aggregate:                                   | \$ 2,000,000 |
| d. Excess or Umbrella Liability --                      |              |
| 1) Each Occurrence:                                     | \$ 4,000,000 |
| 2) General Aggregate:                                   | \$ 4,000,000 |
| e. Automobile Liability --                              |              |
| 1) Bodily Injury:                                       |              |
| a) Each Accident  | \$ _____     |
| 2) Property Damage:                                     |              |
| a) Each Accident  | \$ _____     |

[or]

- |   |            |
|---|------------|
| 1) Combined Single Limit<br>(Bodily Injury and Property Damage):<br>Each Accident | \$ 500,000 |
|---|------------|

f. Other (specify): On all policies except Workers Compensation and Professional Liability - "City of Killeen is named as Additional Insured on the General Liability and Auto Liability policies."

This is **EXHIBIT H**, consisting of 1 page, referred to in and part of the **Agreement between OWNER and ENGINEER for Professional Services** dated \_\_\_\_\_, \_\_\_\_\_.

Initial:

OWNER \_\_\_\_\_  
ENGINEER \_\_\_\_\_ *JF*

**Special Provisions**

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No Further Agreements

This is **EXHIBIT I**, consisting of 1 page, referred to in and part of the **Agreement between OWNER and ENGINEER for Professional Services** dated \_\_\_\_\_, \_\_\_\_\_.

Initial:

OWNER \_\_\_\_\_  
ENGINEER JF

**DBE Goal**

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DBE Goal 0%



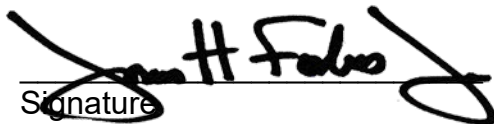
## Contract Verification

Texas law provides that a governmental entity may not enter into certain contracts for goods and services with a company unless the company provides written verification regarding aspects of the company's business dealings.

- Texas Government Code, Chapter 2271 – the company must verify that it does not boycott Israel and will not boycott Israel during the term of the contract. *Boycott Israel is defined in Government Code Chapter 808.*
- Texas Government Code, Chapter 2274 – the company must verify that it does not boycott energy companies and will not boycott energy companies during the term of the contract. *Boycott energy company is defined in Government Code Chapter 809.*
- Texas Government Code, Chapter 2274 – the company must verify that it does not have a practice, policy, guidance or directive that discriminates against a firearm entity or firearm trade association and will not discriminate during the term of the contract against a firearm entity or firearm trade association. Verification is not required from a sole source provider. *Discriminate, firearm entity and firearm trade association are defined in Government Code Chapter 2274.*

Affected by the above statutes are contracts 1) with a company with ten (10) or more full-time employees, and 2) valued at \$100,000 or more to be paid wholly or partly from public funds. A contract with a sole proprietorship is not included.

By signing below, I verify that the company listed below does not boycott Israel, does not boycott energy companies and does not discriminate against firearms entities or firearm trade associations and will not do so during the term of the contract entered into with the City of Killeen. I further certify that I am authorized by the company listed below to make this verification.

  
Signature

James H. Forbes, Jr.  
Printed Name

March 20, 2024  
Date

Pipeline Analysis, LLC  
Company Name

President  
Title