CITY OF POMPANO BEACH, FLORIDA

PROFESSIONAL CONSULTING AGREEMENT

with

Tetra Tech, Inc.



CONTINUING CONTRACT FOR CIVIL ENGINEERING SERVICES FOR VARIOUS CITY PROJECTS E-20-20

CONTRACT FOR PROFESSIONAL CONSULTING SERVICES

This Contract is made on ______, by and between the CITY OF POMPANO BEACH, a municipal corporation of the State of Florida, hereinafter referred to as "CITY," and Tetra Tech, Inc. a Delaware corporation, authorized to do business in the State of Florida hereinafter referred to as the "Consultant."

WHEREAS, the Consultant is able and prepared to provide such services as City requires under the terms and conditions set forth herein; and

WHEREAS, the City Commission has approved the recommendation that Consultant be employed by the City and authorized the negotiation of contractual terms.

NOW, THEREFORE, in consideration of the mutual promises herein, the City and the Consultant agree as follows:

ARTICLE 1 – SERVICES/CONSULTANT AND CITY REPRESENTATIVES

The Consultant's responsibility under this Contract is to provide professional consulting services as more specifically set forth in RLI No. E-20-20 attached hereto as Exhibit A and incorporated herein in its entirety.

The Consultant's representative shall be Charles Drake

The CITY's representative shall be City Engineer or designee,

ARTICLE 2 – TERM

The CONSULTANT shall adhere to the schedule given in each work authorization after receiving the "Notice to Proceed."

Reports and other items shall be delivered or completed in accordance with the detailed schedule set forth in individual Work Authorizations as negotiated.

The Term of this Contract shall be for an initial period of five (5) years from the date of execution by both the City and the Consultant.

ARTICLE 3 – PAYMENTS TO CONSULTANT

A. City agrees to pay Consultant in consideration for its services described herein. It is the intention of the parties hereby to ensure that unless otherwise directed by the City in writing, Consultant will continue to provide services as specified in Exhibit A for the term of this Contract.

B. <u>Price Formula</u>. City agrees to pay Consultant as negotiated on a Work Authorization basis. Each work authorization shall specifically identify the scope of the work to be performed and the fees for said services. As set forth in RLI No. E-20-20, professional services under this contract will be restricted to those required for any project for which construction costs will not exceed four million dollars (\$4,000,000.00), and for any study activity fees shall not exceed five hundred thousand dollars (\$500,000.00).

C. Fee Determination. Each individual Work Authorization may be negotiated for fees to be earned by Time and Materials with a Not to Exceed Amount, Lump Sum, or a combination of both methods for subtasks contained therein. The total amount to be paid by the City under a Work Authorization shall not exceed specified amounts for all services and materials including "out of pocket" expenses as specified in Paragraph E below and also including any approved subcontracts unless otherwise agreed in writing by both parties. The Consultant shall notify the City's Representative in writing when 90% of the "not to exceed amount" for the total Work Authorization has been reached. The Consultant will bill the City on a monthly basis, or as otherwise provided. Time and Materials billing will be made at the amounts set forth in Exhibit B for services rendered toward the completion of the Scope of Work. Where incremental billings for partially completed items are permitted, the total billings shall not exceed the estimated percentage of completion as of the billing date. It is acknowledged and agreed to by the Consultant that the dollar limitation set forth in this section is a limitation upon and describes the maximum extent of City's obligation to pay Consultant, but does not include a limitation upon Consultant's duty to perform all services set forth in Exhibit A for the total compensation in the amount or less than the guaranteed maximum stated above.

D. Invoices received by the City from the Consultant pursuant to this Contract will be reviewed and approved in writing by the City's Representative, indicating that services have been rendered in conformity with the Contract, and then will be sent to the City's Finance Department for payment. All invoices shall contain a detailed breakdown of the services provided for which payment is being requested. In addition to detailed invoices, upon request of the City's representative, Consultant shall provide City with detailed periodic Status Reports on the project. All invoice payments by City shall be made after the Work has been verified and completed. Unless disputed by City as provided herein, upon City's receipt of a Proper Invoice as defined in §218.72, Florida Statutes, as amended, City shall forward Consultant payment for work performed within forty five (45) days for all goods and services provided.

City may temporarily remove for review any disputed amount, by line item, from an invoice and shall timely provide Consultant written notification of any such disputed charge. Consultant shall provide clarification and a satisfactory explanation to City, along with revised copies of all such documents if inaccuracies or errors are discovered, within ten (10) days of receipt of City's notice of the disputed amount

In the event City has a claim against Consultant for Work performed hereunder which has not been timely remedied in accordance with the provisions of this Article 3, City may withhold payment for the contested amount, in whole or in part, to protect itself from loss on account of defective Work, claims filed or reasonable evidence indicating probable filing of claims by other parties against Consultant, and/or Consultant's failure to make proper payments to subcontractors or vendors for material or labor. When the reason(s) for withholding payment are removed or resolved in a manner satisfactory to City, payment shall be made.

E. "Out-of-pocket" expenses shall be reimbursed up to an amount not to exceed amounts included in each Work Authorization. All requests for payment of "out-of-pocket" expenses eligible for reimbursement under the terms of this Contract shall include copies of paid receipts, invoices, or other documentation acceptable to the City's Representative and to the Finance Department. Such documentation shall be sufficient to establish that the expense was actually incurred and necessary in the performance of the Scope of Work described in a Work Authorization and this Contract. All out-of- pocket, reimbursables and expenses shall be billed at actual amount paid by Consultant, with no markup.

F. <u>Final Invoice</u>. In order for both parties herein to close their books and records, the Consultant will clearly state "<u>Final Invoice</u>" on the Consultant's final/last billing to the City. This final invoice shall also certify that all services provided by Consultant have been properly performed and all charges and costs have been invoiced to the City. Because this account will thereupon be closed, any and other further charges not properly included on this final invoice are waived by the Consultant.

ARTICLE 4 – TRUTH-IN-NEGOTIATION CERTIFICATE

Signature of this Contract by the Consultant shall also act as the execution of a truth in negotiation certificate, certifying that the wage rates, overhead charges, and other costs used to determine the compensation provided for this Contract are accurate, complete and current as of the date of the Contract and no higher than those charged the Consultant's most favored customer for the same or substantially similar service. Should the City determine that said rates and costs were significantly increased due to incomplete, non-current or inaccurate representation, then said rates shall be adjusted accordingly.

ARTICLE 5 – TERMINATION

City shall have the right to terminate this Contract, in whole or in part, for convenience, cause, default or negligence on Consultant's part, upon ten (10) business days advance written notice to Consultant. Such Notice of Termination may include City's proposed Transition Plan and timeline for terminating the Work, requests for certain Work product documents and materials, and other provisions regarding winding down concerns and activities.

If there is any material breach or default in Consultant's performance of any covenant or obligation hereunder which has not been remedied within ten (10) business days after City's

written Notice of Termination, City, in its sole discretion, may terminate this Contract immediately and Consultant shall not be entitled to receive further payment for services rendered from the effective date of the Notice of Termination.

In the event of termination, City shall compensate Consultant for all authorized Work satisfactorily performed through the termination date under the payment terms set forth in Article 3 above and all Work product documents and materials shall be delivered to City within ten (10) business days from the Notice of Termination. If any Work hereunder is in progress but not completed as of the date of the termination, then upon City's written approval, this Contract may be extended until said Work is completed and accepted by City.

This Contract may be cancelled by the Consultant, upon thirty (30) days prior written notice to the City's Representative, in the event of substantial failure by the City to perform in accordance with the terms of this Contract through no fault of the Consultant.

ARTICLE 6 – PERSONNEL

The Consultant is, and shall be, in the performance of all work services and activities under this Contract, an independent Contractor, and not an employee, agent or servant of the City. All persons engaged in any of the work or services performed pursuant to this Contract shall at all times, and in all places, be subject to the Consultant's sole direction, supervision, and control and shall not in any manner be deemed to be employees of the City. The Consultant shall exercise control over the means and manner in which it and its employees perform the work. This contract does not create a partnership or joint venture between the parties.

The Consultant represents that it has, or will secure at its own expense, all necessary personnel required to perform the services under this Contract. Such personnel shall not be employees of or have any contractual relationship with the City, nor shall such personnel be subject to any withholding for tax, Social Security or other purposes by the City, nor be entitled to any benefits of the City including, but not limited to, sick leave, pension benefits, vacation, medical benefits, life insurance, workers or unemployment compensation benefits, or the like from the City.

All of the services required hereunder shall be performed by the Consultant or under its supervision, and all personnel engaged in performing the services shall be fully qualified and, if required, authorized or permitted under state and local law to perform such services.

Any changes or substitutions in the Consultant's key personnel, as may be listed in Article 1, must be made known to the City's Representative at the time substitution becomes effective.

The Consultant warrants that all services shall be performed by skilled and competent personnel to the degree exercised by consultants performing the same or similar services in the same location at the time the services are provided.

ARTICLE 7 – SUBCONTRACTING

Consultant may subcontract any services or work to be provided to City with the prior written approval of the City's Representative. The City reserves the right to accept the use of a subcontractor or to reject the selection of a particular subcontractor and to inspect all facilities of any subcontractors in order to make determination as to the capability of the subcontractor to perform properly under this Contract. The City's acceptance of a subcontractor shall not be unreasonably withheld. The Consultant is encouraged to seek small business enterprises and to utilize businesses that are physically located in the City of Pompano Beach with a current Business Tax Receipt for participation in its subcontracting opportunities.

ARTICLE 8 – FEDERAL AND STATE TAX

The City is exempt from payment of Florida State Sales and Use Taxes. The City will provide the Consultant with the current state issued exemption certificate. The Consultant shall not be exempted from paying sales tax to its suppliers for materials used to fulfill contractual obligations with the City, nor is the Consultant authorized to use the City's Tax Exemption Number in securing such materials.

The Consultant shall be responsible for payment of its own and its share of its employees' payroll, payroll taxes and benefits with respect to this Contract

ARTICLE 9 – AVAILABILITY OF FUNDS

The City's performance and obligation to pay under this contract is contingent upon appropriation for various projects, tasks and other professional services by the City Commission.

ARTICLE 10 - INSURANCE REQUIREMENTS

The Consultant shall not commence work under this Contract until it has obtained all insurance required under this paragraph and such insurance has been approved by the Risk Manager of the City, nor shall the Consultant allow any Subcontractor to commence work on its sub-contract until the aforementioned approval is obtained.

CERTIFICATE OF INSURANCE, reflecting evidence of the required insurance, shall be filed with the Risk Manager prior to the commencement of the work. The Certificate shall contain a provision that coverage afforded under these policies will not be cancelled, will not expire and will not be materially modified until at least thirty (30) days prior written notice has been given to the City. Policies shall be issued by companies authorized to conduct business under the laws of the State of Florida and shall have adequate Policyholders and Financial ratings in the latest ratings of A. M. Best and be part of the **Florida Insurance Guarantee Association Act**.

Insurance shall be in force until all work required to be performed under the terms of the Contract is satisfactorily completed as evidenced by the formal acceptance by the City. In the event the Insurance Certificate provided indicates that the insurance shall terminate and lapse during the period of this Contract, the Consultant shall furnish, at least ten (10) days prior to the

expiration of the date of such insurance, a renewed Certificate of Insurance as proof that equal and like coverage for the balance of the period of the Contract and extension thereunder is in effect. The Consultant shall not continue to work pursuant to this Contract unless all required insurance remains in full force and effect.

Limits of Liability for required insurance are shown in Exhibit C.

The City of Pompano Beach must be named as an additional insured for the Automobile and Commercial General Liability Coverage.

For Professional Liability, if coverage is provided on a claims made basis, then coverage must be continued for the duration of this Contract and for not less than one (1) year thereafter, or in lieu of continuation, provide an "extended reporting clause" for one (1) year.

Consultant shall notify the City Risk Manager in writing within thirty (30) days of any claims filed or made against the Professional Liability Insurance Policy.

For Workers' Compensation Insurance, coverage shall be maintained during the life of this Contract to comply with statutory limits for all employees, and in the case of any work sublet, the Consultant shall require any Subcontractors similarly to provide Workers' Compensation Insurance for all the latter's employees unless such employees are covered by the protection afforded by the Consultant. The Consultant and his Subcontractors shall maintain during the life of this Contract Employer Liability Insurance.

ARTICLE 11 – INDEMNIFICATION

A. Consultant shall at all times indemnify, hold harmless the City, its officials, employees, volunteers and other authorized agents from and against any and all claims, demands, suit, damages, attorneys' fees, fines, losses, penalties, defense costs or liabilities suffered by the City to the extent caused by any negligent act, omission, breach, recklessness or misconduct of Consultant and/or any of its agents, officers, or employees hereunder, including any inaccuracy in or breach of any of the representations, warranties or covenants made by the Consultant, its agents, officers and/or employees, in the performance of services of this contract. To the extent considered necessary by City, any sums due Consultant hereunder may be retained by City until all of City's claims for indemnification hereunder have been settled or otherwise resolved, and any amount withheld shall not be subject to payment or interest by City.

B. Consultant acknowledges and agrees that City would not enter into this Contract without this indemnification of City by Consultant. The parties agree that one percent (1%) of the total compensation paid to Consultant hereunder shall constitute specific consideration to Consultant for the indemnification provided under this Article and these provisions shall survive expiration or early termination of this Contract.

C. Nothing in this Agreement shall constitute a waiver by the City of its sovereign immunity limits as set forth in section 768.28, Florida Statutes. Nothing herein shall be construed as consent from either party to be sued by third parties.

ARTICLE 12 – SUCCESSORS AND ASSIGNS

The City and the Consultant each binds itself and its partners, successors, executors, administrators and assigns to the other party of this Contract and to the partners, successors, executors, administrators and assigns of such other party, in respect to all covenants of this Contract. Except as above, neither the City nor the Consultant shall assign, sublet, encumber, convey or transfer its interest in this Contract without prior written consent of the other. Nothing herein shall be construed as creating any personal liability on the part of any officer or agent of the City, which may be a party hereto, nor shall it be construed as giving any rights or benefits hereunder to anyone other than the City and the Consultant.

ARTICLE 13 – REMEDIES

The laws of the State of Florida shall govern this Contract. Any and all legal action between the parties arising out of the Contract will be held in Broward County. No remedy herein conferred upon any party is intended to be exclusive of any other remedy, and each and every such remedy shall be cumulative and shall be in addition to every other remedy given hereunder or now or hereafter existing at law or in equity or by statute or otherwise. No single or partial exercise by any party of any right, power or remedy hereunder shall preclude any other or further exercise thereof.

ARTICLE 14 – CONFLICT OF INTEREST

The Consultant represents that it has no interest and shall acquire no interest, either direct or indirect, which would conflict in any manner with the performance of services required hereunder, as provided for in the Code of Ethics for Public Officers and Employees (Chapter 112, Part III, Florida Statutes). The Consultant further represents that no person having any interest shall be employed for said performance.

The Consultant shall promptly notify the City's representative, in writing, by certified mail, of a potential conflict(s) of interest for any prospective business association, interest or other circumstance, which may influence or appear to influence the Consultant's judgment or quality of services being provided hereunder. Such written notification shall identify the prospective business association, interest or circumstance, the nature of work that the Consultant may undertake and request an opinion of the City as to whether the association, interest or circumstance would, in the opinion of the City, constitute a conflict of interest if entered into by the Consultant. The City agrees to notify the Consultant. If, in the opinion of the City, the prospective business association, interest, or circumstance would not constitute a conflict of interest by the Consultant, the City shall so state in the notice and the Consultant shall at its option, enter into said association, interest or circumstance and it shall be deemed not a conflict of interest with respect to services provided to the City by the Consultant under the terms of this Contract.

ARTICLE 15 – EXCUSABLE DELAYS

The Consultant shall not be considered in default by reason of any failure in performance if such failure arises out of causes reasonably beyond the control of the Consultant or its subcontractors and without their fault or negligence. Such causes include, but are not limited to, acts of God; natural or public health emergencies; freight embargoes; and abnormally severe and unusual weather conditions.

Upon the Consultant's request, the City shall consider the facts and extent of any failure to perform the work and, if the Consultant's failure to perform was without it, or its subcontractors fault or negligence, the Contract Schedule and/or any other affected provision of this Contract shall be revised accordingly; subject to the City's rights to change, terminate, or stop any or all of the work at any time.

ARTICLE 16 – DEBT

The Consultant shall not pledge the City's credit or attempt to make it a guarantor of payment or surety for any contract, debt, obligation, judgment, lien or any form of indebtedness. The Consultant further warrants and represents that it has no obligation or indebtedness that would impair its ability to fulfill the terms of this Contract.

ARTICLE 17 – DISCLOSURE AND OWNERSHIP OF DOCUMENTS

The Consultant shall deliver to the City's representatives for approval and acceptance, and before being eligible for final payment of any amounts due, all documents and materials prepared by and for the City under this Contract.

All written and oral information not in the public domain or not previously known, and all information and data obtained, developed, or supplied by the City or at its expense will be kept confidential by the Consultant and will not be disclosed to any other party, directly or indirectly, without the City's prior written consent unless required by a lawful order. All drawings, maps, sketches, programs, data base, reports and other data developed, or purchased, under this Contract for or at the City's expense shall be and remain the City's property and may be reproduced and reused at the discretion of the City.

A. The City of Pompano Beach is a public agency subject to Chapter 119, Florida Statutes. The Consultant shall comply with Florida's Public Records Law, as amended. Specifically, the Consultant shall:

1. Keep and maintain public records required by the City in order to perform the service.

2. Upon request from the City's custodian of public records, provide the City with a copy of requested records or allow the records to be inspected or copied within a reasonable time at a cost that does not exceed the cost provided in Chapter 119, Florida Statutes or as otherwise provided by law. 3. Ensure that public records that are exempt or confidential and exempt from public records disclosure requirements are not disclosed except as authorized by law for the duration of the contract term and following completion of the contract if the Consultant does not transfer the records to the City.

4. Upon completion of the contract, transfer, at no cost to the City, all public records in possession of the Consultant, or keep and maintain public records required by the City to perform the service. If the Consultant transfers all public records to the City upon completion of the contract, the Consultant shall destroy any duplicate public records that are exempt or confidential and exempt from public records disclosure requirements. If the Consultant keeps and maintains public records upon completion of the contract, the Consultant shall meet all applicable requirements for retaining public records. All records stored electronically must be provided to the City, upon request from the City's custodian of public records in a format that is compatible with the information technology systems of the City.

B. Failure of the Consultant to provide the above described public records to the City within a reasonable time may subject Consultant to penalties under 119.10, Florida Statutes, as amended.

PUBLIC RECORDS CUSTODIAN

IF THE CONSULTANT HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO THE CONSULTANT'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS CONTRACT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT:

CITY CLERK 100 W. Atlantic Blvd., Suite 253 Pompano Beach, Florida 33060 (954) 786-4611 <u>RecordsCustodian@copbfl.com</u>

All covenants, agreements, representations and warranties made herein, or otherwise made in writing by any party pursuant hereto, including but not limited to any representations made herein relating to disclosure or ownership of documents, shall survive the execution and delivery of this Contract and the consummation of the transactions contemplated thereby.

ARTICLE 18 – CONTINGENT FEES

The Consultant warrants that it has not employed or retained any company or person, other than a bona fide employee working solely for the Consultant to solicit or secure this Contract and that it has not paid or agreed to pay any person, company, corporation, individual, or firm, other than a bona fide employee working solely for the Consultant, any fee, commission, percentage, gift, or any other consideration contingent upon or resulting from the award or making of this Contract. Violation of this Article shall constitute a forfeiture of this Contract by Consultant.

ARTICLE 19 – ACCESS AND AUDITS

The Consultant shall maintain adequate records to justify all charges, expenses, and cost incurred in estimating and performing the work for at least three (3) years after completion of this Contract. The City shall have access to such books, records and documents as required in this section for the purpose of inspection or audit during normal business hours, at the Consultant's place of business.

ARTICLE 20 – NONDISCRIMINATION

The Consultant warrants and represents that all of its employees are treated equally during employment without regard to race, color, religion, disability, sex, age, national origin, ancestry, marital status and sexual orientation.

ARTICLE 21 – INTERPRETATION

The language of this Contract has been agreed to by both parties to express their mutual intent and no rule of strict construction shall be applied to either party hereto. The headings are for reference purposes only and shall not affect in any way the meaning or interpretation of this Contract. All personal pronouns used in this Contract shall include the other gender, and the singular, the plural, and vice versa, unless the context otherwise requires.

ARTICLE 22 – AUTHORITY TO PRACTICE

The Consultant hereby represents and warrants that it has and will continue to maintain all licenses and approvals required conducting its business, and that it will at all times conduct its business activities in a reputable manner. Proof of such licenses and approvals shall be submitted to the City's representative upon request.

ARTICLE 23 – SEVERABILITY

If any term or provision of this Contract, or the application thereof to any person or circumstances shall, to any extent be held invalid or unenforceable, to remainder of this Contract, or the application of such terms or provision, to persons or circumstances other than those as to which it is held invalid or unenforceable, shall not be affected, and every other term and provision of this Contract shall be deemed valid and enforceable to the extent permitted by law.

ARTICLE 24 – ENTIRETY OF CONTRACTUAL AGREEMENT

The City and the Consultant agree that this Contract, together with the Exhibits hereto, sets forth the entire agreement between the parties, and that there are no promises or understandings other than those stated herein. It is further agreed that no modification, amendment or alteration in the terms or conditions contained herein shall be effective unless contained in a written document executed with the same formality and off equal dignity herewith. None of the provisions, terms and conditions contained in this Contract may be added to, modified, superseded or otherwise altered, except by written instrument executed by the parties hereto in accordance with Article 25 – Modification of Work. In the event of any conflict or inconsistency between this Contract and the provisions in the incorporated Exhibits, the terms of this Contract shall supersede and prevail over the terms in the Exhibits.

ARTICLE 25 – MODIFICATION OF SCOPE OF WORK

The City reserves the right to make changes in the Scope of Work, including alterations, reductions therein or additions thereto. Upon receipt by the Consultant of the City's notification of a contemplated change, the Consultant shall, in writing: (1) provide a detailed estimate for the increase or decrease in cost due to the contemplated change; (2) notify the City of any estimated change in the completion date; and (3) advise the City if the contemplated change shall affect the Consultant's ability to meet the completion dates or schedules of this Contract.

If the City so instructs in writing, the Consultant shall suspend work on that portion of the Scope of Work affected by a contemplated change, pending the City's decision to proceed with the change.

If the City elects to make the change, the City shall initiate a Work Authorization Amendment and the Consultant shall not commence work on any such change until such written amendment is signed by the Consultant and the City Manager, and if such amendment is in excess of \$75,000, it must also first be approved by the City Commission and signed by the appropriate City Official authorized by the City Commission

The City shall not be liable for payment of any additional or modified work, which is not authorized in the manner provided for by this Article.

ARTICLE 26 – NOTICE

All notices required in this Contract shall be sent by certified mail, return receipt requested, to the following:

FOR CITY:

City Manager City of Pompano Beach Post Office Drawer 1300 Pompano Beach, Florida 33061

FOR CONSULTANT:

Charles W. Drake, P.G., CPG Tetra Tech, Inc. 201 E. Pine St., Suite 1000 Orlando, FL 32801

ARTICLE 27 – OWNERSHIP OF DOCUMENTS

All finished or unfinished documents, data, reports, studies, surveys, drawings, maps, models and photographs prepared or provided by the Consultant in connection with this Contract shall become property of the City, whether the project for which they are made is completed or not, and shall be delivered by Consultant to City within ten (10) days of notice of termination. If applicable, City may withhold any payments then due to Consultant until Consultant complies with the provisions of this section.

ARTICLE 28 – PROMOTING PROJECT OBJECTIVES

Consultant, its employees, subcontractors, and agents shall refrain from acting adverse to the City's interest in promoting the goals and objectives of the projects. Consultant shall take all reasonable measures necessary to effectuate these assurances. In the event Consultant determines it is unable to meet or promote the goals and objectives of the projects, it shall immediately notify the City and the City, may then in its discretion, terminate this Contract.

ARTICLE 29 – PUBLIC ENTITY CRIMES ACT

As of the full execution of this Contract, Consultant certifies that in accordance with §287.133, Florida Statutes, it is not on the Convicted Vendors List maintained by the State of Florida, Department of General Services. If Consultant is subsequently listed on the Convicted Vendors List during the term of this Contract, Consultant agrees it shall immediately provide City written notice of such designation in accordance with Article 26 above.

ARTICLE 30 – GOVERNING LAW

This Contract must be interpreted and construed in accordance with and governed by the laws of the State of Florida. The exclusive venue for any lawsuit arising from, related to, or in connection with this Agreement will be in the state courts of the Seventeenth Judicial Circuit in and for Broward County, Florida. If any claim arising from, related to, or in connection with this Agreement must be litigated in federal court, the exclusive venue for any such lawsuit will be in the United States District Court or United States Bankruptcy Court for the Southern District of Florida. BY ENTERING INTO THIS AGREEMENT, THE PARTIES HEREBY EXPRESSLY WAIVE ANY RIGHTS EITHER PARTY MAY HAVE TO A TRIAL BY JURY OF ANY CIVIL LITIGATION RELATED TO THIS AGREEMENT.

ARTICLE 31 - BINDING EFFECT

The benefits and obligations imposed pursuant to this Contract shall be binding and enforceable by and against the parties hereto.

THE REMAINDER OF THE PAGE IS INTENTIONALLY LEFT BLANK

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed the day and year hereinabove written.

Attest:	CITY OF POMPANO BEACH	
ASCELETA HAMMOND, CITY CLERK	By: REX HARDIN, MAYOR	
(SEAL)	By: GREGORY P. HARRISON, CITY MANAGER	

APPROVED AS TO FORM:

MARK E. BERMAN, CITY ATTORNEY

"CONSULTANT"

Tetra Tech, Inc.

Witnesses:

Signature

BURL REARDON

Name Typed, Printed or Stamped

By: Lawrence E. Jenkins, Vice-President

ALZARETTA IM Name Type, Printed or Stamped

STATE OF FLORIDA COUNTY OF ORANGE

The foregoing instrument was acknowledged before me, by means of \checkmark physical presence or \Box online notarization, this <u>12</u>^m day of <u>Januare</u>, 2021, by Lawrence E. Jenkins, as Vice-President of Tetra Tech, Inc., a Delaware corporation, authorized to do business in Florida, on behalf of the corporation. He is personally known to me or who has produced (type of identification) as identification.

NOTARY'S SEAL:



NOTARY PUBLIC, STATE OF FLORIDA

<u>JENNY</u> MCClaun (Name of Acknowledger Typed, Printed or Stamped)

#HH 006 255

Commission Number



June 30, 2020

CITY OF POMPANO BEACH, FLORIDA

REQUEST FOR LETTERS OF INTEREST E-20-20

CONTINUING CONTRACT FOR CIVIL ENGINEERING SERVICES FOR VARIOUS CITY PROJECTS

Pursuant to Florida Statutes Chapter 287.055 "Consultants' Competitive Negotiation Act" the City of Pompano Beach and the Pompano Beach Community Redevelopment Association (CRA) invite professional firms to submit qualifications and experience for consideration to provide construction engineering inspection (CEI) services to the City and the CRA on a continuing as-needed basis.

The City will receive sealed proposals until <u>2:00 p.m. (local), July 30, 2020.</u> Proposals must be submitted electronically through the eBid System on or before the due date/time stated above. Any proposal received after the due date and time specified, will not be considered. Any uncertainty regarding the time a proposal is received will be resolved against the Proposer.

Proposer must be registered on the City's eBid System in order to view the solicitation documents and respond to this solicitation. The complete solicitation document can be downloaded for free from the eBid System as a pdf at: <u>https://pompanobeachfl.ionwave.net</u>. The City is not responsible for the accuracy or completeness of any documentation the Proposer receives from any source other than from the eBid System. Proposer is solely responsible for downloading all required documents. A list of proposers will be read aloud in a public forum.

Introduction

The City of Pompano Beach is seeking qualified civil engineering firms to work on various projects for City and the CRA. The projects range in magnitude from small-scale to large or specialized designs.

The types of projects to be undertaken may include, but are not limited to:

- The City's approved Capital Improvement Plan (CIP) maybe found here: <u>Adopted</u>
 <u>Capital Improvement Plan FY 2020-2024</u>
- Roadway, Streetscape or Parking Lot projects.
- Water or Reuse Main projects.
- Gravity Sewer Main projects.
- Force Main projects.
- Lift station/pump station rehabilitation projects.
- Parks and Recreational Facilities.
- Seawall and dock construction and repair.
- Storm Water/Drainage Improvement projects
- Consultation for Emergency Water/Wastewater/Stormwater Repairs.
- Inspection Services for Emergency Water/Wastewater/Stormwater Repairs.
- Canal and lake dredging.

- Grant reimbursement, FAA and FDOT support and compliance.
- SRF support and Davis Bacon Wage Reporting requirements
- Support Services for Remediation
- Demolition Projects

A. <u>Scope of Services</u>

The City intends to issue multiple contracts to civil engineering firms to provide continuing professional services to the City and the CRA for various projects as-needed. Professional services under this contract will be restricted to those required for any project for which construction costs will not exceed \$4 million, and for any study activity for which fees will not exceed \$500,000.00.

The scope of services may include, but is not limited to, the following:

- Prepare preliminary design reports and/or design alternative recommendations. This may include various types of utility modeling, surveying, and field data analysis.
- Prepare all required bidding/construction documents for projects. This may include the preparation of surveys, design plans and construction documents, technical specifications, and cost estimates. Attendance at required pre-design, design, bidding and bid award meeting may also be required.
- Attend pre-bid conference, prepare possible bid addenda for contract document revisions. Assist in making bid award recommendations for contracting/construction services.
- Prepare all required permit applications and submittal packages as required for permit issuance of all agency permits (i.e. Federal, State, County and City).
- Provide construction engineering/management/administration services for projects. Services during construction may include shop drawing/contractor submittal reviews and approvals, inspection and approval of project improvements, certification of projects for various permitting entities, possible field revisions, and review and approval of contractor pay applications.
- Provide project close-out services. This may include preliminary and final acceptance of projects, preparation and approval of punch list items and project certification as required to all permitting agencies.

Firms must have previous municipal experience and must be licensed to practice **Civil Engineering services** in the State of Florida, Florida State Statute 481, by the Board of Professional Regulation.

B. <u>Task/Deliverables</u>

Tasks and deliverables will be determined per project. Each project shall require a signed Work Authorization (WA) form from the awarded firm to be provided to the City or the CRA. Forms shall be completed in its entirety and include the agreed upon scope, tasks, schedule, cost, and deliverables for the project Consultant will be required to provide all applicable insurance requirements.

C. <u>Term of Contract</u>

The Term of this Contract shall be for an initial period of five (5) years from the date of execution by both the City and the Consultant.

D. <u>Project Web Requirements</u>:

1. This project will utilize e-Builder Enterprise[™], a web-based project management tool. This web-based application is a collaboration tool, which will allow all project team members continuous access through the Internet to important project data as well as up to the minute decision and approval status information.

e-Builder Enterprise[™] is a comprehensive Project and Program Management system that the City will use to manage all project documents, communications and costs between the Lead Consultant, Sub-Consultants, Design Consultants, Contractor and Owner. e-Builder Enterprise[™] includes extensive reporting capabilities to facilitate detailed project reporting in a web-based environment that is accessible to all parties and easy to use. Training will be provided for all consultants selected to provide services for the City of Pompano Beach.

 Lead and Sub-Consultants shall conduct project controls outlined by the Owner, Project Manager, and/or Construction Manager, utilizing e-Builder Enterprise[™]. <u>The designated</u> <u>web-based application license(s) shall be provided by the City to the Prime</u> <u>Consultant and Sub-Consultants.</u> No additional software will be required.

Lead Consultant and Sub-Consultants shall have the responsibility for logging in to the project web site on a daily basis, and as necessary to be kept fully apprised of project developments and required action items. , These may include but are not limited to: Contracts, Contract Exhibits, Contract Amendments, Drawing Issuances, Addenda, Bulletins, Permits, Insurance & Bonds, Safety Program Procedures, Safety Notices, Accident Reports, Personnel Injury Reports, Schedules, Site Logistics, Progress Reports, Correspondence, Daily Logs, Non-Conformance Notices, Quality Control Notices, Punch Lists, Meeting Minutes, Requests for Information, Submittal Packages, Substitution Requests, Monthly Payment Request Applications, Supplemental Instructions, Owner Change Directives, Potential Change Orders, Change Order Requests, Change Orders and the like. All supporting data including but not limited to shop drawings, product data sheets, manufacturer data sheets and instructions, method statements, safety SDS sheets, Substitution Requests and the like will be submitted in digital format via e-Builder Enterprise[™].

E. Local Business Program

On March 13, 2018, the City Commission approved Ordinance 2018-46, establishing a Local Business Program, a policy to increase the participation of City of Pompano Beach businesses in the City's procurement process.

For purposes of this solicitation, "Local Business" will be defined as follows:

 TIER 1 LOCAL VENDOR. POMPANO BEACH BUSINESS EMPLOYING POMPANO BEACH RESIDENTS. A business entity which has maintained a permanent place of business within the city limits and maintains a staffing level, within this local office, of at least ten percent who are residents of the City of Pompano Beach or includes subcontracting commitments to Local Vendors Subcontractors for at least ten percent of the contract value. The permanent place of business may not be a post office box. The business must be located in a non-residential zone, and must actually distribute goods or services from that location. The business must be staffed with full-time employees within the limits of the city. In addition, the business must have a current business tax receipt from the City of Pompano Beach for a minimum of one year prior to the date of issuance of a bid or proposal solicitation.

- 2. TIER 2 LOCAL VENDOR. BROWARD COUNTY BUSINESS EMPLOYING POMPANO BEACH RESIDENTS OR UTILIZING LOCAL VENDOR SUBCONTRACTORS. A business entity which has maintained a permanent place of business within Broward County and maintains a staffing level, within this local office, of at least 15% who are residents of the City of Pompano Beach or includes subcontracting commitments to Local Vendors Subcontractors for at least 20% of the contract value. The permanent place of business may not be a post office box. The business must be located in a non-residential zone, and must actually distribute goods or services from that location. The business must be staffed with full-time employees within the limits of the city. In addition, the business must have a current business tax receipt from the respective Broward County municipality for a minimum of one year prior to the date of issuance of a bid or proposal solicitation.
- 3. LOCAL VENDOR SUBCONTRACTOR. POMPANO BEACH BUSINESS. A business entity which has maintained a permanent place of business within the city limits of the City of Pompano Beach. The permanent place of business may not be a post office box. The business must be located in a non-residential zone, and must actually distribute goods or services from that location. The business must be staffed with fulltime employees within the limits of the city. In addition, the business must have a current business tax receipt from the City of Pompano Beach for a minimum of one year prior to the date of issuance of a bid or proposal solicitation.

You can view the list of City businesses that have a current Business Tax Receipt on the City's website, and locate local firms that are available to perform the work required by the bid specifications. The business information, sorted by business use classification, is posted on the webpage for the Business Tax Receipt Division: <u>www.pompanobeachfl.gov</u> by selecting the Pompano Beach Business Directory in the Shop Pompano! section.

The City of Pompano Beach is **strongly committed** to insuring the participation of City of Pompano Beach Businesses as contractors and subcontractors for the procurement of goods and services, including labor, materials and equipment. Proposers are required to participate in the City of Pompano Beach's Local Business Program by including, as part of their package, the Local Business Participation Form (Exhibit A,) listing the local businesses that will be used on the contract, and the Letter of Intent Form (Exhibit B) from each local business that will participate in the contract.

Please note that, while no goals have been established for this solicitation, the City encourages Local Business participation in *all* of its procurements.

If a Prime Contractor/Vendor is not able to achieve the level of goal attainment of the contract, the Prime Vendor will be requested to demonstrate and document that good faith efforts were made to achieve the goal by providing the Local Business Unavailability Form (Exhibit C), listing firms that were contacted but not available, and the Good Faith Effort Report (Exhibit D), describing the efforts made to include local business participation in the contract. This documentation shall be provided to the City Commission for acceptance.

The awarded proposer will be required to submit "Local Business Subcontractor Utilization Reports" during projects and after projects have been completed. The reports will be submitted to the assigned City project manager of the project. The Local Business Subcontractor Utilization Report template and instructions have been included in the bid document.

Failure to meet Local Vendor Goal commitments will result in "unsatisfactory" compliance rating. Unsatisfactory ratings may impact award of future projects if a sanction is imposed by the City Commission.

The city shall award a Local Vendor preference based upon vendors, contractors, or subcontractors who are local with a preferences follows:

- 1. For evaluation purposes, the Tier 1 and Tier 2 businesses shall be a criterion for award in this Solicitation. No business may qualify for more than one tier level.
- 2. For evaluation purposes, local vendors shall receive the following preferences:

a. Tier 1 business as defined by this subsection shall be granted a preference in the amount of five percent of total score.

b. Tier 2 business as defined by this subsection shall be granted a preference in the amount of two and one-half percent of total score.

3. It is the responsibility of the awarded vendor/contractor to comply with all Tier 1 and Tier 2 guidelines. The awarded vendor/contractor must ensure that all requirements are met before execution of a contract.

F. <u>Required Proposal Submittal</u>

Sealed proposals shall be submitted electronically through the eBid System on or before the due date/time stated above. Proposer shall upload response as one (1) file to the eBid System. The file size for uploads is limited to 250 MB. If the file size exceeds 10 MB the response must be split and uploaded as two (2) separate files.

Information to be included in the proposal: In order to maintain comparability and expedite the review process, it is required that proposals be organized in the manner specified below, with the sections clearly labeled:

Title page:

Show the project name and number, the name of the Proposer's firm, address, telephone number, name of contact person and the date.

Table of Contents:

Include a clear identification of the material by section and by page.

Letter of Transmittal:

Briefly state the Proposer's understanding of the project and express a positive commitment to provide the services described herein. State the name(s) of the person(s) who will be authorized to make representations for the Proposer, their title(s), office and E-mail addresses and telephone numbers. Please limit this section to two pages.

Technical Approach:

Firms or teams shall submit their technical approach to the tasks described in the scope, including details of how each phase of the project would be completed, and how their firm proposes to maintain time schedules and cost controls.

Schedule:

Proposer shall provide a timeline that highlights proposed tasks that will meet all applicable deadlines.

References:

References for past projects in the tri-county area (Broward, Palm Beach, and Miami-Dade.) Describe the scope of each project in physical terms and by cost, describe the respondent's responsibilities, and provide the contact information (name, email, telephone number) of an individual in a position of responsibility who can attest to respondent's activities in relation to the project.

List any prior projects performed for the City of Pompano Beach.

Project Team Form:

Submit a completed "Project Team" form. The purpose of this form is to identify the key members of your team, including any specialty subconsultants.

Organizational Chart:

Specifically identify the management plan (if needed) and provide an organizational chart for the team. The proposer must describe at a minimum, the basic approach to these projects, to include reporting hierarchy of staff and sub-consultants, clarify the individual(s) responsible for the co-ordination of separate components of the scope of services.

Statement of Skills and Experience of Project Team:

Describe the experience of the entire project team as it relates to the types of projects described in the Scope section of this solicitation. Include the experience of the prime consultants as well as other members of the project team; i.e., additional personnel, subconsultants, branch office, team members, and other resources anticipated to be utilized for this project. Name specific projects (successfully completed within the past five years) where the team members have performed similar projects previously.

Resumes of Key Personnel

Include resumes for key personnel for prime and subconsultants.

Office Locations:

Identify the location of the office from which services will be rendered, and the number of professional and administrative staff at the prime office location. Also identify the location

of office(s) of the prime and/or sub consultants that may be utilized to support any or all of the professional services listed above and the number of professional and administrative staff at the prime office location.

If firms are situated outside the local area, (Broward, Palm Beach, and Miami-Dade counties) include a brief statement as to whether or not the firm will arrange for a local office during the term of the contract, if necessary.

Local Businesses:

Completed Local Business program forms, Exhibits A-D. NOTE: Form B must be signed by a representative of the subcontractor, NOT of the Prime.

Litigation:

Disclose any litigation within the past five (5) years arising out your firm's performance, including status/outcome.

City Forms:

The Proposer Information Page Form and any other required forms <u>must</u> be completed and submitted electronically through the City's eBid System. The City reserves the right to request additional information to ensure the proposer is financially solvent and has sufficient financial resources to perform the contract and shall provide proof thereof of its financial solvency. The City may as at its sole discretion ask for additional proof of financial solvency, including additional documents post proposal opening, and prior to evaluation that demonstrates the Proposer's ability to perform the resulting contract and provide the required materials and/or services.

Reviewed and Audited Financial Statements:

Proposers shall be financially solvent and appropriately capitalized to be able to service the City for the duration of the contract. Proposers shall provide a complete financial statement of the firm's most recent audited financial statements, indicating organization's financial condition. Must be uploaded to the Response Attachments tab in the eBid System as a separate file titled "Financial Statements" and marked "CONFIDENTIAL."

Financial statements provided shall not be older than twelve 12) months prior to the date of filing this solicitation response. The financial statements are to be reviewed and submitted with any accompanying notes and supplemental information. The City of Pompano Beach reserve the right to reject financial statements in which the financial condition shown is of a date twelve (12) months or more prior to the date of submittals.

The City is a public agency subject to Chapter 119, Florida's Public Records Law and is required to provide the public with access to public records, however, financial statements that are required as submittals to prequalify for a solicitation will be exempt from public disclosure.

The City reserves the right to request additional information to ensure the proposer is financially solvent and has sufficient financial resources to perform the contract and shall provide proof thereof of its financial solvency. The City may as at its sole discretion ask for additional proof of financial solvency, including additional documents post proposal opening, and prior to evaluation that demonstrates the Proposer's ability to perform the resulting contract and provide the required materials and/or services.

A combination of two (2) or more of the following may substitute for audited financial statements:

- 1) Bank letters/statements for the past 3 months
- 2) Balance sheet, profit and loss statement, cash flow report
- 3) IRS returns for the last 2 years
- 4) Letter from CPA showing profits and loss statements (certified)

G. Insurance

CONTRACTOR shall not commence services under the terms of this Agreement until certification or proof of insurance detailing terms and provisions has been received and approved in writing by the CITY's Risk Manager. If you are responding to a bid and have questions regarding the insurance requirements hereunder, please contact the CITY's Purchasing Department at (954) 786-4098. If the contract has already been awarded, please direct any queries and proof of the requisite insurance coverage to CITY staff responsible for oversight of the subject project/contract.

CONTRACTOR is responsible to deliver to the CITY for timely review and written approval/disapproval Certificates of Insurance which evidence that all insurance required hereunder is in full force and effect and which name on a primary basis, the CITY as an additional insured on all such coverage.

Throughout the term of this Agreement, CITY, by and through its Risk Manager, reserve the right to review, modify, reject or accept any insurance policies required by this Agreement, including limits, coverages or endorsements. CITY reserves the right, but not the obligation, to review and reject any insurer providing coverage because of poor financial condition or failure to operate legally.

Failure to maintain the required insurance shall be considered an event of default. The requirements herein, as well as CITY's review or acceptance of insurance maintained by CONTRACTOR, are not intended to and shall not in any way limit or qualify the liabilities and obligations assumed by CONTRACTOR under this Agreement.

Throughout the term of this Agreement, CONTRACTOR and <u>all subcontractors or other</u> <u>agents hereunder</u>, shall, at their sole expense, maintain in full force and effect, the following insurance coverages and limits described herein, including endorsements.

1. Worker's Compensation Insurance covering all employees and providing benefits as required by Florida Statute, Chapter 440. CONTRACTOR further agrees to be responsible for employment, control and conduct of its employees and for any injury sustained by such employees in the course of their employment.

2. Liability Insurance.

(a) Naming the City of Pompano Beach as an additional insured as CITY's interests may appear, on General Liability Insurance only, relative to claims which arise from CONTRACTOR's negligent acts or omissions in connection with Contractor's performance under this Agreement.

(b) Such Liability insurance shall include the following <u>checked types of</u> <u>insurance</u> and indicated minimum policy limits.

Туре	e of Insurance	Limits of Liability
GENERAL LIABILITY:		Minimum \$1,000,000 Per Occurrence and \$2,000,000 Per Aggregate
* Po	licy to be written on a claims inc	curred basis
XX	comprehensive form	bodily injury and property damage
XX	premises - operations explosion & collapse	bodily injury and property damage
	hazard underground hazard	
XX	products/completed operations hazard	bodily injury and property damage combined
XX	contractual insurance	bodily injury and property damage combined
XX	broad form property damage	bodily injury and property damage combined
XX XX	independent contractors personal injury	personal injury
	sexual abuse/molestation	Minimum \$1,000,000 Per Occurrence and Aggregate
	liquor legal liability	Minimum \$1,000,000 Per Occurrence and Aggregate
AUT	OMOBILE LIABILITY:	Minimum \$1,000,000 Per Occurrence and Aggregate. Bodily injury (each person) bodily injury (each accident), Property damage, bodily injury and property damage combined.
XX	comprehensive form	
XX	owned	
	nirea	
~~		

REAL & PERSONAL PROPERTY

	comprehensive form	Agent must show p	roof they have th	nis coverage.	
EXCESS LIABILITY			Per Occurrence Aggregate		
	other than umbrella	bodily injury and property damage combined	\$1,000,000	\$1,000,000	
PRC	FESSIONAL LIABILITY		Per Occurrence	e Aggregate	
ХХ	* Policy to be written on a clair	ns made basis	\$1,000,000	\$1,000,000	
	(a) If Drofossion		ia reguired C	contractor correct the	

(c) If Professional Liability insurance is required, Contractor agrees the indemnification and hold harmless provisions set forth in the Agreement shall survive the

termination or expiration of the Agreement for a period of four (4) years unless terminated sooner by the applicable statute of limitations.

CYBER LIABILITY	Per Occurrence Aggregate		
* Policy to be written on a claims made basis	\$1,000,000	\$1,000,000	

- ____ Network Security / Privacy Liability
- Breach Response / Notification Sublimit (minimum limit of 50% of policy aggregate)
- Technology Products E&O \$1,000,000 (only applicable for vendors supplying technology related services and or products)
- Coverage shall be maintained in effect during the period of the Agreement and for not less than four (4) years after termination/ completion of the Agreement.

3. <u>Employer's Liability</u>. If required by law, CONTRACTOR and all subcontractors shall, for the benefit of their employees, provide, carry, maintain and pay for Employer's Liability Insurance in the minimum amount of One Hundred Thousand Dollars (\$100,000.00) per employee, Five Hundred Thousand Dollars (\$500,000) per aggregate.

4. <u>Policies</u>: Whenever, under the provisions of this Agreement, insurance is required of the CONTRACTOR, the CONTRACTOR shall promptly provide the following:

- (a) Certificates of Insurance evidencing the required coverage;
- (b) Names and addresses of companies providing coverage;
- (c) Effective and expiration dates of policies; and

(d) A provision in all policies affording CITY thirty (30) days written notice by a carrier of any cancellation or material change in any policy.

5. <u>Insurance Cancellation or Modification</u>. Should any of the required insurance policies be canceled before the expiration date, or modified or substantially modified, the issuing company shall provide thirty (30) days written notice to the CITY.

6. <u>Waiver of Subrogation</u>. CONTRACTOR hereby waives any and all right of subrogation against the CITY, its officers, employees and agents for each required policy. When required by the insurer, or should a policy condition not permit an insured to enter into a pre-loss agreement to waive subrogation without an endorsement, then CONTRACTOR shall notify the insurer and request the policy be endorsed with a Waiver of Transfer of Rights of Recovery Against Others, or its equivalent. This Waiver of Subrogation requirement shall not apply to any policy which includes a condition to the policy not specifically prohibiting such an endorsement, or voids coverage should CONTRACTOR enter into such an agreement on a pre-loss basis.

H. <u>Selection/Evaluation Process</u>

A Selection/Evaluation Committee will be appointed to select the most qualified firm(s). The Selection/Evaluation Committee will present their findings to the City Commission.

Proposals will be evaluated using the following criteria.

Line 1	Criteria Prior experience of the firm with projects of similar size and complexity: a. Number of similar projects b. Complexity of similar projects c. References from past projects performed by the firm d. Previous projects performed for the City (provide description) e. Litigation within the past 5 years arising out of firm's performance (list, describe outcome)	Point Range 0-15
2	 Qualifications of personnel including sub consultants: a. Organizational chart for project b. Number of technical staff c. Qualifications of technical staff: (1) Number of licensed staff (2) Education of staff (3) Experience of staff on similar projects 	0-15
3	Proximity of the nearest office to the project location: a. Location b. Number of staff at the nearest office	0-15
4	Current and Projected Workload	0-15
	Rating is to reflect the workload (both current and projected) of the firm, staff assigned, and the percentage availability of the staff member assigned. Respondents which fail to note both existing and projected workload conditions and percentage of availability of staff assigned shall receive zero (0) points	
5	Demonstrated Prior Ability to Complete Project on Time	0-15
	Respondents will be evaluated on information provided regarding the firm's experience in the successful completion and steadfast conformance to similar project schedules. Provide an example of successful approaches utilized to achieve a timely project completion. Respondents who demonstrate the ability to complete projects on time shall receive more points.	
6	Demonstrated Prior Ability to Complete Project on Budget	0-15

Proposers will be evaluated on their ability to adhere to initial design budgets. Examples provided should show a comparison between initial negotiated task costs and final completion costs. Respondents should explain in detail any budgetary overruns due to scope modifications. Respondents which fail to provide schedule and budget information as requested will receive zero (0) points.

Is the firm a certified minority business enterprise as defined by the Florida Small and Minority Business Assistance Act of 1985? (Certification of any sub-contractors should also be included with the response.)

Additional 0-5% for Tier1/Tier2 Local Business will be calculated on combined scoring totals of each company.

NOTE:

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Financial statements that are required as submittals to prequalify for a solicitation will be exempt from public disclosure; however, financial statements submitted to prequalify for a solicitation, and are <u>not</u> required by the City, may be subject to public disclosure.

<u>Value of Work Previously Awarded to Firm (Tie-breaker)</u> - In the event of a tie, the firm with the lowest value of work as a prime contractor on City of Pompano Beach projects within the last five years will receive the higher ranking, the firm with the next lowest value of work shall receive the next highest ranking, and so on. The analysis of past work will be based on the City's Purchase Order and payment records.

The Committee has the option to use the above criteria for the initial ranking to short-list Proposers and to use an ordinal ranking system to score short-listed Proposers following presentations (if deemed necessary) with a score of "1" assigned to the short-listed Proposer deemed most qualified by the Committee.

Each firm should submit documentation that evidences the firm's capability to provide the services required for the Committee's review for short listing purposes. After an initial review of the Proposals, the City may invite Proposers for an interview to discuss the proposal and meet firm representatives, particularly key personnel who would be assigned to the project. Should interviews be deemed necessary, it is understood that the City shall incur no costs as a result of this interview, nor bear any obligation in further consideration of the submittal.

When more than three responses are received, the committee shall furnish the City Commission (for their approval) a listing, in ranked order, of no fewer than three firms deemed to be the most highly qualified to perform the service. If three or less firms respond to the Solicitation, the list will contain the ranking of all responses.

The City Commission has the authority to (including, but not limited to); approve the recommendation; reject the recommendation and direct staff to re-advertise the solicitation; or, review the responses themselves and/or request oral presentations and determine a ranking order that may be the same or different from what was originally presented to the City Commission.

<u>Value of Work Previously Awarded to Firm (Tie-breaker)</u> - In the event of a tie, the firm with the lowest value of work as a prime contractor on City of Pompano Beach projects within the last five years will receive the higher ranking, the firm with the next lowest value of work shall receive the next highest ranking, and so on. The analysis of past work will be based on the City's Purchase Order and payment records.

I. Hold Harmless and Indemnification

Proposer covenants and agrees that it will indemnify and hold harmless the City and all of its officers, agents, and employees from any claim, loss, damage, cost, charge or expense arising out of any act, action, neglect or omission by the Proposer, whether direct or indirect, or whether to any person or property to which the City or said parties may be subject, except that neither the Proposer nor any of its subcontractors will be liable under this section for damages arising out of injury or damage to persons or property directly caused by or resulting from the sole negligence of the City or any of its officers, agents or employees.

J. <u>Right to Audit</u>

Contractor's records which shall include but not be limited to accounting records, written policies and procedures, computer records, disks and software, videos, photographs, subcontract files (including proposals of successful and unsuccessful bidders), originals estimates, estimating worksheets, correspondence, change order files (including documentation covering negotiated settlements), and any other supporting evidence necessary to substantiate charges related to this contract (all the foregoing hereinafter referred to as "records") shall be open to inspection and subject to audit and/or reproduction, during normal working hours, by Owner's agent or its authorized representative to the extent necessary to adequately permit evaluation and verification of any invoices, payments or claims submitted by the contractor or any of his payees pursuant to the execution of the contract. Such records subject to examination shall also include, but not be limited to, those records necessary to evaluate and verify direct and indirect costs (including overhead allocations) as they may apply to costs associated with this contract.

For the purpose of such audits, inspections, examinations and evaluations, the Owner's agent or authorized representative shall have access to said records from the effective date of this contract, for the duration of the Work, and until 5 years after the date of final payment by Owner to Consultant pursuant to this contract.

Owner's agent or its authorized representative shall have access to the Contractor's facilities, shall have access to all necessary records, and shall be provided adequate and appropriate work space, in order to conduct audits in compliance with this article. Owner's agent or its authorized representative shall give auditees reasonable advance notice of intended audits.

Contractor shall require all subcontractors, insurance agents, and material suppliers (payees) to comply with the provisions of this article by insertion of the requirements hereof in any written contract agreement. Failure to obtain such written contracts which include such provisions shall be reason to exclude some or all of the related payees' costs from amounts payable to the Contractor pursuant to this contract.

K. <u>Retention of Records and Right to Access</u>

The City of Pompano Beach is a public agency subject to Chapter 119, Florida Statutes. The Contractor shall comply with Florida's Public Records Law, as amended. Specifically, the Contractor shall:

1. Keep and maintain public records required by the City in order to perform the service;

2. Upon request from the City's custodian of public records, provide the City with a copy of requested records or allow the records to be inspected or copied within a reasonable time at a cost that does not exceed the cost provided in Chapter 119, Florida Statutes or as otherwise provided by law;

3. Ensure that public records that are exempt or that are confidential and exempt from public record requirements are not disclosed except as authorized by law;

4. Ensure that public records that are exempt or confidential and exempt from public records disclosure requirements are not disclosed except as authorized by law for the duration of the contract term and following completion of the contract if the Contractor does not transfer the records to the City; and

5. Upon completion of the contract, transfer, at no cost to the City, all public records in possession of the Contractor, or keep and maintain public records required by the City to perform the service. If the Contractor transfers all public records to the City upon completion of the contract, the Contractor shall destroy any duplicate public records that are exempt or confidential and exempt from public records disclosure requirements. If the Contractor shall meet all applicable requirements for retaining public records. All records stored electronically must be provided to the City, upon request from the City's custodian of public records in a format that is compatible with the information technology systems of the City.

L. <u>Communications</u>

No negotiations, decisions, or actions shall be initiated or executed by the firm as a result of any discussions with any City employee. Only those communications, which are in writing from the City, may be considered as a duly authorized expression on behalf of the City. In addition, only communications from firms that are signed and in writing will be recognized by the City as duly authorized expressions on behalf of firms.

M. <u>No Discrimination</u>

There shall be no discrimination as to race, sex, color, age, religion, or national origin in the operations conducted under any contract with the City.

N. Independent Contractor

The selected firm will conduct business as an independent contractor under the terms of this contract. Personnel services provided by the firm shall be by employees of the firm and subject to supervision by the firm, and not as officers, employees, or agents of the City. Personnel policies, tax responsibilities, social security and health insurance,

employee benefits, purchasing policies and other similar administrative procedures applicable to services rendered under this agreement shall be those of the firm.

O. <u>Staff Assignment</u>

The City of Pompano Beach reserves the right to approve or reject, for any reasons, Proposer's staff assigned to this project at any time. Background checks may be required.

P. <u>Contract Terms</u>

The contract resulting from this Solicitation shall include, but not be limited to the following terms:

The contract shall include as a minimum, the entirety of this Solicitation document, together with the successful Proposer's proposal. Contract shall be prepared by the City of Pompano Beach City Attorney.

If the City of Pompano Beach defends any claim, demand, cause of action, or lawsuit arising out of any act, action, negligent acts or negligent omissions, or willful misconduct of the contractor, its employees, agents or servants during the performance of the contract, whether directly or indirectly, contractor agrees to reimburse the City of Pompano Beach for all expenses, attorney's fees, and court costs incurred in defending such claim, cause of action or lawsuit.

Q. Waiver

It is agreed that no waiver or modification of the contract resulting from this Solicitation, or of any covenant, condition or limitation contained in it shall be valid unless it is in writing and duly executed by the party to be charged with it, and that no evidence of any waiver or modification shall be offered or received in evidence in any proceeding, arbitration, or litigation between the parties arising out of or affecting this contract, or the right or obligations of any party under it, unless such waiver or modification is in writing, duly executed as above. The parties agree that the provisions of this paragraph may not be waived except by a duly executed writing.

R. <u>Survivorship Rights</u>

This contract resulting from this Solicitation shall be binding on and inure to the benefit of the respective parties and their executors, administrators, heirs, personal representative, successors and assigns.

S. <u>Termination</u>

The contract resulting from this Solicitation may be terminated by the City of Pompano Beach without cause upon providing contractor with at least sixty (60) days prior written notice.

Should either party fail to perform any of its obligations under the contract resulting from this Solicitation for a period of thirty (30) days after receipt of written notice of such failure, the non-defaulting part will have the right to terminate the contract immediately upon delivery of written notice to the defaulting part of its election to do so. The foregoing rights of termination are in addition to any other rights and remedies that such party may have.

T. <u>Manner of Performance</u>

Proposer agrees to perform its duties and obligations under the contract resulting from this Solicitation in a professional manner and in accordance with all applicable local, federal and state laws, rules and regulations.

Proposer agrees that the services provided under the contract resulting from this Solicitation shall be provided by employees that are educated, trained and experienced, certified and licensed in all areas encompassed within their designated duties. Proposer agrees to furnish the City of Pompano Beach with all documentation, certification, authorization, license, permit, or registration currently required by applicable laws or rules and regulations. Proposer further certifies that it and its employees are now in and will maintain good standing with such governmental agencies and that it and its employees will keep all license, permits, registration, authorization or certification required by applicable laws or regulations in full force and effect during the term of this contract. Failure of Proposer to comply with this paragraph shall constitute a material breach of contract.

U. <u>Acceptance Period</u>

Proposals submitted in response to this Solicitation must be valid for a period no less than ninety (90) days from the closing date of this solicitation.

V. <u>Conditions and Provisions</u>

The completed proposal (together with all required attachments) must be submitted electronically to City on or before the time and date stated herein. All Proposers, by electronic submission of a proposal, shall agree to comply with all of the conditions, requirements and instructions of this solicitation as stated or implied herein. All proposals and supporting materials submitted will become the property of the City.

Proposer's response shall not contain any alteration to the document posted other than entering data in spaces provided or including attachments as necessary. By submission of a response, Proposer affirms that a complete set of bid documents was obtained from the eBid System or from the Purchasing Division only and no alteration of any kind has been made to the solicitation. Exceptions or deviations to this proposal may not be added after the submittal date.

All Proposers are required to provide all information requested in this solicitation. Failure to do so may result in disqualification of the proposal.

The City reserves the right to postpone or cancel this solicitation, or reject all proposals, if in its sole discretion it deems it to be in the best interest of the City to do so.

The City reserves the right to waive any technical or formal errors or omissions and to reject all proposals, or to award contract for the items herein, in part or whole, if it is determined to be in the best interests of the City to do so.

The City shall not be liable for any costs incurred by the Proposer in the preparation of proposals or for any work performed in connection therein.

W. <u>Standard Provisions</u>

1. <u>Governing Law</u>

Any agreement resulting from this Solicitation shall be governed by the laws of the State of Florida, and the venue for any legal action relating to such agreement will be in Broward County, Florida.

2. <u>Licenses</u>

In order to perform public work, the successful Proposer shall: Be licensed to do business in Florida, if an entity, and hold or obtain such Contractor' and Business Licenses if required by State Statutes or local ordinances.

3. <u>Conflict Of Interest</u>

For purposes of determining any possible conflict of interest, each Proposer must disclose if any Elected Official, Appointed Official, or City Employee is also an owner, corporate officer, or an employee of the firm. If any Elected Official, Appointed Official, or City Employee is an owner, corporate officer, or an employee, the Proposer must file a statement with the Broward County Supervisor of Elections pursuant to §112.313, Florida Statutes.

4. Drug Free Workplace

The selected firm(s) will be required to verify they will operate a "Drug Free Workplace" as set forth in Florida Statute, 287.087.

5. <u>Public Entity Crimes</u>

A person or affiliate who has been placed on the convicted vendor list following a conviction for public entity crime may not submit a proposal on a contract to provide any goods or services to a public entity, may not submit a proposal on a contract with a public entity for the construction or repair of a public building or public work, may not submit proposals on leases of real property to public entity, may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity, and may not transact business with any public entity in excess of the threshold amount provided in Florida Statute, Section 287.017, for CATEGORY TWO for a period of 36 months from the date of being placed on the convicted vendor list.

6. <u>Patent Fees, Royalties, And Licenses</u>

If the selected Proposer requires or desires to use any design, trademark, device, material or process covered by letters of patent or copyright, the selected Proposer and his surety shall indemnify and hold harmless the City from any and all claims for infringement by reason of the use of any such patented design, device, trademark, copyright, material or process in connection with the work agreed to be performed and shall indemnify the City from any cost, expense, royalty or damage

which the City may be obligated to pay by reason of any infringement at any time during or after completion of the work.

7. <u>Permits</u>

The selected Proposer shall be responsible for obtaining all permits, licenses, certifications, etc., required by federal, state, county, and municipal laws, regulations, codes, and ordinances for the performance of the work required in these specifications and to conform to the requirements of said legislation.

8. Familiarity With Laws

It is assumed the selected firm(s) will be familiar with all federal, state and local laws, ordinances, rules and regulations that may affect its services pursuant to this Solicitation. Ignorance on the part of the firm will in no way relieve the firm from responsibility.

9. <u>Withdrawal Of Proposals</u>

A firm may withdraw its proposal without prejudice no later than the advertised deadline for submission of proposals by written communication to the General Services Department, 1190 N.E. 3rd Avenue, Building C, Pompano Beach, Florida 33060.

10. <u>Composition Of Project Team</u>

Firms are required to commit that the principals and personnel named in the proposal will perform the services throughout the contractual term unless otherwise provided for by way of a negotiated contract or written amendment to same executed by both parties. No diversion or substitution of principals or personnel will be allowed unless a written request that sets forth the qualifications and experience of the proposed replacement(s) is submitted to and approved by the City in writing.

11. Invoicing/Payment

All invoices should be sent to City of Pompano Beach, Accounts Payable, P.O. Drawer 1300, Pompano Beach, Florida, 33061. In accordance with Florida Statutes, Chapter 218, payment will be made within 45 days after receipt of a proper invoice.

12. <u>Public Records</u>

- a. The City of Pompano Beach is a public agency subject to Chapter 119, Florida Statutes. The Contractor shall comply with Florida's Public Records Law, as amended. Specifically, the Contractor shall:
 - i. Keep and maintain public records required by the City in order to perform the service;

- ii. Upon request from the City's custodian of public records, provide the City with a copy of requested records or allow the records to be inspected or copied within a reasonable time at a cost that does not exceed the cost provided in Chapter 119, Florida Statutes or as otherwise provided by law;
- iii. Ensure that public records that are exempt or confidential and exempt from public records disclosure requirements are not disclosed except as authorized by law for the duration of the contract term and following completion of the contract if the Contractor does not transfer the records to the City; and
- iv. Upon completion of the contract, transfer, at no cost to the City, all public records in possession of the Contractor, or keep and maintain public records required by the City to perform the service. If the Contractor transfers all public records to the City upon completion of the contract, the Contractor shall destroy any duplicate public records that are exempt or confidential and exempt from public records disclosure requirements. If the Contractor keeps and maintains public records upon completion of the contract, the Contractor shall meet all applicable requirements for retaining public records. All records stored electronically must be provided to the City, upon request from the City's custodian of public records in a format that is compatible with the information technology systems of the City.
- b. Failure of the Contractor to provide the above described public records to the City within a reasonable time may subject Contractor to penalties under 119.10, Florida Statutes, as amended.

PUBLIC RECORDS CUSTODIAN

IF THE CONTRACTOR HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO THE CONTRACTOR'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS CONTRACT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT:

CITY CLERK 100 W. Atlantic Blvd., Suite 253 Pompano Beach, Florida 33060 (954) 786-4611 RecordsCustodian@copbfl.com

X. <u>Questions and Communication</u>

All questions regarding the Solicitation are to be submitted using the Questions feature in the eBid System. Questions must be received at least seven (7) calendar days before the scheduled solicitation opening. Oral and other interpretations or clarifications will be without legal effect. Addenda will be posted to the solicitation in the eBid System, and it
is the Proposer's responsibility to obtain all addenda before submitting a response to the solicitation.

Y. <u>Addenda</u>

The issuance of a written addendum or posting of an answer in response to a question submitted using the Questions feature in the eBid System are the only official methods whereby interpretation, clarification, or additional information can be given. If any addenda are issued to this solicitation the addendum will be issued via the eBid System. It shall be the responsibility of each Proposer, prior to submitting their response, to contact the City Purchasing Office at (954) 786-4098 to determine if addenda were issued and to make such addenda a part of their proposal. Addenda will be posted to the solicitation in the eBid System.

Z. <u>Contractor Performance Report</u>

The City will utilize the Contractor Performance Report to monitor and record the successful proposer's performance for the work specified by the contract. The Contractor Performance Report has been included as an exhibit to this solicitation.

COMPLETE THE PROPOSER INFORMATION FORM ON THE ATTACHMENTS TAB IN THE EBID SYSTEM. PROPOSERS ARE TO COMPLETE THE FORM IN ITS ENTIRITY AND INCLUDE THE COMPLETED FORM IN YOUR PROPOSAL THAT MUST BE UPLOADED TO THE RESPONSE ATTACHMENTS TAB IN THE EBID SYSTEM.

PROPOSER INFORMATION PAGE

(number) (Title)

To: The City of Pompano Beach, Florida

The below named company hereby agrees to furnish the proposed services under the terms stated subject to all instructions, terms, conditions, specifications, addenda, legal advertisement, and conditions contained in the solicitation. I have read the solicitation and all attachments, including the specifications, and fully understand what is required. By submitting this proposal. I will accept a contract if approved by the City and such acceptance covers all terms, conditions, and specifications of this proposal.

Proposal submitted by:

Name (printed)	_ Title
Company (Legal Registered)	
Federal Tax Identification Number	
Address	
City/State/Zip	
Telephone No	_ Fax No
Email Address	

COMPLETE THE PROJECT TEAM FORM ON THE ATTACHMENTS TAB IN THE EBID SYSTEM. PROPOSERS ARE TO COMPLETE FORM IN ITS ENTIRITY AND INCLUDE THE FORM IN YOUR PROPOSAL THAT MUST BE UPLOADED TO THE RESPONSE ATTACHMENTS TAB IN THE EBID SYSTEM.

PROJECT TEAM

SOLICITATION NUMBER

		Federal I.D.#	
PRIME			
Role	Name of Individual Assigned to Project	Number of Years Experience	Education, Degrees
Principal-In-Charge			
Project Manager			
Asst. Project Manager			
Other Key Member			
Other Key Member			

SUB-CONSULTANT

Role	Company Name and Address of Office Handling This Project	Name of Individual Assigned to the Project
Surveying		
Landscaping		
Engineering		
Other Key Member		
Other Key Member		
Other Key Member		

(use attachments if necessary)

COMPLETE THE PROPOSER INFORMATION FORM ON THE ATTACHMENTS TAB IN THE EBID SYSTEM. PROPOSERS ARE TO COMPLETE THE FORM IN ITS ENTIRITY AND INCLUDE THE COMPLETED FORM IN YOUR PROPOSAL THAT MUST BE UPLOADED TO THE RESPONSE ATTACHMENTS TAB IN THE EBID SYSTEM.

VENDOR CERTIFICATION REGARDING SCRUTINIZED COMPANIES LISTS

Respondent Vendor Name: _____

Vendor FEIN:

Section 287.135, Florida Statutes, prohibits agencies from contracting with companies, for goods or services over \$1,000,000, that are on either the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List. Further, Section 215.4725, Florida Statutes, prohibits agencies from contracting (at any dollar amount) with companies on the Scrutinized Companies that Boycott Israel List, or with companies that are engaged in a boycott of Israel. As the person authorized to sign electronically on behalf of Respondent, I hereby certify by selecting the box below that the company responding to this solicitation is not listed on the Scrutinized Companies with Activities in Sudan List, the Scrutinized Companies that Boycott Israel List. I also certify that the company responding to this solicitation is not participating in a boycott of Israel, and is not engaged in business operations in Syria or Cuba. I understand that pursuant to sections 287.135 and 215.4725, Florida Statutes, the submission of a false certification may subject company to civil penalties, attorney's fees, and/or costs.

I Certify



Exhibit – Contractor Performance Report



City of Pompano Beach, Purchasing Division 1190 N.E. 3rd Avenue, Building C Pompano Beach, Florida, 33060

CITY OF POMPANO BEACH CONTRACTOR PERFORMANCE REPORT

1. Report Period: from	to
2. Contract Period: from	to
3. Bid# & or P.O.#:	
4. Contractor Name:	
5. City Department:	
6. Project Manager:	
7. Scope of Work (Service Deliverables):	

CATEGORY	RATING	COMMENTS
1. Quality Assurance/Quality	Poor =1	
Control	Satisfactory =2	
- Product/Services of high quality	Excellent $=3$	
- Proper oversight		
- Communication		
2 Record Keeping	Poor -1	
Accurate record keeping	Sotisfactory -2	
Proper invoicing	Satisfactory -2 Excellent -3	
-Floper Involcing	Excellent –5	
-Testing results complete		
3. Close-Out Activities	Poor =1	
- Restoration/Cleanup	Satisfactory $=2$	
- Deliverables met	Excellent $=3$	
- Punch list items addressed		
4. Customer Service	Poor =1	
- City Personnel and Residents	Satisfactory $=2$	
- Response time	Excellent $=3$	
- Communication		
5. Cost Control	Poor =1	
- Monitoring subcontractors	Satisfactory $=2$	
- Change-orders	Excellent $=3$	
- Meeting budget		
6. Construction Schedule	Poor =1	
- Adherence to schedule	Satisfactory =2	
- Time-extensions	Excellent $=3$	
- Efficient use of resources		
		ADD ABOVE RATINCS/DIVIDE TOTAL
SCORE		BY NUMBER OF CATEGORIES REINC
SCORE		RATED

Exhibit – Contractor Performance Report

RATINGS

Poor Performance (1.0 – 1.59): Marginally responsive, effective and/or efficient; delays require significant adjustments to programs; key employees marginally capable; customers somewhat satisfied.

Satisfactory Performance (1.6 – 2.59): Generally responsive, effective and/or efficient; delays are excusable and/or results in minor program adjustments; employees are capable and satisfactorily providing service without intervention; customers indicate satisfaction.

Excellent Performance (2.6 - 3.0): Immediately responsive; highly efficient and/or effective; no delays; key employees are experts and require minimal direction; customers expectations are exceeded.

Would you select/recommend this contractor again? _____ Yes _____ No

Please attach any supporting documents to this report to substantiate the ratings that have been provided.

Ratings completed by (print name)	Ratings completed by signature	Date
Department Head (print name)	Department Head Signature	Date
Vendor Representative (print name)	Contractor Representative Signature	Date

Comments, corrective actions etc., use additional page if necessary:

City of Pompano Beach Florida

Local Business Subcontractor Utilization Report

Project Name (1)		Contract Number and Work Order Number (if	applicable) (2)
Report Number (3)	Reporting Period (4)	Local Business Contract Goal (5)	Estimated Contract Completion Date (6)
Contractor Name (7)		Contractor Telephone Number (8) () -	Contractor Email Address (9)
Contractor Street Address (10)	Project Manager Name (11)	Project Manager Telephone Number (12) () -	Project Manager Email Address (13)

Local Business Payment Report						
Federal Identification Number (14)	Local Subcontractor Business Name (15)	Description of Work (16)	Project Amount (17)	Amount Paid this Reporting Period (18)	Invoice Number (19)	Total Paid to Date (20)
		Т	otal Paid to Date for A	II Local Business Subo	contractors (21) \$	0.00

I certify that the above information is true to the best of my knowledge.

Contractor Name – Authorized Personnel (print) (22)	Contractor Name – Authorized Personnel (sign) (23)	Title (24)	Date (25)

Local Business Subcontractor Utilization Report Instructions

- **Box (1) Project Name –** Enter the entire name of the project.
- **Box (2)** Contract Number (work order) Enter the contract number and the work order number, if applicable (i.e., 4600001234, and if work order contract include work order number 4600000568 WO 01).
- **Box (3) Report Number -** Enter the Local Business Subcontractor Utilization Report number. Reports must be in a numerical series (i.e., 1, 2, 3).
- **Box (4)** Reporting Period Enter the beginning and end dates this report covers (i.e., 10/01/2016 11/01/2016).
- Box (5) Local Contract Goal Enter the Local Contract Goal percentage on entire contract.
- **Box (6)** Contract Completion Date Enter the expiration date of the contract, (not work the order).
- Box (7) Contractor Name Enter the complete legal business name of the Prime Contractor.
- **Box (8)** Contractor Telephone Number Enter the telephone number of the Prime Contractor.
- Box (9) Contractor Email Address Enter the email address of the Prime Contractor.
- Box (10) Contractor Street Address Enter the mailing address of the Prime Contractor.
- **Box (11) Project Manager Name -** Enter the name of the Project Manager for the Prime Contractor on the project.
- **Box (12)** Project Manager Telephone Number Enter the direct telephone number of the Prime Contractor's Project Manager.
- **Box (13) Project Manager Email Address –** Enter the email address of the Prime Contractor's Project Manager.
- **Box (14)** Federal Identification Number Enter the federal identification number of the Local Subcontractor(s).
- **Box (15)** Local Subcontractor Business Name Enter the complete legal business name of the Local Subcontractor(s).
- **Box (16)** Description of Work Enter the type of work being performed by the Local Subcontractor(s) (i.e., electrical services).
- **Box (17) Project Amount –** Enter the dollar amount allocated to the Local Subcontractor(s) for the entire project (i.e., amount in the subcontract agreement).

- **Box (18)** Amount Paid this Reporting Period Enter the total amount paid to the Local Subcontractor(s) during the reporting period.
- **Box (19)** Invoice Number Enter the Local Subcontractor's invoice number related to the payment reported this period.
- **Box (20)** Total Paid to Date Enter the total amount paid to the Local Subcontractor(s) to date.
- **Box (21)** Total Paid to Date for All Local Subcontractor(s) Enter the total dollar amount paid to date to all Local Subcontractors listed on the report.
- **Box (22)** Contractor Name Authorized Personnel (print) Print the name of the employee that is authorized to execute the Local Subcontractor Utilization Report.
- **Box (23)** Contractor Name Authorized Personnel (sign) Signature of authorized employee to execute the Local Subcontractor Utilization Report.
- **Box (24)** Title Enter the title of authorized employee completing the Local Subcontractor Utilization Report.
- **Box (25)** Date Enter the date of submission of the Local Subcontractor Utilization Report to the City.

REQUESTED INFORMATION BELOW IS ON LOCAL BUSINESS PROGRAM FORM ON THE BID ATTACHMENTS TAB. BIDDERS ARE TO COMPLETE FORM IN ITS ENTIRITY AND INCLUDE COMPLETED FORM IN YOUR PROPOSAL THAT MUST BE UPLOADED TO THE RESPONSE ATTACHMENTS TAB IN THE EBID SYSTEM.

CITY OF POMPANO BEACH, FLORIDA LOCAL BUSINESS PARTICIPATION FORM

Solicitation # & Title: _____

Prime Contractor's Name: _____

	Contact Person,	Type of Work to be Performed/Materials to be	Contract Amount
Name of Firm, Address	<u>l elepnone Number</u>	Purchased	<u>Contract Amount</u>

LOCAL BUSINESS EXHIBIT "A

LOCAL BUSINESS EXHIBIT "B" LOCAL BUSINESS LETTER OF INTENT TO PERFORM AS A LOCAL SUBCONTRACTOR

Solicitation Number_____

TO:

(Name of Prime or General Bidder)

The undersigned City of Pompano Beach business intends to perform subcontracting work in connection with the above contract as (check below)

an individual

_____ a corporation

_____ a partnership

_____ a joint venture

The undersigned is prepared to perform the following work in connection with the above Contract, as hereafter described in detail:

at the following price:

(Date)

(Print Name of Local Business Contractor)

(Street Address)

(City, State Zip Code)

BY: _____

(Signature)

IMPORTANT NOTE: Signatures on this form MUST be by an authorized employee of Subcontractor and must be uploaded to the Response Attachment Tab

LOCAL BUSINESS EXHIBIT "B"

Ĺ	LOCAL BUSINESS EXHIBIT "C" OCAL BUSINESS UNAVAILABILITY F	<u>ORM</u>
	Solicitation #	
I, (Name and Title)		
of	, certify that on the	day of
,, I (Month) (Year)	invited the following LOCAL BUSINES	S(s) to bid work
items to be performed in th	e City of Pompano Beach:	
Business Name, Address	Work Items Sought	Form of Bid Sought (i.e., Unit Price, Materials/Labor, Labor Only, etc.)
Said Local Businesses:		
	Did not bid in response to the invitation	n
	Submitted a bid which was not the low	responsible bid
	Other:	
	Name and Title:	
	Date:	
Note: Attach additional documents as available.		

LOCAL BUSINESS EXHIBIT "C"

LOCAL BUSINESS EXHIBIT "D" GOOD FAITH EFFORT REPORT LOCAL BUSINESS PARTICIPATION

Solicitation #

1. What portions of the contract have you identified as Local Business opportunities?

2. Did you provide adequate information to identified Local Businesses? Please comment on how you provided this information.

3. Did you send written notices to Local Businesses?

Yes NC	Yes	No
--------	-----	----

If yes, please include copy of the notice and the list of individuals who were forwarded copies of the notices.

4. Did you advertise in local publications?

Yes No

If yes, please attach copies of the ads, including name and dates of publication.

- 5. What type of efforts did you make to assist Local Businesses in contracting with you ?
- 7. List the Local Businesses you will utilize and subcontract amount.

	Φ	
	\$	
Other comments:		

LOCAL BUSINESS EXHIBIT "D" – Page 2

Exhibit A RLI E-20-20 & Consultant Proposal

LOCAL BUSINESS EXHIBIT "D"



PROPOSAL FOR Continuing Civil Engineering Services for Various City Projects



TETRA TECH

TITLE PAGE



City of Pompano Beach

Continuing Civil Engineering Services for Various City Projects

E-20-20

Date:

July 30, 2020

Firm:

Tetra Tech 4601 Sheridan Street, Suite 212; Hollywood, FL 33021

Contact:

Charles Drake, PG Direct: 407.480.3912 Cell: 407.256.7715 Exhibit A RLI E-20-20 & Consultant Proposal

g Services | Pompano Beach

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July 30, 2020

City of Pompano Beach Purchasing Office 1190 N.E. 3rd Avenue, Building C Pompano Beach, Florida 33060

Subject: RLI E-20-20 – Continuing Contract for Civil Engineering Services for Various City Projects

Dear Selection Committee Members:

Successful projects begin with the commitment of a qualified and experienced team that offers exceptional client service, technical expertise, and a unique understanding of the types of projects required for this contract. Over the years, Tetra Tech has been providing quality civil engineering services under continuing services contracts to over 55 governmental agencies in Florida starting back as early as 1977 and serving Pompano Beach since 2016. We are committed to continuing to successfully serve the City of Pompano Beach in this capacity.

In our submittal, we are not providing qualifications and experience for all projects listed in the Request for Letters of Interest (RLI). We are providing qualifications and experience for the following types of projects listed below:

- Water or Reuse Mains
- Gravity Sewer Mains
- Force Mains
- Lift Station/Pump station rehabilitation
- Stormwater/Drainage Improvements
- Consultation for Emergency Water/Wastewater/Stormwater Repairs

As one of the largest engineering firms in the nation (No.4), **Tetra Tech has** been ranked No. 1 water for the past 17 consecutive years and is currently also ranked No. 1 in water supply by Engineering News Record (ENR). We are a leader in the environmental engineering industry, providing engineering consulting services with 25 offices throughout Florida. Our local office philosophy allows our clients to benefit from the best of both worlds; local, personalized service with nationally recognized resources.

Our proposed team is highly qualified and experienced to deliver the City's proposed projects for the following reasons:

• Local Knowledge: Tetra Tech has worked on water and reuse projects for the City since 2016 and recently completed the City's Reuse Master Plan Update and hardening projects at the water treatment plant campus and was selected to provide raw water wellfield services. In addition, our staff has experience and knowledge with the City's Stormwater Master Plans and detailed stormwater design projects. Our knowledge of your water, stormwater, and reuse facilities

MESSAGE FROM OUR PRINCIPAL-IN-CHARGE



I have worked for the City of Pompano Beach since 2016 on several utility projects and make a personal commitment to the City staff to continue my active role in the civil engineering projects."

- Charles Drake, PG

FIRM INFORMATION

Corporate Name: Tetra Tech, Inc. FEIN: 95-4148514 Address: 4601 Sheridan Street, Suite 212; Hollywood, FL 33021 Contact: Charles Drake, PG Vice President Charles.Drake@tetratech.com Direct: 407.480.3912 Cell: 407.256.7715 and the reuse treatment plant, and distribution system is unmatched because of the hydraulic model of the reuse water mains which was used to develop the recommended CIP. Our recent work on the hardening projects provides us with detailed knowledge of the buildings at the water treatment plant. We have extensive experience with design, permitting, and construction in Broward County, including over 300,000 feet of water mains, 55,000 feet of gravity sewers and force mains, and multiple duplex and complicated regional triplex wastewater pump stations.

- Familiarity with City Staff: Since 2016, we have been one of the City's consultants under the "Water and Reuse Treatment Plant" services contract. Through that work, we have built relationships with several City utility and public works staff on the Reuse Master Plan Update, WTP Hardening projects, and the new Raw Water Wellfield Services project. We enjoy working with staff and understand the City's internal project management methods.
- Experience with Continuing Services Contracts: We provide continuing engineering services to over 55 municipalities in Florida, acting as an extension of staff, or providing specialty expertise for unique projects. Our current Broward County continuing services contracts include the cities of: Pompano Beach, Hollywood and Ft. Lauderdale.
- Local Business/Minority Business: Tetra Tech will use Keith and Associates, Pace Analytical, and The Chappell Group as our subconsultants who will bring professional, site-specific expertise to the team.
- Quality In-House Personnel: The team presented in the following submittal represents more than 100 years of municipal water and reclaimed water experience in Florida. The experience of Tetra Tech's key team members, Tim Vanderwalker, PE; Ken Caban, PE; Jon Fox, PE; Janine Alexander, PE; James Warner, PE; John Toomey, PE; Kevin Roe, PE; Michael Thatcher, PE; Diana Santander, PE; and Jason Warren, PE; will ensure proper execution on all projects assigned. We demonstrate in this submittal that Tetra Tech has complete in-house capabilities to provide the necessary professional services for these types of projects. Tetra Tech will use in-house support services for electrical, instrumentation, and structural disciplines. Ardaman & Associates, a Tetra Tech Company, will be utilized for geotechnical engineering services.
- Ability and Commitment to Perform the Work: Our team is positioned to dedicate resources to the City immediately to provide the delivery of any task assignments. With more than 700 employees throughout Florida, we are ready to deliver any type of project to meet the City's needs. As the principal-in-charge, I will be personally involved in all projects, to ensure that the City's expectations are being met. Mr. Vanderwalker, as the overall project manager, will be responsible for day to day management of each project and all discipline leads will report to him.
- Successful Project Delivery: At Tetra Tech, we pride ourselves in on-time and on-budget delivery of projects. We understand that the City will require us to use the e-Builder EnterpriseTM a web-based project management tool. We routinely use our client's project management tools to ensure successful projects and have the ability to adapt to different management tools. The e-Builder EnterpriseTM tool is a structured project management approach including monthly estimates of project completion status, including a review of time to complete and budget remaining. We anticipate weekly or monthly meetings with the City, as required, to ensure that the project goals and expectations are met.

We appreciate the opportunity to submit this response to the City's Letters of Interest for the Continuing Contract for Civil Engineering Services and look forward to continuing to serve the City.

Sincerely, Tetra Tech

Charles W. Dake

Charles W. Drake, PG Vice President

Continuing Civil Engineering Services | Pompano Beach



» Technical Approach

Overview

The City owns and operates water, wastewater, reuse and stormwater systems as Enterprise Funds, and has an intensive Capital Improvement Plan (CIP) to implement the projects needed to maintain and improve these systems and improvement them to the benefit of the customer and natural environment. This commitment can be read in the missions of the Utilities and Engineering Departments.

Within the Engineering Department is the CIP team and they collectively manage more than 50 active projects throughout the city, of all types, sizes, complexity and dollar value, consisting of installing water, sewer, and storm-drain piping, construction of new public restrooms throughout the city at various parks.

Ms. Tammy Good, CIP manager, has met with several of the Tetra Tech team during our projects, including the water treatment plant hardening evaluation and construction specifications and most recently, the scoping of the wellfield relocation project. During our hardening projects, we worked with the Building Department on permitting requirements, and the standards that they want to see employed during construction.

On these projects, we work for the Utilities Department, and meet with *Mr. Randy Brown, Ms. Shana-Roy Coombs-Gordon, Mr. Phil Hyer and Mr. Jason Mraz.* Through this work, including brainstorming development of work scope, project review meetings, and report writing, we have developed a great working relationship with these professionals.

The following is a brief description of the Utility system, as we know it from our work, which demonstrates a working knowledge of the types of projects that are identified in the City's CIP to be designed and constructed.

The Utilities mission is to provide superior service and exceed standards. Also, our goal is to provide water, reuse, wastewater and stormwater services in an environmentally and financially responsible way with respect to the role of government in protecting the taxpayers' and public's interest.

Water Treatment Plant and Wellfields

The City's drinking water supply is pumped from 25 wells completed into the Biscayne aquifer to from the Eastern and Western wellfields and then pumped to the water treatment plant. The City operates two co-located water treatment plants; a traditional lime filtration and an RO membrane plant. The rated capacity of the treatment plants is approximately

Strategic Plan Objective	Target/Goal	Status
Replace 3,700 feet of water mains per year	3,700 feet constructed	Progressing toward benchmark goal
Rehabilitate five wells per year	Five wells rehabbed	Progressing toward benchmark goal
Distribution system water loss percent	<10%	At or exceeding benchmark goal

Drinking Water Strategic Plan Objectives Dashboard

40 MGD, but with effective water conservation and reuse, and rate structure the potable water demands are much less. The City's current water use permit allocation is approximately 19 MGD, on an annual average basis.

We are currently working with Mr. Brown, his staff, and Ms. Good on inspecting and testing wells in the Western Wellfield, which provide raw water to the membrane plant, potentially building new Western wells, and a new raw water transmission line from the Western Wellfield. Our work also includes relocating wells located on the Airpark property and constructing a new raw water line to deliver that water to the lime filtration plant.

Because these projects will involve construction of new piping and wells, Ms. Good was involved with development of the project scope.

The Utilities Department maintains a **projects dashboard** on their website to inform the public of their commitment to delivering high-quality water and superior services to their customers, and several of these dashboards are shown above and on subsequent pages.

Water Reuse-OASIS Plant

In 2019-2020, Tetra Tech updated the City's Reuse Master Plan and through analysis of the plant operations and hydraulic modeling of the reuse distribution system, we have and very thorough understanding of the required upgrades and expansion of the treatment plant and distribution system to meet demands from the present to buildout.

We worked closely with Mr. Brown, Mr. Hyer and Ms. Coombs-Gordon on the update, and appreciate the time they took with review and comments. We also appreciate the time the operators took to give us a tour of the OASIS plant and describe for us the treatment plant, as well as transmission and distribution systems.

The City's Reuse Water Treatment Facility (RWTF) was built in 1989 and is named "OASIS: "Our Alternative Supply Irrigation System." The Oasis plant influent is currently supplied by diverting up to 5 MGD of treated wastewater effluent from the North Broward County Regional Wastewater Treatment Plant (NBCRWWTP) ocean outfall line. The City staff take great pride in producing a very high-quality reuse water; OASIS reuse water passed 94 of 96 annual drinking water tests.

In 2019 testing, the OASIS water met drinking water standards for all tests except for TDS and nitrite, 544 mg/L v. MCL of 500 and 1.5 mg/L v. MCL of 1.0 mg/L, respectively. This very high-quality reuse water reduces potable water demands for irrigation, and also reduces the use of residential fertilizer.

Because of the high-quality of the reuse water, the City obtained the only variance in Florida from the FDEP to allow irrigation of garden crops with reclaimed water.

Due to ocean outfall legislation, an alternate conveyance of treated effluent to the OASIS plant will be needed. Tetra Tech will be able to assist the City

Reuse Strategic Plan Objectives Dashboard

Strategic Plan Objective	Target/Goal	Status
Complete Connection of 70% of newly available single-family homes	70%	At or exceeding benchmark goal
Expand the reuse system two miles per year	Two miles constructed	At or exceeding benchmark goal
Volume of reclaimed water distributed annually	839 million gallons	At or exceeding benchmark goal

and Broward County with design and construction of the new conveyance pipeline because of our knowledge of the OASIS plant piping infrastructure.

We reviewed several alternate technologies to replace the current sand filtration system to reduce times when influent TSS is very high and made recommendations for technologies to efficiently remove TSS, at higher rates within the existing footprint, in our Master Plan update.

The City maintains 38 miles of transmission and distribution system piping to serve 1,510 reuse connections in the system, of which 1,234 are active. The active connections are a mix of residential, commercial, institutional, median, and park connections. In the Master Plan Update, we provide recommendations for improvements to the reuse system and treatment plant to improve delivery of reuse water and the efficiency of the treatment system.

Wastewater System

The City of Pompano Beach does not have a wastewater treatment plant but sends its wastewater to Broward County's regional wastewater plant. The City has approximately 62 miles of 2" to 42" diameter force mains to send wastewater to Broward County. The City routinely replaces and upgrades its wastewater system, including installing cured in place liners in clay pipes.

The City has 80 lift stations that are maintained by the City, of which three are owned by Lauderdale by the Sea. There are approximately 85 private lift stations in the City service area. The City provides sewer connection services to previously unsewered areas, thereby improving groundwater quality and making more reuse water available to reduce potable demands. The City lines wastewater pipes and maintains approximately 4,300 manholes in order to prevent infiltration and inflow into wastewater pipes, which reduces flow to the Broward County wastewater treatment plant.

Stormwater Utility

The Utilities Stormwater Division provides stormwater services in an environmentally and financially responsible way with respect to the role of government in protecting the customers' and public's interest. The utility provides stormwater services to reduce flooding and improve water quality, meet MS4 permit requirements, and provide superior customer service.

The Stormwater Distribution system was established to provide a dedicated funding source to address the City's stormwater management needs. Funding from the utility is utilized to maintain compliance with the City's stormwater permit, protect the environment, maintain the City's stormwater structures and to provide for construction of new drainage systems/ structures that are outlined in the Stormwater Management Master Plan.

The City completed the Stormwater Master Plan Update in June 2013 and includes 25 stormwater projects designed to improve flooding conditions throughout the City. Financing is currently underway to fund these projects at a total cost of \$32 million. These projects will be financed for 20 years and through a variety of mechanisms including bonds and state revolving fund loans.

The Stormwater Utility Capital Budget for Fiscal Year 2020 is \$2,419,006 is supported by transfer

Strategic Plan Objective	Target/Goal	Status
Achieve 100% NPDES (National Pollutant Discharge Elimination System) Compliance	100% Compliance	Progressing toward benchmark goal
Finalize Stormwater Financing Plan	Plan Approved by City Commission	Progressing toward benchmark goal
Total linear feet of drainage pipes cleaned	52,536 feet	Progressing toward benchmark goal

Stormwater Strategic Plan Objectives Dashboard

from Stormwater Utility Operating Fund. This level of funding reflects the fund's various drainage rehabilitations and improvements throughout the City and a working capital reserve. For FY 2021-2024 the Stormwater Utility CIP budget is \$10,768,355 (FY 2021- FY 2024).

Consultant's Understanding of Project Types

Tetra Tech's experience in performing continuing services for South Florida communities has allowed us to fine-tune our project delivery approach. We understand that each client and each project merits a customized approach based on sound science, an experienced project team, and Tetra Tech's 50 years of best practices in project delivery. Our core belief is that our professionals serve as an extension of our client's staff, which we have had the pleasure of serving Pompano Beach since 2016.

After reviewing the City's RLI No. E-20-20, we understand the continuing on-call professional engineering services may include water, wastewater and reclaimed water conveyance including collection, transmission and distribution piping, as well as pumping facilities. These projects may include feasibility studies, planning, emergency services,



hydraulic modeling, preliminary engineering, field investigations, final design, permitting, bidding assistance, and Construction Engineering and Inspection (CEI) services.

We understand the City operations are critical and objectives were established within the current City of Pompano Beach CIP to keep up with on-going infrastructure needs, including:

- Increasing infrastructure through the R&R Program
- Continuing to expand GIS capabilities
- Minimizing disruptions to the collection and distribution systems

Based on our experience with the City, we found successful delivery of such projects has required the development of a clear understanding of the City's goals at the earliest possible juncture. We accomplish this by meeting with the City during the scope development phase to discuss goals and objectives. The figure below conceptually presents this project development sequence.

In addition to understanding project goals, objectives, and requirements, we developed a strong team of engineers to work for the City and ensure continuity and the best possible outcome for a successful project. Tetra Tech's project manager, Tim Vanderwalker, PE, will carefully evaluate the various components of each assignment and assemble the engineering staff with the technical skills and availability to meet City needs.

Stormwater Infrastructure Continuing Civil Engineering Services | Pompano Beach



Tetra Tech's Project Management Plan

To ensure a technically successful project, Tetra Tech uses the following Project Management Plan (PMP). Tetra Tech will have a scope preparation meeting and discussions with the City to identify the project goals, objectives, special constraints and permitting requirements of the project. Emphasis will be placed on ensuring that all efforts required to meet the City's needs and standards are identified. The draft scope, schedule, and budget will be submitted to the City for review and feedback. We would then meet with City staff to finalize these documents to the City's satisfaction. Tetra Tech's overall project approach is unique because we perform more detailed due diligence during the planning phase of a project and prior to the 60 percent design development phase.

Typically, immediately after project initiation, Tetra Tech performs data acquisition and secures existing utility agency facility information, requests GIS and as-built files, geocodes, and locates existing utility markers and above ground features such as manhole lids, valves, fire hydrants, stormwater piping infrastructure, fiber

Project Management Plan Overview



5

optic markers, transmission and distribution power poles and other corridor features during a detailed field review, which also includes photo documentation for routing purposes. However, Tetra Tech has already commenced the data acquisition phase of this project.

Due diligence early on is also performed with respect to stakeholders. Because the pipelines and other infrastructure included in this project span many miles and areas, there are many stakeholders. Early coordination with stakeholders has proven to be invaluable.

Relationships are established early on with the stakeholders to get project "buy-in". Pre-application meetings are also scheduled such that moratoriums,

project specific restoration requirements, permit or regulatory timelines and fees are identified prior to the design phase.

Timelines and costs therefore are also evaluated in advance of final design efforts. By performing these preliminary design efforts, initial recommendations often lead to less critical changes and the project often ends up more effectively designed, permitted, and constructed.

Tetra Tech understands the importance of detailed and effective due diligence to identify critical project areas where advanced stakeholder coordination and communication saves time and money.

Additional considerations that impact construction of the project, but which should be made during planning and design include:

- **Constructability analysis**
- Piping layout and staging areas, work areas
- Evaluating high risk areas such as work near the subaqueous crossings, high pressure gas mains or electrical ducts
- Understanding geotechnical conditions and physical barriers
- Maintaining access to residents and businesses
- Communication duct banks or other utilities of major significance that would require additional protection
- Obtaining test holes where potential conflicts may exist between facilities

Current & Projected Workload

The Tetra Tech team is available and fully committed to the City of Pompano Beach and this contract. Our commitment is to provide the right people and appropriate resources for every project during the life of this contract. This project management approach maintains project knowledge and client relationship.

Tetra Tech utilizes several tools to project workloads and allocate staff to our projects to maintain maximum utilization. These projections are done monthly on a quarterly basis. We use man-hour usage rates to determine longer term utilization, which is generally less than a year.

We provided the required Firm workload existing, projected utilization and availability in the bar graph below. On the following page we provide our team's existing and projected utilization availability for a one (1) year period.

We commit to providing the staff and man-hours needed to complete any project that you assign to us on-time and within budget. We make and meet this commitment to our clients and ensure that our commitments are met through use of our project management tools.



TETRA TECH'S FLORIDA WORKLOAD PROJECTIONS

Availability

Our team's resources are deep enough to successfully tackle all of the City's needs. If additional staff beyond those team members identified within this SOQ is necessary, our team has the resources available to commit additional team members. We have approximately 20,000 employees located in more than 450 offices worldwide.

We have all the resources and staff necessary to quickly execute the work assignments and complete the project correctly. This is one of the advantages of a large firm that has specialized in serving municipalities of the size and resources of a community like the City of Pompano Beach. We bring large firm capabilities and people with an understanding of local municipal needs. Availability of key personnel is noted below.

		Estimated Hours per Month (Assuming 160 hours per month as 100% Utilization)			
Name	Role	Existing Workload, % Utilized	Existing Availability, %	Projected Workload, % Utilized	Projected Availability, % *
Charles Drake, PG	Principal-in-Charge	50	50	50	50
Tim Vanderwalker, PE, CDT	Project Manager	90	10	20	80
Ken Caban, PE, LEED AP	Technical Advisor	50	50	50	50
Jon Fox, PE	Technical Advisor	50	50	50	50
Janine Alexander, PE	Gravity Sewer/Force Mains Lead	90	10	40	60
Chris Zavatsky, PE	Gravity Sewer/Force Mains Support	70	30	40	60
John Toomey, PE	Lift Station/Pump Station Rehabilitation Lead	90	10	40	60
Brent White, PE	Lift Station/Pump Station Rehabilitation Support	90	10	35	65
Michael Thatcher, PE, CDT	Stormwater/Drainage Improvements Lead	90	10	20	80
James Warner, PE	Stormwater/Drainage Improvements Support	85	15	10	90
Jason Warren, PE	Water/Reuse Mains Lead	70	30	40	60
Scott Smith, PE	Water/Reuse Mains Support	85	15	40	60
Diana Santander, PE	Consultation for Emergency Water/Wastewater/ Stormwater Repairs Lead and Permitting Services	90	10	100	100
Burl Reardon, PE	Consultation for Emergency Water/Wastewater/ Stormwater Repairs Support	90	10	100	100
Kevin Roe, PE, CFM	Hydraulic Modeling Lead	90	10	40	60
Zuzanna Wasowska, PE	Hydraulic Modeling Support	80	20	40	60
Ed Wills, PE	Construction Services	90	10	20	80
Dave Burger, PE	Electrical/Instrumentation	90	10	40	60
Nick Benedico, PE, PMP	MOT	90	10	40	60
Alex Montalvo	GIS/Mapping	90	10	40	60
Georgia Vince	Ecological	90	10	70	30
Jason Burkett, PE	Structural Engineering	85	15	35	65
Daniel Nelson, PE	Funding	90	10	40	60
Mike Mossey, PSM from Keith & Associates	Surveying/SUE	95	5	40	60

This availability table is good through fiscal year 2020. These are estimates and we will adjust staff's availability as necessary.

The estimations in the table above are projected based on current and anticipated workloads. However, Tetra Tech commits to making the appropriate staff available, as required, based on the work orders assigned.

Technical Approach

Tetra Tech places an emphasis on providing responsive on-call service, while maintaining an understanding of budgets/schedules and our institutional knowledge of the City's needs and expectations. To achieve timely, efficient project completion, tasks are typically broken-down into distinct phases. For most design projects, the phases include: preliminary engineering, final design, permitting, bidding, construction administration, and, on occasion, CEI services when requested. However, our services to the City start well before the project phase. The initial step for any project is to meet with the City to discuss the expected scope of services. This is followed up with a proposal consisting of a project description, detailed scope of services, budget, and a task authorization form for execution by the City. Below are general project approaches for projects expected as part of this continuing contract.

Common to pipeline and pump station/lift station projects is surveying and SUE. We will use Keith and Associates to conduct these tasks.

Pipeline Projects

The major engineering tasks associated with a pipeline project include preliminary design and corridor evaluation, survey and utility identification, corrosion analysis and coating system evaluations, ecological impacts along the project corridor, soils and water table evaluations, dewatering discharge analysis, final design, permitting, public outreach, bidding assistance, and construction administration. During the preliminary design and corridor evaluation phase, construction methods, material evaluations and right-of-way ownership is reviewed to identify design requirements and to address constructability concerns. If needed, after final design, Tetra Tech offers public outreach services to educate the community about upcoming construction and to minimize questions to the City during construction activities. Our approach to utility pipeline projects was developed based on our team's successful completion of projects consisting of over 1,500 miles of water, wastewater, and reclaimed water mains in the past 38 years.



Reclaimed Water Pumps

Pump/Lift Station Upgrades

The major engineering tasks associated with pump station projects include preliminary engineering and evaluation, hydraulic analysis, corrosion and odor control analysis, survey, final design, permitting and construction administration. During the preliminary evaluation, the site will be reviewed for the ability to construct a station meeting City standards. If site constraints exist, Tetra Tech will work with the City to layout a non-standard station or evaluate other sites. The hydraulic analysis includes a review of existing and anticipated future station flows, as well as system curve evaluations for the transmission network to select a suitable pump.

Project Management Approach

To help ensure the timely and efficient completion of the work, it is imperative to properly identify the project specific considerations during the proposal and initial stages of any project. Our approach to addressing project considerations utilizes the following approach:

- 1. Identify the key issues early
- 2. Involve and inform the City of Pompano Beach of the project status from start to finish
- 3. Meet with the key stakeholders early
- 4. Incorporate risk mitigation measures into the design and contract documents
- 5. Prepare clear and concise documents to promote competitive bidding, minimize questions and potential change order requests.

Tetra Tech intends to work as an extension of the Pompano Beach staff with our Project Manager establishing a Project Management Plan (PMP) for the project. The PMP is updated and revised during the project's life and will provide a road map for success. The intent is to address considerations so that the cost, schedule and risks can be quantified and accounted for when evaluating each alternative versus the next. The creation of a PMP is required for every project at Tetra Tech. The PMP is scalable to the specific size and complexity of the project. The PMP establishes the following:

- 1. Project Summary
- 2. Project Goal
- 3. Project Objectives
- 4. Project Team
- 5. QA/QC Plan
- 6. Risk Identification
- 7. Communication Plan
- 8. Document Control
- 9. Standards
- 10. Health and Safety Plan
- 11. Financial Plan
- 12. Project Schedule

Communications Plan

Our approach to this project includes a partnering approach with the City. We understand that it is imperative to work closely with your staff to ensure a successful project. The Tetra Tech team's goal is to keep the City informed from day one of the project. Communication tools include formal progress reports, meeting agendas and minutes, e-mail and informal calls. Our Project Manager will be responsible for all day-to-day communications, giving the City one point of contact. However, prior to commencement, a chain of command and communication methods will be setup and agreed upon.



City of Pompano Beach Water Treatment Plant

Key Tasks of Our Approach

Data Collection and Review

Tetra Tech has worked with the City on several projects, and developed a good working relationship and knowledge of the City's protocols.

We understand that having all of the available information is essential to being able to make good decisions and sound designs. All of our projects begin with obtaining information from the City and the stakeholders that are directly or indirectly involved with the project. Accurate existing utility locations are critical for planning of pipeline projects.

Some key data that is readily available from the City, Broward County, and other sources includes known environmental sites. These sites include environmentally sensitive areas such as wetlands and mangroves and also identifies known contamination sites. Understanding the locations of these sites, how they will impact the project, and how to mitigate their impacts is crucial to understand early in the project.

Key Data For The Pompano Beach Civil Engineering Projects:

Surveying

To initiate design, our surveyors will review available topographical, boundary, and state plane coordinate system survey data and obtain any additional survey information required for the design including boundary surveys, rights-of-way surveys and jurisdictional surveys. We recommend that the drawing scale be no greater than 40 feet per inch. For additional conflict avoidance and minimization, once surveying has been performed and reviewed, the locations of existing utilities will be verified using subsurface utility engineering equipment.

Once the route survey is completed, we commence the actual production drawings design phase. Existing key features are identified such as paved roads, waterways, communications or duct manholes and vaults, areas requiring more specialized MOT to be performed by the Contractor, access considerations and pedestrian accommodations, etc. are reviewed. We also confirm the pavement restoration thickness and resurfacing limits of travel lanes according to the Agency having jurisdiction over the ROW limits and to adjust cost estimates as applicable for restoration efforts.

We will compile and review existing geotechnical information and identify appropriate areas where additional geotechnical information is needed. Based on this information, we will arrange for field investigations to obtain the of the required subsurface information (borings), will review the geotechnical information and coordinate a geotechnical report for use in the development of the design.

In order to be cost effective during the design phase of the project, Tetra Tech will initiate several tasks concurrently. First we release our survey to commence with the route survey including topographic and boundary components relating to existing easements (whether dedicated by plat or by legal instruments) to identify right-of-way widths, and encroachments through latest survey equipment technology (such as Total Stations, EDM devices, etc.) and to locate all visible improvements along the proposed route.

During this same time, any additional as built information for existing utilities is obtained and reviewed, and all utility providers are contacted again



Water Main constructed in Broward County

with the preferred alternative routing being submitted to them for their more detailed utility information.

Once the route survey is completed, then we shall proceed with either ground penetrating radar (GPR) and/or " soft digs " to further fine tune any other utility which may present a future potential conflict during construction. Also at this time we arrange for a formal pre-application meeting with the governmental authority having jurisdiction over the existing right-of-ways and to update them of the selected routing alternative.

Benthic Survey

If benthic surveys are required for water or subaqueous crossings, we will implement a benthic survey as described below:

Prior to the field activities for the benthic survey, a Health and Safety Plan (HASP) will be prepared to evaluate site-specific field conditions, local medical facilities, potential risks, and mitigation measures associated with boating and diving related activities in the project area. The HASP will be reviewed and approved by Tetra Tech's Health and Safety Officer prior to conducting field activities.

The Tetra Tech Center for Coastal Services marine scientists will mobilize for the marine resource investigation. The purpose of the survey will be to determine the presence of natural resources that are present in the submerged areas where the proposed pipeline would be installed. The results of the survey will support planning efforts and preliminary discussions with Agencies.

The visual reconnaissance survey will be accomplished via transect or bounce dives, as underwater visibility permits. If bounce dives are required due to poor visibility and in lieu of transects, the frequency of bounce dives will be dependent upon the water depth and likeliness of seagrass presence at the surveyed depth. If seagrass is not observed during the reconnaissance survey, no further quantitative sampling will be completed.



Photos of some of the environmental resources taken during environmental monitoring during a dredging project.

If seagrass is observed during the reconnaissance portion of the survey, then the seagrass beds will be assessed. Sampling of seagrass beds will be accomplished via line-intercept and regularly spaced point-intercept quadrats along each transect. For the line-intercept technique, the marine scientists will swim the length of each transect to record locations of the limits of each seagrass bed within a 10-foot-wide area centered on the transect. For the point-intercept technique, the number of quadrats and spacing between quadrats will be determined on-site based on underwater visibility.

Quadrats will be assessed along each transect at intervals that allow for a quantitative assessment based on underwater visibility. Within each quadrat, total percent cover of seagrass (all species combined and for each species separately) will be assessed. Representative still photographs will be obtained at each vegetated area, as underwater visibility permits.

A draft summary report of field investigations will be prepared and submitted for review and comment within 15 business days of completion of field activities. A final report will be submitted within five business days following receipt of comments.

Geotechnical Engineering

The foundation of any new construction work is a thorough understanding of the subsurface conditions. Without accurate knowledge of the conditions to be encountered, one cannot properly prepare a design that will minimize construction risk and potential construction claims. Further, insufficient or inaccurate geotechnical information hinders contractors' abilities to prepare responsible, competitive bids.

A contractor must consider risk due to unknown or difficult conditions when preparing a bid. If inadequate geotechnical information is available, the contractor is forced to make the difficult decision of either adding significant additional cost to his bid (likely making his bid uncompetitive) or making optimistic assumptions and then having to pursue claims during construction if more challenging conditions are encountered.

We think that at a minimum borings should be spaced at approximately 500 feet. Additionally, borings should always be performed at planned horizontal directional drill (HDD) locations. The borings allow for a good understanding of the conditions to be encountered when constructing the HDD and allow for the contractor to provide the proper tooling and equipment for the installation.

Many times trenchless construction is used to avoid disturbance to surface features such as highways, railways, or waterways and it is tempting to avoid



Tetra Tech is a full service engineering firm, with the equipment necessary to implement most projects, including geotechnical engineering.

borings in these locations to further minimize disruption. However, doing so may create a significant data gap.

Existing As-Built and Utility Information

Tetra Tech will obtain information for existing as-built underground and above-ground utilities for use in design development. We will use Sunshine State One Call to identify all utility providers.

Preliminary Design

Our preliminary design tasks include the following activities:

- Field reviews
- Utilities verification and coordination
- Conceptual pipe layouts for the water and wastewater infrastructure
- Design alternatives and layouts
- Maintenance of traffic considerations
- Open cut versus trenchless analysis
- Flow calculations/modeling
- Pre-application meetings with permitting agencies
- Stakeholder coordination
- Risk avoidance and mitigation
- Preliminary cost evaluations

Field Reviews

Tetra Tech will conduct the preliminary field reviews to assess the project corridor and existing field conditions. Additional field reviews will be conducted to gather additional information necessary for the preliminary design phase. These field reviews will be photo documented for inclusion in a preliminary design memorandum.

Utilities Verification & Coordination

Tetra Tech initiates preliminary utility coordination; however, some utility owners do not provide detailed facility information until they know that the project is under the design phase. As such, Tetra Tech follows up with the utility owners multiple times to secure their facility information, review potential conflicts, and perform conflict avoidance and minimization. At the 30 percent design completion level, Tetra Tech will provide the alternative routing to all utility owners and request their facility information. The data will be confirmed at a utility coordination meeting with these utilities to verify the location of their facilities and resolve conflicts. Subsurface utility engineering (SUE) will be used if required to supplement this information.

Subsurface Utility Evaluation and Ground Penetrating Radar

Subsurface Utility Evaluation (SUE) and Ground Penetrating Radar (GPR) services will be undertaken at key locations in the project. Critical underground utility locations will be identified in the early stages of the design process to allow designers to identify potential utility interferences and design solutions. Asbuilt information and record drawings will be reviewed against the field information to identify and resolve potential utility discrepancies.

A cost saving measure related to SUE is to inquire with FDOT and other agencies for any recent SUE information that may be available. Oftentimes, information is available, which reduces the quantity of SUEs required.



Reclaimed Water Transmission

Conceptual Pipe Layouts for the Water and Wastewater Infrastructure

Conceptual pipe layouts will be developed to avoid existing utilities and provide service to all of the City's customers within the project limits. Tetra Tech will develop preliminary pipe layouts for the proposed water infrastructure.

The conceptual pipe layouts are utilized to identify potential utility conflicts and to facilitate wastewater flow calculations. In addition, preliminary layouts aid in conceptual quantity estimates and cost estimating.

Planning Year	ADD (MGD)	ADD Supply Flow 12-hour Delivery Window (MGD)	MDD Supply Flow 12-hour Delivery Window (MGD)	PHD Supply Flow 12-hour Delivery Window (MGD)
Year 5	1.73	3.46	5.99	6.92
Year 10	2.16	4.32	7.47	8.64
Year 20	3.15	6.30	10.90	12.60
Build-Out	6.73	13.46	23.29	26.92

Reuse System Future Planning Scenario Low-Pressure System Demands from Tetra Tech's Reuse Master Plan Update

Design Alternatives and Layouts

Design alternatives are developed to identify cost savings and to evaluate which alternative layouts can minimize disruptions to residents and businesses. Environmental impacts can be identified and evaluated for pre-application meetings with the various regulatory agencies and to avoid or mitigate potential impacts which may lead to longer permitting timelines and increased cost and/or environmental mitigation.

Maintenance of Traffic (MOT) Considerations

The project area may consist of City, FDOT and Broward County Rights of Ways (ROWs). *MOT will involve vehicular considerations and pedestrian considerations*. Pre-application meetings will be critical to identify and address MOT requirements within the various ROW limits.

Open Cut vs. Trenchless Analysis

Tetra Tech specializes in horizontal directional drilling including shallow horizontal directional drilling which could be utilized. Open cut installations must take into consideration the excavation limits, stockpiling of removed soils, utility conflicts and vehicular and pedestrian safety.

Other trenchless installations will be considered for the proposed infrastructure projects within the area.

Wastewater Flow Calculations / Modeling

Tetra Tech will use water, wastewater and reuse water flow demands (average and peak flows) from the respective master plans to confirm pipe size or lift station or pump station requirements, and finalize design of the project. We excerpted from our Reuse Master Plan, the projected reuse demands that we calculated, and provided it on the page above.

Risk Avoidance and Mitigation

Tetra Tech routinely commences a project by identifying potential project risks and mitigation measures well in advance of project construction. For example, Tetra Tech successfully designed, permitted, and constructed multiple complex HDDs within Broward County and understands the critical components required for a successfully designed and constructed trenchless installation.

Horizontal Directional Drilling (HDD)

Tetra Tech has performed highly complex HDDs as part of numerous projects throughout Florida. Tetra Tech designed and successfully installed a 920 foot long, 36-inch subaqueous crossing that was, at the time, the longest ductile iron horizontal directional drilling ever installed. HDD is perhaps the fastest-growing technology in the trenchless industry. The horizontal-



Tetra Tech successfully designed multiple horizontal directional drills of water mains under active railways in Broward County.

directional drilling process represents a significant improvement over traditional cut-and cover methods for installing pipelines beneath obstructions, such as roadways, driveways, historical areas, landscaped areas, rivers, streams, and shorelines, which warrant specialized construction attention.

Preliminary Cost Evaluations

Tetra Tech understands that preliminary cost considerations cannot just be preliminary in nature and need to be as accurate as possible for budgetary considerations. Our cost estimates use recent bid costs for similar projects and take into consideration the need for potential key allowances such that the City can accurately plan for the overall project construction costs.

Trenchless Installation

Because of the size, routes, and construction barriers of the pipelines associated with the CIP, typical open-cut installation may not be feasible. Since some consideration should be given to utilizing horizontal directional drilling, microtunneling, and/or jack and bores. Tetra Tech utilized these methods on many projects, and know where and when they are best used.

Constructability

Another consideration in pipeline projects is constructability, including accommodating contractor storage and lay down areas as well as excavations that would be necessary for trenchless installation of pipes. We will typically evaluate this issue during design, since it can have an important impact on cost and can result in the need to secure Temporary Construction Easements.

Our Team has specific expertise in right-of-way acquisition and Temporary Construction Easements. Temporary Construction Easements are often required for pipeline projects to give the Contractor additional working room during the installation process. It is important that all conditions negotiated with the property owner are properly conveyed to the Contractor during the bidding so they can be properly accounted for in the bid price. It is advisable in the initial stages of design to evaluate any temporary construction easements that may be required. With any tunneling type operation, microtunneling, jack & bore, or trenchless, accounting for adequate space for jacking and receiving pits is important. If temporary construction easements are required, they will be identified early in the design process to maintain project schedules. In addition, sheeting, shoring, and bracing, trench stabilization and dewatering are required to be evaluated.

Cathodic Protection

Where necessary, a corrosion control engineering evaluation of the pipeline route should be conducted to determine if cathodic protection is required in addition to standard polyethylene wrap. Ductile iron pipe can be subject to corrosion related failures. Tetra Tech recommends obtaining soil samples to a depth of the approximate pipe invert at approximately 1,000 foot spacing and test the samples for moisture content, pH, resistivity, chloride ion concentration, sulfide ion concentration, sulfate ion concentration and Redox potential. Tetra Tech may recommends that we perform in-situ soil resistivity measurements to determine average soil resistivity conditions from grade to the approximate pipe invert and performing electrical measurements at select locations to determine if stray current control measures are warranted. Also, it should be considered that corrosion control impacts that may be caused by nearby high-voltage AC transmission lines, cathodically protected pipelines, and other potential sources of stray current corrosion.

Subaqueous Crossings

From time to time, particularly in South Florida, pipeline projects require a crossing of open bodies of water or canals or the Intracoastal Waterway (ICW), which will require utilizing a subaqueous installation technique.

Subaqueous canal crossings use special joints, such as ball and socket, where both a large pulling force and considerable angle deflection, upwards to 15 degrees are required in order to assemble the pipeline crossing on the ground and then "pull" across the canal.
Another very critical task is to determine the cover of the subaqueous pipe itself below the bottom of the ICW. This depth is established by researching the ICW bottom elevation and ensuring that the HDD installation is a minimum of 20 feet below this elevation.

Preliminary Permit Application Meetings

After initial contact with Permitting Agencies during the development of the BODR, the Tetra Tech team will continue coordinating with these agencies and attend pre-application meetings at approximately the 30% complete level. The necessary permit applications and required backup data will be ready for submittal at the 90% complete level.

Some of the key permitting issues include:

- Traffic interruption, dust, possible service interruption, and interruptions that impact residents and businesses within the corridor due to the pipeline installation activities
- OSHA requirements
- Right-of-way Ownership and the permitability of the proposed pipelines along and within certain agencies' jurisdictional authority.

We have extensive expertise in the region based on our experience with Broward County, FL. We successfully dealt with all of the permitting agencies required for infrastructure projects. Certain permits require a long lead time so it is imperative that these are identified as early as possible and include in the preliminary design process

Tetra Tech schedules pre-application meetings and coordinates with all stakeholders prior to routing alternatives analyses to minimize conflict that can often occur during the design phase of the project.

Phase | Design 60% Design

The 60% design will include engineering calculations for the wastewater and water systems. The 60% design will consist of drawings, specifications, calculations, and an engineer's estimate of probable construction cost.

The drawings will consist of plan and profile infrastructure improvements, details, site plans, sections, electrical, mechanical, structural and other drawings. Technical specifications will be drafted, along with input for the City's front end documents. A draft bid schedule, with corresponding measurement and payment section, will be developed to identify major project components for pricing by bidders. The 60% design will be reviewed internally, as part of Tetra Tech's QA/QC program, prior to submittal to the City for review. Tetra Tech will arrange a 60% design review meeting to discuss comments from the City to be addressed prior to permit submittals and Final Design.



Oasis Reuse Treatment Plant

Permit Submittal

After addressing 60% design review comments, Tetra Tech will develop various sets of drawings applicable to the various permit agencies. Permit applications will be drafted, along with other permit requirements such as figures or cost estimates.

Permit packages will be submitted to the various regulatory agencies having jurisdiction over the project. If requests for additional information are received from the agencies, Tetra Tech will provide responses and supporting information to the agency. Once permits are approved, final design will commence.

Final Design

Final Design will commence once all permit revisions are received and incorporated into the drawings, specifications, and cost estimates. The final design will complete the design in preparation for a final QA/QC review, prior to sending the final design documents to the City for review. Tetra Tech will arrange a Final Design review meeting to discuss comments from the City to be addressed prior to bidding of the project.

Bidding

During this phase, Tetra Tech will attend the pre-bid meeting and place great importance on responding to Contractors' questions adequately and thoroughly through addenda. It is our opinion that Contractors will more accurately bid the project if they have a thorough understanding of the plans and specifications and have any initial questions addressed. Our previous experience with projects in the area should minimize Contractors' questions and provide the City with competitive bids. Once the bids are received, Tetra Tech will review the bids for completeness and accuracy and will verify references for the apparent low bidder. We will then make recommendation of award to the City. Upon the City's direction, we will prepare the Contract Documents for execution.

Construction

Tetra Tech carefully controls the construction effort to ensure a successful project. The Tetra Tech team will utilize the same individuals for review of Contractor



Oasis Reuse Plant Monitoring and Plant Overview

submittals (shop drawings, schedules, phasing plans, etc.) as performed the design. This maximizes compliance with the design intent and minimizes review time. Upon award by the City of the construction contract, Tetra Tech will provide construction administration phase services.

These services will typically include the following tasks and activities:

- Attend a pre-construction conference
- Process, review and distribute shop drawings and samples
- Respond to contractor Requests for Information (RFIs).Interpret the Contract Documents
- Review and comment on the Contractor's construction schedule
- Report whenever it is believed that any work is unsatisfactory, faulty or defective or does not conform to the Contract Documents, was damaged, or does not meet the requirements of any test or approval required
- Advise the City of work that should be corrected or rejected or should be uncovered for observation, or requires special testing, review or approval and properly document any deficiencies
- Resolve differing site/field conditions
- Maintain orderly files for correspondence, reports

of job conferences, Shop Drawings and samples, reproductions of original Contract Documents including all Work Directive Changes, Addenda, Change Orders, Field Orders or Directives, additional Drawings issued subsequent to the execution of the Contract, RFIs and interpretations of the Contract Documents, Progress reports, and other Project related documents

- Record names, addresses and telephone numbers of all Contractors', subcontractors and major suppliers of materials and equipment
- Conduct and administer monthly on-site progress meetings and distribute minutes
- Review contractor proposals and change order requests
- Review Contractor pay requests
- Respond in a timely manner to all RFIs with supplemental drawings, specifications, etc
- Assist the City with responding to resident complaints and maintain records of such
- Provide substantial and final completion site visits, develop punchlists and make recommendations to the City regarding acceptance
- Provide startup assistance
- Review Operation & Maintenance (O&M) manuals
- Tetra Tech can also provide O&M training,
- Evaluate testing results and make recommendations to the City
- Verify that test, equipment and systems startups and operating and maintenance training are conducted in the presence of appropriate personnel and that Contractor maintains adequate records thereof; and observe, record and report appropriate details relative to the test procedures and startups
- Review the Contractor's as-builts and prepare Record Drawings
- Prepare and submit certifications to the permitting agencies
- Assist the City as required to close out the construction contract

Closeout

Final closeout for a project involves procedural issues and phase-out administrative procedures, transfer of responsibilities, financial closeout activities, and preparation of appropriate documentation. The purpose of a project closeout effort is to ensure a timely, orderly, and cost-effective project termination. If the closeout is complex and may take substantial time, a closeout plan should be issued prior to full project demobilization.

To ensure orderly closeout of a project, the Project Manager should, once all costs are incurred against the project with invoices and contracts are closed—prepare a project closeout report. The following items should be addressed in the closeout report:

- Technical, scope, cost, and schedule baseline accomplishments
- Financial closeout, including a final cost report with details as required
- Closeout approvals
- Permits, licenses, and/or environmental documentation
- Construction substantial and final completion verification
- Contract closeout status
- Adjustments to obligations and costs
- Photographic documentation
- Baseline change control log
- As-builts and record drawing production

Quality Assurance & Control

All deliverables, whether draft or final, undergo a formal review process prior to submittal to the City. Reviewers are senior staff and corporate/regional technical advisory group specialists who are kept involved in and informed about the project from conception through completion, particularly regarding project objectives, approach to completion of the scope of work, and client expectations. The plan and schedule for review during various stages of each project is established at the beginning of the project between the review team and the project manager. Typical review milestones include: development of the project approach, preliminary design, 30-, 60-, 90and 100 percent completion, interdisciplinary checks, and final sign-off. The review process begins with an evaluation of the detailed project approach by the project manager and associated senior management. The project approach consists of a detailed work plan, financial plan and a schedule for discipline, interdisciplinary and QA checks. The initial project peer review consists of the formal presentation of technical memoranda, design concepts and project-specific criteria by the project manager and task leaders to senior staff and appropriate technical advisory group specialists to resolve technical issues before presentation to the City. The peer review process during the design memorandum and report phase of the work effort ensures that a clearly focused technical direction is established. Reviews later in the project primarily address construction drawings and specifications and focus on constructability, clarity, and value engineering.

Quality, Accuracy, and Integrity

Tetra Tech will implement a detailed documents quality assurance/quality control process where all deliverables, whether draft or final, undergo a formal review process prior to submittal to the City. Our rigorous quality program will apply to all members of our team. We understand that it is critical that our deliverables and services fully meet the City's goals and expectations in a cost-effective manner.

Tetra Tech Quality Management System (QMS) is an internal set of practices and associated organizational structure established for planning and executing services that not only meet, but will also exceed the quality requirements of the City. These practices are implemented on all projects to provide deliverables that are technically sound, error-free, and costeffective.

While standardized, our QMS procedures are also flexible, allowing a level of customization to suit a wide variety of projects. We understand the need to balance innovation and creativity with the implementation of systematic processes for performance valuation as well as planning and design reviews.

Our quality plan will be included in our deliverables at the 30-, 60-, 90- and the 100 percent design



submittals. Tetra Tech's quality system approach applies the fundamental principles of the Plan-Do-Check-Act model of continuous improvement, highlighted in the below graphic. QA/QC activities are identified during project planning and applied throughout the project life. QA activities help guide the project work based on professional and regulatory standards. QC activities occur at key milestones to confirm project quality. Continuous improvement is achieved on the project by applying these QA/QC activities and on future projects by applying lessons learned.

Our stringent quality approach allows our team to identify issues early and implement a corrective action plan to resolve discrepancies with minimal impact to the project. During the 30-, 60-, and 90-percent submittal reviews if an issue arises we will work with the City to develop a solution, implement the solution and then follow-up to ensure the issue is resolved and provide closure so the project and continue to progress forward. If requested, QA/QC documentation will be provided to the City after each milestone so there is a record of all activities and buy in from each discipline as well as from the City.



IMPROVING QUALITY CONTROL WITH THE PLAN-DO-CHECK-ACT MODEL

Continuing Civil Engineering Services | Pompano Beach



» Schedule

With our vast experience with projects under continuing consulting contract, Tetra Tech knows how to successfully manage project schedules and budgets and is experienced in the scheduling requirements, coordination, and organization required to maintain the schedule and budget. Schedules often have overlapping tasks, which utilize various personnel and require experience in coordinating subconsultants, if used, so that multiple critical paths are preserved. Below are some of the controls Tetra Tech uses to manage schedules:



COMPUTER-BASED PROJECT MANAGEMENT. Our ability to meet the project schedule is enhanced by our computer-based project management systems. We are experienced with project scheduling software developed by companies such as Primavera Systems, Inc. and Microsoft, and we will utilize the County's preferred scheduling software. Tetra Tech currently utilizes Microsoft™ Office Project® for preparation and management of detailed project schedules. This software program tracks progress for the established schedule, delineates deliverables, logs project milestones, and visibly reflects the relationship of various tasks.



OPEN COMMUNICATION. Tetra Tech believes in open communication during all phases of every project. By dedicating time in the schedule to meet with the city to fully understand the requirements of the project, Tetra Tech will minimize project re-design. Likewise, during permitting, Tetra Tech has an established philosophy of arranging pre-application meetings with all applicable permitting agencies as a means to facilitate a more streamlined permitting review process. We have permitted numerous projects without receiving any requests for additional information based on our commitment to working with the permitting agency and our ability to incorporate their comments into the design before it is finalized.



CLOSE COORDINATION DURING CONSTRUCTION. During the construction phase, Tetra Tech's project manager will identify key items that may affect the schedule, such as critical shop drawings for long lead items. Where such long lead items exist, Tetra Tech will encourage the contractor(s) to submit those critical shop drawings as soon as possible, while Tetra Tech will dedicate and commit the time to returning those shop drawings as soon as possible in advance of the allotted time for contract review. Our field inspectors will also continually review work progress and inform the project manager when progress is slipping, either for the entire project, or for individual project components.

Project Web Requirements

This project will utilize e-Builder Enterprise[™], a webbased project management tool. This web-based application is a collaboration tool, which will allow all project team members continuous access through the Internet to important project data as well as up to the minute decision and approval status information. e-Builder Enterprise[™] is a comprehensive Project and Program Management system that the City will use to manage all project documents, communications and costs between the Lead Consultant, Sub-Consultants, Design Consultants, Contractor and Owner. e-Builder Enterprise[™] includes extensive reporting capabilities to facilitate detailed project reporting in a web-based environment that is accessible to all parties and easy to use. Training will be provided for all consultants selected to provide services for the City of Pompano Beach.

We understand that Tetra Tech and our subconsultants shall conduct project controls outlined by the Owner, Project Manager, and/or Construction Manager, utilizing e-Builder Enterprise[™]. We understand that the designated web-based application license(s) shall be provided by the City to the Prime Consultant and Sub-Consultants. No additional software will be required. Tetra Tech shall have the responsibility for logging in to the project web site on a daily basis, and as necessary to be kept fully apprised of project developments and required action items.

These project controls may include but are not limited to: Contracts, Contract Exhibits, Contract Amendments, Drawing Issuances, Addenda, Bulletins, Permits, Insurance & Bonds, Safety Program Procedures, Safety Notices, Accident Reports, Personnel Injury Reports, Schedules, Site Logistics, Progress Reports, Correspondence, Daily Logs, Non-Conformance Notices, Quality Control Notices, Punch Lists, Meeting Minutes, Requests for Information, Submittal Packages, Substitution Requests, Monthly Payment Request Applications, Supplemental Instructions, Owner Change Directives, Potential Change Orders, Change Order Requests, Change Orders and the like. All supporting data including but not limited to shop drawings, product data sheets, manufacturer data sheets and instructions, method statements, safety SDS sheets, Substitution Requests and the like will be submitted in digital format via e-Builder Enterprise[™].



Continuing Civil Engineering Services | Pompano Beach



» References

Overview

Our team is proud to provide the following clients as viable references for similar projects in the tri-county area. These references are extremely familiar with the extra effort put forth by staff members to establish and maintain good working relationships, as we will do with the City of Pompano Beach. We encourage you to contact these references for additional proof of our team member's excellent record of superior services. Detailed descriptions of these projects and other relevant experience are provided in the Statement of Skills and Experience of Project Team section.

CLIENT REFERENCE	SUMMARY OF SCOPE	COST
City of Pompano Beach, FL Randy Brown, PE 1205 NE 5th Ave Pompano Beach, FL 33060 954.545.7043 randolph.brown@copbfl.com	 Water and Reuse Treatment Plant Continuing Services Hurricane Hardening Study Water and Reuse Treatment Plant Continuing Services 	 \$675,044 (to date) On schedule and on budget
City of Hollywood, FL Clece Aurelus, PE 1621 N. 14th Ave Hollywood, FL 33019 954.921.3930 caurelus@hollywoodfl.org	 Water main replacement program Sewer expansion program Stormwater Pump Station Assessments Surveying, geotechnical evaluations, design, permitting, and construction administration services Over 300,000 linear feet (56 miles) of water main replacement of 4-to-24 inch in diameter Condition assessments of 10 stormwater pump stations Approximately 50,000 linear feet in gravity sewers and force mains Permitting through multiple regulatory agencies 	 \$4,000,000 fees (to date) Approximately \$40 million construction cost (total to date) On schedule and on budget

City of Fort Lauderdale, FL Steve Hillberg, PE 100 North Andrews Ave Fort Lauderdale, FL 33301 954.336.6970 shillberg@fortlauderdale.gov	 Wastewater Consent decree projects Regional triplex wastewater pump stations evaluations and rehabilitation Duplex wastewater pump station evaluations and rehabilitation Gravity sewers and force mains Water main replacements 	 Approximately \$700,000 fees (to date) On schedule and on budget
City of Cape Coral, FL Jody Sorrels P.O. Box 150097 Cape Coral, FL 33915 239.242.3227 jsorrels@capecoral.net	 Value engineering of previous design Design, permitting and CEI services for over 200 miles of potable water/wastewater/ irrigation water infrastructure Hydraulic modeling of potable water/ wastewater/irrigation water systems Assist City with SRF loan application for \$70 million 	\$7,600,000On schedule and on budget
City of North Miami, FL Wisler Pierre Louis, PE A776 NE 125 St North Miami, FL 33161 305.893.6511, ext. 12501 pwisler@northmiamifl.gov	 Water main replacement Force main replacement Master planning Water treatment plant rehabilitation Planning, design, permitting, construction management Owner's engineering representative services Staff augmentation 	 Approximately \$1,000,000 On schedule and on budget



» Project Team Form

COMPLETE THE PROJECT TEAM FORM ON THE ATTACHMENTS TAB IN THE EBID SYSTEM. PROPOSERS ARE TO COMPLETE FORM IN ITS ENTIRITY AND INCLUDE THE FORM IN YOUR PROPOSAL THAT MUST BE UPLOADED TO THE RESPONSE ATTACHMENTS TAB FOR THE RLI IN THE EBID SYSTEM.

PROJECT TEAM

RLI NUMBER E-20-20

Federal I.D.#_95-4148514

PRIME

Role	Name of Individual Assigned to Project	Number of Years Experience	Education, Degrees
Principal-In-Charge	Charles Drake, PG	37	BS, Geology
Project Manager	Tim Vanderwalker, PE	14	MBA; BS, Civil Eng.
Other Key Member	Ken Caban, PE, LEED AP	25	MS, Env Eng; BS CvI Eng
Other Key Member	Jon Fox, PE	29	BS, Env Eng
Other Key Member	Janine Alexander, PE	23	BS, Env Eng

SUB-

CONSULTANT Role	Company Name and Address of Office Handling This Project Keith Engineering	Name of Individual Assigned to the Project Michael Mossey, PSM
Guiveying	301 E Atlantic Blvd Pompano Beach, FL 33060	
Landscaping		
Engineering		
Other Key Member	Pace Analytical	Christina Raschke
The star decise to the final later of the second	3610 Park Central Blvd N, Pompano Beach, FL 33064	
Other Key Member		
Other Key Member	The Chappell Group	Tyler Chappell
	714 E McNab Rd Pompano Beach, FL 33060	
Other Key Member		
(use attachments if nec	essary)	

Continuing Civil Engineering Services | Pompano Beach

COMPLETE THE PROJECT TEAM FORM ON THE ATTACHMENTS TAB IN THE EBID SYSTEM. PROPOSERS ARE TO COMPLETE FORM IN ITS ENTIRITY AND INCLUDE THE FORM IN YOUR PROPOSAL THAT MUST BE UPLOADED TO THE RESPONSE ATTACHMENTS TAB FOR THE RLI IN THE EBID SYSTEM.

PROJECT TEAM

RLI NUMBER E-20-20 Federal I.D.#_95-4148514 PRIME Name of Individual Assigned to Role Number of Education, Project Years Degrees Experience John Toomey, PE 40 BS, Env Eng Other Key Member Michael Thatcher, PE, CDT 8 BS, Cvl Eng Other Key Member 9 Jason Warren, PE MS, Eng; BS, Cvl Eng Other Key Member 23 Diana Santander, PE MS, CVI Eng; BS, CVI Eng Other Key Member Kevin Roe, PE, CFM 11 BS, Cvl Eng Other Key Member PRIME Role Name of Individual Assigned to Number of Education, Project Years Degrees Experience Ed Wills, PE 19 BS, Env Eng Other Key Member 32 Dave Burger, PE BS, Elect. Eng Other Key Member Nick Benedico, PE, PMP 30 MBA; BS, Cvl Eng Other Key Member 48 Evelio Horta, PE, GE PhD & MS, Soil Mechanics Other Key Member 20 Georgia Vince BS, Bio Oceonography Other Key Member PRIME Role Name of Individual Assigned to Number of Education, Years Project Degrees Experience Jason Burkett, PE, SE, MLSE 15 MS & BS Cvl Eng Other Key Member 23 Alex Montalvo AA, Geology Other Key Member 24 Daniel Nelson, PE BS Cvl Eng Other Key Member

Other Key Member Other Key Member



» Organizational Chart

pimpano beach. Florida's Warmest Welcome

Principal-in-Charge

Charles Drake, PG

Project Manager

Tim Vanderwalker, PE, CDT

Technical Advisors

Ken Caban, PE, LEED AP Jon Fox, PE

Stormwater/Drainage

Improvements

Michael Thatcher, PE, CDT

James Warner, PE

Hydraulic Modeling

Kevin Roe, PE, CFM

Zuzanna Wasowska, PE

Gravity Sewer/Force Mains Janine Alexander, PE

Chris Zavatsky, PE

Water/Reuse Mains Jason Warren, PE Scott Smith, PE

Construction Services

Ed Wills, PE

Permitting Services

Diana Santander, PE

Structural Engineering

Jason Burkett, PE

Lift Station/Pump Station Rehabilitation John Toomey, PE Brent White, PE

DISCIPLINES

Consultation for Emergency Water/Wastewater/ Stormwater Repairs Diana Santander, PE Burl Reardon, PE

SUPPORT SERVICES

Electrical/Instrumentation Dave Burger, PE

> GIS/Mapping Alex Montalvo

Funding Daniel Nelson, PE **MOT** Nick Benedico, PE, PMP

> **Ecological** Georgia Vince

Surveying/SUE Keith & Associates Mike Mossey, PSM

SUBCONSULTANT

Keith & Associates (LB) - *Survey/SUE* Pace Analytical (LB) - *Water Quality Laboratory* The Chappell Group (MBE/WBE, LB) - *Environmental*



RANKING

in a row

» Statement of Skills & Experience of Project Team

Overview

Tetra Tech has built a reputation in the industry as a leader in developing effective solutions to constantly changing, tough engineering challenges. Our reputation for providing effective engineering solutions is backed by reliable systems, engineering, scientific, economic, and business analyses. This is proven by our firm's constant rankings with the *Engineering-News Record* (*ENR*). For the past 17 consecutive years, Tetra Tech has been ranked No. 1 in water. We are ranked by *ENR* as the No. 4 design firm in the country, which is the result of the professional relationships we enjoy with our clients. We continue to build on the expertise we developed over the past five decades.

Our Technical Expertise

Tetra Tech has extensive pipeline, pump station, green infrastructure, sea level rise, and resiliency experience throughout Florida, the southeast, and around the world. Relevant areas of key expertise include:

Water, Wastewater, Reuse, and Stormwater: We have planned, designed, permitted and/or constructed hundreds of miles of water lines throughout the southeastern US ranging from 6-inch to 72-inch diameter pipelines. This experience includes construction through complex corridors including roadway, railroad and even water body crossings and environmentally sensitive areas. In Broward County, Tetra Tech has designed and permitted over 50 miles of water mains and 55,000 feet of gravity sewers and force mains.

Tetra Tech recently completed the Reuse Water System Master Plan Update for the City of Pompano Beach, assisting the City to develop a Capital Improvement Program for its reuse water system to meet current and future demands. In addition, Tetra Tech also completed a Reuse Feasibility Study and Plan for the Miami-Dade Water and Sewer Department, to identify technically and economically feasible reuse demands through 2040. Tetra Tech staff have worked on previous stormwater master plan updates for the City of Pompano Beach. In addition, our staff have designed and assisted with construction administration of numerous stormwater projects throughout the City of Pompano Beach.

Pumping Facilities: Our experience also includes the design and construction management of hundreds of water, wastewater, and stormwater pump station projects ranging from small grinder stations to up to 206 MGD stations.

Funding: Our team's significant funding knowledge and expertise will guide Pompano Beach to obtain outside funding as well as comply with all contractual and reporting requirements. Tetra Tech has partnered with clients to secure over \$500 million in funding from various sources including the Clean Water State Revolving Fund (CWSRF), Water Quality Improvement Fund (WQIF), USEPA's Water Infrastructure and Finance Act (WIFIA), and others. We partnered with clients to develop high-quality grant applications and obtain approval for hundreds of water and wastewater facilities across the US. The table below details several of our most significant SRF funded projects in Florida.

Client	Project	Funding Source	Amount
City of Hollywood	Water Main Replacement/Sewer Expansion	SRF	\$20M
Toho Water Authority	Gravity Sewer Rehabilitation	WIFIA	\$61.8M
City of Sanibel	Wastewater Collection, Treatment, and Disposal Facilities	SRF	\$26.0M
City of Edgewater	Centralized Wastewater Collection, Treatment and Effluent Disposal	SRF	\$26.2M
City of New Smyrna Beach	Wastewater Treatment Plant	SRF	\$16.2M
City of Lake City	Price Creek Water Treatment Plant	SRF	\$9.2M
City of Cape Coral	Water/Sewer Distribution/ Collection	SRF	\$70M
Gateway Improvement District	Lake Bank Improvements (clean water)	SRF	\$10M
City of Fort Myers Beach	Water/Sewer Distribution/ Collection	SRF	\$50M
City Punta Gorda	RO Plant and Wellfield	SRF	\$20M
City of Orlando	Conserv I Reclaimed Water Improvements	SRF	\$20M

Significant SRF & WIFIA Funded Projects in Florida

Our Performance

While experience and innovative solutions are part of what Pompano Beach looks for in a consultant; responsiveness, flexibility, and project management discipline are the keys to effective, efficient project delivery. Our proven track record of success is highlighted by 80 percent of our work coming from repeat clients. The experience, safety record, organizational capability, and project management presented in this proposal demonstrates our performance as well as the recognized dedication of our key staff.

The longevity of our team's personnel is proven by Tetra Tech's employee retention rate of 89 percent. Not only do we provide superior client service, we focus internally on providing quality work environments for our staff.

Safety is a priority through all project phases. Our experience modification rate, total recordable incident rate, and days away, restricted, or transfer are at least 25 percent below the industry average, demonstrating our industry leadership in safety.

Over 90% of our projects are delivered on time and within budget, demonstrating that we meet our clients' project delivery needs. Each of the following project descriptions provides information on project delivery. This demonstrates that we meet our clients' delivery needs with no surprises.

Exhibit A RLI E-20-20 & Consultant Proposal

Continuing Services Contract

Tetra Tech is currently providing utility engineering services under the Water and Reuse Treatment Plant Continuing Services contract. Through this contract we have been issued six work authorizations (WA); WA 1-5 for hardening projects on the WTP campus and WA-6 for the Reuse Master Plan Update. We also serve the City under the Raw Water Well Consulting



key team members:

Chris Zavatsky, PE (WA 1-5)

Jason Burkett, PE (WA 1-5)

Charles Drake, PG (WA 1-6)

Banks Wason, PE (WA 2-5)

> Kevin Roe, PE (WA-6)

Diana Santander, PE (WA-6)

Zuzanna Wasowska, PE (WA-6)





cost: \$675,044 engineering fee; all projects delivered on time and on budget

TETRA TECH

Services Contract. No work authorizations have been issued under the Raw Water Well Contract.

Through these WAs and the scoping of the raw water well services, we have met and worked with utility department, building department and public works staff, and understand their dedication to maintaining and improving the City's infrastructure in a cost effective manner.

Work Authorization (WA) No. 1 - Pompano Beach Water Treatment Plant Hurricane

Hardening Study. Tetra Tech completed a facility-wide hurricane hardening evaluation for all of the water treatment plant's manned buildings. Tetra Tech detailed deficiencies and capital improvements in line with Florida's Building Code. Cost estimates and a prioritized improvements schedule were developed to aid the City in planning implementation of the improvements.

WA No. 2. Pompano Beach Water Treatment Plant Filter and High Service Pump Building. The Filter and High Service Pumps 1-4 Building at the City of Pompano Beach Water Treatment Plant moved one step closer to resiliency by hardening the structure to comply with current Florida Building Codes. Tetra Tech provided engineering and architecture services to design the hurricane hardening project including plans,

PROJECT #1 DISCIPLINES THAT CORRESPOND TO RLI

Reuse water system

Water system

Design alternatives

Utility modeling

Field data analysis

Surveying & field data analysis

Bidding/construction documents

Design plans, technical specifications, & cost estimates

Bidding/construction documents

Permitting, bidding, and services during construction

Project closeout

Tetra Tech has provided services to the City of Pompano Beach for its water and reuse water systems since 2016. calculations, specifications, and an opinion of probable cost. The improvements were permitted through the City Building Department and Fire Department. Tetra Tech assisted the City in bidding and awarding the project and providing construction phases services through project closeout.

WA No. 3 - Pompano Beach Water Treatment Plant Chemical Feed Building Hurricane Hardening

Design, Permitting, and Construction Administration. The Chemical Feed Building at the City of Pompano Beach Water Treatment Plant is moving one step closer to resiliency by hardening the structure to comply with current Florida Building Codes. Tetra Tech provided engineering and architecture services to design the hurricane hardening project including plans, calculations, specifications, and an opinion of probable cost. The improvements are being permitted through the City Building Department and Fire Department. Tetra Tech will assist the City in bidding and awarding the project and providing construction phases services through project closeout. Project completion is anticipated in FY 2021.

WA No. 4 - Pompano Beach Water Treatment Plant Sludge Dewatering Building Hurricane Hardening Design, Permitting, and Construction Administration. The Sludge Dewatering Building at the City of Pompano Beach Water Treatment Plant is moving one step closer to resiliency by hardening the structure to comply with current Florida Building Codes. Tetra Tech provided engineering and architecture services to design the hurricane hardening project including plans, calculations, specifications, and an opinion of probable cost. The improvements are being permitted through the City Building Department and Fire Department. Tetra Tech will assist the City in bidding and awarding the project and providing construction phases services through project closeout. Project completion is anticipated in FY 2021.

WA No. 5 - Pompano Beach Water Treatment Plant Filter Administration Building with Exterior Tanks and Membrane Building Hurricane Improvements Design, Permitting, and Construction Administration. The

City requested additional improvements to aide in reducing long term maintenance on the Filter/Administration Building and Exterior Tanks. In addition, the Membrane Building's exterior façade, water proofing, drainage, electrical, and mechanical systems were included. Tetra Tech provided engineering and architecture services to design the hurricane hardening project including plans, calculations, specifications, and an opinion of probable cost. The improvements are being permitted through the City Building Department and Fire Department. Tetra Tech will assist the City in bidding and awarding the project and providing construction phases services through project closeout. Project completion is anticipated in the fall of 2021.

WA No. 6 - Pompano Beach Reuse Water Master Plan Updates. Tetra Tech reviewed the existing master plan and met with City staff to identify goals and objectives of the updated master plan, toured and familiarized themselves with the Oasis Plant and parts of the reuse system. Tetra Tech staff identified the existing system deficiencies, prioritized reuse system (treatment plant and distribution), estimated capital costs, and identified funding options. The Master Plan evaluated the existing system, estimated demand projections using current growth assumptions, updated the existing hydraulic model to assist in identifying system sizing deficiencies and develop a capital improvement program to accommodate future demands to meet reuse system demands in five year increments through build-out. Project was completed July 2020.

Water Main Replacement Program

CITY OF HOLLYWOOD, FL

Tetra Tech is providing surveying, geotechnical evaluations, design, permitting, and construction administration services on multiple projects concurrently. To date, Tetra Tech's program project comprises over 300,000 linear feet (56 miles) of water main replacement, reconnection of over 1,000 service connections, conflict resolution for numerous underground and overhead utilities, permitting through multiple regulatory agencies, and construction within schedule and budget. The projects are also State Revolving Fund (SRF) projects, which included document control, payroll reviews, and compliance reviews for Davis Bacon, American Iron and

Steel (AIS), and other funding requirements.

Exhibit A RLI E-20-20 & Consultant Proposi

key team members: Ken Caban, PE Project Manager

Janine Alexander, PE Engineer of Rec<u>ord</u>

Jon Fox, PE Technical Advisor

Project Engineers: Chris Zavatsky, PE



completion date: Ongoing



cost:

\$3M engineering fee; delivered on time and on budget

TETRA TECH

The improvements included replacing existing aged cast iron water mains with both DIP and PVC water mains, ranging from 4- to 24-inch in diameter. The existing water mains were located within residential streets, paved and unpaved alleys, and easements in the rear of residential lots, which had become overgrown or encroached upon by property owners. These improvements relocated existing water meters within unpaved alleys or rear easements to the front of the lots and included new water services within private property and replaced aged fire hydrants with new fire hydrants. The program also includes extensive maintenance of traffic (MOT), asphalt pavement, and pavement markings restoration and improvements.

PROJECT #2 DISCIPLINES THAT CORRESPOND TO RLI

Water system

SRF & Davis Bacon

Surveying & field data analysis

Bidding/construction documents

Design plans, technical specifications, & cost estimates

Bidding/construction documents

Permitting, bidding, and services during construction

Project closeout

Tetra Tech has designed and permitted over 300,000 linear feet of water under this program and assisted with the successful construction of approximately 200,000 linear feet.

Proj. #	Linear Ft	Cost	Water Services	Status	Permitting Agencies
1	27,000	\$2.3 M	300	Constructed	Department of Health (DOH) Department of Transportation (DOT) City of Hollywood (COH)
2	99,000	\$13 M (est.)	1,000	Constructed	DOH, DOT, COH
3	99,700	\$13 M (est.)	1,000	Under Construction	DOH, DOT, COH Broward County FL East Coast Railway
4	3,000	\$1 M	N/A	Constructed	COH FL Dept of Env Protection (FDEP) Broward County
5	70,000	N/A	N/A	Design	DOH, DOT, COH Broward County

Sanitary Sewer Expansion Program

For the City's Sanitary Sewer Expansion Program, Tetra Tech is providing surveying, geotechnical evaluations, design, permitting, bidding, and construction administration services on multiple projects concurrently. To date, Tetra Tech's program project comprises over 50,000 linear feet of gravity sewers and force main replacement, new and replaced

Exhibit /

key team members:

Ken Caban, PE Project Manager

anine Alexander, PE Engineer of Record

Jon Fox, PE Technical Advisor

Project Engineers: Chris Zavatsky, PE



completion date: Ongoing



cost:

\$1.2M engineering fee; currently on time and on budget

TETRA TECH

sewer laterals and cleanouts, new lift stations, abandonment and connection of existing private lift stations to the gravity sewer system, septic tank location and abandonment, large user meter upsizing and replacement, and other system components. These projects have include permitting through multiple regulatory

agencies, and construction within schedule and budget. The projects are also State Revolving Fund (SRF) projects, which included document control, payroll reviews, and compliance reviews for Davis Bacon,

American Iron and Steel (AIS), and other funding requirements.

Prior to detail design, a basis of design memorandum is prepared, establishing service area, projected wastewater flows, flow routing, lift station capacity confirmations, pipe sizing calculations, and hydraulic modeling performed by the City.

PROJECT #3 DISCIPLINES THAT CORRESPOND TO RLI

Wastewater system

SRF & Davis Bacon

Surveying & field data analysis

Bidding/construction documents

Design plans, technical specifications, & cost estimates

Bidding/construction documents

Permitting, bidding, and services during construction

Project closeout

Geotechnical investigations

Tetra Tech is assisting the City of Hollywood to rehabilitate its existing force mains and improve groundwater quality through the elimination of septic tanks.

To date, the following projects are being performed under this program:

- Royal Poinciana Sewer Expansion
- Washington Park/Lawn Acres Sewer Expansion
- Large User Meter 7 and Force Main Upsizing and Replacement

Continuing Services Contract

CITY OF FORT LAUDERDALE, FL

Tetra Tech currently provides services to the City of Fort Lauderdale through the existing continuing contract for these same services. We have held this contract since 2012. Some of the projects Tetra Tech completed or is currently completing for the City of Fort Lauderdale include:

Exhibit A RLI

East Las Olas Boulevard 12-Inch Force Main Replacement. The

key team members:

Ken Caban, PE Program Manager

Jon Fox, PE Technical Advisor

Janine Alexander, PE Engineer of Record

Project Engineers: Chris Zavatsky, PE Diana Santander, PE Jason Burkett, PE Banks Wason, PE



completion date: Ongoing



cost: See project description for each service fee; projects were delivered or are on time and on budget

TETRA TECH

City of Fort Lauderdale selected Tetra Tech to assist the City with replacement of an existing 12-inch-diameter force main that experienced multiple unexpected ruptures resulting in damaged public and private property and regulatory actions against the City, due to sewer overflows into the Intracoastal

Waterway. Because of the regulatory actions against the City, expedited services and the use of corrosiveresistant piping and coatings were necessary, along with trenchless installations. The existing force main is along East Las Olas Boulevard, an FDOT roadway, and includes an aerial crossing of a canal connected to the Intracoastal Waterway. Services provided by Tetra Tech for replacement of approximately 2,000 feet of 12-inch-diameter force main included the following: survey; geotechnical evaluations; utilities verification, including subsurface utility evaluations; route analysis; structural evaluations of aerial water crossing pilings; regulatory coordination and negotiations; design; permitting; bidding assistance, and construction oversight. Tetra Tech successfully

assisted the City of Fort Lauderdale to meet the strict deadlines with this project, due to being the first project to be implemented as part of a consent order between the City of Fort Lauderdale and the FDEP. Fee \$279,000

PROJECT #4 DISCIPLINES THAT CORRESPOND TO RLI

Water, gravity sewer, lift stations, and force mains

Preliminary and final design

Field data analysis

Surveying & field data analysis

Bidding/construction documents

Design plans, technical specifications, & cost estimates

Permitting, bidding, and services during construction

Project closeout

Tetra Tech successfully assisted the City of Fort Lauderdale to meet the schedule requirements of its first consent decree project, the East Las Olas Boulevard 12-inch Force Main Replacement Lake Estates Small Water Main Improvements. This community improvement involves the design of approximately 10,850 linear feet of 8-inch diameter potable water mains to replace existing aged pipes. Permitting involved the City of Fort Lauderdale Building Department, Florida Department of Health, Broward County Environmental Protection and Growth Management Department, and Florida Department of Transportation. The project includes surveying, geotechnical, preparation of design and construction documents, permitting, bidding review and assistance, construction administration and inspection, and project closeout and certification. Fee: \$183, 854

Pump Stations A-7, D-10 and D-11. Tetra Tech performed wastewater flow analyses due to increased land use densities in multiples area of the City, including residential areas and downtown Fort Lauderdale. In addition, evaluations of existing duplex and triplex pump stations and upstream influent manholes were completed to identify rehabilitation or replacement requirements. Two of the existing pump stations are located adjacent to East Las Olas Boulevard on the Isle of Venice (Pump Station D-10) and Hendricks Isle (Pump Station D-11), in areas which experience sea level and high tide impacts. Tetra Tech prepared preliminary design memoranda for each pump station which included findings and recommendations for rehabilitation and replacement and associated costs. Field data collection, surveys, designs, permitting, and construction administration services were completed. Two of the three projects was designed, permitted, bid, and constructed and the third was designed, permitted, bid and is currently under construction. Fee: \$373,033

441 NW 7th Avenue and Downtown Fort Lauderdale Gravity Sewers. Tetra Tech assisted the City with gravity sewer improvements for two recent projects, which included design, permitting, bidding, and construction administration services for a gravity sewer extension. In addition, Tetra Tech is assisting the City with a design/build project to improve a portion of the gravity sewer system in Downtown Fort Lauderdale. Tetra Tech prepared a Design Criteria Package, which included preliminary drawings and specifications to solicit and select a design/build firm to complete the project. In addition, permitting activities through Broward County were completed. Fee: \$258,304

Southwest 6&7 Utility Expansion Program

The initial development for Cape Coral planned for over 350,000 residential lots and a projected population of over 400,000. Today, the City has nearly 170,000 residents and is the third largest city geographically in the state of Florida. As development continued, centralized water and wastewater services were added. However, as development began to outpace the rate at which centralized services could be provided, water and wastewater service had to begin to be provided through on-site wells and

key team members: Danny Nelson, PE Project Manager

Jon Fox, PE Principal-in-Charge





cost:

\$7.6M engineering fee; delivered on time and on budget with minor change orders added TETRA TECH septic tank/drain field systems. Although the City did expand service as funds were available, the pace of growth far exceeded the utility extension pace. As such, the City developed and adopted a Utilities Master Plan which outlined the Utility Extension Program (UEP) in a phased approach that would ultimately extend water, wastewater and irrigation water service to virtually all areas south of Pine Island Road (SR 78) and some areas north of Pine Island Road.

As part of the Utilities Extension Program (UEP), the City selected Tetra Tech to perform value engineering and plan adoption of the prior design; hydraulic modeling; financial assistance; bidding assistance (including assistance with prequalifying contractors); and construction management/construction engineering inspection (CEI) services for the Southwest 6&7 UEP. The project area consists of over four square miles and 200 miles collectively of infrastructure consisting of the following:

- 53 miles of 4-inch through 12-inch potable water mains (PVC)
- 65 miles of 4-inch through 30-inch irrigation water mains (PVC)
- 12 miles of 4-inch through 12-inch wastewater force mains (PVC)
- 60 miles of 8-inch through 24-inch wastewater gravity collection piping (PVC)
- 10 miles of 12-inch through 42-inch stormwater pipe (HDPE and RCP)
- 18 wastewater lift stations
- 60 miles of new road construction

PROJECT #5 DISCIPLINES THAT CORRESPOND TO RLI

Hydraulic modeling

Water, gravity sewer, lift stations, and force mains

Preliminary and final design

Field data analysis

Surveying & field data analysis

Bidding/construction documents

Design plans, technical specifications, & cost estimates

Permitting, bidding, and services during construction

Project closeout

This was the largest and most complex utility expansion performed by the City of Cape Coral. Over 4 square miles of improved area and over 200 miles of utility infrastructure was designed and constructed. We assisted the City in obtaining \$70 million in SRF loans.

Continuing Civil Engineering Services | Pompano Beach

Hydraulic Modeling

One of the first tasks associated with the project was to utilize the City's existing hydraulic models for the potable water, wastewater and irrigation systems and to utilize them for final design of the infrastructure within the Southwest 6&7 UEP. Our team utilized H20MAP Water for the water system and InfoWater for irrigation and wastewater models. The designs of the wastewater, potable water, and irrigation water infrastructure were all based on hydraulic modeling of the City's systems to understand how the proposed infrastructure in Southwest 6&7 would operate in conjunction with existing facilities. Tetra Tech's modelers worked closely with the designers to make reasonable pump and pipe recommendations and iteratively make adjustments to the model as the design changed to ensure that the final design would be hydraulically acceptable.

Eighteen wastewater lift stations and their force mains were modeled to provide a basis for pump selections and force main sizes. Many of the lift stations discharged into force mains conveying wastewater from other, existing lift stations, including 3 which were connected to the 30-inch force main upstream of the Southwest Water Reclamation Facility. For this reason, there was often a wide range of operating conditions. Therefore, Tetra Tech selected pumps to operate at both a higher duty point when multiple pump stations were running and at the minimum system curve to prevent the pump from running outside its proper operating band.

Potable water and irrigation models were also used to make recommendations for transmission and local main sizes within Southwest 6&7. Modeling led directly to the elimination of several crossings of major roads, particularly Chiquita Boulevard and Trafalgar Parkway, because we were able to prove with the model that the crossings were not necessary to provide adequate working pressure and fire flow (on the potable water system). As part of Southwest 6&7, work was begun to determine the feasibility of an irrigation storage and pumping facility that had been considered near the area. It was shown that the facility was not needed to maintain pressures in Southwest 6&7, so a subsequent study was completed by Tetra Tech to fully evaluate additional irrigation facilities.

Tetra Tech has also used the hydraulic models to assist the City with design of casing sleeves to be installed north of Pine Island Road (in the vicinity of the North 2 UEP boundary) to house future water, wastewater and irrigation piping. The sleeves are proposed to be installed now along with proposed road widening by Lee County.

Water, Wastewater, and Reclaimed Water Planning MIAMI-DADE WATER & SEWER DEPARTMENT

Tetra Tech is providing engineering and geological services for water, wastewater and reclaimed water planning, design, and assistance with the continuation of various program components to the Miami-Dade County Water and Sewer Department (MDWASD). MDWASD is the largest water and sewer utility in the southeastern United States, serving nearly 2.3

key team members: Ken Caban, PE Quality Control

Diana Santander, PE Project Manager

Chris Zavatsky, PE Project Engineer

Janine Alexander, PE Project Engineer

Kevin Roe, PE Hydraulic Modeler



completion date: 2019

cost: \$7.7M engineering fee; delivered on time and on budget

TETRA TECH

million residents and thousands of visitors on a daily basis. To continue to fulfill the department's vision of continuous delivery of high-quality drinking water and wastewater services in compliance with all regulatory requirements, MDWASD has planned a systematic and responsible multi-year CIP.

Exhibit A RLI E-20-20 & Consultant Proposal

This plan focuses on providing necessary upgrades to thousands of miles of pipes, hundreds of pump stations, and several water and wastewater treatment plants that provide its customers high-quality drinking water and wastewater services. Therefore, the water, wastewater and reclaimed water master plan contract is extremely important and integral to Miami-Dade County. Over the past few years, regulatory pressure has required MDWASD to focus its attention on negotiating and planning strategies to address the everevolving system requirements and challenges, including legislative mandates like the Ocean

PROJECT #6 DISCIPLINES THAT CORRESPOND TO RLI

Water, wastewater, water supply, and reuse systems

Gravity sewers, pump station, and force mains

Preliminary design and alternatives

Utility modeling

Field data analysis

Tetra Tech assisted WASD with every type of water infrastructure, including water supply, water treatment and transmission, sewer collection and transmission, and reuse.

Outfall Legislation (OOL), which mandates elimination of ocean outfall of wastewater treatment plant effluent and enforcement actions such as the most recent consent decree. Programs, as well as individual projects to meet these requirements, have been identified, planned, scheduled and are actively being implemented.

MDWASD has the foresight to understand that regulatory matters must be addressed to resolve the past without neglecting the plans to build the future.

Professional Services

Our team has provided a diversity of services related to planning, preliminary design, implementation, and construction of the water and wastewater infrastructure, including climate change and sea level rise considerations. Services include water and wastewater systems hydraulic modeling, flow projections, master planning, operational studies, hydrogeological evaluations, geological evaluations, process optimization, cost estimating, scheduling, and additional engineering support services as requested by the client. Tetra Tech is also aiding MDWASD through on-site staff augmentation for the determination of capacity analyses of various systems as well as with the water supply well development program, hydraulic modeling, zoning application reviews, groundwater modeling, hydrogeological services, cadastral technician services, among others.

Since 2015, Tetra Tech has been assisting MDWASD with all these services. Specific tasks are listed below:

- Task Order #1: Geological Services Assistance
 - Task Order #2: Miscellaneous Planning Services
 - Task Order #3: NW 79th Street & NW 7th Avenue Basis of Design Reports & Hydraulic Evaluations
 - Task Order #4: Basis of Design Report Services for Water and Sewer Services within Unsewered Commercial Corridors
 - Task Order #6: Capacity Analysis for Water and Wastewater Developer Connections
 - Task Order #7: Hydrogeological Support Services Staff Support
 - Task Order #8: Water Demand Projections GIS Module
 - Task Order #9: Zoning Application Review Assistance
 - Task Order #10: Miscellaneous Planning Services
 - Task Order #11: Water Reuse Feasibility Study
 - Task Order #12: Miscellaneous Planning Services
 - Task Order #13: Interim Water Facilities Master Plan
 - Task Order #14: PortMiami Water Distribution System
 Analysis and Upgrades Recommendations

Dual 30-inch Subaqueous Water Mains and Port Miami Water Infrastructure Master Plan

MIAMI-DADE WATER & SEWER DEPARTMENT

PortMiami, one of the busiest cruise ship ports in the world, was facing water distribution system flow and pressure issues during cruise ship

key team

members:

Ken Caban, PE Technical Advisor

Jon Fox, PE Technical Advisor

Janine Alexander, PE Project Manager



completion date: 2018

\$ cost: \$300K engineering fee; delivered on time and on budget

TETRA TECH

potable water filling activities. In addition, PortMiami was preparing for the arrival of the largest Mega Cruise Ships in the world, which would have worsened the water flow and pressure issues, if not addressed.

Exhibit A RLI E-20-20 & Consultant Proposal

Tetra Tech developed an expedited water infrastructure master plan to prepare for the arrival of the Mega Cruise Ships and to address the existing flow and pressure deficiencies.

This project was a joint project for the Miami-Dade Water and Sewer Department (WASD) and the Miami-Dade Seaport Department.

The initial phase included identifying the sizes of subaqueous water lines necessary to provide sufficient water for the Mega Cruise Ships. Tetra Tech identified the need for two subaqueous 30-inch HDPE water mains, underneath Biscayne Bay, in Downtown **PROJECT #7**

DISCIPLINES THAT CORRESPOND TO RLI

Water system planning

Design alternatives

Hydraulic modeling

Field data analysis

Constructability

Preliminary design plans, technical specifications, & cost estimates

This project was chosen for the technical program of the 2018 AWWA Annual Conference and Exposition due to its unique and technically complex aspects.

Miami. Tetra Tech assisted with the routing of the two 30-inch subaqueous water mains, including identifying the depths necessary to avoid seawalls, bridge piers, and other obstacles between the mainland and PortMiami.

Tetra Tech also assisted the detailed design engineering firm with design specifications necessary for the required HDPE piping and technical guidance.

Work for this project included extensive field data collection in high traffic and high security areas related to PortMiami's utility and marine infrastructure to update and calibrate PortMiami's water system hydraulic model.

Extensive hydraulic modeling of numerous scenarios, to minimize construction costs, as well as to ensure constructability, were completed in an expeditious manner, due to the need to commence construction of the identified improvements prior to the completion of construction of the first new Mega cruise ship terminal. Cost estimates and schedules were developed to facilitate funding of the different portions of the water systems. Tetra Tech also served as WASD's technical advisors, providing technical recommendations to PortMiami's staff, engineering consultants and designers.

> Once constructability and model calibration were complete, preliminary and expedited analyses were conducted to identify transmission system improvements required ahead of the Cruise Terminal A construction.

Simulations were developed using the existing WASD water system hydraulic model, for 2018 and 2040. Water demands were updated with PortMiami and WASD staff, and included existing demands, future building/tenant demands, and future ship filling demands. Tetra Tech successfully identified the water transmission system in time for PortMiami and WASD to design, permit, and construct them before the opening of Cruise Terminal A.

Other terminal improvement/redevelopment projects were to follow the construction of Cruise Terminal A. The remainder of Tetra Tech's work also needed to be expedited to provide sufficient water prior to the opening of the other future terminals to be completed in the future. Once all the transmission, distribution, and ship filling improvements were identified, cost estimates and schedules were developed and used by PortMiami and WASD to fund and schedule the various projects.

Tetra Tech developed an expedited, phased capital program for PortMiami and WASD to implement projects in a timely fashion to meet tight redevelopment schedules.

Construction of portions of this important and expedited project were completed on schedule, providing sufficient water to the new Mega Cruise Ships, which began to berth at PortMiami.

Integrated Master Plan PALM BEACH COUNTY, FL

As one of the largest utilities in Florida, the Palm Beach County Water Utilities Department (PBCWUD) provides water, and wastewater service to approximately 500,000 people and reclaimed water service to thousands of customers. Tetra Tech was retained by PBCWUD to develop an Integrated Utility Master Plan (IUMP) that will guide the operations, maintenance and capital improvements of the utility through 2050. The project is focused on developing a process rather than a document that leverages PBCWUD's CMMS, SCADA and GIS information to

key team members:

Ken Caban, PE Technical Advisor

Chris Zavatsky, PE Deputy Project Manager

Kevin Roe, PE Hydraulic Modeler



completion date: Ongoing estimated 2022 completion

\$ cost: \$6,000,000 estimated engineering fee; on time and on budget TETRA TECH identify issues and develop effective solutions for implementation. Key to the concept is the development of dashboards to present crucial information from the data systems in a meaningful manner and provide for day to day tracking of key performance metrics.

Exhibit A RLIE-20-20 & Consultant Proposa

The development of system actions and improvements starts with placing a priority on operational and maintenance solutions over capital projects that add to the utilities asset base. Once projects are identified they will be prioritized based on risk and then further optimized based on benefits. A planning tool will be developed that will allow PBCWUD to adjust projects based on external and internal constraints and identify

PROJECT #8

DISCIPLINES THAT CORRESPOND TO RLI

Water, wastewater, and reuse systems Lift stations and force mains Preliminary design and alternatives Utility modeling Field data analysis

Tetra Tech is assisting Palm Beach County with developing an intelligent and integrated master plan for its water, wastewater, and reuse water supply, treatment, collection, and transmission systems.

the impact of the adjustments on system risks and key performance indicators. Phase 1 of the project currently underway focuses on developing a conceptual framework for the process. Numerous workshops have been held with PBCWUD staff to confirm goals and objectives and identify key metrics. The goals and metrics were structured to align with and support PBCWUD's ongoing program to achieve ISO 55001 certification in Asset Management. PBCWUD's current data systems including Maximo (CMMS), SCADA, GIS, and customer billing were reviewed to verify the ability to utilize and integrate the information into the decision model. Finally, a system-wide risk assessment analysis was performed that established the initial risk approach as well as achieving compliance with the Risk and Resiliency Analysis requirements of America's Water Infrastructure Act. Other Phase 1 activities include preparing population and demand projections through 2050, evaluating the existing assets of the water, wastewater and reclaimed water systems, and developing hydraulic models for the water, wastewater transmission and reclaimed water systems. Future Phases of the project will define the portfolio of project to meet the needs of the utility through 2050, develop the dashboards and decision criteria and implement the revised planning process.

Exhibit A RLI E-20-20 & Consultant Proposal

Gravity Sewer Rehabilitation & Replacement, Phases I & 2 TOHO WATER AUTHORITY

The maintenance cost related to operating Tohopekaliga Water Authority (TWA)'s wastewater collection system was becoming a concern. Emergency calls and repairs were consuming most of the annual maintenance budget, leaving limited funds for preventative system maintenance.

key team members: Jon Fox, PE Client Manager

Janine Alexander, PE Project Manager

Alex Montalvo GIS Asset Manager



completion date: 2019



TETRA TECH

TWA authorized Tetra Tech to perform surveying and engineering services related to its gravity sewer system improvements in areas previously prioritized based on risk of failure. Tetra Tech provided survey, design, permitting, bidding, construction management, and funding compliance for

phases 1 and 2 of this project, totaling over 550,000 linear feet of sewer. Tetra Tech also assisted in obtaining a \$61,800,000 Water Infrastructure Finance and Innovation Act (WIFIA) Loan to continue with the program execution.

TWA maintenance crews targeted several areas of their system, including downtown Kissimmee and the Poinciana areas with an aggressive inspection program including sewers and manholes in these areas. Their crews had amassed over 550,000 feet of sewer inspections and several hundred manhole inspections before contracting with

PROJECT #9 DISCIPLINES THAT CORRESPOND TO RLI

Water, gravity sewer, lift stations, and force mains

Preliminary and final design

Field data analysis

Surveying & field data analysis

Bidding/construction documents

Design plans, technical specifications, & cost estimates

Permitting, bidding, and services during construction

Project closeout

Tetra Tech provided design, permitting and construction management of over 550,000 feet of sewer lines. We assisted Toho with obtaining over \$61 million in WIFIA funding for the repair work.

Tetra Tech to evaluate, make recommendations, and complete a preliminary design report (PDR) for repairs. Inspections used the National Sewer Service Company Pipeline Assessment Certification and Manhole Assessment Certification Program (NASSCO PACP & MACP) standards.

In order to take advantage of available loan funding, TWA had to have construction contracts executed by 2017, leaving little time to complete the evaluations, recommendations and prioritization of projects. Tetra Tech developed a method for compiling the PACP and MACP database information and displaying the defect spatially using TWA's sewer collection system GIS maps. To meet tight time

constraints for review of the inspections, Tetra Tech had several NASSCO-certified engineers simultaneously working on the project using a web-based version of the GIS mapping. The map was set up to symbolize based on different potential recommendations, including replace, point repair and Cured-in-place pipe (CIPP) lining. A senior engineer would QA/QC the work and accept the recommendations.

Recommendations were summarized in the PDR and the work was separated into several construction packages. A common problem in the system was settlement of pipelines due to high groundwater conditions, which led to many sewers in need of structural rehabilitation which had settled to the point where trenchless repairs were no longer feasible. The settled and offset piping was also the defect leading to pipeline failures, backups and prolonged bypass pumping while repairs were made. Two construction packages were compiled, one consisting of CIPP lining only of sewer mains, manholes and laterals, and another to perform manhole replacements, and sewer and lateral point repairs. Many of the point repairs were necessary to complete the lining, so the individual projects were coordinated to run simultaneously and when open cut repair work had been completed the remainder of the trenchless repairs would then be executed.

A third contract includes more complex problems that included full sewer reach replacements in difficult locations, requiring further investigation and business case evaluation prior to proceeding with a solution to ensure the appropriate decisions are made. Work on reviewing these areas continues as each individual area is reviewed with TWA and bid individually through their annual as-needed open cut sewer repair contract. Gravity main inspections are continually ongoing and as issues are discovered, the process if repeated.

Construction on the initial CIPP and Point Repair contracts began in 2017. Difficult groundwater conditions and pre-construction investigations have revealed that certain types of defects are prone to worsening and must be repaired quickly before potential trenchless repair solutions progress into open cut repairs. Lessons learned throughout the program, have allowed Tetra Tech to modify and tailor the review and construction document generation process to target different types of defects, such as areas with high I&I defect occurrences, offset joints, or sagging pipes. Through better understanding of the failure modes each of these areas is experiencing, allows for more efficient planning and repair. Continuing Civil Engineering Services | Pompano Beach



» Resumes of Key Personnel

Overview

The organizational chart on page 28 and our resumes on the following pages highlight our team's organization, leadership, and experience. Tetra Tech commits industry experts and experienced professionals needed to deliver a successful project.

We dedicate our staff to the successful completion of any project assigned to us. Tetra Tech utilizes several tools to project workloads and allocate staff to our projects to maintain maximum utilization. These projections are done monthly on a quarterly basis. We use man-hour usage rates to determine longer term utilization, which is generally less than a year.

Our team members existing and projected utilization and availability is presented in the Technical Approach section on page 8 of our submittal.

Tetra Tech provides our unwavering obligation that these project team members are available to deliver a successful project to the City.

This project will affect the surrounding community with local business and residents that deserve dedicated management. With that important factor in mind, we handpicked such leadership for our team.

Our team was built as a partnership around six key traits – Leadership, Trust, Commitment, Availability, Expertise, and Relationships - to successfully deliver projects to Pompano Beach. We will leverage our combined experience, resources, and expertise to develop solutions to the key issues and challenges by applying best practices and drawing parallels from similar projects and experiences. We selected some of our most talented professionals to serve in key roles who bring unmatched knowledge, experience throughout South Florida, a track-record of delivering award-winning projects, and an ability to deliver reliable, cost-effective, and innovative solutions. With this, our team can provide the required staff and resources necessary to complete our assignments on schedule and below budget. This project will be our team's top priority and the Tetra Tech team affirms that we have the resources, ability, and record of past performance, to deliver a successful projects, as we have done previously for the City of Pompano Beach.



Principal-in-Charge



education: BS, Geology, University of Florida, 1982

years of experience: 37

years with Tetra Tech: 30

certifications:

Professional Geologist: Florida: No. 37

AIPG, Certified Professional: No. 11179

TETRA TECH

Charles Drake, PG

Mr. Drake has 37 years of experience in groundwater resource testing and evaluation for all aspects of water supply and aquifer recharge projects for public utilities.

Mr. Drake's experience includes aquifer performance test and analysis, design, permitting and construction management of fresh and brackish groundwater wellfields, deep injection wells for RO concentrate, and aquifer recharge in many different hydrogeologic conditions. He is a qualified expert witness in hydrogeology, well construction, groundwater flow, and solute transport modeling, water use permitting, and water resource planning.

He has been principal-in-charge for several clients, including: The City of Pompano Beach, City of Naples, and the City of Plant City. Mr. Drake worked extensively with city managers from the cities of Lakeland and Daytona Beach. He served as Governing Board member of the St. Johns River Water Management District for eight years and two of those years as Secretary.

Experience

Various projects, City of Pompano Beach, FL. Principal-in-Charge. Mr. Drake has managed and functioned as Principal in Charge of the hardening projects and reuse master plan and also for the Raw Water Well Services contract for the City of Pompano Beach. As such, he has worked closely with City staff and understands the utilities and engineering departments mission. He understands the critical nature of project completion on time and budget and meeting clients expectations.

Water Use Permitting Assistance, Toho Water Authority, Osceola County, FL. Lead Hydrogeologist. Multiple water use permit modifications and new permits for Upper and Lower Floridan aquifer withdrawals which includes the Cypress Lake Wellfield WUP for 37.5 MGD.

Cypress Lake Wellfield Exploratory Well Program, Toho Water Authority, Osceola County, FL. Lead Hydrogeologist Lead Hydrogeologist for the implementation of the exploratory well program, groundwater flow modeling and water use permitting for this project. He worked with Mr. Brian Wheeler and Mr. Robert Pelham from the Toho Water Authority (TWA) to define the objectives of the program and the wellfield yield needed to satisfy water demands beyond the 2013 demands from traditional sources. The program was developed and several meetings were held with the South Florida Water Management District staff to refine the program such that sufficient data would be collected to determine whether 37.5 MGD could be withdrawn from the Lower Floridan Aquifer to meet future demands of TWA and the other members of the Water Cooperative of Central Florida (WCCF). The data also needed to provide supporting documentation to construct a groundwater flow model to demonstrate that conditions for issuance of a Water Use Permit (WUP) were met. These objectives were met, and in 2011, the South Florida Water Management District issued TWA a 30-year WUP for 37.5 MGD average annual daily flow. The WUP was then transferred to the WCCF.

Water Use Permits and Wellfield Monitoring, City of Lakeland, FL. Lead Hydrogeologist. Obtain initial WUP for the Northeast wellfield in 1991 for 9 mgd and subsequent renewals. Establish and implement baseline wetland and hydrologic monitoring plan in 1994. Wetland rehydration program design and implementation. Annual environmental monitoring and management plan submittal since 2004.

Hydrogeologic and Water Use Permitting Expertise, City of Lakeland, FL. Lead Hydrogeologist. Extensive aquifer testing, analysis of data and evaluation of results for Northeast and Northwest wellfields. Assist City with review and application of SWFWMD rules and regulations and application of the 40D-2 to the City's wellfields.

Winson WTP Well Rehabilitations, City of North Miami, FL. Hydrogeologist. Hydrogeologist involved in the review of project specifications prepared by another consulting firm prior to bidding for selection of drilling/well rehabilitation contractor. Project includes well evaluation, rehabilitation, testing, and technical reporting for six Biscayne aquifer wells and included upgrades to well heads, vertical turbine pumps, and piping.

Water Use Permit Renewal, Gateway Services Community Development District, FL. Project Manager and lead Hydrogeologist. A renewal of Gateway's 5-year Water Use Permit which allows withdrawal of groundwater from the Sandstone and Hawthorne aquifers for the purpose of lawn and landscape irrigation. The services have included documentation of historical uses, demand projections, meetings with the South Florida Water Management District and related services. The goal is to achieve a 20-year Water Use Permit, as opposed to the historical 5-year permits.

Miscellaneous Hydrogeological Services, Naples, FL. Project Manager for multiple hydrogeological tasks performed for the City since 1990, including but not limited to assistance with permitting and water use issues with the South Florida Water Management District (SFWMD), Water Use Permit renewals with the SFWMD, assistance with development of new wells within the East Golden Gate Wellfield, Assistance with rehabilitating wells within both the East Golden Gate Wellfield and Coastal Ridge Wellfield, assisting with water quality issues (high chlorides) within the reclaimed water/irrigation system, assisting with development of exploratory aquifer storage and recovery wells for potential reclaimed water/irrigation storage, assistance with aquifer performance testing to determine yields and make recommendations for well improvements and future well spacing, assisting with locating and securing grants with the SFWMD, where available for alternative water supplies, assistance with developing a water supply feasibility study for potable water, stormwater, irrigation and related needs, assistance with converting abandoned raw water supply wells to irrigation wells for use in the City's reclaimed water/irrigation at public workshops and council meetings and related hydrogeological services



Project Manager



education: MBA, University of Central Florida, 2019

BS, Civil Engineering, Arizona State University, 2007

years of experience: 14

years with Tetra Tech: 14

certifications:

Professional Engineer: Florida: No. 74415 FDOT TTC: No. 39989 Construction Documents Technology (CDT) Certification, FL

TETRA TECH

Tim Vanderwalker, PE, CDT

Mr. Vanderwalker is a registered professional engineer in the state of Florida, with extensive experience managing water, wastewater, reuse water, and stormwater projects. He has successfully led multidisciplinary teams of engineers and scientists for numerous continuing engineering contracts throughout the state of Florida. In addition, because of his technical expertise, he has also supported other project managers. Mr. Vanderwalker's broad experience, dedication, and leadership will benefit management of this contract and the City of Pompano Beach.

Experience

Continuing Services (On-Call Consultant), City of Deltona, FL. Project Engineer. Responsible for the completion of engineering design, permitting, and construction administration for several stormwater retrofit projects in the City. Served as Project Manager for over five emergency pumping authorizations from the St. Johns River Water Management District to alleviate flooding due to 92-inches of rain.

Estero Boulevard Water Main Improvements Phases 2-4, Town of Fort Myers Beach, FL. Project Engineer. Design, permitting, and construction oversight for Segments 2-4. As part of the Fort Myers Beach reFRESH program, the Town of Fort Myers Beach (Town) and Lee County are providing water, sewer, and streetscape improvements along Estero Boulevard. As a consultant for the Town for stormwater improvements, multiple joint outfalls were modeled, designed, and constructed to provide relief for runoff collected on Estero Boulevard. In total, more than 15 outfalls will provide a connection to Estero Bay to improve the nuisance flooding conditions within the County and Town right-of-way, increase water quality discharged into the Bay, and prevent tidal backflow into the streets.

Stormwater 30% Preliminary Design, Town Fort Myers Beach, FL. Project Engineer. Preliminary design report for the remaining side streets of Fort Myers Beach. Design included the utilization of 2D hydrologic and hydraulic modeling to identify areas of nuisance flooding and deficient infrastructure. These results aided in the development of preliminary designs for stormwater improvements for more than 27,000 linear feet of roadway within the Town right-of-way. Projects were scored based on benefit provided to the residents. **Stormwater Infrastructure Retrofit, Town of Fort Myers Beach, FL.** Project Engineer. Project Engineer for a preliminary facilities plan (including preliminary basin mapping, alternative analysis, and cost estimating) to assist the Town with stormwater infrastructure effectiveness. The project includes 42,500 LF of drainage pipe, ranging in size from 15- to 48-inches, 58 nutrient-separating baffle boxes, and 71 backflow prevention devices. The retrofit project has provided a plan for improvements to reduce nuisance flooding, provide treatment within the system prior to discharge, and increase protection from storm surge. Design and construction of this multi-phase project is underway.

Cypress Street Outfall Regional Stormwater Improvements, Design-Build Partnership with Woodruff and Sons, Inc, City of Tampa, FL. Project Engineer for stormwater and roadway design. Design of 7,500 LF of box culvert, varying in size from 5'x6' to twin-8'x8', to implement a regional stormwater conveyance system to reduce flooding within a 220-acre basin. Project included secondary stormwater collection and conveyance, as well as 6,500 LF of 36-inch distribution watermain, 9,600 LF of watermain relocations and improvements, 5,600 LF of wastewater relocations and improvements, and roadway improvements for the length of the corridor. Performed hydrologic and hydraulic analysis of the project area, design of 2,700 LF of cycle track, and 15,000 LF of sidewalk improvements, low-impact development improvements (baffle boxes, pervious pavement, and swales), design of utility improvements, coordination with utility agency owners, as well as preparation of construction documents, obtaining of SWFWMD ERP, FDOT, and NPDES NOI permits, and construction administration services. Mr. Vanderwalker also provided MOT services.

Superstorm Sandy Port Authority New York/New Jersey (PANYNJ) Facility-wide FEMA 406 Mitigation Assistance, NY. Project Engineer. Project Engineer on a team of engineers covering multiple disciplines that worked to identify FEMA 406 Mitigation opportunities at sixteen of the Port Authority's facilities. This included a preliminary analysis of the FEMA 406 Opportunities followed by a mobilization of our team of engineers to perform site visits, develop FEMA 406 scopes of work, create opinions of construction cost, and negotiate with FEMA for the accepted mitigation included in the Port Authority's PWs. Sites included LaGuardia, JFK, and Newark Airports; New York Brooklyn Piers, Red Hook Container, and Howland Hook Marine Terminals; New Jersey Port Newark, Port Elizabeth, Port Bayonne, and Port Jersey South Marine Terminals; and Holland Tunnel. Role consisted of compiling recommendations for multi-discipline flood mitigation measures, reviewing the final scope of the proposed work and coordinating the development of the engineer's opinion of cost.

Skyview Utilities Water and Wastewater Systems Improvements, Lakeland, FL. Full-time Inspector for water and wastewater improvements to an existing private utility to assumed by the City Utility System. Project included the replacement of nine duplex pump stations, increasing the pumping capacity of a City-owned lift station, and removal and replacement of water and sanitary sewer mains. Work inspected included the installation of duplex lift stations, 6-inch water main, 10-inch force main, 8-inch gravity sewer, manholes and vaults, erosion control measures, and restoration activities. Deliverables included daily construction reports and construction photos.



Technical Advisor



education: MS, Environmental Engineering, Florida International University, 2007 BS, Civil Engineering, Florida International University, 1997

years of experience: 25

years with Tetra Tech: 10

certifications:

Professional Engineer, Florida, No. 59276 Board Certified Environmental Engineer (BCEE), Leadership in Energy and Environmental Design Accredited Professional (LEED AP)

TETRA TECH

Ken Caban, PE, BCEE, LEED AP

Mr. Caban has over 25 years of experience in all facets of civil and environmental engineering. He has led numerous projects and multi-discipline teams for the analysis, design, permitting, inspection, construction management, and program and project management of water and wastewater conveyance and treatment systems, water, wastewater, and stormwater master planning and design, site development, and capital improvement programs for various agencies throughout south Florida. He oversees the quality control programs for the majority of projects in the Southeast Florida area for Tetra Tech.

Experience

Various projects, City of Pompano Beach, FL. Mr. Caban has managed and functioned as a project engineer and Engineer of Record on numerous projects with the City of Pompano Beach, including Stormwater Master Plan Updates, Stormwater Projects Design and Implementation, and the Lyons Park Sanitary Sewer Project. He conducted planning, preliminary and detailed design, permitting, and engineering services during construction on multiple projects in the City of Pompano Beach.

Water, Wastewater, and Reclaimed Water Master Planning, Miami-Dade County Water and Sewer Department, FL. Quality Manager responsible for updating and maintaining a comprehensive plan for the future of the Miami-Dade County Water and Sewer Department's (MDWASD's) water, wastewater, and reclaimed water utility infrastructure. Services provide hydraulic modeling, flow projections, master planning, operational studies, hydrogeological evaluations, geological evaluations, process optimization, cost estimating, scheduling, and additional engineering support services as requested by MDWASD.

Water Main Replacement Program, City of Hollywood, FL. Quality Manager. Responsible for the oversight of surveying, geotechnical evaluations, design, permitting, and construction administration services on multiple projects being completed concurrently. The entire program is comprised of over 300,000 linear feet (57 miles) of water main replacement, reconnection of over 1,000 service connections, numerous underground and overhead utilities conflicts, permitting through multiple agencies, and construction within schedule and budget. Existing aged cast iron water mains were replaced with both DIP and PVC water mains, ranging from 4-inch to 24inch diameters. The existing water mains were located within residential streets, paved and unpaved alleys, and easements in the rear of residential lots, which had become overgrown or encroached upon by property owners. Existing water meters located within unpaved alleys or rear easements were relocated to the front of the lots and included new water services within private property. Aged fire hydrants were replaced some water mains were upsized by one nominal size. Extensive asphalt pavement and pavement markings restoration and improvements were also included.

Civil Engineering Continuing Contract, City of Fort Lauderdale, FL. Quality Manager. Responsible for review and quality control for various water and wastewater projects including water main replacements, force main replacements, gravity sewers, and sewer lift stations. These projects are in different stage of design and/or construction.

Stormwater Master Plan Update and Implementation, Village of Key Biscayne, FL. Quality Manager. Responsible for review and quality control for stormwater master plan, hydraulic modeling, and design and construction administration for the entire stormwater system for the Village of Key Biscayne.

Civil Engineering Continuing Contract, City of North Miami, FL. Quality Manager. Responsible for review and quality control for various water and wastewater projects including water main replacements, force main replacements, water treatment plant projects, including planning, design, and construction administration. These projects are in different stage of design and/or construction.

Cargo Gates Modifications, PortMiami, FL. Quality Manager. Responsible for review and quality control for the planning, design, and construction administration for various underground and above ground infrastructure for the relocation of cargo gates and roadways at PortMiami.

Lake Estates Water Main Improvements Project (NE 56th Court to NE 60th Street between N.

Federal Highway (US1) and Bayview Drive), City of Ft. Lauderdale, FL. Quality Manager. The water main improvements project consisted of 10,850 feet of 8-inch diameter water main, removing existing fire hydrant assemblies and replacing with new fire hydrant assemblies, new water services to existing meters, and backflow devices. The water main will be constructed within City and Florida Department of Transportation right-of-ways using the open cut method of construction with the existing water main being placed out of service and grouted (7,660 feet), pavement removal, and replacement sheets. Bidding services included preparation of bid documents, attending the pre-bid conference, bid questions/clarifications, bid tabulation, and evaluation with recommendation of award. Construction services include progress meetings, periodic inspections, review of shop drawing submittals, requests for information, pay application and change order reviews and approvals, substantial and final completion and punch lists, final clearances and certifications and record drawings to the City.


Technical Advisor



education: BS, Environmental Engineering, University of Central Florida, 1990

years of experience: 29

years with Tetra Tech: 29

certifications: Professional Engineer: Florida, No. 49487

TETRA TECH

Jon Fox, PE

Mr. Fox has almost three decades of experience with water, wastewater, reuse water, and stormwater projects, throughout Florida. He has extensive experience with every facet of these projects, from the planning phase to design and construction. Because of his technical excellence, Mr. Fox oversees the technical and quality aspects of all infrastructure projects throughout the state. His experience and technical knowledge will be an asset to our entire project team and the City of Pompano.

Experience

Water, Wastewater, and Reclaimed Water Master Planning, Miami-Dade County Water and Sewer Department, FL. Technical Advisor. Responsible for updating and maintaining a comprehensive plan for the future of the Miami-Dade County Water and Sewer Department's (MDWASD's) water, wastewater, and reclaimed water utility infrastructure. Services provide hydraulic modeling, flow projections, master planning, operational studies, hydrogeological evaluations, geological evaluations, process optimization, cost estimating, scheduling, and additional engineering support services as requested by MDWASD.

Water Main Replacement Program, City of Hollywood, FL. Technical Advisor. Responsible for review and quality control for the design, permitting, and construction phase services for this program which, to date, includes over 300,000 linear feet of pipe. This program includes multiple projects which are in different stage of design and/or construction.

Civil Engineering Continuing Contract, City of Fort Lauderdale, FL.

Technical Advisor. Responsible for review and quality control for various water and wastewater projects including water main replacements, force main replacements, gravity sewers, and sewer lift stations. These projects are in different stage of design and/or construction.

Water and Wastewater Master Plan, City of Deltona, FL. Quality Control/ Quality Assurance. The water and wastewater master plans for the City of Deltona were the first master plans prepared on the systems since the City's acquisition in 2003. In addition the projections and capacity analysis of facilities a hydraulic model was prepared for both the water and wastewater systems to document system behavior and act as a planning tool to develop the proposed CIP. Hydraulic deficiencies in the water and wastewater systems were already well documented by City staff. The models however, were very useful in determining the magnitude of the deficiencies and the appropriate course of corrective action. The wastewater model was used to determine force main routing to a new WWTP in the developing area of the City. The water model was field calibrated through pressure data record by the City and at remote locations as well as hydrant testing.

Southwest 6&7 Extension Program, City of Cape Coral, FL. Principal-in-Charge. Expansion of the City's water, wastewater, and irrigation systems to a four square mile area south of Pine Island Road. The project includes value engineering, hydraulic modeling for water, wastewater and irrigation systems, design, permitting, bidding, and construction management. The project includes over 200 miles of potable water, wastewater collection, wastewater transmission, and irrigation utility piping; 18 lift stations; and a stormwater canal pumping station to supplement reclaimed water during high demand periods.

Reuse Distribution Retrofits, City of Winter Garden, FL. Principal-in-Charge. The expansion included approximately 9,000 linear feet of new 6- and 8-inch reclaimed water pipe installed within the City's right-of-way through residential neighborhoods. Existing irrigation meters required new service lines from the reuse main and new meter box and backflow prevention assemblies. The project consisted of both open trench construction and trenchless technology in certain areas in order to minimize disruption throughout the corridor. Tetra Tech completed the design using the traditional design-bid-build delivery method and construction was phased to only allow work within two subdivisions at a single time.

Water, Wastewater, and Reclaimed Water Master Plan, City of Clermont, FL. Quality Control. Tetra Tech was retained by the City to provide an update to the water, wastewater and reclaimed water master plans last updated in 2008. The project consists of a service area evaluation, demand projections, a complete rebuild of the City's hydraulic models, and development of a capital improvement program to meet 5 year, 10 year, and build-out demands.

Westside Water Main Loop, City of Clermont, FL. Principal-in-Charge. Pipeline Corridor Evaluation Memo and final design construction plan drawings and specifications for 23,000 feet water main to loop and increase the hydraulic capacity of the City's transmission system and to abandon/take out of service 6- to 12-inch diameter asbestos cement water mains. Project included preliminary cost and constructability analyses for varying methods of construction based on the project corridor and utility coordination, and pipe bursting, horizontal directional drilling and open cut methods of installation were used.

Intermediate and Master Pump Stations, City of New Smyrna Beach, FL. Preliminary engineering, final design, permitting, bidding and construction phase services for two new submersible wastewater pump stations. The Intermediate Pump Station included a circular precast concrete wet well, triplex submersible pump system, discharge piping, controls, and SCADA interface. The Master Pump Station included a cast-in-place concrete wet well, quadraplex submersible pump system, discharge piping, variable frequency drives, odor control facilities, a standby generator set, controls, electrical building and SCADA interface.

Pump Station No. 60 and 97 Improvements, Toho Water Authority, Kissimmee, FL. Project Manager. Preliminary engineering, final design, permitting, bidding and construction phase services for the rehabilitation of two submersible wastewater pump stations. Improvements at each station included structural rehabilitation, installation of a triplex submersible pump system, above-grade discharge piping, odor control facilities, a standby generator set, new controls, and SCADA interface.



Gravity Sewer/Force Mains



education: BS, Environmental Engineering, University of Central Florida, 1996

years of experience: 23

years with Tetra Tech: 5

certifications: Professional Engineer: Florida, No. 59244

NPDES-Certified Inspector, 2005 and 2012

TETRA TECH

Janine Alexander, PE

Ms. Alexander has more than 23 years of utility experience, including project management for the design of new facilities, relocations of existing facilities, utility coordination, permitting, construction administration, construction management, inspections, and certifications for numerous public and private-sector projects.

Experience

East Las Olas Boulevard (SR 842) 12-inch Force Main Replacement, City of Ft. Lauderdale, FL. Project Manager. Design, permitting, bidding, and construction administration services for 280 feet of 18-inch DR-11 HDPE FM piping, 1,775 feet of 16-inch DR-11 HDPE FM piping, 150 feet of 12-inch Protecto 401 lined DIP piping (aerial crossing of the Rio Navarro Canal), and stub-outs for future FM connections from lift stations on adjacent Isles. Permitting included FDOT utility permitting and Broward County Health/DOH permitting. Project was initially bid and awarded using open trench construction with the 12-inch DIP FM piping grout filled and abandoned in place; however, the contractor was terminated and the project was re-designed and rebid with open trench and pipe bursting construction with the pipe bursting portion being within a 16-inch abandoned concrete water main pipe. In addition, the project was bid as an alternate for HDD construction. Additional permitting efforts included obtaining revised permits from FDOT and Broward County DOH approvals. Construction administration efforts included progress meetings, shop drawing reviews and approvals, RFIs, change order reviews, substantial and final completion inspections, final certifications for clearance, coordination with FDOT and assistance for expediting lane closure permits.

Royal Poinciana Sewer Expansion, City of Hollywood, FL. Project Manager. Septic to sanitary conversion project from Sheridan Boulevard south to Taft Street and from Federal Highway (US1) to N. 21st Avenue. Project included three preliminary sanitary sewer system design layouts for addition of a new lift station location on Coolidge Street, evaluation of the existing E-22 lift station at the current location, and a split-flow plan for flows being directed to a lift station at both E-22 and Coolidge Street. A preliminary routing and flow evaluation technical memo were prepared for approval prior to the final design layout and lift station siting Land use/flow calculations were performed using Broward County flows for each land use type, the various land use densities and proposed future development, when necessary. Project consists of approximately 80,000 feet of new gravity sewer piping ranging from 8 to 12 inches in diameter, over 100 new manholes, laterals to each parcel for future connections and abandonment of the septic tanks, abandonment and placing out of service five private lift stations with associated tie-ins to the new gravity sewer system, abandonment and placing out of service existing force main piping ranging from 4 to 6 inches in diameter, conflict resolution and soft digs due to the heavily congested corridors with existing utilities and duct banks and relocation of water mains where necessary. In addition, lift station siting, new duplex lift station design to handle the area's wastewater flows, new control panel and electrical, mechanical and structural system design. Permitting includes Broward County Environmental Protection and Growth Management and City of Hollywood Building Department permitting for the wastewater system and Broward County ROW use for facilities located on N. 21st Avenue. Bidding services and evaluations with recommendation of award and construction administration services including monthly progress meetings, field inspections, review and approval of shop drawings, RFI responses, record drawing production, substantial and final completions and certifications are also included.

Pump Stations D10 and D11 Flow Analysis and Redesign Project, City of Ft. Lauderdale, FL. Project Manager. Wastewater flow analysis due to increased land use densities from single family residential to condo and multifamily uses and evaluation of existing duplex pump stations (PS) and upstream influent manholes for rehabilitation or replacement for two city pump stations located adjacent to East Las Olas Boulevard on the Isle of Venice (PS D10) and Hendricks Isle (PS D11). Preparation of preliminary design memorandum including findings and recommendations for rehabilitation and replacement and associated costs, and survey, design, permitting and construction administration services for the rehabilitation and removal and replacement of infrastructure. Pump stations have 6-inch force mains (FMs) that discharge into a gravity sewer system on East Las Olas Boulevard. Material for the FMs will be verified via subsurface utility excavations with recommendations being made for potential FM removal and/or replacement. Second project phase included PS upgrades for D10 and D11 with new pumps and wetwell and valve vault piping, coating, new control panels and conduit, new upstream discharge piping and manhole(s) and CIPP lining with coordination with the City for gravity sewer mains to be lined. Permitting included Broward County DOH for each lift station, gravity sewer piping and manholes. Bidding and construction administration services were also provided including recommendation of award, reference checks, progress meetings, shop drawing reviews and approvals, RFIs, substantial and final certifications and punch lists, final clearances and record drawings.

Toho I Gravity Sewer Improvements, Toho Water Authority, Kissimmee, FL. Project Manager. Construction administration project phase included 10,000 feet of deteriorating gravity sewer line ranging from 8 to 24 inches and 100 feet of 8-inch sanitary sewer force main within the service area. A combination of complete replacement and cured-in-place lining were used. In addition, it was requested by Toho Water Authority during the construction that 1,687 feet of new 6-inch PVC water main be extended along Sumer Avenue within the project limits from Randolph Street to Beaumont Street with associated water services and reconnections to mains. An FDEP General Permit (GP) was obtained for these improvements. Engineer of Record for the water main field revision and FDEP GP permitting.



Lift Station/Pump Station Rehabilitation



education: BS, Environmental Engineering, University of Central Florida, 1987

years of experience: 40

> years with Tetra Tech: 20

certifications:

Professional Engineer: Florida, No. 40264

TETRA TECH

John Toomey, PE

Mr. Toomey has four decades of nationally recognized water and wastewater engineering experience in planning, design, and construction administration of various projects. He has extensive experience in the development and evaluation of large pumping systems and wastewater treatment options. Located in central Florida, Mr. Toomey has assisted numerous local clients in the planning, design, and implementation of various wastewater treatment programs, including the Cities of Winter Park, Mount Dora, Oldsmar, and Orlando, as well as Orange and Seminole Counties. Mr. Toomey has been involved in over 30 wastewater pumping projects in Florida and brings over 40 years of lessons learned and innovative solutions.

Experience

Pump Stations A-7, D-10 and D-11, City of Fort Lauderdale, FL. Technical Advisor. Tetra Tech performed wastewater flow analyses due to increased land use densities in multiples area of the City, including residential areas and downtown Fort Lauderdale. In addition, evaluations of existing duplex and triplex pump stations and upstream influent manholes were completed to identify rehabilitation or replacement requirements. Two of the existing pump stations are located adjacent to East Las Olas Boulevard on the Isle of Venice (Pump Station D-10) and Hendricks Isle (Pump Station D-11), in areas which experience sea level and high tide impacts. Tetra Tech prepared preliminary design memoranda for each pump station which included findings and recommendations for rehabilitation and replacement and associated costs. Field data collection, surveys, designs, permitting, and construction administration services were completed. Two of the three projects was designed, permitted, bid, and constructed and the third was designed, permitted, bid and is currently under construction

Lift Station No. 1/7 Improvements, Orlando, FL. Project Manager. Design of a new 25.0 million gallon per day (MGD) wastewater pump station that included a split wetwell, provisions for the installation of six 250 horsepower pumps, abovegrade discharge piping, variable frequency drives, odor control system, flow metering facilities, a monorail system, standby power facilities, and a building that is architecturally consistent with the surrounding neighborhood.

Bennett Road Bypass Facility Project, Orlando, FL. Project Manager. Wastewater pumping and transmission main facilities to increase the capacity of the Bennett Road/Crane Strand Transmission System from 22.0 to 44 MGD. The facilities included multiple variable speed submersible pumps along with odor control and standby power facilities.

Lift Station No. 69 Upgrades, City of Orlando, FL. Project Manager. Replacement of three 3,000 gallon per minute (GPM) dry pit pumps along with wet well rehabilitation, building improvements, and replacement of the odor control, electrical, and standby power facilities.

Miscellaneous Lift Station Improvements, Orlando, FL. Project Manager. Over 25 lift station refurbishments involving a variety of improvements ranging from site and electrical enhancements to complete station replacement.

Hunter's Creek 3497 and South Central Master Pump Station Improvements, Orange County Utilities, FL. Senior Engineer. Three major wastewater pumping stations with peak flow capacities ranging from 11.7 to 17.6 MGD. The facilities include multiple constant speed submersible pump systems, along with odor control and standby power facilities.

Group 5A Pump Station Improvements, Orange County, FL. Project Manager for the rehabilitation of existing tributary sewers, installation of fiberglass wet well liners, pump replacement, new above-grade discharge piping, odor control systems, new controls, standby power facilities, concrete masonry unit screen walls, and miscellaneous site improvements at two existing wastewater pump stations.

International Corporate Park Wastewater Pump Station Improvements, Orange County, FL. Project Manager. A new major wastewater pump station and rehabilitation of an existing submersible pumping facility. The new station included a split wetwell, provisions for the installation of six pumps, above-grade discharge piping, variable frequency drives, an odor control system, flow metering facilities, a standby power system, telemetry, and an electrical building.

Pump Station Replacement/Rehabilitation Program, Orange County, FL. Program Manager. Oversaw the replacement program for Orange County Utilities that addressed over 600 pump stations. Mr. Toomey developed an aggressive wastewater replacement/rehabilitation program to prioritize and rank pump stations. Performed preliminary engineering to clearly define scopes and resolve issues that have historically delayed projects in final design. Project tasks included site inspections, condition assessments, improvements prioritization, pump station elimination studies, alternative analysis, and preliminary design.

Greenwood Lakes Wastewater Treatment Plant Master Pump Station Replacement, Seminole County, FL. Replacement of the master pump station at Greenwood Lakes Wastewater Treatment Plant, along with other modifications that included replacement of scum pumping facilities, new aeration facilities for an aerated sludge holding tank and modifications to various stormwater system components. Cast-in-place and pre-cast concrete options were also evaluated during preliminary design and both methods were included in the bidding documents, as well as options for open-cut and caisson methods of construction.



Stormwater/Drainage Improvements



education: BS, Civil Engineering, University of Hartford, 2012, Summa Cum Laude

years of experience: 8

> years with Tetra Tech: 8

certifications: Professional Engineer: Florida, No. 83331

Michael Thatcher, PE, CDT, ENV SP

Mr. Thatcher has served in the Civil Engineering industry since 2012 as a Senior Project Engineer and Technical Group Leader. His technical background encompasses the complete project lifecycle, and includes project start-up services, subcontractor coordination, conceptual studies, preliminary and final design, permitting, bidding procurement, construction administration services, project closeout, as well as the management of multi-disciplinary teams to meet the expectations of his clients. Mr. Thatcher has wide-ranging experience in the execution of stormwater management projects. He has an extensive background in the design and implementation of stormwater infrastructure improvements; including municipal capital improvement projects, regional stormwater management, flood mitigation and retrofit projects, and stormwater master planning. He is also an expert in the conventional and innovative use and evaluation of best management practices (BMPs), and is proficient in the preparation of construction documents, including drawings and comprehensive project manuals.

Experience

Stormwater Pump Stations Condition Assessments, City of Hollywood, FL. Project Engineer. Condition assessment for the rehabilitation of ten (10) stormwater pump stations, including effects and mitigation measures related to sea level rise and lunar tide events. The assessments included both submersible pump stations as well as enclosed pump stations within buildings.

Historic Westside Area Stormwater Management Improvements, City of New Smyrna Beach, FL. Project Engineer and Client Liaison. Development of a 2D adICPR 4 hydrologic and hydraulic (H&H) model for this 520-acre within the Historic Westside neighborhood watershed to assess the level of service of the existing stormwater management facilities. Prepared an alternatives analysis to assist the City with planning for future capital improvements to increase the level of service of the study area. Prepared a Preliminary Design Report (PDR) which included preliminary designs of the various alternatives, a water quality assessment to evaluate Green Infrastructure (GI) and Low Impact Development (LID) Best Management Practices (BMPs) to assist in providing water quality treatment for this drainage area, a benefit versus cost analysis to compare these alternatives, and recommendations for the prioritization of the alternative solutions.

TETRA TECH

Islesboro Subdivision Stormwater & Utility Improvements, City of New Smyrna Beach and Utilities Commission, City of New Smyrna Beach, FL. Project Engineer. Design of 20,000 linear feet of stormwater pipeline improvements to reduce flooding within the 600-acre subdivision. Included was the design of 13,000 linear feet of water main improvements, 4,300 linear feet of wastewater extension and improvements, and roadway improvements for 6-miles of roadway in the subdivision. Due to its proximity to the ocean and bay, tidal surges are prevalent, and were accounted for in design. Performed hydrologic and hydraulic (H&H) analysis of the project area, design of utility improvements, relocation, and extension, coordination with utility agency owners, as well as preparation of construction documents, obtained an Environmental Resource Permit (ERP) through the St. Johns River Water Management District (SJRWMD) and United States Army Corps of Engineers (USACE) permits, bidding procurement, and performed construction administration services. Engineer of Record (EOR) for water and wastewater clearances, and project record drawings.

Community Rating System Technical Assistance, Town of Fort Myers Beach, FL. Project Engineer. Comprehensive review of the Town's Community Rating System (CRS), current scoring, as well as potential activities and improvements the Town can undertake to help maintain, and improve, as a CRS Class 7 community.

Northwest Area Stormwater Management Improvements, City of Deltona, FL. Project Manager and Engineer of Record. Designed 7,600 linear feet of stormwater underdrain improvements to control high groundwater levels along six local roadways within the City. Included was the design of a lift station to manifold into an existing 10-inch forcemain, which discharges into Deep Creek. Performed hydrologic and hydraulic analysis of the project area, designed utility relocations, coordinated with utility agency owners, prepared construction documents, obtained an Environmental Resource Permit through St. John's River Water Management District, bidding procurement, and performed construction administration services.

Side Street Stormwater and Utility Improvements, Town of Fort Myers Beach, FL. Project Engineer. Designed 50,000 linear feet of stormwater improvements, 22,000 linear feet of swales, 65,000 linear feet of watermain improvements, and roadway improvements along multiple side streets in the Town. Due to its proximity to the ocean and bay, tidal surges are prevalent, and were accounted for in design. Performed hydrologic and hydraulic analysis of the project area, designed utility improvements and relocation, coordinated with utility agency owners, prepared construction documents, obtained a South Florida Water Management District Environmental Resource Permit, Department of Health, U.S. Army Corps of Engineers permit, and County permits, bidding procurement, and performed construction administration services.

Lombardy Drive Stormwater Management and Roadway Improvements, City of Deltona, FL. Project Manager and Engineer of Record. Designed 1,100 linear feet (LF) of stormwater underdrain improvements to control high groundwater levels along local roadways within the City. The design included 650 LF of 20-inch raw water forcemain improvements, as well as a roadway redesign to raise the centerline profile as much as 3-feet to improve the headlight sight distance and visibility sightlines for motorists. Performed hydrologic and hydraulic analysis of the project area, designed utility relocations, coordinated with utility agency owners, as well as prepared construction documents, obtained an Environmental Resource Permit exemption through St. John's River Water Management District, bidding procurement, and performed construction administration services.



Water/Reuse Mains



education: MS, Engineering/ Engineering Management & Leadership, Purdue, 2015

BS, Civil Engineering, Purdue, 2011

years of experience:

9

years with Tetra Tech: 3

certifications:

Professional Engineer: Florida, No. 83482

TETRA TECH

Jason Warren, PE

Mr. Warren is a civil/environmental engineer with a strong background in hydraulic modeling, planning and design of water, wastewater, and reclaimed water systems. He has experience in the detailed design of water and wastewater utility systems including large diameter pipelines, wastewater force mains, gravity collection system design and rehabilitation, reclaimed water mains, water distribution piping, wastewater lift stations and water distribution pump stations.

Experience

Reuse Distribution Retrofits, City of Winter Garden, FL. Project Engineer. The expansion included approximately 9,000 linear feet of new 6- and 8-inch reclaimed water pipe installed within the City's right-of-way through residential neighborhoods. Existing irrigation meters required new service lines from the reuse main and new meter box and backflow prevention assemblies. The project consisted of both open trench construction and trenchless technology in certain areas to minimize disruption throughout the corridor. Tetra Tech completed the design using the traditional design-bid-build delivery method and construction was phased to only allow work within two subdivisions at a single time.

Northgate Phase 1 Water Main Replacement, City of Casselberry, FL.

Project Manager. The project includes installation of approximately 10,500 feet of 6- through 8-inch PVC water main through open cut and horizontal direction drilling to replace existing 2- through 8-inch galvanized steel and asbestos cement pipe in a residential neighborhood. New installation includes valves, appurtenances and all services to the meter box. Trenchless installation is being used where practical to minimize roadway restoration and potential harm to mature trees. Existing galvanized steel and asbestos cement pipe will be removed and disposed. Tetra Tech is providing preliminary design, surveying, subsurface utility designation and verification, geotechnical services, final design, permitting, bidding assistance, and construction administration.

Distribution System Improvements, Charlotte Harbor Water Association, Punta Gorda, FL. Project Engineer. Replacement and installation of approximately 96,000 linear feet of 4- to 8-inch water main in Harbour Heights residential community. Proposed water mains will be installed primarily by opencut trenching, but also horizontal direction drilling to minimize restoration and disturbance to the residential area. The project includes preliminary and final design, permitting, bidding assistance, and construction administration services. Water Main Improvements Wellington to Lombardy, City of Deltona, FL. Project Engineer. The City of Deltona desired to increase the distribution system pressure in the Wellington and Lombardy zones. Existing 6-inch and 8-inch parallel distribution lines are to be abandoned and replaced with a 16-inch water line between the high service pump stations. Additionally, a parallel 12-inch water line is to be installed as a dedicated fill line from the Lombardy well to the Wellington Ground Storage Tank. Mr. Warren was responsible for the design of the water lines and the control valves necessary to maximize output of the Lombardy well while maintaining required system pressures.

Distribution System Improvements, Charlotte Harbor Water Association, Punta Gorda, FL. Project Engineer. Replacement and installation of approximately 96,000 linear feet of 4- to 8-inch water main in Harbour Heights residential community. Proposed water mains will be installed primarily by open-cut trenching, but also horizontal direction drilling to minimize restoration and disturbance to the residential area. The project includes preliminary and final design, permitting, bidding assistance, and construction administration services. The project is currently in the 90-percent final design phase.

Water Distribution Improvements Area 2 and 3, City of Minneola, FL. Project Engineer. Construction of 8- and 12-inch water main upgrades for the City to remove from service existing asbestos cement water lines located in back lot easements. Work includes 3,700 feet of 8-inch polyvinyl chloride (PVC) potable water main, 240 feet of 8-inch ductile iron potable water main, 3,400 feet of 12-inch PVC potable water main, 200 feet of 12-inch ductile iron potable water main, and approximately 140 feet of 10-inch and 65 feet of 14-inch HDPE potable water main to be installed via directional drill; water services; and installation of valves, hydrants, tapping sleeve, and miscellaneous appurtenances. The project has been designed, permitted, bid, and Tetra Tech has provided recommendation of award. Contract is pending.

17-92 Water Main Looping, City of Casselberry, FL. Project Manager. The project includes installation of approximately 4,400 feet of 12-inch water main through open cut and horizontal direction drilling to connect the distribution system from Lake of the Woods Boulevard to East Altamonte Drive. The project corridor begins at a 10-inch water main along Lake of the Woods Boulevard and runs west towards U.S. 17-92, north along U.S. 17-92, west along Prairie Lake Drive, and north along Wells Avenue to connect to existing 12-inch water main near the intersection at East Altamonte Drive. Tetra Tech is providing preliminary design, surveying, contamination investigation services, subsurface utility designation and verification, geotechnical services, final design, permitting, bidding assistance, and construction administration.

Barracuda Bridge Utility Replacement, Utilities Commission of New Smyrna Beach, FL. Project Engineer. Relocation of existing potable water and wastewater utility crossings off an existing bridge on Barracuda Boulevard scheduled for replacement by the Florida Department of Transportation. All utility crossings will be removed prior to construction of the bridge and redirected along Quay Assisi and the North Causeway. The project includes replacement of approximately 2,500 linear feet of existing 6- and 8-inch water main and associated services with new 10-inch water main and appurtenances. The project includes approximately 1,600 linear feet of sanitary force main, replacement of an existing lift station, and a reuse main sub-aqueous directional drill. Project includes permitting, bidding, and limited construction administration services. Mr. Warren was responsible for QA/QC review of the potable water and wastewater system.



Consultation for Emergency Water/ Wastewater/Stormwater Repairs & Permitting Services



education: MS, Civil Engineering, Louisiana State University, 1999

BS, Civil Engineering, Pontifical Xaverian University, Bogota, Colombia, 1996

years of experience: 23 years with

Tetra Tech: 4

certifications:

Professional Engineer: Florida, No. 65854

TETRA TECH

Diana Santander, PE

Ms. Santander has 23 years of civil and environmental engineering experience including stormwater management, water distribution, wastewater collection systems, water conservation, and solid waste management. She has managed several projects that range from small municipal improvements to overall programs involving complex improvements in highly urbanized areas. Ms. Santander has also prepared engineering cost estimates, performed project cost tracking and scheduling, reviewed final as-built documentation, and participated in contractor and consultant selection and management. She has in-depth experience coordinating permits with various regulatory agencies including the South Florida Water Management District (SFWMD), the Florida Department of Health, and the Florida Department of Environmental Protection (FDEP). Ms. Santander has served as the client manager for agencies such as City of Miami, Town of Medley, City of Miami Springs, and Miami-Dade County Department of Solid Waste Management.

Experience

W-6 Reuse Water System Master Plan Update, City of Pompano Beach City, Pompano Beach City, FL. Project Manager. The project consisted in updating the City's reuse master plan identifying system deficiencies, prioritizing improvements, estimating costs and identifying financing options. The Master Plan evaluated the existing system, estimated demand projections utilizing the current growth assumptions, and updated the hydraulic model. The process was coordinated with City staff. Ms. Santander was responsible for the overall project coordination with the City and staff.

Pavement and Drainage Improvements Flood Mitigation North, Town of Medley, FL. Project Manager. Design and permitting of a stormwater management system consisting of approximately 470 linear feet (LF) of 24-inch exfiltration trench, 620 LF of 18-inch exfiltration trench, 1,160 LF of 24-inch solid drainage pipe, 1,730 LF of 18-inch solid drainage pipe, 3,850 LF of 15-inch solid drainage pipe, 83 drainage structures, approximately 4,550 square yards (SY) of new asphalt pavement, 1,930 SY of new concrete pavement, 15,000 LF of new concrete curb and gutter or valley gutter, and associated pavement markings, signage, and sodding.

Lake Estates Corrosion Control and Water Quality Improvement Project, City of Fort Lauderdale, FL.

Project Manager. This project included the replacement of the Lake Estates water distribution system infrastructure for the purpose of improving the quality of the potable water delivered to the residents of this neighborhood. Approximately 10,850 linear feet of 8-inch diameter PVC water mains to replace existing aged water mains were installed. Permitting involved the City of Fort Lauderdale Building Department, Florida Department of Health, Broward County Environmental Protection and Growth Management Department, and Florida Department of Transportation. The project also included surveying, geotechnical, preparation of design and construction documents, permitting, bidding review and assistance, construction administration and inspection, and project closeout and certification.

Large User Meter O7 and Force Main Replacement Project, City of Hollywood, FL. Project Manager. Manager for the replacement and site improvements of Large Use Meter O7 (LUM-O7), including below ground structures, piping, electrical, and communication equipment and upsizing and replacement of approximately 2,000 linear feet of 10-inch diameter force main through the residentially area adjacent to South Lake. Portions of the piping will be installed utilizing trenchless technologies such as horizontal directional drilling. The scope of services included survey, geotechnical engineering, preliminary design, design, permitting, and bidding.

Flood Control Stormwater Pump Stations Consent Decree, Commonwealth of Puerto Rico Department of Natural and Environmental Resources, San Juan, PR. Senior Engineer. This project included support to the Commonwealth of Puerto Rico Department of Natural and Environmental Resources (DNER) to address the requirements of consent decree between the DNER and the United States Environmental Protection Agency (EPA). The project included evaluation of the condition of three flood control stations in the municipality of San Juan as well as recommendations to reduce discharges of contaminants to bodies of water to the United States.

NW 109th Street Pavement, Drainage and Water Improvements, Town of Medley, FL. Project Manager. Ms. Santander served as the project manager for this project that consisted of the design of pavement, drainage, water, and sewer improvements along NW 109th Street and NW 97th Avenue. Ms. Santander's responsibilities included the preparation of engineering drawings and technical specifications, providing permitting services through Miami-Dade County and the Town of Medley Building Department, bid services, and general project management. This project was completed on time and under budget.

NW 11th Street Facility Expansion, Miami-Dade County Water and Sewer Department, Miami, FL. Project Manager. This project included the evaluation of the existing condition of the Miami-Dade County Water and Sewer Department distribution and maintenance facility known as 11th Street and the feasibility of improving it by acquiring new properties in the vicinity of the facility. This evaluation included evaluations for land acquisition, review of appraisals, costs, planning and zoning (Miami 21 Requirements) requirements, environmental considerations, utilities, traffic impacts, permitting and accessibility requirements. Specific changeless included the proximity to the Metro Rail and Wagner Creek.



Hydraulic Modeling



education: BS, Civil Engineering, Arizona State University, August 2008

years of experience: 11

> years with Tetra Tech: 7

certifications:

Professional Engineer: Georgia, No. 39494 Arizona, No. 62523

NCEES Record No. 68028

TETRA TECH

Kevin Roe, PE, CFM

Mr. Roe is a project engineer and hydraulic modeler with diverse experience in the study, planning, design, and construction of water, wastewater, stormwater, and general civil/site projects for municipal and industrial clients. As a hydraulic modeler, he plays an integral role in analyzing existing water, wastewater, and stormwater systems and facilities and recommending infrastructure improvement alternatives.

Experience

Reuse Water Master Plan Update, Pompano Beach, FL. Hydraulic Modeler. Model review, update, calibration, existing system evaluation, and future system recommendations as part of the City's reuse water master plan update using InfoWater software.

2020 Palm Beach County Water Utility Department (PBCWUD) Integrated Utility Master Plan. Project Engineer and Lead Hydraulic Modeler. Project Engineer and Lead Hydraulic Modeler for the existing reclaimed water system evaluation as part of the Integrated Utility Master Plan. Specific tasks include reclaimed water customer evaluation and flow characterization, future flow projections, model update and calibration, existing system evaluation, and future system recommendations. Hydraulic modeling is being done using InfoWater software.

Water, Wastewater, and Reclaimed Water Master Plans, Clermont,

FL. Project Engineer and Hydraulic Modeler. Developed and evaluated the wastewater model, which included 24 miles of force main, 6.5 miles of gravity sewer, and 33 lift stations. Mentored junior-level engineer on hydraulic modeling while assisting on the development and evaluation of the existing and future water and reclaimed water system models. Tasks for all three systems included model development and calibration, demand forecasting, and evaluating capital improvements. Wastewater modeling was done using InfoWorks CS software. Water and reclaimed water modeling was done using WaterGEMS software.

Water System Interconnect Study for City of Lakeland, Polk County Utilities, and Bartow County, FL. Lead Hydraulic Modeler. Planning and model analysis of a proposed 16" waterline interconnection for the City of Lakeland, Polk County Utilities, and Bartow County, FL water systems using WaterGEMS software. **Brooks Road Pump Station Improvements, Gwinnett County Department of Water Resources, Gwinnett County, GA.** Hydraulic Modeler. Model development, calibration, and analysis of the GCDWR Eastside Force Main System under normal operating conditions and transient wave conditions using InfoWater and InfoSurge software. This system includes three primary wastewater pump stations and two booster pump stations that tie into the same force main network. The modeling effort was done in conjunction with a wastewater pump station upgrade design project and included analysis of the system under several scenarios simulating various pumping conditions.

Paulding County Hydraulic Water System Model, Paulding County, GA. Hydraulic Modeler. Hydraulic Modeler for the future system analyses of the Paulding County water system using WaterGEMS software. This modeling effort included analyses that incorporated a new source water supply and water treatment plant, under design at the time of this project, and phased out existing system connections for water supplied by the adjacent county.

Water System Master Plan, City of Atlanta, GA. Project Engineer and Hydraulic Modeler. Served as a project engineer/hydraulic modeler for the water system master plan for the City of Atlanta's Department of Watershed Management. Developed and evaluated the water distribution system model which included 2,600 miles of piping ranging from 2 inches to 72 inches, 3 treatment plants, 3 pressure zones, 6 active pump stations and 9 storage facilities. The system serves a current population of approximately 1.1 million with an average daily water demand close to 100 MGD. Specific tasks included updating the existing distribution model including importing new demands, verifying the model with measured flow and pressure data, assessing existing system performance and level of service, performing fire flow analyses, evaluating storage options to serve the downtown area under emergency water-shortage conditions, and evaluating improvement alternatives for capital improvement planning for current year (2012), 2030 and 2060. Modeling was done using WaterGEMS software.

Yellow Jacket Creek Pump Station and Discharge Force Main, LaGrange, GA. Project Engineer. Design of 15,000 ft of discharge sewer force main and 900 ft of associated gravity sewer modifications. This project was designed and constructed in conjunction with a new 7.2-MGD wastewater pump station. Provided resident engineering and construction management services during the pump station construction.

Water System Hydraulic Model and Capital Improvement Program Peer Review, Quincy, MA. Hydraulic Modeler. Hydraulic Modeler for the review of the City's water system model in regards to calibration, demand allocation, and priority pipes for replacement using InfoWater software.



Construction Services



Ed Wills, PE

Mr. Wills specializes in environmental engineering and has experience in assisting clients in areas of engineering services during construction. Mr. Wills provides construction administrative and resident project representative services. His duties include assisting in responding to requests for information, developing and evaluating cost changes for field modifications, developing meeting agenda and minutes, organizing progress meetings, reviewing pay applications, reviewing construction activities and mechanical installations, resolving construction conflicts, reviewing the construction schedule, and preparing the closeout documentation including punch list, as-builts, record drawings, and operation and maintenance manuals.

Experience

Water Reclamation Facility Expansion, City of Apopka, FL. Project Engineer/ Resident Project Representative. The project scope included expansion to increase the treatment capacity of the facility. Existing facilities included supplemental aeration and upsizing the new treatment facilities biological treatment process, clarifiers, filters, disinfection facilities, and biosolids handling facilities. The project also included adding a new headworks, equalization tank, and pump station, conversion of the existing package plant to an anoxic basin and biosolids thermal drying facility, installation of a new operations building, new emergency power system including five new generators, and associated electrical and instrumentation modifications.

Reclaimed Water Main, City of Altamonte Springs, FL. Resident Project Representative. The project scope included installation of 5-miles of 24-inch reclaimed water transmission line installed by means of 2,000 and 1,000 feet of horizontal direction drilling, seven jack and bores, and open cut pipe installation. The project also included maintenance of traffic (MOT) for lane and road closures for pipe installation along the roadway.

Northeast Regional Wastewater Treatment Plant, Polk County, Lakeland,

FL. Resident Project Representative. The project scope included increasing capacity from 3.0 to 6.0 million gallons per day (MGD). Facilities design included a screening process; biological nutrient removal basin; RAS/WAS pumping station; filters; chlorine contact; transfer pumping modifications; effluent pump station and associated meter stations; modifications to the existing sludge stabilization tank; and new sludge stabilization tank.

BS, Environmental Engineering, University of Central Florida, 2001

education:

years of experience: 19

> years with Tetra Tech: 4

certifications: Professional Engineer: Florida, No. 69065

TETRA TECH



Electrical/Instrumentation



education: BS, Electrical Engineering, Gannon University, 1997

years of experience: 32 years with Tetra Tech: 6

certifications: Professional Engineer: Florida, No. 47146

TETRA TECH

Dave Burger, PE

Mr. Burger has 32 years of experience in the design of electric power, controls, instrumentation, SCADA, telemetry, fire alarm, lighting, lightning protection, grounding, and gas detection for water/wastewater, commercial, industrial, and military projects working for municipal, state and federal, commercial and industrial clients. His experience includes lift stations, master pump stations, reverse osmosis, and surface and well water treatment as well as CSO and waste water treatment.

Experience

PortMiami Hydraulic Analysis and Upgrades Recommendations,

Miami, FL. Technical Advisor. The Miami-Dade Water and Sewer Department requested that Tetra Tech assist in preparing a multi-year capital plan for PortMiami, which necessitated extensive coordination with the Seaport and Water and Sewer Departments. A substantial amount of field work conducted by Tetra Tech was successfully coordinated with MDWASD, PortMiami, equipment manufacturers, and others, without impacting any cruise or cargo operations on one of the busiest Ports in the world. Existing infrastructure data was analyzed and prepared for Hydraulic Modeling effort including the identification of existing asset locations for installation of calibration and monitoring equipment.

Pump Stations A-7, D-10 and D-11, City of Fort Lauderdale, FL. Technical Advisor. Tetra Tech performed wastewater flow analyses due to increased land use densities in multiples area of the City, including residential areas and downtown Fort Lauderdale. In addition, evaluations of existing duplex and triplex pump stations and upstream influent manholes were completed to identify rehabilitation or replacement requirements. Two of the existing pump stations are located adjacent to East Las Olas Boulevard on the Isle of Venice (Pump Station D-10) and Hendricks Isle (Pump Station D-11), in areas which experience sea level and high tide impacts. Tetra Tech prepared preliminary design memoranda for each pump station which included findings and recommendations for rehabilitation and replacement and associated costs. Field data collection, surveys, designs, permitting, and construction administration services were completed. Two of the three projects was designed, permitted, bid, and constructed and the third was designed, permitted, bid and is currently under construction.

ΜΟΤ





education: MBA, Business Administration, University of Central Florida, 1995

BS, Civil Engineering, University of Florida, 1989

years of experience: 30

years with Tetra Tech: 4

certifications:

Professional Engineer: Florida, No. 0048110

American Institute of Certified Planners (AICP), 017037, 2001

Project Management Professional (PMP), 463251, 2007

Envision Sustainability Professional (ENV-SP), 2016

TETRA TECH

Nick Benedico, PE, PMP, AICP, ENV SP

Mr. Benedico is responsible for managing the Florida transportation resources. Serving as senior project manager, he is responsible for management oversight, coordination, marketing, client contact, project scheduling, quality assurance and control, billing, profitability, and progress reporting. Mr. Benedico's extensive experience ranges from minor roadway improvements to complex highway design.

Experience

SR 519 (Fiske Boulevard) Resurfacing and Safety Improvements from I-95 Northbound Ramps/Barnes Boulevard to SR 520, Florida Department of Transportation (FDOT) District 5, Brevard County, FL. Project Manager. This project involves resurfacing, adding bicycle lanes, and other safety improvements along 3.5 miles of SR 519 in the Cities of Rockledge and Cocoa. Design included drainage improvements.

SR 405 (Spaceport Connector) Intersection Improvements, Florida Department of Transportation (FDOT) District Five, FL. Project Manager. This project involves the addition of turn lanes, bike lanes, and sidewalks to three intersections along SR 405 in Titusville. The design also includes drainage improvements, traffic signal modifications, protection of an existing pond, and an access drive.

Sheridan Street (SR 822) Utilities Replacement, City of Hollywood, FL.

Project Engineer. As part of water line replacement project, traffic control plans were developed to maintain traffic on a four-lane arterial in Broward County. Phasing plans were developed for four intersections, including detours and provisions for pedestrian access.

Honore Avenue/Pinebrook Road Extension, Sarasota County, FL. Project Manager. Design of a new, 3.7-mile, four-lane, urban arterial to extend Honore Avenue from Laurel Road to SR 681. The project included four bridges over existing creeks, a multi- use path, and a new intersection at SR 681. A unique aspect of the project was utilizing the existing southbound lanes of I-75, which the FDOT was relocating to the I-75 median, as the northbound lanes for Honore Avenue. The existing I-75 bridges over Salt Creek and Cow Pen Slough were also salvaged. Since the entire project was not funded, an interim, twolane, suburban design was developed.



GIS/Mapping



education: AA, University of Florida, 1995

years of experience: 23

years with Tetra Tech: 16

certifications:

URBAN and Regional Information Society of America

TETRA TECH

Alex Montalvo

Mr. Montalvo has over 20 years of data analytics, Geographical Information Systems (GIS) and asset management experience. He currently serves as the GIS Group Manager and has been instrumental in the expansion of GIS services offered by Tetra Tech. A key component of his job function is to coordinate and integrate GIS with engineering practices. GIS is a tremendous benefit to all disciplines in its ability to analyze and exhibit complex data, and its ability to place this information in the hands of key decision makers.

Experience

Water Main Replacement Program, City of Hollywood, FL. GIS Analyst. GIS services associated with the design, permitting, and construction administration services on multiple projects concurrently. To date, the program includes over 225,000 LF (42 miles) of water main replacement, over 1,000 service connections, new fire hydrants, conflict resolution for numerous underground and overhead utilities, permitting through multiple regulatory agencies, and construction within schedule and budget.

PortMiami Hydraulic Analysis and Upgrades Recommendations, Miami,

FL. GIS Analyst. The Miami-Dade Water and Sewer Department requested that Tetra Tech assist in preparing a multi-year capital plan for PortMiami, which necessitated extensive coordination with the Seaport and Water and Sewer Departments. A substantial amount of field work conducted by Tetra Tech was successfully coordinated with MDWASD, PortMiami, equipment manufacturers, and others, without impacting any cruise or cargo operations on one of the busiest Ports in the world. Existing infrastructure data was analyzed and prepared for Hydraulic Modeling effort including the identification of existing asset locations for installation of calibration and monitoring equipment.

Water, Wastewater, & Reclaimed Water Master Planning, Miami-Dade County, FL. GIS Analyst. Serves to identify and quantify water, wastewater, and reclaimed demands throughout existing and potential service areas. This effort includes identifying unserved areas, projecting demands, and developing alternatives for future utility service connections. Existing utility assets from other owners in the county are analyzed to identify any potential conflicts. In addition to utility data, detailed analysis of planning datasets such as zoning, special districts, and existing and future land uses are performed as well.



Ecological



education: BS, Biological Oceanography, Florida Institute of Technology, 1993

years of experience: 20

years with Tetra Tech: 10

certifications:

Qualified Stormwater Management Inspector # 25763

Wetland Delineation and Hydric Soil Identification Training, 2008

TETRA TECH

Georgia Vince

Ms. Vince has over 20 years of experience with regulatory and permitting programs for state, federal and local levels of government, included Sovereign Submerged Lands, Joint Coastal Permitting, Environmental Resource Program, Coastal Zone Management reviews and Section 404 permitting for large and small projects including linear pipelines, ports, and offshore construction projects. Experience also includes Section 106 consultation, wetland delineations, wetland mitigation, wetland restoration, environmental assessments, National Environmental Protection Act (NEPA) analysis, and threatened and endangered species biological assessments. Previously, Ms. Vince was responsible for permitting and compliance activities related to Comprehensive Everglades Restoration Project (CERP) projects through coordination with planning, engineering, construction and operation. Ms. Vince has extensive experience in public speaking and coordinating with stakeholders on sensitive environmental issues.

Experience

South Florida Water Management District (SFWMD) Everglades Agricultural Area (EAA) Storage Reservoir Feasibility Study. Project

Manager. The EAA Storage Reservoir Feasibility Study and Draft Environmental Impact Statement is a federal planning document for 240,000-acre-feet water storage reservoir and associated storm water treatment area. Tetra Tech was the lead consultant on this project and performed project management, report preparation including development of major sections of the document in coordination with SFWMD staff, quantities and cost estimating for the preliminary design, habitat unit evaluations, biological assessment, coordination of numerous public meetings, preparation of the administrative record, and technical editing and publishing the final report. Tetra Tech completed the feasibility study in compliance with federal policy within six months of executing the work order, on time and under budget.

Florida Power & Light Company, Miami-Dade Solar Energy Center, Miami-Dade County, FL. Project Manager. Responsible for overseeing local, state and federal environmental permitting, including preparing of permit applications, wildlife and habitat surveys, wetland delineation, cultural resources surveys, and all agency coordination related to the processing of permits for the construction of the solar facility. State permit was received within 32 days of submittal of the permit application.



Structural Engineering



education: MS, Civil Engineering, University of Central Florida, 2005

BS, Civil Engineering, University of Central Florida, 2003

years of experience: 15 years with Tetra Tech:

15

certifications: Professional Engineer: Florida, No. 69879

Structural Engineer: Illinois, No. 081007184

Model Law Structural Engineer, National Council of Examiners for Engineering and Surveying, No. 47938

TETRA TECH

Jason Burkett, PE, SE, MLSE

Mr. Burkett is a structural engineer who is experienced with many structural systems including composite steel, prestressed/precast concrete, concrete framing, steel framing, masonry, timber, tilt-up concrete panels, light-gauge steel, and aluminum. He has completed projects for water treatment facilities, federal government, Department of Defense, municipal, industrial, commercial, residential, health care, education, aviation, marine construction, performing arts, roofing components, hurricane shelters, high-velocity hurricane zones, renovations, additions, and investigations.

Experience

Pompano Beach WTP Structural Retrofit Design, Pompano Beach, FL.

Engineer of Record. Provided design drawings for five existing buildings to be strengthened to meet the current hurricane wind forces. The buildings were constructed from 1960 through 1988 and are critical to the communities' drinking water supply and need to remain operational during and after a major storm event. The existing drawings were reviewed, and a field investigation was performed to verify the information on the record drawings and document as-built information that were not available. After the investigation phase, a retrofitting design was performed to strengthen the buildings for 180 mph design wind speeds.

Pompano Beach WTP Structural Investigation, Pompano Beach, FL. Lead Structural Engineer and Investigator. Responsible for evaluating five existing buildings dating back to the 1960s for compliance with the Florida Building Code wind design requirements. All the deficiencies were outlined in a report along with a cost breakdown for retrofitting.

Rockledge WRF Digester Tank Assessment, Rockledge, FL. Structural Engineer of Record and Inspector. Responsible for conducting a structural condition assessment of an existing concrete digester tank to determine if it is feasible to reuse for a proposed plant improvement project. The assessment included a field visit for visual observations, and confined space entry into the empty digester tank. Existing conditions were recorded and incorporated into a memo to summarize our findings and recommendations.



Funding



education: BS, Civil Engineering, Florida State University, 1996

years of experience: 24

years with Tetra Tech: 24

certifications: Professional Engineer: Florida, No. 56152

TETRA TECH

Daniel Nelson, PE

Mr. Nelson has assisted with over \$200M of funding assistance through the State Revolving Fund (SRF) process and over \$75M of similar alternative funding (USDA, direct appropriations, bonds, grants, etc. Mr. Nelson's experience has followed from inception and planning through financial approval and documentation. Mr. Nelson has worked on funded projects for over 20 years and has been personally acquainted with members of both the Clean Water and Drinking Water staff of FDEP's SRF program throughout this period. His experience has included assistance with initiation of application process, including preparation of Requests for Inclusion; preparation of Facilities Plans; assistance with Public Hearings; preparation of biding documents, including inclusion of supplemental conditions; wage labor rate verification; verification of compliance with American Iron and Steel (AIS) requirements; and funding disbursement assistance throughout the construction phase.

Experience

Southwest 6 & 7 Utility Extension Program, City of Cape Coral, FL. Program and SRF Manager. Expansion of the City's water, wastewater and irrigation systems to a four square mile area south of Pine Island Road. The project includes value engineering, hydraulic modeling for water, wastewater and irrigation systems, design, permitting, bidding and construction management. The project includes over 200 miles of potable water, wastewater collection, wastewater transmission and irrigation utility piping; 18 lift stations and a stormwater canal pumping station to supplement reclaimed water during high demand periods. \$73M of SRF Funding through the Clean Water and Drinking Water Programs.

Potable Water System Improvements & Stormwater Improvement Program, Fort Myers Beach, FL. Program and SRF Manager. Over \$20M of Drinking Water Funding to Date; \$30M approved and in process of construction over the next 5 years. Improvements consisting of replacing aged 3- and 4-inch galvanized pipe with 8 and 10-inch C-900 PVC water mains to serve the residential areas throughout the Island as well as performing stormwater and roadway improvements. Pipe sizing was determined through hydraulic modeling efforts to meet fire flow requirements. The project consists of over 200,000 linear feet of water piping. Over \$30M of Stormwater Improvements approved for funding through Clean Water SRF. Implementation of stormwater improvements throughout the entire island. The Town is responsible for stormwater along all residential streets consisting of over 26 miles of stormwater system improvements.



Survey Keith & Associates: Subconsultant



education: Maryville College, Maryville, Tennessee

years of experience: 40

certifications:

Professional Surveyor & Mapper: Florida, No. 5660

KEITH & ASSOCIATES

Michael Mossey, PSM

Mr. Mossey has over 40 years of experience in land surveying and mapping in South Florida. He has extensive senior project management experience for largescale projects and continuing service, on-call type contracts for both public and private sector clients. He is a highly talented Quality Surveyor with a successful track record in budget estimation, valuation of items and completing projects on time. Mr. Mossey's experience includes a wide range of projects incorporating GIS deliverables for various agencies including Broward County, the Federal Aviation Administration (FAA) and municipalities.

Experience

A-1-A / S.R. 814 Atlantic Boulevard, Pompano Beach, FL. Survey Project Manager. Mr. Mossey prepared extensive Topographic Design Surveys for this Pompano Beach CRA roadway improvement project. Project included design and right-of-way survey as well as a FDEP Coastal Topographic Survey required for design and permitting of coastal roadways, pedestrian walkways, and beach and dune beautification improvements. Concept includes reconstruction of roadway, water, sewer and drainage, streetscapes and beatifications.

Pompano Beach Boulevard Streetscape, Pompano Beach, FL. Mr. Mossey was responsible for the Coastal Hydrographic and Topographic Surveys for FDEP Permitting for the design and construction of the roadway and pedestrian pathways adjacent to the beachfront. The project was situated seaward of the Coastal Construction Control Line therefore the design required extensive hydrographic and topographic survey in accordance with the requirements of the Florida Department of Environmental Protection-Division of Beaches and Shores as set forth in Section 62B-33.0081.

Pompano Beach Oceanside Fire Station #11, Pompano Beach, FL. KEITH is working with a team of consultants with the primary responsibility of surveying and platting to construct a new barrier island Oceanside Fire Station (Station # 11) in Pompano Beach. The proposed site required a land use plan amendment, rezoning, platting and site plan approval before the station could be permitted. KEITH coordinated with City staff and other consultants to properly time the plat approval in conjunction with the plan amendment as well as coordinating with the architect and FDOT for the plat opening along A-1-A for the fire station driveway. As Survey Project Manager, Mr. Mossey prepared Boundary and Topographic Design Survey including tree locations and identifications for this new public facility station on A-1-A including offsite improvements. Services included easement vacations plat preparation, processing and recordation.

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Office Locations

Overview

Tetra Tech will manage and perform work under this contract from our Hollywood (4601 Sheridan Street, Suite 212; Hollywood, FL 33021) office which is located approximately 18 miles from the City of Pompano Beach Public Works. We will also utilize our nearby Miami office (6303 Blue Lagoon Dr. Ste. 305; Miami, FL 33126) as well as our southeastern design center located in Orlando. We serve surrounding municipalities from this location and find that the close proximity allows our team to provide cost-effective services while maintaining strict schedule time frames. Our Project Manager, Tim Vanderwalker, will facilitate coordination and good communication between the Tetra Tech team and City staff, which is essential to successfully completing any project.

Additionally, the key personnel assigned to this project have a strong local presence and established relationships with local regulatory agencies. We understand the importance of providing local services and we are available to interface with the City staff on a daily basis throughout the duration of this contract. The table below shows the number of full time professional and administrative staff that is maintained by Tetra Tech offices in South Florida, throughout Florida and company-wide, in addition to the local offices for our subconsultants.

By The Numbers

Tetra Tech, Hollywood, FL Office	10
South Florida Tetra Tech Employees	52
State of Florida Tetra Tech Employees	721
Total Tetra Tech Employees	20,000+
Keith & Associates - Pompano Beach Office	145
Pace Analytical Services - Pompano Beach Office	72
The Chappell Group - Pompano Beach Office	7

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» Local Businesses

LOCAL BUSINESS EXHIBIT "A" CITY OF POMPANO BEACH, FLORIDA LOCAL BUSINESS PARTICIPATION FORM

Solicitation Number & Title: E-20-20 Continuing Civil Engineering Services

Prime Contractor's Name: _____ Tetra Tech, Inc.

Name of Firm, Address	Contact Person, Telephone Number	Type of Work to be Performed/Material to be Purchased	Contract Amount or %
KEITH & ASSOCIATES	Alex Lazowick, 954-788-3	8400 Engineering & Surveying/SUE	15%
PACE ANALYTICAL	Nick Rachell, 954.459.76	60 Water Quality Laboratory	TBD% should water quality be needed
THE CHAPPELL GROUP	Tyler Chappell, 954.782.1	908 Environmental	5%

LOCAL BUSINESS EXHIBIT "A"

LOCAL BUSINESS EXHIBIT "B" LOCAL BUSINESS LETTER OF INTENT TO PERFORM AS A LOCAL SUBCONTRACTOR

Solicitation Number E-20-20

TO: <u>Tetra Tech, Inc.</u> (Name of Prime or General Bidder)

The undersigned City of Pompano Beach business intends to perform subcontracting work in connection with the above contract as (check below)

____ an individual

<u>χ</u> a corporation

_____a partnership

_____ a joint venture

The undersigned is prepared to perform the following work in connection with the above Contract, as hereafter described in detail:

_Engineering and Surveying/SUE_____

at the following price: <u>\$ as determined per project</u>

July 15, 2020 (Date) KEITH & ASSOCIATES (Print Name of Local Business Contractor)

301 E. Atlantic Blvd. (Street Address)

Pompano Beach (City, State Zip Co BY: (Signature)

IMPORTANT NOTE: Signatures on this form MUST be by an authorized employee of Subcontractor and must be uploaded to the Response Attachment Tab

LOCAL BUSINESS EXHIBIT "B"

LOCAL BUSINESS EXHIBIT "B"	
LOCAL BUSINESS	
LETTER OF INTENT TO PERFORM AS A LOCAL SUBCONTRACTOR	

Solicitation Number E-20-20 TO: Tetra Tech, Inc (Name of Prime or General Bidder) The undersigned City of Pompano Beach business intends to perform subcontracting work in connection with the above contract as (check below) ____Limited Liability Company_____ a corporation an individual _ a partnership ___a joint venture The undersigned is prepared to perform the following work in connection with the above Contract, as hereafter described in detail: Water Quality at the following price: _______ \$as determined per project______ July 28, 2020 Pace Analytical Services, LLC (Print Name of Local Business Contractor) (Date) 3610 Park Central Blvd. N (Street Address) Pompano Beach, FL 33064 (City, State Zip Code) BY: _____ (Signature)

IMPORTANT NOTE: Signatures on this form MUST be by an authorized employee of Subcontractor and must be uploaded to the Response Attachment Tab

LOCAL BUSINESS EXHIBIT "B"

LOCAL BUSINESS EXHIBIT "B"
LOCAL BUSINESS
LETTER OF INTENT TO PERFORM AS A LOCAL SUBCONTRACTOR

Solicitation Number E-20-20

TO: <u>Tetra Tech, Inc.</u> (Name of Prime or General Bidder)

The undersigned City of Pompano Beach business intends to perform subcontracting work in connection with the above contract as (check below)

____ an individual

a	partnership	

____ a corporation _____a joint venture

The undersigned is prepared to perform the following work in connection with the above Contract, as hereafter described in detail:

at the following price: <u>_\$as determined by proje</u>	act
July 29, 2020 (Date)	(Print Name of Local Business Contractor)
	(Street Address)
	Pompane Beach, 71. 33060

Environmental Consulting Services

(City, Stare Zip Code) hquell ALA BY: (Signature)

IMPORTANT NOTE: Signatures on this form MUST be by an authorized employee of Subcontractor and must be uploaded to the Response Attachment Tab

LOCAL BUSINESS EXHIBIT "B"

LOCAL BUSINESS UNAVAILABILITY FORM BID # E-20-20 I, Charles Drake, Vice President
BID # E-20-20 I, Charles Drake, Vice President
I, Charles Drake, Vice President
(61
(Name and Title)
, certify that on theday of
huly, _2020 I invited the following LOCAL BUSINESSES to bid work ms to be performed in the City of Pompano Beach:
Form of Bid Sought (i.e. Price, Materials/Labor, I Only, etc.)
Isiness Name, Address Work items Sought Only, etc.)
A ALL FINING TE THATEON REACHED OUT TO WERE AVAILABLE
id Local Businesses:
id Local Businesses: Did not bid in response to the invitation
hid Local Businesses: Did not bid in response to the invitation Submitted a bid which was not the low responsible bid
id Local Businesses: Did not bid in response to the invitation Submitted a bid which was not the low responsible bid
Inid Local Businesses: Did not bid in response to the invitation Did not bid which was not the low responsible bid X Other: All firms accepted bid
Id Local Businesses: Did not bid in response to the invitation Submitted a bid which was not the low responsible bid X Other: All firms accepted bid Name and Title: Charles Drake, Vice President

Note: Attach additional documents as available.

LOCAL BUSINESS I	PARTICIPATION
BID # <u>E-20-20</u>	0
What portions of the contract have you identifie	ed as Local Business opportunities?
Surveying/SUE, Civil Engineering; Water	Quality Analysis; Environmental
Did you provide adequate information to identif	ied Local Businesses? Please comment on h
you provided this informationYes, by email	
Did you send written notices to Local Business	es?
YesxNo	
If yes, please include copy of the notice and the	e list of individuals who were forwarded copie
the notices.	
Did you advertise in local publications?	
YesxNo	
If yes, please attach copies of the ads, includin	g name and dates of publication.
What type of efforts did you make to assist Loc	al Businesses in contracting with you ?Pr
established relationships of working together	
List the Local Businesses you will utilize and su	ubcontract amount.
Keith & Associates	\$As needed
Pace Analytical	\$As needed
The Chappell Group	\$ As Needed

Continuing Civil Engineering Services | Pompano Beach



Litigation

In the normal course of business, Tetra Tech, Inc. is subject to certain claims and lawsuits typically filed against the engineering and consulting professions, including contractual disagreements, workers' compensation, personal injury and other similar lawsuits. Tetra Tech maintains insurance coverage for its business and operations, subject to certain deductibles and policy limits against such claims. As described in Tetra Tech's most recent quarterly and annual reports filed with the U.S. Securities and Exchange Commission, Tetra Tech believes that the resolution of any such claims will not have a material effect on its financial position or results of operations.

L00421 HRK Holdings v. Ardaman	L00491 Regions Bank v. Ardaman
Date Opened: 01/10/13	Date Opened: 10/16/15
Plaintiff: HRK Holdings, LLC	Plaintiff: Regions Bank D/B/A Regions Mortgage
Defendant: Ardaman & Associates, Inc.	Defendant: Ardaman & Associates, Inc.
Case Number: 2013-CA-000098-0	Case Number: 2015CA011328
Date Filed: 01/07/13	Date Filed: 10/7/15
Court: Circuit Court, Manatee County, FL, Civil	Court: Circuit Court, 15th Circuit, Palm Beach
Division	County, FL
Cause of Action: Breach of Contract, Negligence	Cause of Action: Foreclosure litigation
Disposition of Case: Ongoing	Disposition of Case: Closed
L00508 Callaway Marine Tech. v. Tetra Tech	L00516 Aanya Hospitality v. Tetra Tech
Date Opened: 03/16/16	Date Opened: 7/8/16

LOO517 Phoenix Building Corp v. Tetra Tech Date Opened: 8/4/16 Plaintiff: Phoenix Building Corp SE Defendant: Tetra Tech, Inc. Case Number: 16-2016-CA-004896-XXXX-MA Date Filed: 7/25/16 Court: Circuit Court of the 4th Judicial Circuit in and for Duval County, FL Cause of Action: Breach of Contract Disposition of Case: Settled	LOO527 Two City Plaza Condo. Assoc. v. Ardaman Date Opened: 10/21/16 Plaintiff: Two City Plaza Condominium Association, Inc. Defendant: Ardaman & Associates, Inc. Case Number: 50-2016-CA-011149-XXX-MB Date Filed: 10/18/16 Court: Circuit Court of the 15th Judicial Circuit, Palm Beach County, FL Cause of Action: Negligence Disposition of Case: Dismissed
L00528 Phoenix Building Corp SE v. Tetra Tech Date Opened: 10/31/16 Plaintiff: Phoenix Building Corp SE Defendant: Tetra Tech, Inc. Case Number: 2016-ca-009194-o Date Filed: 10/19/16 Court: Circuit Court of the 9th Judicial Circuit, Orange County, FL Cause of Action: Breach of Contract Disposition of Case: Closed	LOO532 Chubb Custom Insurance Co. v. Ardaman Date Opened: 12/16/16 Plaintiff: Chubb Custom Insurance Company as subrogee of First Church of Christ Scientist Defendant: Ardaman & Associates, Inc. Case Number: 2016-031146-CA-01 Date Filed: 12/08/16 Court: Circuit Court of the 11th Judicial Circuit in and for Miami Dade County, Florida Cause of Action: Negligence Disposition of Case: Closed
PLOOO04 Barcelona I Condominium Assoc. v. Ardaman Date Opened: 07/17/17 Plaintiff: Barcelona I Condominium Association, Inc. Defendant: Ardaman & Associates, Inc. Case Number: 17-12847 CA 09 Date Filed: 05/26/17 Court: 11th Judicial Circuit, Miami Dade County, Florida Cause of Action: Negligence Disposition of Case: Dismissed, Reopened, Closed 9/19/18	PLOOOO8 Cecilia Sed et al. v. Ardaman Date Opened: 08/08/17 Plaintiff: Cecilia Sed and Jorge Sed Defendant: Ardaman & Associates, Inc. Case Number: 17-CA-7271 Date Filed: 08/02/17 Court: Hillsborough County, Florida Cause of Action: Negligence, Breach of Contract Disposition of Case: Ongoing

_

Continuing Civil Engineering Services | Pompano Beach



» City Forms

COMPLETE THE PROPOSER INFORMATION FORM ON THE ATTACHMENTS TAB IN THE EBID SYSTEM. PROPOSERS ARE TO COMPLETE FORM IN ITS ENTIRITY AND INCLUDE THE FORM IN YOUR PROPOSAL THAT MUST BE UPLOADED TO THE RESPONSE ATTACHMENTS TAB FOR THE RFP IN THE EBID SYSTEM.

PROPOSER INFORMATION PAGE

RFP E-20-20. Continuing Contract for Civil Engineering Services

(number) (RFP name)

To: The City of Pompano Beach, Florida

The below named company hereby agrees to furnish the proposed services under the terms stated subject to all instructions, terms, conditions, specifications, addenda, legal advertisement, and conditions contained in the RFP. I have read the RFP and all attachments, including the specifications, and fully understand what is required. By submitting this proposal, I will accept a contract if approved by the City and such acceptance covers all terms, conditions, and specifications of this proposal.

_

COMPLETE THE PROPOSER INFORMATION FORM ON THE ATTACHMENTS TAB IN THE EBID SYSTEM. PROPOSERS ARE TO COMPLETE THE FORM IN ITS ENTIRITY AND INCLUDE THE COMPLETED FORM IN YOUR PROPOSAL THAT MUST BE UPLOADED TO THE RESPONSE ATTACHMENTS TAB IN THE EBID SYSTEM.

VENDOR CERTIFICATION REGARDING SCRUTINIZED COMPANIES LISTS

Respondent Vendor Name: _____Tetra Tech, Inc.

Vendor FEIN: _____95-4148514

Section 287.135, Florida Statutes, prohibits agencies from contracting with companies, for goods or services over \$1,000,000, that are on either the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List. Further, Section 215.4725, Florida Statutes, prohibits agencies from contracting (at any dollar amount) with companies on the Scrutinized Companies that Boycott Israel List, or with companies that are engaged in a boycott of Israel. As the person authorized to sign electronically on behalf of Respondent, I hereby certify by selecting the box below that the company responding to this solicitation is not listed on the Scrutinized Companies with Activities in Sudan List, the Scrutinized Companies that Boycott Israel List. I also certify that the company responding to this solicitation is not participating in a boycott of Israel, and is not engaged in business operations in Syria or Cuba. I understand that pursuant to sections 287.135 and 215.4725, Florida Statutes, the submission of a false certification may subject company to civil penalties, attorney's fees, and/or costs.

I Certify



TIER 1/TIER 2 COMPLIANCE FORM

IN ORDER FOR YOUR FIRM TO COMPLY WITH THE CITY'S LOCAL BUSINESS PROGRAM AS A TIER 1 OR TIER 2 VENDOR, BIDDERS MUST COMPLETE THE INFORMATION BELOW AND UPLOAD THE FORM TO THE RESPONSE ATTACHMENTS TAB IN THE EBID SYSTEM.

TIER 1 LOCAL VENDOR

_____ My firm has maintained a permanent place of business within the city limits and maintains a staffing level, within this local office, of at least 10 % who are residents of the City of Pompano Beach.

And/Or

_____ My firm has maintained a permanent place of business within the city limits and my submittal includes subcontracting commitments to Local Vendors Subcontractors for at least 10 % of the contract value.

Or

x My firm does not qualify as a Tier 1 Vendor.

TIER 2 LOCAL VENDOR

_____ My firm has maintained a permanent place of business within Broward County and maintains a staffing level, within this local office, of at least 15% who are residents of the City of Pompano Beach

And/Or

<u>×</u> My firm has maintained a permanent place of business within Broward County and my submittal includes subcontracting commitments to Local Vendors Subcontractors for at least 20% of the contract value.

Or

____ My firm does not qualify as a Tier 2 Vendor.

I certify that the above information is true to the best of my knowledge.

July 30, 2020

(Date)

Tetra Tech, Inc. (Name of Firm)

les W. Draha

(Name) Charles (Chuck) Drake, PG

BIDDERS ARE TO COMPLETE FORM AND UPLOAD COMPLETED FORM TO THE EBID SYSTEM

EXHIBIT E

MINORITY BUSINESS ENTERPRISE PARTICIPATION

List all members of your team that are a certified Minority Business Enterprise (as defined by the State of Florida.) You must include copies of the MBE certificates for each firm listed with your electronic submittal.

Name of Firm	Certificate Included?
The Chappell Group	Y

State of Florida

Woman Business Certification

The Chappell Group

Is certified under the provisions of 287 and 295.187, Florida Statutes, for a period from:

10/28/2019 to 10/28/2021

stard. Jath



Office of Supplier Diversity 4050 Esplanade Way, Suite 380 Tallahassee, FL 32399 850-487-0915 www.dms.myflorida.com/osd Continuing Civil Engineering Services | Pompano Beach



» Reviewed and Audited Financial Statements

Tetra Tech's most recent audited financial statements, indicating our organization's financial condition was uploaded as a separate document to Pompano's eBid system. Per the RLI instructions, the document was marked "Financial Statements" and "Confidential."
Exhibit A RLI E-20-20 & Consultant Proposal





ADDRESS

4601 Sheridan Street, Suite 212 Hollywood, FL 33021









Schedule of Hourly Rates

Hourly Billing Rates for: IEW Rates Effective Starting: January 1, 2020

Personnel	Hourly Rate
Management	
Project and Program Management	
Project Manager 1	\$190.00
Project Manager 2	\$210.00
Sr Project Manager	\$250.00
Program Manager	\$275.00
A/E Services	
Engineers	
Engineer 1	\$100.00
Engineer 2	\$115.00
Engineer 3	\$130.00
Project Engineer 1	\$150.00
Project Engineer 2	\$180.00
Sr Engineer 1	\$225.00
Sr Engineer 2	\$230.00
Sr Engineer 3	\$260.00
Principal Engineer	\$340.00
Engineering Designers	
Engineering Technician	\$70.00
Engineering Designer 1	\$90.00
Engineering Designer 2	\$110.00
Engineering Designer 3	\$130.00
Sr Eng Designer 1	\$155.00
Sr Eng Designer 2	\$165.00
Sr Eng Designer 3	\$180.00
Architects	
Arch Technician	\$60.00
Architectural Designer 1	\$85.00
Architectural Designer 2	\$95.00
Architectural Designer 3	\$130.00
Architect 1	\$140.00
Architect 2	\$150.00
Sr Architect 1	\$190.00
Sr Architect 2	\$210.00
Architectural Program Mgr	\$260.00

Exhibit B Fee Schedule



Schedule of Hourly Rates

Hourly Billing Rates for: IEW Rates Effective Starting: January 1, 2020

Personnel	Hourly Rate
Information Technology	
Sys Analyst / Programmer 1	\$105.00
Sys Analyst / Programmer 2	\$120.00
Sr Sys Analyst / Programmer 1	\$165.00
Sr Sys Analyst / Programmer 2	\$265.00
Sci Svcs	
Scientists	
Scientist 1	\$75.00
Scientist 2	\$95.00
Scientist 3	\$120.00
Sr Scientist 1	\$135.00
Sr Scientist 2	\$165.00
Sr Scientist 3	\$210.00
Principal Scientist	\$260.00
Field Services	
Construction Observation	
Construction Project Rep 1	\$80.00
Construction Project Rep 2	\$100.00
Sr Constr Project Rep 1	\$140.00
Sr Constr Project Rep 2	\$150.00
Construction Administration	
Construction Administrator	\$90.00
Sr Construction Administrator	\$116.00
Construction Management	
Construction Manager 1	\$170.00
Construction Manager 2	\$200.00
Sr Construction Manager	\$235.00
Construction Director	\$280.00
Technical Services	
Technicians	
Technician 1	\$65.00
Technician 2	\$80.00
Technician 3	100.00
Sr Technician 1	\$140.00



Schedule of Hourly Rates

Hourly Billing Rates for: IEW Rates Effective Starting: January 1, 2020

Personnel	Hourly Rate
Sr Technician 2	\$140.00
Sr Technician 3	\$145.00
Project Support	
Computer Aided Design (CAD)	1
CAD Technician 1	\$65.00
CAD Technician 2	\$75.00
CAD Technician 3	\$95.00
CAD Designer	\$110.00
Sr CAD Designer 1	\$135.00
Sr CAD Designer 2	\$150.00
CAD Director	\$160.00
Geographic Information Systems (GIS)	
GIS Analyst 1	\$70.00
GIS Analyst 2	\$105.00
Sr GIS Analyst	\$120.00
GIS Application Developer	\$130.00
Sr GIS Application Developer	\$170.00
Business Support	
Project Administration	
Project Assistant 1	\$65.00
Project Assistant 2	\$80.00
Project Administrator	\$95.00
Sr Project Administrator	\$115.00
Miscellaneous Items	

Subconsultants	Cost plus 10 Perce	
Other Direct Costs (Out-of-Pocket)	At Cost	

EXHIBIT C

INSURANCE REQUIREMENTS

CONSULTANT shall not commence services under the terms of this Agreement until certification or proof of insurance detailing terms and provisions has been received and approved in writing by the CITY's Risk Manager. If you are responding to a bid and have questions regarding the insurance requirements hereunder, please contact the City's Purchasing Department at (954) 786-4098. If the contract has already been awarded, please direct any queries and proof of the requisite insurance coverage to City staff responsible for oversight of the subject project/contract.

CONSULTANT is responsible to deliver to the CITY for timely review and written approval/disapproval Certificates of Insurance which evidence that all insurance required hereunder is in full force and effect and which name on a primary basis, the CITY as an additional insured on all such coverage.

Throughout the term of this Agreement, CITY, by and through its Risk Manager, reserve the right to review, modify, reject or accept any insurance policies required by this Agreement, including limits, coverages or endorsements. CITY reserves the right, but not the obligation, to review and reject any insurer providing coverage because of poor financial condition or failure to operate legally.

Failure to maintain the required insurance shall be considered an event of default. The requirements herein, as well as CITY's review or acceptance of insurance maintained by CONSULTANT, are not intended to and shall not in any way limit or qualify the liabilities and obligations assumed by CONSULTANT under this Agreement.

Throughout the term of this Agreement, CONSULTANT and all subcontractors or other agents hereunder, shall, at their sole expense, maintain in full force and effect, the following insurance coverages and limits described herein, including endorsements.

A. Worker's Compensation Insurance covering all employees and providing benefits as required by Florida Statute, Chapter 440. CONSULTANT further agrees to be responsible for employment, control and conduct of its employees and for any injury sustained by such employees in the course of their employment.

B. Liability Insurance.

(1) Naming the City of Pompano Beach as an additional insured as CITY's interests may appear, on General Liability Insurance only, relative to claims which arise from CONSULTANT's negligent acts or omissions in connection with CONSULTANT's performance under this Agreement.

(2) Such Liability insurance shall include the following <u>checked types of</u> <u>insurance</u> and indicated minimum policy limits.

Type of Insurance

Limits of Liability

GEN	NERAL LIABILITY:	Minimum 1,000,000 Per Occurrence and \$1,000,000 Per Aggregate			
* Po XX XX —	licy to be written on a claims inc comprehensive form premises - operations explosion & collapse hazard	curred basis bodily injury and p bodily injury and p	property damage property damage		
xx	underground hazard products/completed	bodily injury and p	roperty damage co	ombined	
XX XX XX XX XX	operations hazard contractual insurance broad form property damage independent contractors personal injury	bodily injury and property damage combined bodily injury and property damage combined personal injury			
AUI	TOMOBILE LIABILITY:	Minimum \$1,000,0 Aggregate. Bodily i accident), property damage combined.	000 Per Occurrenc njury (each perso / damage, bodily i	e and \$1,000,000 Per n) bodily injury (each njury and property	
XX XX XX XX XX	comprehensive form owned hired non-owned				
REA	AL & PERSONAL PROPERT	Y			
	comprehensive form	Agent must show proof they have this coverage.			
EXC	CESS LIABILITY		Per Occurrence	Aggregate	
XX	Umbrella and other than umbrella	bodily injury and property damage combined	\$2,000,000	\$2,000,000	
PRC	DFESSIONAL LIABILITY		Per Occurrence	Aggregate	
XX	* Policy to be written on a claim	ms made basis	\$2,000,000	\$2,000,000	

(3) If Professional Liability insurance is required, CONSULTANT agrees the indemnification and hold harmless provisions set forth in the Agreement shall survive the termination or expiration of the Agreement for a period of three (3) years unless terminated sooner by the applicable statute of limitations.

C. <u>Employer's Liability</u>. If required by law, CONSULTANT and all subcontractors shall, for the benefit of their employees, provide, carry, maintain and pay for Employer's Liability

Insurance in the minimum amount of One Hundred Thousand Dollars (\$100,000.00) per employee, Five Hundred Thousand Dollars (\$500,000) per aggregate.

D. <u>Policies</u>: Whenever, under the provisions of this Agreement, insurance is required of the CONSULTANT, the CONSULTANT shall promptly provide the following:

- (1) Certificates of Insurance evidencing the required coverage;
- (2) Names and addresses of companies providing coverage;
- (3) Effective and expiration dates of policies; and

(4) A provision in all policies affording CITY thirty (30) days written notice by a carrier of any cancellation or material change in any policy.

E. <u>Insurance Cancellation or Modification</u>. Should any of the required insurance policies be canceled before the expiration date, or modified or substantially modified, the issuing company shall provide thirty (30) days written notice to the CITY.

F. <u>Waiver of Subrogation</u>. CONSULTANT hereby waives any and all right of subrogation against the CITY, its officers, employees and agents for each required policy. When required by the insurer, or should a policy condition not permit an insured to enter into a pre-loss agreement to waive subrogation without an endorsement, then CONSULTANT shall notify the insurer and request the policy be endorsed with a Waiver of Transfer of Rights of Recovery Against Others, or its equivalent. This Waiver of Subrogation requirement shall not apply to any policy which includes a condition to the policy not specifically prohibiting such an endorsement, or voids coverage should CONSULTANT enter into such an agreement on a pre-loss basis.

ND CONFERS NO TEND OR ALTE A CONTRACT B y(ies) must have icy, certain polici dorsement(s). DNTACT MAL: TONE (SUCE A: Lexin SURER A: Lexin SURER B: Zuric	D RIGHTS R THE CO ETWEEN T ADDITIONA ies may req 283-7122 JRER(S) AFFO	JPON THE CERTIFICATE /ERAGE AFFORDED BY HE ISSUING INSURER(S) IL INSURED provisions or uire an endorsement. A st [A/C. No.): (800) 3 RDING COVERAGE	HOLDER. THIS THE POLICIES), AUTHORIZED r be endorsed. If tatement on this 63-0105
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DNTACT AME: 16NE /C. No. Ext): (866) 2 	JRER(S) AFFO	FAX (A/C. No.): (800) 3 RDING COVERAGE	63-0105
IONE (C. No. Ext): (866) 2 -MAIL DDRESS: INSL SURER A: Lexin SUBER B: Zuric	JRER(S) AFFO	FAX (A/C. No.): (800) 3 RDING COVERAGE	63-0105
MAIL DDRESS: INSL SURER A: Lexin	JRER(S) AFFO	RDING COVERAGE	
DDRESS: INSL SURER A: Lexin	JRER(S) AFFO	RDING COVERAGE	
INSU SURERA: Lexin	JRER(S) AFFO	RDING COVERAGE	
SURERA: Lexin	aton Theu		NAIC #
SUBER B. Zuric	igcon insu	ance Company	19437
SUNEND. Zuite	h American	INS CO	16535
SURERC: Ameri	can Intern	national Group UK Ltd	AA1120187
SURER D:			
SURER E:			
SURER F:			
	R	EVISION NUMBER:	
BEEN ISSUED TO ANY CONTRACT	THE INSUR	ED NAMED ABOVE FOR THI DOCUMENT WITH RESPEC	e policy period T to which this
		D HEREIN IS SUBJECT TO	ALL THE TERMS,
		Limits show	wn are as requested
(MM/DD/YYYY) 10/01/2020	(MM/DD/YYYY) 10/01/2021		¢0,000,000
10/01/2020	10/01/2021	DAMAGE TO RENTED	\$2,000,000
		PREMISES (Ea occurrence)	\$1,000,000
\bigcirc		MED EXP (Any one person)	\$10,000
Kapoo		PERSONAL & ADV INJURY	\$2,000,000
XLDO IL		GENERAL AGGREGATE	\$4,000,000
35 pm, Oct 05	, 2020	PRODUCTS - COMP/OP AGG	\$4,000,000
10/01/2020	10/01/2021	COMBINED SINGLE LIMIT	\$5,000,000
		BODILY INJURY (Per person)	
		BODILY INJURY (Per accident)	
		PROPERTY DAMAGE (Per accident)	
10/01/2020	10/01/2021	EACH OCCUBBENCE	\$10.000.000
			\$10,000,000
		haaneame	\$10,000,000
10/01/2020	10/01/2021		
10/01/2020	10/01/2021		¢1 000 000
-		E.L. EACH ACCIDENT	\$1,000,000
			\$1,000,000
10/01/2019	10/01/2021	Each Claim	\$1,000,000
		Agggregate	\$1,000,000
τerms & condit	ions		
	SURER D: SURER E: SURER F: BEEN ISSUED TO ANY CONTRACT BY THE POLICIES EEN REDUCED B POLICYEFF (MM/DD/YYY) 10/01/2020 10/01/2020 10/01/2020 10/01/2020 10/01/2020 10/01/2020 10/01/2020	SURER D: SURER E: SURER F: BEEN ISSUED TO THE INSURE ANY CONTRACT OR OTHER INSURE ANY CONTRACT OR OTHER INSURE EN REDUCED BY PAID CLAIM EN REDUCED BY PAID CLAIM POLICY EFF (MM/DD/YYYY) (MM/DD/YYYY) 10/01/2020 10/01/2021 POLICY EFF (MM/DD/YYYY) (MM/DD/YYYY) 10/01/2020 10/01/2021 10/01/2020 10/01/2021 10/01/2020 10/01/2021 10/01/2020 10/01/2021 10/01/2020 10/01/2021 10/01/2020 10/01/2021 10/01/2020 10/01/2021 10/01/2020 10/01/2021 10/01/2019 10/01/2021 10/01/2019 10/01/2021 terms & condit tions	SURER D: SURER F: BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THI ANY CONTRACT OR OTHER DOCUMENT WITH RESPEC BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO EEN REDUCED BY PAID CLAIMS. Limits sho POLICY EFF (MM/DD/YYY) (MM/DD/YYY) LIMITS 10/01/2020 10/01/2021 FACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERALAGGREGATE PRODUCTS - COMP/OP AGG 10/01/2020 10/01/2021 10/01/2020 10/01/2021 LIMITE L. EACH ACCIDENT E.L. DISEASE-EA EMPLOYEE E.L. DISEASE-POLICY LIMIT EACH CCIDENT E.L. DISEASE-POLICY LIMIT EACH CLAIM Agggregate

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Blanket Notification to Others of Cancellation or Non-Renewal

Policy No.	Eff. Date of Pol.	Exp. Date of Pol.	Eff. Date of End.	Producer No.	Add'l. Prem	Return Prem.
BAP 1857085-02	10/01/2020	10/01/2021		75272000	INCL	

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

This endorsement modifies insurance provided under the:

Commercial Automobile Coverage Part

- A. If we cancel or non-renew this Coverage Part by written notice to the first Named Insured, we will mail or deliver notification that such Coverage Part has been cancelled or non-renewed to each person or organization shown in a list provided to us by the first Named Insured if you are required by written contact or written agreement to provide such notification. However, such notification will not be mailed or delivered if a conditional notice of renewal has been sent to the first Named Insured. Such list:
 - 1. Must be provided to us prior to cancellation or non-renewal;
 - 2. Must contain the names and addresses of only the persons or organizations requiring notification that such Coverage Part has been cancelled or non-renewed; and
 - 3. Must be in an electronic format that is acceptable to us.
- **B.** Our notification as described in Paragraph **A.** of this endorsement will be based on the most recent list in our records as of the date the notice of cancellation or non-renewal is mailed or delivered to the first Named Insured. We will mail or deliver such notification to each person or organization shown in the list:
 - 1. Within seven days of the effective date of the notice of cancellation, if we cancel for non-payment of premium; or
 - 2. At least 30 days prior to the effective date of:
 - a. Cancellation, if cancelled for any reason other than nonpayment of premium; or
 - b. Non-renewal, but not including conditional notice of renewal.
- **C.** Our mailing or delivery of notification described in Paragraphs **A.** and **B.** of this endorsement is intended as a courtesy only. Our failure to provide such mailing or delivery will not:
 - 1. Extend the Coverage Part cancellation or non-renewal date;
 - 2. Negate the cancellation or non-renewal; or
 - 3. Provide any additional insurance that would not have been provided in the absence of this endorsement.
- **D.** We are not responsible for the accuracy, integrity, timeliness and validity of information contained in the list provided to us as described in Paragraphs **A.** and **B.** of this endorsement.

All other terms and conditions of this policy remain unchanged.

POLICY NUMBER: WC 2540616-02

(Ed. 4-84)

WAIVER OF OUR RIGHT TO RECOVER FROM OTHERS ENDORSEMENT

We have the right to recover our payments from anyone liable for an injury covered by this policy. We will not enforce our right against the person or organization named in the Schedule. (This agreement applies only to the extent that you perform work under a written contract that requires you to obtain this agreement from us.)

This agreement shall not operate directly or indirectly to benefit anyone not named in the Schedule.

Schedule

ALL PERSONS AND/OR ORGANIZATIONS THAT ARE REQUIRED BY WRITTEN CONTRACT OR AGREEMENT WITH THE INSURED, EXECUTED PRIOR TO THE ACCIDENT OR LOSS, THAT WAIVER OF SUBROGATION BE PROVIDED UNDER THIS POLICY FOR WORK PERFORMED BY YOU FOR THAT PERSON AND/OR ORGANIZATION

WORKERS COMPENSATION AND EMPLOYERS LIABILITY INSURANCE POLICY

POLICY NUMBER: WC 2540616-02

WC 42 03 04 B

(Ed. 6-14)

TEXAS WAIVER OF OUR RIGHT TO RECOVER FROM OTHERS ENDORSEMENT

This endorsement applies only to the insurance provided by the policy because Texas is shown in Item 3.A. of the Information Page

We have the right to recover our payments from anyone liable for an injury covered by this policy. We will not enforce our right against the person or organization named in the Schedule, but this waiver applies only with respect to bodily injury arising out of the operations described in the Schedule where you are required by a written contract to obtain this waiver from us.

This endorsement shall not operate directly or indirectly to benefit anyone not named in the Schedule.

The premium for this endorsement is shown in the Schedule.

Schedule

1. (\Box) Specific Waiver

Name of person or organization

(⊠) Blanket Waiver

Any person or organization for whom the Named Insured has agreed by written contract to furnish this waiver.

2. Operations:

ALL PERSONS AND/OR ORGANIZATIONS THAT ARE REQUIRED BY WRITTEN CONTRACT OR AGREEMENT WITH THE INSURED, EXECUTED PRIOR TO THE ACCIDENT OR LOSS, THAT WAIVER OF SUBROGATION BE PROVIDED UNDER THIS POLICY FOR WORK PERFORMED BY YOU FOR THAT PERSON AND/OR ORGANIZATION.

3. Premium:

The premium charge for this endorsement shall be _____ percent of the premium developed on payroll in connection with work performed for the above person(s) or organization(s) arising out of the operations described.

4. Advance Premium:

POLICY NUMBER: WC 2540616-02

WC 43 03 05 (Ed. 7-00)

UTAH WAIVER OF SUBROGATION ENDORSEMENT

This endorsement applies only to the insurance provided by the policy because Utah is shown in Item 3.A. of the Information Page.

We have the right to recover our payments from anyone liable for an injury covered by this policy. We will not enforce our right against the person or organization named in the Schedule. (This agreement applies only to the extent that you perform work under a written contract that requires you to obtain this agreement from us.)

This agreement shall not operate directly or indirectly to benefit anyone not named in the Schedule. Our waiver of rights does not release your employees' rights against third parties and does not release our authority as trustee of claims against third parties.

Schedule

ALL PERSONS AND/OR ORGANIZATIONS THAT ARE REQUIRED BY WRITTEN CONTRACT OR AGREEMENT WITH THE INSURED, EXECUTED PRIOR TO THE ACCIDENT OR LOSS, THAT WAIVER OF SUBROGATION BE PROVIDED UNDER THIS POLICY FOR WORK PERFORMED BY YOU FOR THAT PERSON AND/OR ORGANIZATION.

ENDORSEMENT

This endorsement, effective 12:01 AM 10/01/2019

Forms a part of policy no.: 028182375

Issued to: TETRA TECH, INC., ET AL

By: LEXINGTON INSURANCE COMPANY

ADVICE OF CANCELLATION TO ENTITIES OTHER THAN THE NAMED INSURED LIMITED TO E-MAIL NOTIFICATION

This policy is amended as follows:

In the event that the Insurer cancels this policy for any reason other than non payment of premium, and

- 1. The cancellation effective date is prior to this policy's expiration date;
- The First Named Insured is under an existing contractual obligation to notify a certificate holder when this policy is canceled (hereinafter, the "Certificate Holder(s)"); and has provided to the Insurer, either directly or through its broker of record, the email address of the contact at such entity,

and the Insurer received this information after the First Named Insured receives notice of cancellation of this policy and prior to this policy's cancellation effective date, via an electronic spreadsheet that is acceptable to the Insurer,

the Insurer will provide advice of cancellation (the "Advice") via e-mail to such Certificate Holders.

Proof of the **Insurer** emailing the Advice, using the information provided by the **First Named Insured**, will serve as proof that the **Insurer** has fully satisfied its obligations under this endorsement.

This endorsement does not affect, in any way, coverage provided under this policy or the cancellation of this policy or the effective date thereof, nor shall this endorsement invest any rights in any entity not insured under this policy.

The following Definitions apply to this endorsement:

- 1. First Named Insured means the Named Insured shown on the Declarations Page of this policy.
- 2. Insurer means the insurance company shown in the header on the Declarations Page of this policy.

All other terms, conditions and exclusions shall remain the same.

BLANKET NOTIFICATION TO OTHERS OF CANCELLATION OR NONRENEWAL ENDORSEMENT

This endorsement adds the following to Part Six of the policy.

PART SIX CONDITIONS

Blanket Notification to Others of Cancellation or Nonrenewal

- 1. If we cancel or non-renew this policy by written notice to you, we will mail or deliver notification that such policy has been cancelled or non-renewed to each person or organization shown in a list provided to us by you if you are required by written contract or written agreement to provide such notification. However, such notification will not be mailed or delivered if a conditional notice of renewal has been sent to you. Such list:
 - a. Must be provided to us prior to cancellation or non-renewal;
 - b. Must contain the names and addresses of only the persons or organizations requiring notification that such policy has been cancelled or non-renewed; and
 - c. Must be in an electronic format that is acceptable to us.
- Our notification as described in Paragraph 1. above will be based on the most recent list in our records as of the date the notice of cancellation or non-renewal is mailed or delivered to you. We will mail or deliver such notification to each person or organization shown in the list:
 - a. Within seven days of the effective date of the notice of cancellation, if we cancel for non-payment of premium; or
 - b. At least 30 days prior to the effective date of:
 - (1) Cancellation, if cancelled for any reason other than nonpayment of premium; or
 - (2) Non-renewal, but not including conditional notice of renewal.
- 3. Our mailing or delivery of notification described in Paragraphs 1. and 2. above is intended as a courtesy only. Our failure to provide such mailing or delivery will not:
 - a. Extend the policy cancellation or non-renewal date;
 - b. Negate the cancellation or non-renewal; or
 - c. Provide any additional insurance that would not have been provided in the absence of this endorsement.
- 4. We are not responsible for the accuracy, integrity, timeliness and validity of information contained in the list provided to us as described in Paragraphs 1. and 2. above.

All other terms and conditions of this policy remain unchanged.

This endorsement changes the policy to which it is attached and is effective on the date issued unless otherwise stated. (The information below is required only when this endorsement is issued subsequent to preparation of the policy.)

Endorsement Effective	Policy No.	Endorsement No.
Insured	WC 1857087-02	Premium \$

Insurance Company