

**AGREEMENT FOR EMERGENCY DEBRIS REMOVAL MONITORING SERVICES - SECONDARY**

THIS AGREEMENT FOR EMERGENCY DEBRIS REMOVAL MONITORING SERVICES - SECONDARY ("Agreement") is entered into by and between the **CITY OF OCALA**, a Florida municipal corporation ("City") and **TETRA TECH, INC.**, a foreign profit corporation duly organized in the state of Delaware and authorized to do business in the state of Florida (EIN: 95-4148514) ("Consultant").

**WHEREAS**, on March 13, 2023, City issued a Request for Proposal ("RFP") for the provision of pre-event monitoring services for emergency debris removal, RFP No.: PWD/230227 (the "Solicitation"); and

**WHEREAS**, four (4) firms responded to the Solicitation and, Tetra Tech, Inc. was the second-highest ranked firm scored by a City evaluation committee; and

**WHEREAS**, Tetra Tech, Inc. was selected as the secondary provider of emergency debris removal monitoring services (the "Services"); and

**NOW THEREFORE**, in consideration of the foregoing recitals, the following mutual covenants and conditions, and other good and valuable consideration, City and Consultant agree as follows:

1. **RECITALS.** City and Consultant hereby represent, warrant, and agree that the Recitals set forth above are true and correct and are incorporated herein by reference.
2. **CONTRACT DOCUMENTS.** The Contract Documents which comprise the entire understanding between City and Consultant shall only include this Agreement and those documents listed in this section as Exhibits to this Agreement. Each of these documents are incorporated herein by reference for all purposes. If there is a conflict between the terms of this Agreement and the Contract Documents, then the terms of this Agreement shall control, amend, and supersede any conflicting terms contained in the remaining Contract Documents.

**Exhibits to Agreement:** The Exhibits to this Agreement are as follows:

- Exhibit A: Scope of Work (A-1 through A-14)
- Exhibit B: Price Proposal (B-1)
- Exhibit C: Federal Requirements (C-1 through C-7)
- Exhibit D: Consultant Proposal (D-1 through D-58)

If there is a conflict between the individual Exhibits regarding the scope of work to

be performed, then any identified inconsistency shall be resolved by giving precedence in the following order: (1) Exhibit C, then (2) Exhibit A, then (3) Exhibit B, then (4) Exhibit D.

3. **SCOPE OF SERVICES.** Consultant shall provide all materials, labor, supervision, tools, accessories, equipment, and permits necessary for Consultant to perform its obligations under this Agreement as set forth the attached **Exhibit A - Consultant Proposal** and Contract Documents. The Scope of Work under this Agreement may only be adjusted by written amendment executed by both parties.
4. **COMPENSATION.** City shall pay Consultant for the performance of the work, and in accordance with the contract documents based on the unit prices set forth in **Exhibit B – Price Proposal**. All loaded hourly rates in Exhibit B include all taxes, per diem, handling charges, equipment, travel, overhead, profits, etc. No additional charges shall be billed to the City.

- A. **Invoice Submission.** Consultant shall submit monthly invoices to City no later than thirty (30) days following final acceptance of the individual task as requested by the City. Invoices submitted by Consultant shall include the City Contract Number, an assigned Invoice Number, an Invoice Date and Description of Services. Consultant shall submit the original invoice through the responsible City Project Manager at: **City of Ocala Public Works Department**, 1805 NE 30<sup>th</sup> Avenue, Bldg. 300, Ocala, Florida 34470 Attn: **Darren Park**, E-Mail: [dpark@ocalafl.org](mailto:dpark@ocalafl.org); Office: 352-351-6720, Cellphone: 352-414-8622.
- B. **Invoicing Responsibilities.**
- a. Consultant must ensure all contract quantities for both the contractors and monitors are documented and recorded according to current Federal requirements, including but not limited to, FHWA-ER actual costs incurred (cradle to grave) for work conducted on First Push and First Pass Federal Aid roadways, including time at disposal sites estimating loads on incoming and outgoing debris loads.
  - b. For Non-Federal Aid eligible roadways, FEMA PA program actual costs incurred (cradle to grave) for work conducted on non-Federal Aid eligible roadways First Push, First Pass, and second and subsequent passes: Monitor's invoices must delineate between hours spent on FHWA vs. FEMA-reimbursed tasks.
  - c. Maintain a database of all contract quantities and perform contractor invoice verification for the City.
  - d. All invoices shall be submitted in an acceptable format to the City in an electronic and hard copy format with daily reports as supporting documentation. The invoices must be submitted in accordance with the Consultant Invoice Transmittal System (CITS) procedures and other federal, state, and local rules, regulations, and laws.
- C. **Payment of Invoices by City.** The City Project Manager must review and approve all invoices prior to payment. City Project Manager's approval shall not be unreasonably withheld, conditioned, or delayed. Payments by City shall be made no later than the time periods established in section 218.735, Florida Statutes.
- D. **Withholding of Payment.** City reserves the right to withhold, in whole or in part, payment for any and all work that: (i) has not been completed by Consultant; (ii) is inadequate or defective and has not been remedied or resolved in a manner satisfactory to the City Project Manager; or (iii) which fails to comply with any term, condition, or other requirement under this Agreement. Any payment withheld shall be released and remitted to Consultant within **THIRTY (30)** calendar days of the Consultant's remedy or resolution of the inadequacy or defect.
- E. **Excess Funds.** If due to mistake or any other reason Consultant receives payment under this Agreement in excess of what is provided for by the Agreement, Consultant shall promptly notify City upon discovery of the receipt of the overpayment. Any overpayment shall be refunded to City within **THIRTY (30)** days of Consultant's receipt of the overpayment or must also include interest calculated from the date of the overpayment at the interest rate for judgments at the highest rate as allowed by law.
- F. **Amounts due to the City.** Consultant must be current and remain current in all obligations due to the City during the performance of services under the Agreement. Payments to

Consultant may be offset by any delinquent amounts due to the City or fees and/or charges owed to the City.

- G. **Tax Exemption.** City is exempt from all federal excise and state sales taxes (State of Florida Consumer’s Certification of Exemption 85-8012621655C-9). The City’s Employer Identification Number is 59-60000392. Consultant shall not be exempted from paying sales tax to its suppliers for materials to fulfill contractual obligations with the City, nor will Consultant be authorized to use City’s Tax Exemption Number for securing materials listed herein.
5. **EFFECTIVE DATE AND TERM.** This Agreement shall become effective and commence on **MAY 17, 2023** and continue for a term of **THREE (3) YEARS**, through and including **MAY 16, 2026**. This Agreement may be renewed for **TWO (2)** additional **ONE-YEAR (1-Year)** periods by written consent between City and Vendor.
6. **PERFORMANCE AND PAYMENT BOND:** Consultant must submit a Performance and Payment bond in the amount of **FIVE HUNDRED THOUSAND AND NO/100 DOLLARS (\$500,000)** upon contract execution.
7. **FORCE MAJEURE.** Neither party shall be liable for delay, damage, or failure in the performance of any obligation under this Agreement if such delay, damage, or failure is due to causes beyond its reasonable control, including without limitation: fire, flood, strikes and labor disputes, acts of war, acts of nature, terrorism, civil unrest, pandemics, acts or delays in acting of the government of the United States or the several states, judicial orders, decrees or restrictions, or any other like reason which is beyond the control of the respective party (“Force Majeure”). The party affected by any event of force majeure shall use reasonable efforts to remedy, remove, or mitigate such event and the effects thereof with all reasonable dispatch.
- A. The party affected by force majeure shall provide the other party with full particulars thereof including, but not limited to, the nature, details, and expected duration thereof as soon as it becomes aware.
- B. When force majeure circumstances arise, the parties shall negotiate in good faith any modifications of the terms of this Agreement that may be necessary or appropriate in order to arrive at an equitable solution. Consultant performance shall be extended for a number of days equal to the duration of the force majeure.
- C. Consultant shall be entitled to an extension of time only and, in no event, shall Consultant be entitled to any increased costs, additional compensation, or damages of any type resulting from such force majeure delays.
8. **INSPECTION AND ACCEPTANCE OF THE WORK.** All services, work, and materials provided by Consultant under this Agreement shall be provided under the direction and to the satisfaction and approval of the Project Manager.
- A. The Project Manager shall decide all questions regarding the quality, acceptability, and/or fitness of materials, the rate of progress of the work, and the acceptable fulfillment of the Agreement, in his or her sole discretion, based upon both the requirements set forth by City and the information provided by Consultant in its proposal. The authority vested in the Project Manager pursuant to this paragraph shall be confined to the direction or specification of what is to be performed under this Agreement and shall not extend to the actual execution of the Services.

- B. Neither the Project Manager’s review of Consultant’s work nor recommendations made by Project Manager pursuant to this Agreement will impose on Project Manager any responsibility to supervise, direct, or control Consultant’s work in progress or for the means, methods, techniques, sequences, or safety precautions or programs incident to Consultant’s provision of Services under this Agreement.
9. **TERMINATION AND DEFAULT.** Either party, upon determination that the other party has failed or refused to perform or is otherwise in breach of any obligation or provision under this Agreement or the Contract Documents, may give written notice of default to the defaulting party in the manner specified for the giving of notices herein. Termination of this Agreement by either party for any reason shall have no effect upon the rights or duties accruing to the parties prior to termination.
- A. **Termination by City for Cause.** City shall have the right to terminate this Agreement immediately, in whole or in part, upon the failure of Consultant to carry out any obligation, term, or condition of this Agreement. City’s election to terminate the Agreement for default shall be communicated by providing Consultant written notice of termination in the manner specified for the giving of notices herein. Any notice of termination given to Consultant by City shall be effective immediately, unless otherwise provided therein, upon the occurrence of any one or more of the following events:
- (1) Consultant’s performance or workmanship falls below acceptable City or trade standards;
  - (2) Consultant fails to timely and properly perform any of the services set forth in the specifications of the Agreement;
  - (3) Consultant provides material that does not meet the specifications of the Agreement;
  - (4) Consultant fails to complete the work required within the time stipulated in the Agreement; or
  - (5) Consultant fails to make progress in the performance of the Agreement and/or gives City reason to believe that Consultant cannot or will not perform to the requirements of the Agreement.
- B. **Consultant’s Opportunity to Cure Default.** City may, in its sole discretion, provide Consultant with an opportunity to cure the violations set forth in City’s notice of default to Consultant. Consultant shall commence to cure the violations immediately and shall diligently and continuously prosecute such cure to completion within a reasonable time as determined by City. If the violations are not corrected within the time determined to be reasonable by City or to the reasonable satisfaction of City, City may, without further notice, declare Consultant to be in breach of this Agreement and pursue all remedies available at law or equity, to include termination of this Agreement without further notice.
- C. **City’s Remedies Upon Consultant Default.** In the event Consultant fails to cure any default under this Agreement within the time period specified in this section, City may pursue any remedies available at law or equity, including, without limitation, the following:
- (1) City shall be entitled to terminate this Agreement without further notice;
  - (2) City shall be entitled to hire another vendor to complete the required work in accordance with the needs of City;

- (3) City shall be entitled to recover from Consultant all damages, costs, and attorney's fees arising from Consultant's default prior to termination; and
  - (4) City shall be entitled to recovery from Consultant any actual excess costs by: (i) deduction from any unpaid balances owed to Consultant; or (ii) any other remedy as provided by law.
- D. **Termination for Non-Funding.** In the event that budgeted funds to finance this Agreement are reduced, terminated, or otherwise become unavailable, City may terminate this Agreement upon written notice to Consultant without penalty or expense to City. City shall be the final authority as to the availability of budgeted funds.
- E. **Termination for Convenience.** City reserves the right to terminate this Agreement in whole or in part at any time for the convenience of City without penalty or recourse. The Project Manager shall provide written notice of the termination. Upon receipt of the notice, Consultant shall immediately discontinue all work as directed in the notice, notify all subcontractors of the effective date of the termination, and minimize all further costs to City including, but not limited to, the placing of any and all orders for materials, facilities, or supplies, in connection with its performance under this Agreement. Consultant shall be entitled to receive compensation solely for: (1) the actual cost of the work completed in conformity with this Agreement; and/or (2) such other costs incurred by Consultant as permitted under this Agreement and approved by City.
10. **PERFORMANCE EVALUATION.** At the end of the contract, City may evaluate Consultant's performance. Any such evaluation will become public record.
11. **NOTICE REGARDING FAILURE TO FULFILL AGREEMENT.** Any Consultant who enters into an Agreement with the City of Ocala and fails to complete the contract term, for any reason, shall be subject to future bidding suspension for a period of **ONE (1)** year and bid debarment for a period of up to **THREE (3)** years for serious contract failures.
12. **CONSULTANT REPRESENTATIONS.** Consultant expressly represents that:
- A. Consultant has read and is fully familiar with all of the terms and conditions of this Agreement, the Contract Documents, and other related data and acknowledges that they are sufficient in scope and detail to indicate and convey understanding of all terms and conditions of the work to be performed by Consultant under this Agreement.
  - B. Consultant has disclosed, in writing, all known conflicts, errors, inconsistencies, discrepancies, or omissions discovered by Consultant in the Contract Documents, and that the City's written resolution of same is acceptable to Consultant.
  - C. Consultant has had an opportunity to visit, has visited, and has had an opportunity to examine and ask questions regarding the sites upon which the work is to be performed and is satisfied with the site conditions that may affect cost, progress, and performance of the work, as observable or determinable by Consultant's own investigation.
  - D. Consultant is familiar with all local, state, and Federal laws, regulations, and ordinances which may affect cost, progress, or its performance under this Agreement whatsoever.
  - E. **Public Entity Crimes.** Neither Consultant, its parent corporations, subsidiaries, members, shareholders, partners, officers, directors or executives, nor any of its affiliates, contractors, suppliers, subcontractors, or consultants under this Agreement have been placed on the

convicted vendor list following a conviction of a public entity crime. Consultant understands that a "public entity crime" as defined in section 287.133(1)(g), Florida Statutes, is "a violation of any state or federal law by a person with respect to and directly related to the transaction of business with any public entity or with an agency or political subdivision of any other state or with the United States..." Consultant further understands that any person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime: (1) may not submit a bid, proposal, or reply on a contract: (a) to provide any goods or services to a public entity; (b) for the construction or repair of a public building or public work; or (c) for leases of real property to a public entity; (2) may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity; and (3) may not transact business with any public entity in excess of the threshold amount provided in section 287.017, Florida Statutes, for CATEGORY TWO for a period of 36 months from the date of being placed on the convicted vendor list.

13. **CONSULTANT RESPONSIBILITIES.** Except as otherwise specifically provided for in this Agreement, the following provisions are the responsibility of the Consultant:
  - A. Consultant shall competently and efficiently supervise, inspect, and direct all work to be performed under this Agreement, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the work in accordance with the Contract Documents.
  - B. Consultant shall be solely responsible for the means, methods, techniques, sequences, or procedures, and safety precautions or programs incident thereto.
  - C. Consultant shall be responsible to see that the finished work complies accurately with the contract and the intent thereof.
  - D. Consultant shall comply with all local, state, and Federal laws, regulations, and ordinances which may affect cost, progress, or its performance under this Agreement, and be responsible for all costs associated with same.
  - E. Consultant shall continue its performance under this Agreement during the pendency of any dispute or disagreement arising out of or relating to this Agreement, except as Consultant and City may otherwise agree in writing.
14. **NO EXCLUSIVITY.** It is expressly understood and agreed by the parties that this is not an exclusive agreement. Nothing in this Agreement shall be construed as creating any exclusive arrangement with Consultant or as prohibit City from either acquiring similar, equal, or like goods and/or services or from executing additional contracts with other entities or sources.
15. **STORAGE OF MATERIALS/EQUIPMENT.** Consultant shall be fully responsible for receipt, inspection, acceptance, handling, and storage of equipment and materials (whether furnished by Consultant or City) to be utilized in the performance of or incorporated into the work.
16. **COMMERCIAL AUTO LIABILITY INSURANCE.** Consultant shall procure, maintain, and keep in full force, effect, and good standing for the life of this Agreement a policy of commercial auto liability insurance with a minimum combined single limit of One Million Dollars (\$1,000,000) per occurrence for bodily injury and property damage arising out of Consultant's operations and covering all owned, hired, scheduled, and non-owned automobiles utilized in said operations. If Consultant does not own vehicles, Consultant shall maintain coverage for hired and non-owned

automobile liability, which may be satisfied by way of endorsement to Consultant's Commercial General Liability policy or separate Commercial Automobile Liability policy.

17. **COMMERCIAL GENERAL LIABILITY INSURANCE.** Consultant shall procure, maintain, and keep in full force, effect, and good standing for the life of this Agreement a policy of commercial general liability insurance with limits not less than:
  - A. One Million Dollars (\$1,000,000) per occurrence and Two Million Dollars (\$2,000,000) aggregate (or project aggregate, if a construction project) for bodily injury, property damage, and personal and advertising injury; and
  - B. One Million Dollars (\$1,000,000) per occurrence and Two Million Dollars (\$2,000,000) aggregate (or project aggregate, if a construction project) for products and completed operations.
  - C. Policy must include coverage for contractual liability and independent contractors.
  - D. The City, a Florida municipal corporation, and its officials, employees, and volunteers are to be covered as additional insureds with a CG 20 26 04 13 Additional Insured – Designated Person or Organization Endorsement or similar endorsement providing equal or broader Additional Insured Coverage with respect to liabilities arising out of activities performed by or on behalf of Consultant. This coverage shall contain no special limitation on the scope of protection to be afforded to the City, its officials, employees, and volunteers.
  
18. **WORKERS' COMPENSATION AND EMPLOYER'S LIABILITY.** Consultant shall procure, maintain, and keep in full force, effect, and good standing for the life of this Agreement adequate workers' compensation and employer's liability insurance covering all of its employees in at least such amounts as required by Chapter 440, Florida Statutes, and all other state and federal workers' compensation laws, including the U.S. Longshore Harbor Workers' Act and the Jones Act, if applicable. Consultant shall similarly require any and all of its subcontractors to afford such coverage for all of its employees as required by applicable law. Consultant shall waive and shall ensure that Consultant's insurance carrier waives, all subrogation rights against the City of Ocala and its officers, employees, and volunteers for all losses or damages. Consultant's policy shall be endorsed with WC 00 03 13 Waiver of our Right to Recover from Others or its equivalent. **Exceptions and exemptions to this Section may be allowed at the discretion of the City's Risk Manager on a case-by-case basis in accordance with Florida Statutes and shall be evidenced by a separate waiver.**
  
19. **PROFESSIONAL LIABILITY AND/OR ERRORS AND OMISSIONS INSURANCE COVERAGE.** Consultant shall procure, maintain, and keep in full force, effect, and good standing - until the third anniversary of the expiration of this Agreement or the third anniversary of acceptance of work by City - professional liability or errors and omissions insurance coverage for wrongful acts in an amount not less than One Million Dollars (\$1,000,000) per claim and Two Million Dollars (\$2,000,000) aggregate, exclusive of defense costs. It is recognized that this type of insurance is only available on a claims-made basis and additional insured endorsements are not available.
  
20. **MISCELLANEOUS INSURANCE PROVISIONS.**
  - A. Consultant's insurance coverage shall be primary insurance for all applicable policies. The limits of coverage under each policy maintained by Consultant shall not be interpreted as limiting Consultant's liability or obligations under this Agreement. City does not in any way represent that these types or amounts of insurance are sufficient or adequate enough to

protect Consultant's interests or liabilities or to protect Consultant from claims that may arise out of or result from the negligent acts, errors, or omissions of Consultant, any of its agents or subcontractors, or for anyone whose negligent act(s) Consultant may be liable.

- B. No insurance shall be provided by the City for Consultant under this Agreement and Consultant shall be fully and solely responsible for any costs or expenses incurred as a result of a coverage deductible, co-insurance penalty, or self-insured retention to include any loss not covered because of the operation of such deductible, co-insurance penalty, self-insured retention, or coverage exclusion or limitation.
- C. Certificates of Insurance. No work shall be commenced by Consultant under this Agreement until the required Certificate of Insurance and endorsements have been provided nor shall Consultant allow any subcontractor to commence work until all similarly required certificates and endorsements of the subcontractor have also been provided. Work shall not continue after expiration (or cancellation) of the Certificate of Insurance and work shall not resume until a new Certificate of Insurance has been provided. Consultant shall provide evidence of insurance in the form of a valid Certificate of Insurance (binders are unacceptable) prior to the start of work contemplated under this Agreement to: City of Ocala. Attention: Procurement & Contracting Department, Address: 110 SE Watula Avenue, Third Floor, Ocala Florida 34471, E-Mail: [vendors@ocalafl.org](mailto:vendors@ocalafl.org). Consultant's Certificate of Insurance and required endorsements shall be issued by an agency authorized to do business in the State of Florida with an A.M. Best Rating of A or better. The Certificate of Insurance shall indicate whether coverage is being provided under a claims-made or occurrence form. If any coverage is provided on a claims-made form, the Certificate of Insurance must show a retroactive date, which shall be the effective date of the initial contract or prior.
- D. Failure to Maintain Coverage. In the event Consultant fails to disclose each applicable deductible/self-insured retention or obtain or maintain in full force and effect any insurance coverage required to be obtained by Consultant under this Agreement, Consultant shall be considered to be in default of this Agreement.
- E. City as an Additional Insured. The City of Ocala shall be named as an Additional Insured and Certificate Holder on all liability policies identified in this Section with the exception of Workers' Compensation and Professional Liability policies.
- F. Notice of Cancellation of Insurance. Consultant's Certificate of Insurance shall provide **THIRTY (30) DAY** notice of cancellation, **TEN (10) DAY** notice if cancellation is for non-payment of premium. In the event that Consultant's insurer is unable to accommodate the cancellation notice requirement, it shall be the responsibility of Consultant to provide the proper notice. Such notification shall be in writing by registered mail, return receipt requested, and addressed to the certificate holder. Additional copies may be sent to the City of Ocala at [vendors@ocalafl.org](mailto:vendors@ocalafl.org).
- G. Failure to Maintain Coverage. The insurance policies and coverages set forth above are required and providing proof of and maintaining insurance of the types and with such terms and limits set forth above is a material obligation of Consultant. Consultant's failure to obtain or maintain in full force and effect any insurance coverage required under this Agreement shall constitute material breach of this Agreement.
- H. Severability of Interests. Consultant shall arrange for its liability insurance to include, or be endorsed to include a severability of interests/cross-liability provision so that the "City of

Ocala" (where named as an additional insured) will be treated as if a separate policy were in existence, but without increasing the policy limits.

21. **SAFETY/ENVIRONMENTAL.** Consultant shall be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the work. Consultant shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury, or loss to:
- A. All employees on the work and other persons that may be affected thereby;
  - B. All work, materials, and equipment to be incorporated therein, whether in storage on or off the site; and
  - C. Other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, and utilities.

All, injury, or loss to any property caused, directly or indirectly, in whole or in part, by Consultant, any subcontractor, or anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable, shall be remedied by Consultant. Consultant's duties and responsibilities for the safety and protection of the work shall continue until such time as the work is completed and accepted by City.

22. **NON-DISCRIMINATORY EMPLOYMENT PRACTICES.** During the performance of the contract, the Consultant shall not discriminate against any employee or applicant for employment because of race, color, religion, ancestry, national origin, sex, pregnancy, age, disability, sexual orientation, gender identity, marital or domestic partner status, familial status, or veteran status and shall take affirmative action to ensure that an employee or applicant is afforded equal employment opportunities without discrimination. Such action shall be taken with reference to, but not limited to: recruitment, employment, termination, rates of pay or other forms of compensation and selection for training or retraining, including apprenticeship and on-the-job training.
23. **SUBCONTRACTORS.** Nothing in this Agreement shall be construed to create, impose, or give rise to any duty owed by City or its representatives to any subcontractor of Consultant or any other persons or organizations having a direct contract with Consultant, nor shall it create any obligation on the part of City or its representatives to pay or seek payment of any monies to any subcontractor of Consultant or any other persons or organizations having a direct contract with Consultant, except as may otherwise be required by law. City shall not be responsible for the acts or omissions of any Consultant, subcontractor, or of any of their agents or employees. nor shall it create any obligation on the part of City or its representatives to pay or to seek the payment of any monies to any subcontractor or other person or organization, except as may otherwise be required by law.
24. **INDEPENDENT CONTRACTOR STATUS.** Consultant acknowledges and agrees that under this Agreement, Consultant and any agent or employee of Consultant shall be deemed at all times to be an independent contractor and shall be wholly responsible for the manner in which it performs the services and work required under this Agreement. Neither Consultant nor its agents or employees shall represent or hold themselves out to be employees of City at any time. Neither Consultant nor its agents or employees shall have employee status with City. Nothing in this Agreement shall constitute or be construed to create any intent on the part of either party to create an agency relationship, partnership, employer-employee relationship, joint venture relationship, or any other relationship which would allow City to exercise control or discretion

over the manner or methods employed by Consultant in its performance of its obligations under this Agreement.

25. **ACCESS TO FACILITIES.** City shall provide Consultant with access to all City facilities as is reasonably necessary for Consultant to perform its obligations under this Agreement.
26. **ASSIGNMENT.** Neither party may assign its rights or obligations under this Agreement to any third party without the prior express approval of the other party, which shall not be unreasonably withheld.
27. **RIGHT OF CITY TO TAKE OVER CONTRACT.** Should the work to be performed by Consultant under this Agreement be abandoned, or should Consultant become insolvent, or if Consultant shall assign or sublet the work to be performed hereunder without the written consent of City, the City Project Manager shall have the power and right to hire and acquire additional men and equipment, supply additional material, and perform such work as deemed necessary for the completion of this Agreement. Under these circumstances, all expenses and costs actually incurred by City to accomplish such completion shall be credited to City along with amounts attributable to any other elements of damage and certified by the Project Manager. The City Project Manager's certification as to the amount of such liability shall be final and conclusive.
28. **PUBLIC RECORDS.** Consultant shall comply with all applicable provisions of the Florida Public Records Act, Chapter 119, Florida Statutes. Specifically, Consultant shall:
  - A. Keep and maintain public records required by the public agency to perform the service.
  - B. Upon request from the public agency's custodian of public records, provide the public agency with a copy of the 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.
  - C. 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 Consultant does not transfer the records to the public agency.
  - D. Upon completion of the contract, transfer, at no cost, to the public agency all public records in possession of Consultant or keep and maintain public records required by the public agency to perform the service. If Consultant transfers all public records to the public agency upon completion of the contract, Consultant shall destroy any duplicate public records that are exempt or confidential and exempt from public records disclosure requirements. If Consultant keeps and maintains public records upon completion of the contract, Consultant shall meet all applicable requirements for retaining public records. All records stored electronically must be provided to the public agency, upon request from the public agency's custodian of public records, in a format that is compatible with the information technology systems of the public agency.

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

**THE CITY CLERK; 352-629-8266; E-mail: [clerk@ocalafl.org](mailto:clerk@ocalafl.org); City Hall, 110 SE Watula Avenue, Ocala, FL 34471.**

29. **AUDIT.** Consultant shall comply and cooperate immediately with any inspections, reviews, investigations, or audits relating to this Agreement as deemed necessary by the Florida Office of the Inspector General, the City's Internal or External auditors or by any other Florida official with proper authority.
30. **PUBLICITY.** Consultant shall not use City's name, logo, seal or other likeness in any press release, marketing materials, or other public announcement without City's prior written approval.
31. **E-VERIFY.** Pursuant to section 448.095, Consultant shall register with and use the U.S. Department of Homeland Security's ("DHS") E-Verify System, accessible at <https://e-verify.uscis.gov/emp>, to verify the work authorization status of all newly hired employees. Consultant shall obtain affidavits from any and all subcontractors in accordance with paragraph 2(b) of section 448.095, Florida Statutes, and maintain copies of such affidavits for the duration of this Agreement. By entering into this Agreement, Consultant certifies and ensures that it utilizes and will continue to utilize the DHS E-Verify System for the duration of this Agreement and any subsequent renewals of same. Consultant understands that failure to comply with the requirements of this section shall result in the termination of this Agreement and Consultant may lose the ability to be awarded a public contract for a minimum of one (1) year after the date on which the Agreement was terminated. Consultant shall provide a copy of its DHS Memorandum of Understanding upon City's request. Please visit [www.e-verify.gov](http://www.e-verify.gov) for more information regarding the E-Verify System.
32. **CONFLICT OF INTEREST.** Consultant is required to have disclosed, with the submission of their bid, the name of any officer, director, or agent who may be employed by the City. Consultant shall further disclose the name of any City employee who owns, directly or indirectly, any interest in Consultant's business or any affiliated business entity. Any additional conflicts of interest that may occur during the contract term must be disclosed to the City of Ocala Procurement Department.
33. **WAIVER.** The failure or delay of any party at any time to require performance by another party of any provision of this Agreement, even if known, shall not affect the right of such party to require performance of that provision or to exercise any right, power or remedy hereunder. Any waiver by any party of any breach of any provision of this Agreement should not be construed as a waiver of any continuing or succeeding breach of such provision, a waiver of the provision itself, or a waiver of any right, power or remedy under this Agreement. No notice to or demand on any party in any circumstance shall, of itself, entitle such party to any other or further notice or demand in similar or other circumstances.
34. **SEVERABILITY OF ILLEGAL PROVISIONS.** Wherever possible, each provision of this Agreement shall be interpreted in such a manner as to be effective and valid under the applicable law. Should any portion of this Agreement be declared invalid for any reason, such declaration shall have no effect upon the remaining portions of this Agreement.
35. **INDEMNITY.** Consultant shall indemnify City and its elected officials, employees and volunteers against, and hold City and its elected officials, employees and volunteers harmless from, all damages, claims, losses, costs, and expenses, including reasonable attorneys' fees, which City or its elected officials, employees or volunteers may sustain, or which may be asserted against City

or its elected officials, employees or volunteers, arising out of the activities contemplated by this Agreement including, without limitation, harm or personal injury to third persons during the term of this Agreement to the extent attributable to the actions of Consultant, its agents, and employees.

36. **NO WAIVER OF SOVEREIGN IMMUNITY.** Nothing herein is intended to waive sovereign immunity by the City to which sovereign immunity may be applicable, or of any rights or limits of liability existing under Florida Statute § 768.28. This term shall survive the termination of all performance or obligations under this Agreement and shall be fully binding until any proceeding brought under this Agreement is barred by any applicable statute of limitations.
37. **NOTICES.** All notices, certifications or communications required by this Agreement shall be given in writing and shall be deemed delivered when personally served, or when received if by facsimile transmission with a confirming copy mailed by registered or certified mail, postage prepaid, return receipt requested. Notices can be concurrently delivered by e-mail. All notices shall be addressed to the respective parties as follows:

If to Consultant: Tetra Tech, Inc.  
Attention: Jonathan Burgiel  
2301 Lucien Way, Suite 120  
Maitland, FL 32751  
Phone: 321-441-8518  
E-mail: [tdr.contracts@tetrattech.com](mailto:tdr.contracts@tetrattech.com)

If to City of Ocala: Daphne M. Robinson, Esq. - Contracting Officer  
City of Ocala  
110 SE Watula Avenue, 3rd Floor  
Ocala, Florida 34471  
Phone: 352-629-8343  
E-mail: [notices@ocalafl.org](mailto:notices@ocalafl.org)

Copy to: William E. Sexton, Esq., City Attorney  
City of Ocala  
110 SE Watula Avenue, 3rd Floor  
Ocala, Florida 34471  
Phone: 352-401-3972  
E-mail: [cityattorney@ocalafl.org](mailto:cityattorney@ocalafl.org)

38. **ATTORNEYS' FEES.** If any civil action, arbitration or other legal proceeding is brought for the enforcement of this Agreement, or because of an alleged dispute, breach, default or misrepresentation in connection with any provision of this Agreement, the successful or prevailing party shall be entitled to recover reasonable attorneys' fees, sales and use taxes, court costs and all expenses reasonably incurred even if not taxable as court costs (including, without limitation, all such fees, taxes, costs and expenses incident to arbitration, appellate, bankruptcy and post-judgment proceedings), incurred in that civil action, arbitration or legal proceeding, in addition to any other relief to which such party or parties may be entitled. Attorneys' fees shall include, without limitation, paralegal fees, investigative fees, administrative costs, sales and use taxes and all other charges reasonably billed by the attorney to the prevailing party.

39. **JURY WAIVER.** IN ANY CIVIL ACTION, COUNTERCLAIM, OR PROCEEDING, WHETHER AT LAW OR IN EQUITY, WHICH ARISES OUT OF, CONCERNS, OR RELATES TO THIS AGREEMENT, ANY AND ALL TRANSACTIONS CONTEMPLATED HEREUNDER, THE PERFORMANCE HEREOF, OR THE RELATIONSHIP CREATED HEREBY, WHETHER SOUNDING IN CONTRACT, TORT, STRICT LIABILITY, OR OTHERWISE, TRIAL SHALL BE TO A COURT OF COMPETENT JURISDICTION AND NOT TO A JURY. EACH PARTY HEREBY IRREVOCABLY WAIVES ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY. NEITHER PARTY HAS MADE OR RELIED UPON ANY ORAL REPRESENTATIONS TO OR BY ANY OTHER PARTY REGARDING THE ENFORCEABILITY OF THIS PROVISION. EACH PARTY HAS READ AND UNDERSTANDS THE EFFECT OF THIS JURY WAIVER PROVISION.
40. **GOVERNING LAW.** This Agreement is and shall be deemed to be a contract entered and made pursuant to the laws of the State of Florida and shall in all respects be governed, construed, applied and enforced in accordance with the laws of the State of Florida.
41. **JURISDICTION AND VENUE.** The parties acknowledge that a majority of the negotiations, anticipated performance and execution of this Agreement occurred or shall occur in Marion County, Florida. Any civil action or legal proceeding arising out of or relating to this Agreement shall be brought only in the courts of record of the State of Florida in Marion County or the United States District Court, Middle District of Florida, Ocala Division. Each party consents to the exclusive jurisdiction of such court in any such civil action or legal proceeding and waives any objection to the laying of venue of any such civil action or legal proceeding in such court and/or the right to bring an action or proceeding in any other court. Service of any court paper may be effected on such party by mail, as provided in this Agreement, or in such other manner as may be provided under applicable laws, rules of procedures or local rules.
42. **REFERENCE TO PARTIES.** Each reference herein to the parties shall be deemed to include their successors, assigns, heirs, administrators, and legal representatives, all whom shall be bound by the provisions hereof.
43. **MUTUALITY OF NEGOTIATION.** Consultant and City acknowledge that this Agreement is a result of negotiations between Consultant and City, and the Agreement shall not be construed in favor of, or against, either party because of that party having been more involved in the drafting of the Agreement.
44. **SECTION HEADINGS.** The section headings herein are included for convenience only and shall not be deemed to be a part of this Agreement.
45. **RIGHTS OF THIRD PARTIES.** Nothing in this Agreement, whether express or implied, is intended to confer any rights or remedies under or because of this Agreement on any persons other than the parties hereto and their respective legal representatives, successors and permitted assigns. Nothing in this Agreement is intended to relieve or discharge the obligation or liability of any third persons to any party to this Agreement, nor shall any provision give any third persons any right of subrogation or action over or against any party to this Agreement.
46. **AMENDMENT.** No amendment to this Agreement shall be effective except those agreed to in writing and signed by both parties to this Agreement.

- 47. **COUNTERPARTS.** This Agreement may be executed in counterparts, each of which shall be an original and all of which shall constitute the same instrument.
- 48. **ELECTRONIC SIGNATURE(S).** Consultant, if and by offering an electronic signature in any form whatsoever, will accept and agree to be bound by said electronic signature to all terms and conditions of this Agreement. Further, a duplicate or copy of the Agreement that contains a duplicated or non-original signature will be treated the same as an original, signed copy of this original Agreement for all purposes.
- 49. **ENTIRE AGREEMENT.** This Agreement, including exhibits, (if any) constitutes the entire Agreement between the parties hereto with respect to the subject matter hereof. There are no other representations, warranties, promises, agreements or understandings, oral, written or implied, among the Parties, except to the extent reference is made thereto in this Agreement. No course of prior dealings between the parties and no usage of trade shall be relevant or admissible to supplement, explain, or vary any of the terms of this Agreement. No representations, understandings, or agreements have been made or relied upon in the making of this Agreement other than those specifically set forth herein.
- 50. **LEGAL AUTHORITY.** Each person signing this Agreement on behalf of either party individually warrants that he or she has full legal power to execute this Agreement on behalf of the party for whom he or she is signing, and to bind and obligate such party with respect to all provisions contained in this Agreement.

**IN WITNESS WHEREOF**, the parties have executed this Agreement on \_\_\_\_\_.

**ATTEST:**

**CITY OF OCALA**

\_\_\_\_\_  
Angel B. Jacobs  
City Clerk

\_\_\_\_\_  
James P. Hilty  
City Council President

**Approved as to form and legality:**

**TETRA TECH, INC.**

\_\_\_\_\_  
William E. Sexton, Esq.  
City Attorney

\_\_\_\_\_  
By: \_\_\_\_\_  
(Printed Name)

Title: \_\_\_\_\_  
(Title of Authorized Signatory)

Consultant is needed for natural disaster-related emergency debris removal monitoring services for the City of Ocala, Florida (City).

### **Consultant Responsibilities**

Consultant responsibilities include, but are not limited to, monitoring and documenting the following:

- Field operations
- Debris pickup
- Debris hauling and removal
- Debris staging and reduction by grinding
- Temporary debris storage site management
- Debris management
- Final disposal to an approved facility in full compliance with regulatory agency requirements, consistent with Federal Emergency Management Agency (FEMA) requirements for debris management, removal, and disposal.

The Consultant shall have experience in the Federal Emergency Management Public Assistance (FEMA-PA) Program, the Federal Highway Administration Emergency Relief (FHWA-ER) Program, and other applicable federal, state, and/or local programs to assist the City and its emergency response/recovery efforts. The consultant will be responsible for tracking all contract costs, adhering to the “not to exceed” limit as determined by the City, and preparing the project worksheets for all disaster categories. Proper notification must be given to the City as costs approach the “not to exceed” limit. Proper documentation by the consultant as required by FEMA, FHWA, and all applicable federal, state, and local agencies is required for all debris removal monitoring operations to ensure reimbursement to the City from the appropriate agency.

Consultant is responsible for ensuring the work performed under their control is progressing in a manner satisfying the expectations as noted in the FDOT Emergency Management Program 956-030-001, 23 CFR 668, and the current edition of the FHWA Emergency Relief Manual, including the supplements prepared by the FHWA Florida Division and the FEMA PA Program.

Roads and other City facilities will be identified by the City and direction will be given to the Consultant and debris removal contractor for clearing these roads and facilities. Debris removal and monitoring activities shall be in accordance with the Public Works Emergency Preparedness Manual. The City reserves the right to add or remove road segments at the direction of the City Debris Manager. The City, at its sole discretion, may elect to perform work with in-house forces or other contract forces.

### **Activation**

The work will begin upon written authorization by the City. Consultant shall provide a 24/7 contact number and shall be activated (project manager on-site) within twenty-four (24) hours of receipt of Notice to Proceed. Failure to meet this requirement will result in immediate termination of the contract.

No guarantee of minimum or maximum amounts of work is made by the City under this contract. No adjustment to bid prices will be considered due to increases or decreases in estimated quantities. The City will not provide price adjustments for cost increases or decreases in the price of fuel. The consultant shall have the ability to handle multiple, simultaneous large-scale disaster events.

In cases of discrepancy between this scope and regulatory agency guidelines, the regulatory agency's guidelines will take precedence.

### **Termination for Convenience**

City may, at any time and for any reason, terminate the Consultant's services and work at City's convenience. Upon receipt of such notice, the Consultant shall, unless the notice directs otherwise, immediately discontinue the work and placing of orders for materials, facilities, and supplies in connection with the performance of the agreement. Upon such termination, the Consultant shall be entitled to payment only as follows: (1) the actual cost of the work completed in conformity with the agreement; plus, (2) such other costs actually incurred by the Consultant as permitted by the contract and approved by City.

### **Definitions and Acronyms**

- A. City Debris Manager: A City staff member who functions as the City point of contact and is responsible for providing overall supervision of debris clearance, removal, and disposal operations.
- B. Construction and Demolition (C&D) Debris\*: Damaged components of buildings and structures such as lumber and wood, gypsum wallboard, glass, metal, roofing material, tile, carpeting and floor coverings, window coverings, plastic pipe, concrete, fully cured asphalt, heating ventilation and air conditioning (HVAC) systems and their components, light fixtures, small consumer appliances, equipment, furnishings, and fixtures that are a result of a disaster event.  
\*Note – This definition of C&D is for disaster recovery purposes and is not the same definition commonly found in Chapters 62-701, Florida Administrative Code.
- C. Data Manager: Manager of data collected from monitoring operations and employed by the consultant.
- D. Debris: Debris is scattered items and materials broken, destroyed, or displaced which is generated by an event and is located within a designated area.
- E. Debris Collection Monitor: Employee of the Consultant who observes the debris removal contractor removing debris from assigned areas.
- F. Debris Management Plan: The plan establishes policies, procedures, and guidelines for recovery from debris-generating disaster events.
- G. Debris Removal Contractor: A person or entity, including employees, partners, principals, agents, and assignees that are under contract with the City to remove storm-deposited debris according to federal and state guidelines.
- H. Disposal Site Monitor: The Consultant's employee(s) assigned to the debris disposal site manage disposal operations and monitor the debris removal contractor's performance. The duties include but are not limited to, ensuring the debris is eligible, quantifying and accurately documenting debris loads consistent with FEMA and FHWA guidelines.
- I. Drop-Off Site: A site established for residents of the City of Ocala to drop off debris.
- J. Electronic Waste (E-Waste): Loosely discarded, damaged, obsolete, or broken electrical or electronic devices including, but not limited to, computers, computer monitors, televisions, and microwaves.
- K. Eligible Debris: As determined by FEMA Section #325 Debris Management Guide and other applicable regulations – Debris resulting from a Presidentially declared disaster whose removal, as determined by the City Manager or designee, is in the public interest because it is necessary to (1) eliminate immediate threats to life, public health, and safety; (2) eliminate immediate threats of significant damage to improved public or private property; or (3) ensure economic recovery.

- L. Emergency Operations Center (EOC): A central command and control facility responsible for carrying out the principles of emergency preparedness and emergency management, disaster management functions at a strategic level in an emergency situation.
- M. Exit Site Monitor: Employee(s) of the Consultant who observes outbound trucks at the Debris Management Site.
- N. Federal Aid Eligible Roads: Roads that are paved, gravel, or dirt, and are eligible for repair or replacement.
- O. Federal Emergency Management Agency (FEMA): FEMA is a funding source to the City for activities during an event declared a disaster by the President of the United States. FEMA-eligible debris removal is second and subsequent passes on FHWA-eligible roads and other roadways not on the federal aid system.
- P. Federal Highway Administration (FHWA): FHWA, through the Emergency Relief program, is a federal funding source for work on Federal-Aid roadways and facilities. FHWA has designated federal aid roadways also known as "on-system" roadways that are eligible for Emergency Relief funding.
- Q. Field Operations Manager: Employee of the Consultant who oversees debris removal contractor(s) and general field operations including monitors and data managers.
- R. Global Positioning System (GPS): Global navigation satellite system that provides location and time information in all weather conditions, anywhere on or near the earth, where there is an unobstructed line of sight to four or more GPS satellites.
- S. Hand Held Units (HHU): Devices used to write data to, and read data from, removable storage media. The HHU is used in electronic debris monitoring.
- T. Hazardous Stump: Uprooted tree or stump (i.e. 50% or more of the root ball is exposed), greater than twenty-four inches (24") above the ground on a public right-of-way, improved public property or improved property owned by certain private nonprofit organizations, and the exposed root ball poses an immediate threat to life, public health and safety.
- U. Hazardous Waste: Materials and products from institutional, commercial, recreational, industrial, and agricultural sources that contain certain chemicals with one or more of the following characteristics, as defined by the U.S. Environmental Protection Agency: 1) toxic; 2) flammable; 3) corrosive; and/or 4) reactive, in accordance with Environmental Protection Agency (EPA) Section for toxic, flammable, corrosive reaction Resource Conservation and Recovery Act (RCRA) Subtitle C 40 CFR Part 260.
- V. Household Hazardous Waste: Used or leftover contents of consumer products that contain chemicals with one or more of the following characteristics, as defined by the U.S. Environmental Protection Agency: 1) toxic; 2) flammable; 3) corrosive; and/or 4) reactive. Examples of Household Hazardous Waste include small quantities of normal household cleaning and maintenance products, latex and oil-based paint, cleaning solvents, gasoline, oils, swimming pool chemicals, pesticides, and propane gas cylinders in accordance with Environmental Protection Agency (EPA) Section for toxic, flammable, corrosive reaction Resource Conservation and Recovery Act (RCRA) Subtitle C 40 CFR Part 260.
- W. Mixed Debris: A mixture of various types of debris including, but not limited to, C&D debris, white goods, e-waste, household hazardous waste, metals, abandoned vehicles, tires, etc.
- X. Notice to Proceed: This is a written notice issued to the Consultant by the City fixing the date on which operations outlined will commence.
- Y. Project Manager: A Consultant who functions as the point of contact for the City responsible for the overall project management and coordination of the debris monitoring services required to oversee the debris removal operations.

- Z. System: The word “System” is used in reference to the electronic portion of electronic debris monitoring.
- AA. System Database: A system database is a compilation of all information gathered or reconciled and meets requirements set forth by this Scope of Services.
- BB. Temporary Debris Management Sites: A Florida Department of Environmental Protection authorized site where debris is stored, reduced, grinded, or sorted. Debris resides at the site for a relatively short period of time prior to final disposal during the debris management process. May also be referred to as a Debris Management Site (DMS) or Temporary Debris Staging and Reduction Site (TDSR).
- CC. Ticket Manager: Consultant responsible for overseeing the electronic ticket processing.
- DD. Vegetative Debris: Clean, woody debris and other organic materials that can be chipped and mulched.
- EE. White Goods: Appliances, including, but not limited to refrigerators, freezers, stoves, washers, dryers, and HVAC units.

### **Personnel Qualifications**

- **Data Manager**: A Data Manager must have at least two (2) years of experience working with a relational database management system. The Data Manager will work under the supervision of the Project Manager.
- **Debris Collection Monitors, Exit Site Monitors, and Disposal or Tower Monitors** must have a High School Diploma or GED, and be adequately trained in Debris Operations.
- **Field Operations Manager**: A Field Operations Manager must have a minimum of two (2) years’ experience in disaster debris management.
- **Project Manager**: A Project Manager must have a minimum of five (5) years’ experience in disaster debris management. The Project Manager must also be a permanent staff employee of the Consultant.

### **Services to be Provided by the Consultant**

#### **1. Daily Reports**

The Consultant shall ensure that daily reports are provided to the City Debris Manager or designee and other key City personnel within a minimum number of hours requested by the Debris Manager.

#### **2. Key Responsibilities**

It is the responsibility of the Consultant to assist the City in performing:

- A. Contract Administration;
- B. Damage assessment;
- C. Environmental Permitting of temporary debris management sites;
- D. Truck Certification;
- E. Debris Removal Monitoring;
- F. Quality Assurance and Quality Control of all documentation pertaining to debris removal monitoring;
- G. Assist the City in responding to public inquiries;
- H. Be available to address questions from the City, FEMA, and FHWA both during and after services have been performed.
- I. Provide assistance as requested, especially after the services have been performed to complete FEMA reimbursement project worksheets (PW).

**3. Safety Provisions**

Consultant shall provide all monitors (or ensure monitors are in possession of) appropriate personal protective equipment, including but not limited to eye protection, hearing protection, safety work shoes, safety vests, hard hats, gloves, and wet and cold weather clothing, to comply with all federal (including, but not limited to Occupational Safety and Health Administration [OSHA] guidelines), state and local requirements.

**4. Annual Pre-Storm Coordination Meetings**

This task will consist of any or all three separate meetings conducted in May or June of each year the contract is in force. The meetings are described below:

- A. Meeting 1 - Conduct a formal half-day meeting with all debris haulers prior to each hurricane season. Topics of discussion will include debris removal scheduling and planning, defining specific work zones and uploading to the Consultant's computerized database and software, debris monitoring, staging area location and use, citizen drop-off sites, mobilization schedules, equipment requirements, damage reporting and repair, invoicing, and other topics as requested by the City.
- B. Meeting 2 - Present training materials and conduct formal half-day training and coordination meetings with City staff responsible for project management, staging area tower monitors, debris monitors, or other positions as required by the City.
- C. Meeting 3 - If required, the Consultant will meet with the City to coordinate debris management and discuss reimbursement issues.

**5. Debris Monitoring Operations**

The Consultant shall coordinate with the City to schedule debris removal monitoring and debris removal contractor operations. The Consultant shall within twenty-four (24) hours of notification, provide an adequate number of qualified personnel to monitor debris removal sites and reduction/disposal sites along with associated roving monitors. The Consultant will be required to increase or reduce its staffing from this point depending on the severity of debris generating event. The Consultant shall provide the following:

The project Manager shall be onsite within twenty-four (24) hours of notification and responsible for the overall project management and coordination of the debris monitoring services required to oversee the debris removal operations. The Project Manager shall be the point of contact for the City. The Project Manager shall assign Field Operations Manager(s) to oversee the debris removal contractor(s), monitors, and a Data Manager to provide supervision of the data entry operations and documentation process. Project Manager duties include but are not limited to the following:

- A. Ensure a sufficient number of trained debris monitors are available to monitor the "first push" (cut & toss) operations.
- B. Ensure a sufficient number of trained debris monitors are available to monitor all "first pass" and subsequent passes of debris removal and hauling activities.
- C. Provide tower/disposal site monitors to observe and record all debris loads entering the temporary debris management sites.
- D. Provide tower/disposal site monitors to observe and record all debris loads exiting the temporary debris management sites for final disposal.
- E. Provide data entry and document processing personnel, if applicable.
- F. Conduct safety meetings with field staff, as necessary.
- G. Respond to and document issues regarding complaints, damages, accidents or incidents

involving the Consultant or Contractor personnel and ensure that they are fully documented and reported.

- H. Coordinate daily briefings with the City and the debris removal contractor(s), daily status reports of work progress, and staffing.
- I. Review and verify documentation of environmental authorizations and/or permits for temporary debris management sites and final disposal.
- J. Review and reconcile debris removal contractor invoices submitted to the City.
- K. Preparation of interim operations, status reports, and final report, as directed by the City.

#### 6. **Field Monitoring**

The Consultant shall provide trained staff in sufficient numbers to adequately monitor all operations supervised by Field Operations Managers. Duties of monitors shall include, but are not limited to, the following:

- A. Truck certification and documentation of all vehicles used in the debris removal activities.
- B. Quality assurance/quality control (QA/QC) of truck certification measurements throughout the life of the project.
- C. Provide monitoring services and documentation of all eligible debris removal activities from Federal Aid eligible roadways – First Push (Cut & Toss) and First Pass.
- D. Provide monitoring services and documentation of all eligible debris removal activities on non-Federal Aid-eligible roadways, as directed by the City.
- E. Provide monitoring services and documentation of all eligible debris removal activities from second and subsequent passes on all roadways, as directed by the City.
- F. Ensure that ineligible debris is not collected by the debris removal Contractor, unless directed in writing by the City.
- G. Disposal Site/Tower Monitors will observe and record the truck quantity estimates of inbound and outbound debris.
- H. Exit Site Monitors will observe that all outbound trucks are fully discharged of their load prior to the exit of the temporary debris management site.
- I. Monitors will ensure that accurate, legible, and complete documentation is provided through load tickets, truck certifications, and/or other logs and reports, as required.
- J. Maintain photo documentation of the debris removal trucks and activities, specifically of the hazardous stumps, hangers, leaners, or tree removal and/or other special or unusual occurrences in the field.
- K. Immediately document and report activities to the City which may require remediation, such as fuel spills, hazardous materials collection locations, and other similar environmental concerns.
- L. Immediately document and report to the City damages which occur on public or private property as a result of the debris removal operations.
- M. Immediately document and report to the City any violations of the Department of Environmental Protection's (DEP) debris site conditions.
- N. If DEP debris site conditions are violated, the Consultant shall oversee tasks sufficient to satisfy the DEP.
- O. Monitors must be capable of spending shifts in an outside environment and be able to climb a staircase ladder, ten (10) feet or higher.
- P. Monitors shall make multiple, random visits to all loading sites and disposal sites on a daily basis.
- Q.

**7. Data Management and Documentation**

The Consultant shall ensure all necessary documentation is provided as follows:

- A. Ensure all eligible debris removal operations activities are documented and tracked specific to the FHWA-ER program, the FEMA PA program, or other applicable Federal, state, or local agencies.
- B. Documentation of the number of crews and types of equipment utilized, actual hours of operation, and locations of work performed during the time and materials phase of operations.
- C. Completion of truck certifications, equipment certifications, and establishment of a QA/QC program throughout the life of the project.
- D. Load tickets documenting the eligible debris removal and/or disposal activities by the applicable program FHWA – ER or FEMA PA, and/or other federal, state, or local programs as outlined in and in accordance with the Debris Management Plan.
- E. Documentation of eligible hazardous stump removal, hangers, leaners, or tree removal which includes photos, GPS coordinates, street or milepost identifier, and/or other information as available and applicable.
- F. Environmental authorizations and/or permits, as applicable.
- G. Daily electronic spreadsheet summaries of cubic yards/tons collected by Federal program. The daily summary shall be communicated to the City's Emergency Coordination Officer (ECO) or designee on a daily basis.
- H. Production in electronic format (scanned) and paper copies of all documentation for submittal to Federal and/or State agencies.
- I. Provide certified weigh master if necessary.
- J. Assist the City in creating field maps using GIS, as well as track and present contractor progress in GIS.
- K. Organize, maintain, and provide the City with electronic copies of documentation in a satisfactory manner. All documentation and information related to the project shall be surrendered to the City upon completion of the project.
- L. Paper copies of all electronic or handwritten load tickets shall be provided daily to both the City and the Debris Removal Contractor at the daily meeting.

**8. Electronic Debris Monitoring**

The Consultant may exercise the option to utilize electronic debris monitoring and if chosen, the Consultant must comply with requirements set forth below:

**Equipment Requirements**

- A. Data Storage Media – Debris management data will be stored and transferred on encryption-protected removable data storage media. All data media will be provided by the Consultant. Data must include a unique user ID that identifies the user's role, limits the user's ability to collect or validate information, etc. and employs an anti-tampering mechanism. Consultant shall provide media to each person performing a debris mission role that results in data collection, i.e., drivers, ticket managers, etc.
- B. Handheld Units (HHU) - The Consultant will provide weatherproof and shock-resistant handheld units (HHU) for recording debris management data in the field. These HHU devices will be capable of writing data to and reading data from, the removable data storage media. HHUs shall have the capability to determine locations by GPS and the capability to write GPS coordinates to the removable media. The HHUs will perform two functions: (1) Recording of initial load data information, and (2) verification of vehicle certification, and recording of debris type and quantity and (3) All field units

will be operated by standalone power sources which will allow the units to perform uninterrupted for a shift.

- 1) HHUs capable of recording truck certification data onto driver removable media are used at the truck certification area. Truck certification records will include truck measurements, Truck ID, Driver ID, and a digital photograph of the truck and trailers.
  - 2) HHUs capable of recording user ID information, including a unique user ID, digital photograph, and any additional user information required for system operation.
  - 3) GPS- HHU units shall have integrated GPS capability. GPS readings (accuracy within 3 meters of the HHU) shall automatically be recorded without any additional manual effort each time the HHU unit records and retrieves information related to the debris mission. External GPS units shall have reliable connectivity to the HHU and be rugged and durable.
- C. Durable Printer – The Consultant shall provide a durable printer to print load tickets at the request of the City. Once the tower manager completes the load data entries the information shall be transmitted to the printer. The printer will print a minimum of 2 copies of the ticket. Two copies shall be given to the driver (one copy for the driver and the other for the prime contractor). The HHU should have program flexibility to alter the number of printed tickets. The printed ticket paper and print shall be of a quality that the print is not affected by harsh weather conditions and does not fade over time, nor smear or deteriorate due to moisture or UV rays. All field units will be operated by stand-alone power sources which will allow the units to perform uninterrupted for a minimum of a shift.
- D. Server(s) – The Consultant shall provide computer servers for the storage and maintenance of records. The data contained in the Consultant’s database shall be placed on the Internet for controlled use, and be password protected by the Consultant. Upon completion of the work, the Consultant shall surrender the records to the City who shall maintain the official database and records on its government-furnished secure server. Access to the City server is limited to “Official Use Only”. The City server is provided and maintained by the City.
- E. Back-up equipment – In the event of equipment malfunction, loss, or damage, the Consultant shall assure a sufficient supply of replacement equipment and personnel are available such that production is not affected. The backup equipment shall be readily available on-site for rapid distribution.
- F. GIS – GIS mapping shall be provided by the Consultant from the most current source(s) available. This information shall be used as a base map to visually illustrate work zones, ticket and tower personnel locations and activities, work progress, historically and/or environmentally sensitive areas, geospatial data, and other mission informational needs from the data gathered by the HHUs.
- G. Internet Accessible database – The Consultant will establish a web-based database that is updated daily if not in real-time. The data shall be accessible, by permission only, to sub-contractors, local and state officials, and others on a “need to know” basis. Database access will be role-based and no direct access to the data tables shall be allowed unless approved by the City.

**General Statement of Electronic Debris Monitoring System Parameters:**

- A. The system must utilize an encryption-protected removable data storage device. The data storage device will store data collected in the field, such as fields from traditional debris paper load tickets as well as truck certification information. The device must be

- capable of depicting images and other identifying data.
- B. The system must have a database capable of storing all data collected in the field. The Consultant shall provide the City with a copy of the database with a matching structure at the completion of the work unless otherwise specified.
  - C. The system must include the capability to share database records with contractors, sub-contractors, the City, and others via the Internet. Data contained in the system must be password protected, implement role-based access controls, and must have viewing, printing, and editing capabilities. Each contractor, subcontractor, and customer must have permissions that allow only them to review and print information specific to their need. The system shall also have the capability to generate reports on all aspects of the debris mission.
  - D. The Consultant uses the HHU to initiate the load data by entering the debris type into the HHU. The driver's media card will either be swiped or inserted into the HHU and the HHU will write the debris type, pick-up GPS location), address of pick-up if applicable, time, date, truck certification, and driver information, and the ticket manager's unique ID Code onto the removable media. Once the data is written to the media, the Ticket Manager will return the media to the driver. By this action, the Consultant verifies the debris meets FEMA and FHWA eligibility requirements.
  - E. HHUs are used at the debris verification area of disposal site(s) by the tower manager. The vehicle driver presents the removable media, which was previously initiated by the field monitor, to the tower manager personnel located in the disposal site tower(s). The tower manager verifies the debris classification is appropriate (vegetative, C&D, mixed, etc., and manually revises, if needed), verifies vehicle(s) and driver information is correct, estimates, and enters the load quantity into the HHU. The HHU will automatically extract the information recorded earlier on the smart card and add the information to the tower manager's HHU including the date, time debris arrives, site ID, GPS readings, load quantity, and tower manager's unique ID Code.
  - F. All information regarding each debris load will be stored in the HHUs internal memory or on a separate, encryption-protected removable media device. The debris load information will be uploaded to the City and Consultant databases. Once this information is recorded, the tower manager HHU will clear the removable media's debris data for the driver to re-use.
  - G. The media will retain a running total of the quantity and type of debris hauled by a particular vehicle. All debris load information within the tower manager HHU will be retained until upload to the database has been accomplished and confirmed by authorized personnel. Direct access to data on the HHU will be restricted to personnel specifically authorized to do so by the City.

#### **Functional Specifications and System Architecture**

- A. Ticket/Tower Managers – Personnel Registration, Administration, and Management: The system shall have the capability to manage user roles. The majority of the system users will be either a ticket or tower managers. At a minimum, the system must have the following capabilities:
  - 1) A means to create encryption-protected electronic media with the unique User ID, digital photograph, and user roles;
  - 2) Other identifying data;
  - 3) Electronic registration of ticket/tower monitor;

- 4) Link designated ticket/tower personnel roles to a specific mission;
  - 5) The ability to edit ticket/tower personnel roles i.e., create, update, and delete;
  - 6) Store ticket/tower personnel contact information relative to the mission;
  - 7) Track and manage ticket/tower personnel role and status;
  - 8) Assign and track equipment assigned to the user;
  - 9) Reject invalid ticket/tower personnel credentials;
  - 10) Reject invalid certification credentials;
- B. Truck Certification: The system shall have the capability to record truck and trailer certification data. Truck certification is used to register authorized debris-hauling vehicles and equipment. At a minimum, the following must be included:
- 1) A means of electronically registering authorized debris Consultant vehicles and equipment;
  - 2) Link electronic registration to digital images to identify the mission and respective City;
  - 3) Generate unique ID for contractor vehicles and equipment;
  - 4) Utilize uniform measurements e.g. feet and inches;
  - 5) Capture vehicle volume;
  - 6) Utilize industry-standard equations for all volume calculations;
  - 7) Capture drivers and certification team members unique identification numbers;
  - 8) A means to create encryption-protected electronic driver removable media with unique Truck ID, digital photograph, truck and/or trailer measurements, vehicle volume, and other identifying data;
  - 9) Must depict image and other identifying data;
  - 10) Must contain counter area for total cubic yards hauled;
  - 11) Must employ an anti-tampering mechanism;
  - 12) Capability to recertify vehicles;
  - 13) Recertified vehicles must be recorded in an audit table;
  - 14) Certification data must be associated with the authorized system user;
  - 15) Reject media which are not associated with current events and applicant;
  - 16) Capture vehicle audit records;
  - 17) Create a printed certification record;
  - 18) Administrative reporting capabilities.
- C. Right-of-Way (ROW) Debris Management: ROW transactional data must be captured, stored, validated, audited, reported and transmitted to mission managers, haulers and applicants. At a minimum, the application must exhibit the following characteristics:
- 1) Allow creation of point of origin load data on encryption protected driver media when position is known and credentials have been authenticated;
  - 2) Capture date and time and other relevant point of origin data;
  - 3) Validate media is present in system and configured to receive data;
  - 4) Designate debris type;
  - 5) Designate debris location as Federal Aid or Non- Federal Aid;
  - 6) Designate first pass and subsequent passes;
  - 7) Write point of origin load data using encrypted storage algorithms;
  - 8) Associate ticket/tower personnel credentials with point of origin load data;
  - 9) Acknowledge successful card write via display status message;
  - 10) Provide user configurable time option for GPS audit;
  - 11) Detect current location using GPS and store data to secure memory location;

- 12) Provide capability to add digital image if debris is other than vegetative or C&D.
- D. Debris Disposal Site Management: Completed ROW, and Per-unit point of origin transactions must be received at the approved disposal site. Transactions are not considered complete until they are processed thru the receiving applications. At a minimum, the system must provide the capability to:
- 1) Accept site configuration data at the beginning of each work day.
  - 2) Dynamically configure receiving application based on site configuration data.
  - 3) Display certification data and photo from driver smart card so that ticket/tower personnel can perform a field audit of truck/trailer to assure data matches certification and placard number.
  - 4) Accept loads where:
    - a) Mission and applicant are valid;
    - b) Media authentication data is valid and unaltered;
    - c) Media contains valid load data.
    - d) Designate debris type;
    - e) Record debris volume (based on unit of measure);
    - f) Receive volume or per unit loads;
    - g) Identify original load data;
    - h) Identify duplicate load data;
    - i) Configure number of hard copies;
    - j) Create load data record in internal storage;
    - k) Create backup copy of internal storage;
    - l) Prepare driver media for next load;
    - m) Increment driver smart card based on total CY counter value;
    - n) Continuously calculate and present real-time disposal site statistics;
    - o) Re-print load ticket data;
    - p) Interface with durable outdoor printer;
    - q) Preserve in its original state, then transmit daily transaction data;
    - r) Associate ticket/tower personnel credentials with each received load.
- E. Field Administrative Functions: The system must have the capability to perform administrative duties in the field. Requirements include the capability to edit user roles, verify vehicle audit information, display real-time collection volumes, and review ticket/tower personnel GPS audit logs. At a minimum, the system must provide the capability to:
- 1) Change ticket/tower personnel identification badge roles and responsibilities;
  - 2) Review media total CY counter value;
  - 3) Audit vehicle certification data;
  - 4) Validate/Invalidate smart cards;
  - 5) Reinitiate security sequence for ticket/tower personnel or media;
  - 6) In tabular format, display the results of ticket/tower GPS audit files by limiting access to the internet data or by the Department secure server.
- F. Data Consolidation and Analysis/Reports Generation: Transactional data must be summarized, validated, presented and audited to provide an overall status of mission performance. The system must facilitate billing, error reporting, performance tracking and graphical data preparation. At a minimum the Data Consolidation/Data Storage and Data Analysis/Reports tools must provide the capability to:
- 1) Accept transactional data sets from multiple debris location systems;

- 2) Recognize multiple mission/applicant configurations;
- 3) Grant access to authorized authenticated users or processes;
- 4) Contain a master record of:
  - a) Roles and responsibilities;
  - b) Ticket/tower personnel credentials and other data;
  - c) Certification credentials and other data;
  - d) Mission data;
  - e) Applicant data;
  - f) Geospatial data;
    - Street centerlines
    - City outlines
    - Population and demographic
    - Elevation
    - Wetlands delineation
    - Historic and Environmentally Sensitive areas
    - Debris work zones
    - Parcel data
    - Land use
    - FEMA flood zones
  - g) Graphically depict:
    - Load locations by contractor
    - Load locations by subcontractor
    - Load locations by driver
    - Load locations by ticket/tower personnel
    - Load locations by date range
    - Load locations by zone
    - Load locations by municipality
    - Load locations by applicant
    - Load locations by mission
    - Load locations by debris type
    - Load locations by disposal site
    - Load locations by federal, state and private roads
    - Load locations by land use
    - Load locations by disposal site
- 8) Thematic mapping techniques to distinguish different data by color and/or symbol
- 9) Identify data attributes for a single point of data
- 10) Select one or many points of data
- 11) Calculate operational efficiency statistics such as:
  - Trip turnaround time
  - Trip distance to disposal site (straight line projection sorted by 0 -15 miles, 16–30 miles, 31 – 60 miles and greater than 61 miles)
  - Average container fill percentage
  - Average tower manager load call
  - Load call trend data e.g., by tower managers, contractor, sub-contractor, driver, etc.
- 12) Dynamically configure user interface in response to point data selection to limit user authorities

- 13) Multiple data selections generate tabular data reports
  - 14) Filter mechanisms to highlight geospatial data
  - 15) Control data access using role based security
  - 16) User interface and access to underlying system data must dynamically configured at run time through the presentation of appropriate user credentials
  - 17) Manage data ownership
  - 18) Provide access based on security role model
  - 19) Identify and distribute "owned" transactional datasets to limit internet access to the website data to view only your data
  - 20) Prevent distributed data from being reprocessed for billing purposes
  - 21) Identify billing data sets based on parameters such as:
    - Time/Date
    - Contractor/Subcontractor
    - Debris type
    - Debris disposal method (haul-in, reduction, open burn, incineration, haul out, leave in place, etc.)
    - Haul distance
  - 22) Route billing data sets via defined and customizable workflow rules
  - 23) Approved billing data sets
  - 24) Communicate general event status e.g.:
    - Total CY hauled (by debris type);
    - Total CY by disposal site;
    - Total CY by contractor/subcontractor;
    - Total CY by work zone/sector;
    - Total CY by municipality;
    - Total CY by Federal, state and private roads;
    - Total CY by certified vehicle;
    - Number of vehicles utilized;
    - Number of ticket/tower personnel resources assigned;
  - 25) Manage user roles, responsibilities and passwords
  - 26) Prevent modification to original data by unauthorized or unauthenticated users
  - 27) Insert audit records into audit tables for all insertions, modifications, and deletions to original data.
- G. Field Architecture: The field based system must be characterized by the following general statements of direction with respect to construction, operability, supportability and security. At a minimum, the system must:
- 1) Require user authentication credentials;
  - 2) Display current version at application start-up;
  - 3) Synchronize with Greenwich Mean Time (GMT) for all date/time fields;
  - 4) System must utilize location specific configuration data to initiate a warm start sequence for global positioning system;
  - 5) System must remain in a ready state by default;
  - 6) Acknowledge successful card write via display status message;
  - 7) Create identification structures that utilize encryption technologies;
  - 8) Employ anti-tamper and anti-tearing methods and technologies;
  - 9) Where applicable, utilize 3 DES data encryption technologies to protect data;
  - 10) Perform validation and checksum (a running production total of cubic yards or

- appropriate payment capacity) stored on each debris vehicle's removable media).
- H. Back-office Architecture: At a minimum, the back-office applications must be characterized by the following general statements of direction with respect to construction, operability, supportability, and security.
- 1) Utilize relational database technology;
  - 2) Employ geospatial analysis tools for data visualization;
  - 3) Enable audit ability for:
    - Data insertion;
    - Data modification;
    - Data deletion;
  - 4) Prevent field and row-level data deletion;
  - 5) All access to data must be controlled;
  - 6) Store certification and other identification data using encrypted relational technology;
  - 7) Reside in a secure internet environment;
  - 8) Preserve base transactional data in its original state prior to processing or consolidation with other data.
  - 5) Initial Startup Procedure For Debris Removal – Debris missions are critical to emergency response and the Consultant should be adequately prepared to respond.
- I. Reporting: The City requires the Consultant to provide daily status reports, unless otherwise specified, of the debris removal operations, preparation of interim reports (as directed by the City), as well as a final report of the debris removal operations.
- 1) The daily status report shall include at a minimum: the daily cubic yards/tons collected by material and by program (FHWA-ER First Pass, First Pass on non- Federal Aid roadways, second and subsequent passes on all roadways), cumulative totals in cubic yards/tons by debris type, number of debris removal crews and equipment operating, number of debris monitors in field, cubic yards/ton by debris type hauled to final disposal and location of final disposal, and total cubic yard/tons hauled to recycling or salvage facilities.
  - 2) An interim status report may be required at the discretion of the City. A final report covering the history of the operations, the locations temporary debris sites used, remediation and site closure activities, including any environmental reports or authorizations generated; and the locations of final disposal sites and permits, recycling facilities and salvage facilities used during operations. The report may include identification of weakness in the operations and recommendations for future debris activities.

**Tetra Tech, Inc**

**INITIAL TERM PRICING**

ITEM	DESCRIPTION	HOURLY RATE
1	Project Manager	\$ 68.00
2	Field Operations Manager	\$ 57.00
3	Disposal Site Monitor	\$ 34.00
4	Tower Monitor	\$ 34.00
5	Exit Site Monitor	\$ 30.00
6	Debris Collection Monitor	\$ 34.00
7	Data Manager	\$ 50.00
8	Consultant (i.e. Ticket Manager)	\$ 60.00
9	Load Tick Data Entry Clerks (QA/QC) <sup>1</sup>	\$ 1.00
10	Field Supervisor	\$ 42.00
11	Scheduler/Expeditors	\$ 30.00
12	GIS Analyst	\$ 67.00
13	Environmental Specialist	\$ 67.00
14	Billing/Invoice Analyst	\$ 55.00
15	FEMA/FHWA Specialist	\$ 95.00
16	Administrative Assistants	\$ 39.00

\*The Load Ticket Data Entry Clerks (QA/QC) position is typically applicable when paper ticketing is used. However, Tetra Tech uses an electronic ticketing system (Tetra Tech's proprietary ADMS technology), therefore such a position will not be utilized for this project.

**Exhibit C – Federal Requirements****DRUG FREE WORKPLACE REQUIREMENTS**

Drug free workplace requirements in accordance with Drug Free Workplace Act of 1988 (Publ 100-690, Title V, Subtitle D) Contractor entering into Federal funded contracts over \$100,000 must comply with Federal Drug Free workplace requirements in accordance with the Drug Free Workplace Act of 1988.

**EQUAL EMPLOYMENT OPPORTUNITY**

During the performance of this contract, the Contractor agrees as follows:

Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender, identity, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, sexual orientation, gender identity, or national origin. Such action shall include, but not be limited to the following: Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause. Contractor will ensure that conduct and communication at the DMS and with all personnel will not be discriminatory, inappropriate or offensive and the City shall have the right to request replacement personnel when violations of this policy occur.

Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.

Contractor will send to each labor union or representative of workers with which he/she has a collective bargaining agreement or other contract or understanding, a notice to be provided, advising the said labor union or workers' representatives of the Contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

**Exhibit C – Federal Requirements**

Contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.

Contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

In the event of the Contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

The Contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance: Provided, however, that in the event a Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency the Successful Proposer may request the United States to enter into such litigation to protect the interests of the United States.

**COMPLIANCE WITH THE COPELAND "ANTI-KICKBACK" ACT**

Contractor shall comply with 18 U.S.C. § 874, 40 U.S.C. § 3145, and the requirements of 29 CFR pt. 3 as may be applicable, which are incorporated by reference into this contract.

**Exhibit C – Federal Requirements**

The Contractor or subcontractor shall insert in any subcontracts the clause above and such other clauses as the FEMA may by appropriate instructions require, and a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime Contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all of these contract clauses.

A breach of the contract clauses above may be grounds for termination of the contract, and for disbarment as a Contractor and subcontractor as provided in 29 CFR § 5.12.13.5

**CONTRACT WORK HOURS AND SAFETY STANDARDS ACT (40 U.S.C. 3701–3708)**

Where applicable, all contracts awarded in excess of \$100,000 that involve the employment of mechanics or laborers must be in compliance with 40 U.S.C. 3702 and 3704, as supplemented by Department of Labor regulations (29 CFR Part 5). Under 40 U.S.C. 3702 of the Act, each contractor is required to compute the wages of every mechanic and laborer on the basis of a standard workweek of 40 hours. Work in excess of the standard workweek is permissible provided that the worker is compensated at a rate of not less than one and a half times the basic rate of pay for all hours worked in excess of 40 hours in the workweek. The requirements of 40 U.S.C. 3704 are applicable to construction work and provide that no laborer or mechanic must be required to work in surroundings or under working conditions which are unsanitary, hazardous or dangerous. These requirements do not apply to the purchases of supplies or materials or articles ordinarily available on the open market, or contracts for transportation or transmission of intelligence.

Compliance with the Contract Work Hours and Safety Standards Act:

Overtime requirements. No Contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (1) of this section the Contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such Contractor

**Exhibit C – Federal Requirements**

subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1) of this section.

Withholding for unpaid wages and liquidated damages. The City of Ocala shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the Contractor or subcontractor under any such contract or any other federal contract with the same Contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same Contractor, such sums as may be determined to be necessary to satisfy any liabilities of such Contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2) of this section.

Subcontracts. The Contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1) through (4) of this section and a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The Contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1) through (4) of this section.

**CLEAN AIR ACT AND THE FEDERAL WATER POLLUTION CONTROL ACT**Clean Air Act

The Contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act, as amended, 42 U.S.C. § 7401 et seq.

The Contractor agrees to report each violation to the City and Contractor understands and agrees that the City will, in turn, report each violation as required to assure notification to the State of Florida, Federal Emergency Management Agency, and the appropriate Regional Office of the Environmental Protection Agency.

**Exhibit C – Federal Requirements**

The Contractor agrees to include these requirements in each subcontract exceeding \$150,000 financed in whole or in part with Federal assistance provided by FEMA. Federal Water Pollution Control Act.

The Contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et seq.

The Contractor agrees to report each violation to the City and Contractor understands and agrees that the City will, in turn, report each violation as required to assure notification to the State of Florida, Federal Emergency Management Agency, and the appropriate Regional Office of the Environmental Protection Agency.

The Contractor agrees to include these requirements in each subcontract exceeding \$150,000 financed in whole or in part with Federal assistance provided by FEMA.

**SUSPENSION AND DEBARMENT**

This contract is a covered transaction for purposes of 2 CFR pt. 180 and 2 CFR pt. 3000. As such the Contractor is required to verify that none of the Contractor, its principals (defined at 2 CFR §180.995), or its affiliates (defined at 2 CFR § 180.905) are excluded (defined at 2 CFR § 180.940) or disqualified (defined at 2 CFR § 180.935).

The Contractor must comply with 2 CFR pt. 180, subpart C and 2 CFR pt. 3000, subpart C and must include a requirement to comply with these regulations in any lower tier covered transaction it enters into.

This certification is a material representation of fact relied upon by the City. If it is later determined that the Contractor did not comply with 2 CFR pt. 180, subpart C and 2 CFR pt. 3000, subpart C, in addition to remedies available to THE city, the State of Florida and the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment.

The Contractor agrees to comply with the requirements of 2 CFR pt. 180, subpart C and 2 CFR pt. 3000, subpart C throughout the period of the contract. The Contractor further agrees to include a provision requiring such compliance in its lower tier covered transactions.

## Exhibit C – Federal Requirements

Consultant certifies it is not so listed as excluded or disqualified from contracting and shall confirm same for every subcontractor receiving any payment in whole or in part from federal funds.

### **ACCESS TO RECORDS**

Access to Records. The following access to records requirements apply to this contract:

Contractor agrees to provide the City, the FEMA Administrator, the Comptroller General of the United States, or any of their authorized representatives access to any books, documents, papers, and records of the Contractor which are directly pertinent to this Agreement for the purposes of making audits, examinations, excerpts, and transcriptions.

Contractor agrees to permit any of the foregoing parties to reproduce by any means whatsoever or to copy excerpts and transcriptions as reasonably needed.

Contractor agrees to provide the FEMA Administrator or his/her authorized representatives access to construction or other work sites pertaining to the work being completed under the contract.

### **DHS SEAL, LOGO AND FLAGS**

Contractor shall not use the Department of Homeland Security (DHS) seal(s), logos, crests, or reproductions of flags or likenesses of DHS agency officials without specific FEMA pre-approval.

### **COMPLIANCE WITH FEDERAL LAW, REGULATIONS, AND EXECUTIVE ORDERS**

**This is an acknowledgement that FEMA financial assistance may be used to fund the contract. The Contractor will comply will all applicable federal law, regulations, executive orders, FEMA policies, procedures, and directives.**

### **NO OBLIGATION BY FEDERAL GOVERNMENT**

The Federal Government is not a party to this contract and is not subject to any obligations or liabilities to the non-Federal entity, Contractor, or any other party pertaining to any matter resulting from the contract.

**Exhibit C – Federal Requirements****PROGRAM FRAUD AND FALSE OR FRAUDULENT STATEMENTS OR RELATED ACTS**

Contractor acknowledges that 31 U.S.C. Chap. 38 (Administrative Remedies for False Claims and Statements) applies to the Contractor's actions pertaining to this contract.

**CONFLICT OF INTEREST**

Contractor must disclose in writing any potential conflict of interest to the City or pass-through entity in accordance with applicable Federal policy.

**MANDATORY DISCLOSURES**

Contractor must disclose in writing all violations of Federal criminal law involving fraud, bribery, or gratuity violations potentially affecting the Federal award.

**UTILIZATION OF MINORITY AND WOMEN FIRMS (M/WBE)**

Contractor must take all necessary affirmative steps to assure that minority businesses, women's business enterprises, and labor surplus area firms are used when possible. Contractor has documented efforts to utilize M/WBE firms including what firms were solicited as suppliers and/or subcontractors as applicable and submit this information with their proposal, which shall be made part of the Agreement.

**BYRD ANTI-LOBBYING AMENDMENT**

Byrd Anti-Lobbying Amendment, 31 U.S.C. §1352 (as amended) Contractors who apply or bid for an award of \$100,000 or more shall file the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant, or any other award covered by 31 U.S.C. §1352. Each tier shall also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the recipient.

Contractor's certification of compliance with certification requirements under 10 CFR Part 601 New Restrictions on Lobbying is attached and incorporated by reference into and made part of the Agreement.



Proposal for (RFP PWD/230227)  
**Pre-Event Monitoring  
Services for Emergency  
Debris Removal**  
City of Ocala, FL

*Leading with Science®*

Electronic | April 2023

# Cover Letter

City of Ocala  
Louis Joseph, Buyer  
110 SE Watula Avenue, 3rd Floor,  
Ocala, Florida, 34471

April 4, 2023

**Subject: Pre-Event Monitoring for Emergency Debris Removal**

Dear Mr. Joseph and Members of the Evaluation Committee,

Tetra Tech, Inc. (Tetra Tech) submits the enclosed proposal in response to the City of Ocala (City) request for proposals for Pre-Event Monitoring for Emergency Debris Removal. Our proposal describes our technical expertise in disaster debris management and our approach to delivering unmatched services to the City:

- **National Leadership in Debris Monitoring.** Our team has successfully assisted **over 300 local and state government clients across the nation** with planning for and recovering from disasters and has extensive experience successfully managing multiple disaster response and recovery operations across the United States simultaneously. Our team has overseen and managed the removal of **over 172 million cubic yards (CYs) of debris**, resulting in excess of **\$12 billion in reimbursable costs** to our clients. We have served as the ground-zero debris monitoring consultant for hundreds of clients affected by our nation's most catastrophic natural disasters, including Hurricanes Ian, Laura, Sally, Michael, Irma, Matthew, Florence, and Harvey; over a dozen wildfires; and numerous severe storm, tornado, and flooding events.
- **Extensive Experience Throughout the State of Florida.** Since 2004, our team has **monitored the collection and removal of almost 60 million CY of debris in Florida** and has assisted numerous communities in Florida with response and recovery efforts after Hurricanes Charley, Frances, Jeanne, Ivan, Dennis, Katrina, Wilma, Matthew, Irma, Michael, Sally, and most recently, Ian, and Nicole. In addition, our team has assisted communities after a variety of other disasters, including tropical storms, tornadoes, fires, and floods. Tetra Tech is proud of our experience in Florida and is committed to successfully managing all phases of debris monitoring for our clients after a debris-generating event. **We have over 1,000 staff across 24 offices throughout Florida, including our Response and Recovery Division headquarters in Maitland.** Tetra Tech is available to the City before, during, and after a disaster.
- **Immediate Response Capability to Meet the City's Needs.** Our team understands the importance of rapid mobilization of qualified staff. We are committed to provide a project team that meets the technical requirements of the RFP and maximizes use of local personnel when possible. With disaster response and recovery experts located throughout the state, Tetra Tech can stage a full-scale mobilization in the City within hours of a disaster. Our staff of interdisciplinary experts will apply the necessary project controls to efficiently complete and document fieldwork and provide follow-up support—including appeal development and closeout audit support—long after completion of fieldwork. Our team has never failed to respond to a client's needs, providing each community with a dedicated project team. In 2017, **Tetra Tech successfully deployed more than 6,000 field staff throughout the country** to respond to clients affected by Hurricane Irma in Florida, Hurricane Harvey in Texas, Hurricane Maria in Puerto Rico, and multiple wildfires in California. **Most recently, Tetra Tech deployed more than 1,300 staff in 10 days in response to Hurricane Ian throughout Florida.** Our simultaneous response to several disasters is proof that we have the staff, resources, and expertise to respond to the City's post-disaster needs. Tetra Tech stands ready to work with the City as a trusted partner who will respond immediately and provide high-quality services throughout the engagement.
- **Commitment to a City-Driven Recovery Effort.** Tetra Tech recognizes that any recovery effort must be driven by the interests and objectives of the City and its residents. Tetra Tech is committed to providing expert staff that has the knowledge base to enhance the City's recovery, and not challenge City staff unnecessarily. Tetra Tech is committed to developing an understanding of the City's recovery goals and building a path to achieve those goals as partners.
- **Deeply Experienced Project Management Team.** We have assembled a team of disaster debris experts who were specifically selected for this engagement based on their experience, programmatic expertise, and availability to respond to the City's needs. Leading the Tetra Tech Disaster Recovery division is **Mr. Jonathan Burgiel, a 35-year veteran in the solid waste industry of the industry who is a leading expert in disaster debris monitoring, solid waste**

**management, and Federal Emergency Management Agency (FEMA) reimbursement.** Additionally, Nick Dragon, our proposed project manager, is an expert in large-scale mobilizations, project staffing, and debris monitoring operations, and has extensive experience in disaster debris project management support under the FEMA Public Assistance (PA) Grant Program.

- **Proprietary, Best-in-Class Automated Debris Management System (ADMS) Technology.** Via *RecoveryTrac™* ADMS, our staff can monitor and manage a recovery effort electronically, increasing productivity while decreasing fraud, human error, and cost to the City. *RecoveryTrac™* ADMS enables real-time collection data and furnishes accurate and timely reporting to City stakeholders. ***RecoveryTrac™* ADMS is validated by the United States Army Corps of Engineers (USACE)** and is the ADMS preferred by USACE debris contractors.
- **Long History of Working with Municipal Solid Waste Collection Systems.** One significant advantage of the municipal solid waste collection system is that it allows the City of Ocala to provide a high level of customer service to its residents. Since the city's own crews are responsible for waste collection, they are intimately familiar with the community's needs and can tailor their services accordingly. This results in a more personalized approach to waste management and allows the city to provide timely, efficient, and effective service to its customers. The Tetra Tech team has over 20 years of experience working with solid waste authorities in communities similar to Ocala.
- **Cost-effective Solution for Recovering Communities.** Our team of disaster recovery experts remains on the forefront of the debris monitoring industry, and we are committed to providing the latest technological advancements, which increase efficiency and result in significant cost savings to our clients. **Tetra Tech provides the best value by arming recovering communities with unmatched expertise and reasonably priced hourly rates thanks to advancements in our proprietary ADMS technological capabilities.**

For questions regarding this response, please contact the representatives listed below. As an authorized representative of the firm, I am authorized and empowered to sign this proposal and bind the firm in contractual commitments.

**Technical Representative: Mr. Ralph Natale**

2301 Lucien Way, Suite 120, Maitland, FL 32751

Phone: 321-441-8511 | Fax: 321-441-8501

ralph.natale@tetrattech.com

Sincerely,

**Tetra Tech, Inc.**



Jonathan Burgiel

Business Unit President – Tetra Tech Disaster Recovery

**Contractual Representative: Ms. Betty Kamara**

2301 Lucien Way, Suite 120, Maitland, FL 32751

Phone: 321-441-8511 | Fax: 321-441-8501

TDR.contracts@tetrattech.com

## A. Proposer Information

Tetra Tech, Inc. (Tetra Tech) is a leading provider of consulting, engineering, environmental, and technical services worldwide. Founded in 1966, Tetra Tech is one of the leading firms in the nation in the field of disaster management and homeland security, with millions of dollars in revenue coming from contracts in such diverse areas as infrastructure hardening and protection; disaster recovery; emergency management, planning, and preparedness; community resilience; environmental services, and grant management. Tetra Tech supports government and commercial clients by providing innovative solutions to complex problems focused on water, environment, energy, infrastructure, and natural resources. We are a global company with over 27,000 employees that is *Leading with Science*® to provide innovative solutions to complex problems for our public and private clients.

Dedicated to helping state and local governments plan for and recover from natural and human-caused disasters, our staff members offer a field-tested and proven methodology for emergency readiness, continuity planning, and disaster recovery. Our team is recognized for its ability to quickly respond to a broad range of emergencies, allowing our clients to return to the business of running their day-to-day operations. Likewise, our team’s understanding of the Federal Emergency Management Agency (FEMA), the Federal Highway Administration (FHWA) (including recent changes), and other reimbursement agencies’ requirements for eligibility, documentation, and reimbursement helps clients receive the maximum reimbursement allowed. **Our team has obtained over \$12 billion in reimbursement funds for our clients from federal agencies such as FEMA, FHWA, and the Natural Resources Conservation Service (NRCS).** In total, our team has successfully managed the removal of and reimbursement for over **172 million cubic yards (CYs) of debris as well as the demolition of over 22,000 uninhabitable residential and commercial structures.**

**Contact Information and List of Principals:** Jonathan Burgiel, Business Unit President | 2301 Lucien Way, Suite 120 Maitland, FL 32751 | 321-441-8500 | TDR.Contracts@tetratech.com | Taxpayer ID: 95-4148514

90+ MAJOR DISASTERS RESPONDED

25 YEARS IN DISASTER RECOVERY

172M+ CUBIC YARDS OF DEBRIS MONITORED

\$10B REIMBURSED TO CLIENTS

RANKED #2 in SOLID WASTE by the Engineering News Record (ENR)

\$3.2 billion ANNUAL REVENUE

650 DEBRIS PROJECTS MANAGED

WORKS IN 100+ COUNTRIES

WORKS ON 100,000 PROJECTS ANNUALLY

550 OFFICES WORLDWIDE

2.3 MILLION HAZARDOUS TREES & LIMBS REMOVED

30,000+ PPDR PARCELS SERVED

Publicly traded on NASDAQ as TTEK

27,000 ASSOCIATES

#1 MOST PREFERRED ADMS TECHNOLOGY

Corporate Leadership		
<b>Dan L. Batrack</b> Chairman, Chief Executive Officer	<b>Jill M. Hudkins</b> President	<b>Steven M. Burdick</b> Executive Vice President, Chief Financial Officer
<b>Leslie L. Shoemaker</b> Executive Vice President, Chief Sustainability and Leadership Development Office	<b>William R. Brownlie</b> Senior Vice President, Chief Engineer	<b>Brian N. Carter</b> Senior Vice President, Corporate Controller and Chief Accounting Officer
<b>Craig L. Christensen</b> Senior Vice President, Chief Information Officer	<b>Preston Hopson</b> Senior Vice President, General Counsel, and Secretary	<b>Richard A. Lemmon</b> Senior Vice President, Corporate Administration
<b>Brendan O'Rourke</b> Senior Vice President, Enterprise Risk Management		
Operational Leadership		
<b>Derek G. Amidon</b> President, Commercial/International Services Group and President, Energy Engineering Division	<b>Roger R. Argus</b> President, Government Services Group and President, U.S. Government Division and U.S. Infrastructure Division	<b>Keith Brown</b> President, Global Development Services Division
<b>Stuart W. Fowler</b> President, High Performance Buildings Division	<b>Olivier H. Jeannot</b> President, Federal Information Technology Division	<b>Bernard Teufele</b> President, Environment/Geotech Division
Directors		
<b>Dan L. Batrack</b> Chairman of the Board, Director since 2005	<b>Gary R. Birkenbeuel</b> Director since 2018	<b>Prashant Gandhi</b> Director since 2022
<b>J. Christopher Lewis</b> Director since 1988	<b>Joanne M. Maguire</b> Director since 2016	<b>Kimberly E. Ritrievi</b> Director since 2013
<b>J. Kenneth Thompson</b> Director since 2007	<b>Kirsten M. Volpi</b> Director since 2013	<b>Li-San Hwang</b> Chairman Emeritus

## B. Qualifications and Experience

### 1. Previous Experience

Our team has provided disaster management, recovery, and consulting services to hundreds of state and local government agencies since 2001. These services have included environmental permitting; monitoring of debris collection, hazardous tree programs, debris management sites (DMS), and specialized debris missions; fire damage restoration; contractor invoice reconciliation; and federal grant reimbursement support. **Profiles and references from specific projects are featured later in this section. Tetra Tech can provide additional projects and information upon request.**

Experience Matrix (2001–2022)

# OVER 95 EVENTS SINCE 2001

#### 2022

HURRICANE IAN - 31 Clients  
 CA WILDFIRES - 2 Clients  
 NM WILDFIRE (USACE) - 1 Client  
 WINTER STORM VA - 1 Client  
 KY STORMS/TORNADOES - 2 Clients

#### 2021

DIXIE FIRE - 1 Client  
 HURRICANE IDA - 9 Clients  
 BUILDING COLLAPSE - 1 Client  
 STORMS/TORNADOES AL - 1 Client  
 WINTER STORM TX - 3 Clients  
 STORMS/FLOODING TN - 1 Client  
 WINTER STORM VA - 1 Client

#### 2020

HURRICANE ZETA - 6 Clients  
 HURRICANE DELTA - 4 Clients  
 WILDFIRES - 2 Clients  
 HURRICANE SALLY - 4 Clients  
 HURRICANE LAURA - 18 Clients  
 HURRICANE ISAIAS - 2 Clients  
 HURRICANE HANNA - 3 Clients  
 TORNADOES - 3 Clients  
 IOWA DERECHO - 1 Client

#### 2019

TROPICAL STORM IMELDA - 3 Clients  
 HURRICANE DORIAN - 4 Clients  
 TORNADOES - 2 Clients

#### 2018

HURRICANE MICHAEL - 13 Clients  
 HURRICANE FLORENCE - 12 Clients  
 WILDFIRES - 1 Client

#### 2017

WILDFIRES - 2 Clients  
 HURRICANE MARIA - 1 Client  
 HURRICANE IRMA - 67 Clients  
 HURRICANE HARVEY - 38 Clients  
 TX & GA TORNADOES - 2 Clients

#### 2016

HURRICANE MATTHEW - 34 Clients  
 HURRICANE HERMINE - 1 Client  
 STORMS & FLOODING - 2 Clients  
 WILDFIRES - 2 Clients  
 FLOODING - 6 Clients

#### 2015

WILDFIRES - 2 Clients  
 SEVERE STORMS - 3 Clients  
 FLOODING - 10 Clients

#### 2014

FLOODING - 1 Client  
 TORNADOES - 2 Clients  
 ICE STORM - 7 Clients

#### 2013

ICE STORM - 2 Clients  
 FLOODING - 1 Client

#### 2012

HURRICANE SANDY - 13 Clients  
 HURRICANE ISAAC - 5 Clients  
 TROPICAL STORM DEBBY - 3 Clients

#### 2011

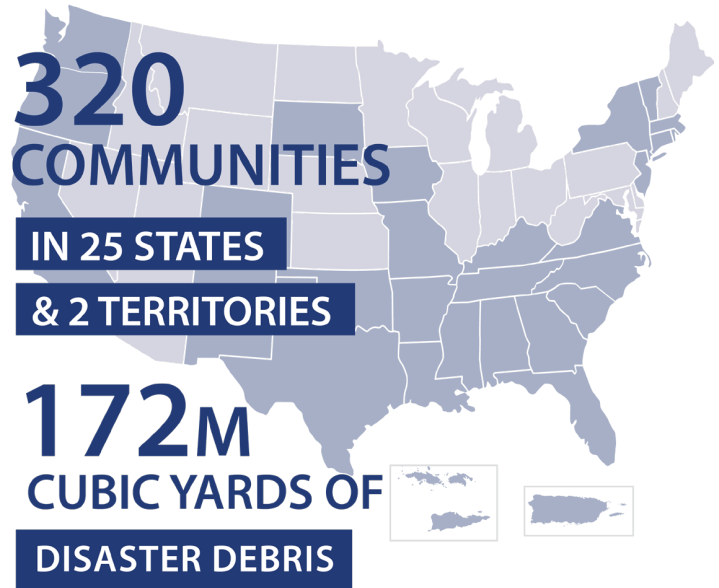
WINTER STORMS - 19 Clients  
 TEXAS DROUGHT - 1 Client  
 TEXAS WILDFIRES - 1 Client  
 HURRICANE IRENE - 22 Clients  
 TORNADOES - 4 Clients

#### 2010

FLOODING - 2 Clients  
 TORNADOES - 1 Client  
 ICE STORMS - 1 Client  
 TROPICAL STORM ALEX - 1 Client

#### 2009

ICE STORMS - 1 Client  
 SNOW STORMS - 2 Clients  
 TROPICAL STORM IDA



#### 2008

HURRICANE IKE - 78 Clients  
 HURRICANE GUSTAV - 7 Clients  
 TROPICAL STORM FAY - 3 Clients  
 HURRICANE DOLLY - 30 Clients  
 MIDWEST FLOODING - 2 Clients

#### 2007

MIDWEST ICE STORM - 3 Clients  
 TORNADOES - 2 Clients  
 MIDWEST SNOW STORMS - 3 Clients

#### 2006

BUFFALO SNOW STORMS - 6 Clients

#### 2005

HURRICANE WILMA - 17 Clients  
 HURRICANE RITA - 3 Clients  
 HURRICANE KATRINA - 11 Clients  
 HURRICANE DENNIS - 5 Client

#### 2004

HURRICANE JEANNE - 2 Clients  
 HURRICANE IVAN - 3 Clients  
 HURRICANE FRANCES - 2 Clients  
 HURRICANE CHARLEY - 2 Clients

#### 2002

HURRICANE LILI - 1 Client

#### 2001

TROPICAL STORM GABRIELLE - 1 Client

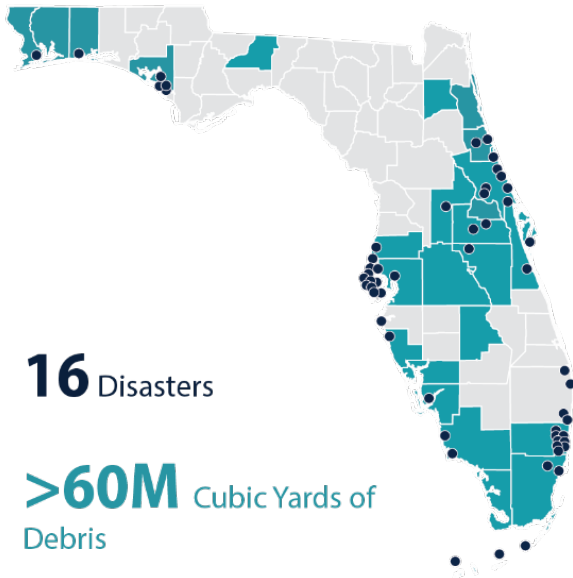
## Florida Debris Monitoring Experience

**Tetra Tech has performed more debris monitoring services in the state of Florida than any other firm.** Our team has responded to every major disaster in Florida since 2001. In response to these events, our team has overseen 141 projects amounting to over 60 million CYs of debris across the State. Due to our vast experience, we have become experts in Florida's unique needs disaster recovery needs, including PPDR, waterways, and beach projects.

Florida is also our home state, where many of our principal and senior staff reside. We are proud of our work in Florida, and we want to be known in our hometowns for providing excellent service to our communities. With 24 offices throughout the state, including **our disaster recovery headquarters and fully stocked warehouse in Central Florida, Tetra Tech is mere hours away to mobilize rapidly to our clients throughout the state.**

### Florida Debris Monitoring Experience

## Florida Debris Monitoring Projects



**16** Disasters

**>60M** Cubic Yards of Debris

**140+** Projects

**24** Offices and

**>900** Personnel throughout the State



## Our program is designed to maximize federal grant reimbursement.

Over the course of working with hundreds of local and state governments on disaster debris management projects, our team has developed a deep understanding of FEMA, FHWA, NRCS, and other reimbursement and regulatory agencies' policies and procedures. Our efforts allow clients to maintain their focus on continuing daily operations while relying on us to oversee the management of debris removal operations in compliance with programmatic guidelines and procedures. Additionally, we have supported clients across the state and have successfully helping our clients navigate the Florida Department of Emergency Management (FDEM) reimbursement and closeout process. Our understanding of requirements for eligibility, documentation, and reimbursement has helped our clients obtain **over \$12 billion in reimbursed costs.**

Our team has direct experience with federal grant programs, including:

- FEMA PA Program (including Section 406 mitigation and Section 428 alternative procedures program)
- FEMA Hazard Mitigation Grant Program (HMGP, Section 404 mitigation)
- FEMA Hazard Mitigation Assistance (HMA)
- FEMA Individual Assistance (IA) Program
- FHWA-Emergency Relief (FHWA-ER) Program
- FHWA Transportation Investment Generating Economic Recovery Grant
- Natural Resources Conservation Service (NRCS) Emergency Watershed Protection
- U.S. Department of Housing and Urban Development (HUD) Community Development Block Grant Program (CDBG)
- U.S. Treasury Coronavirus Aid, Relief, and Economic Security (CARES) Act and COVID-related funds

For this engagement, Tetra Tech anticipates that majority of reimbursement will be pursued through the FEMA PA Program. Our team holds comprehensive qualifications in working both for and with FEMA. Tetra Tech maintains six current contracts directly supporting FEMA, in addition to our routine work with FEMA as part of state and local projects seeking FEMA reimbursement.

Tetra Tech is able to maximize FEMA PA disaster debris reimbursement funding for the City based on the following:

- **Procedures Tailored to FEMA:** Our data management and document storage procedures are tailored to facilitate FEMA review and the generation of project worksheet versions throughout the entire project. We incorporate changes or updates to the FEMA PA Program and Policy Guide (PAPPG) into our procedures for field documentation and data management as they occur. Our software systems, *RecoveryTrac™* and *RecoveryTrac™* Grants Management were designed with FEMA programs in mind and were built to interface with FEMA Grants Portal/Grants Manager.



Our team has worked closely with FEMA and FHWA staff in the determination of debris eligibility, data requirements, project worksheet/detailed damage inspection report development, auditing of documentation, and reimbursement requirements. This includes providing **step-by-step assistance to clients throughout the FEMA reimbursement process.** "As a former State Recovery Director in Region IV, I advise our team, and yours, on the best approach to documentation and presentation of costs in order to maximize your utilization of PA funding."

--Allison McLeary, J.D.,  
Senior Management Team

- **Comprehensive Understanding of FEMA Regulations:** Our management team and field staff fully understand FEMA rules and regulations for hand-loaded vehicles; stump, limb, and tree removal at unit rates; volumetric load calls at temporary disposal site locations; and right-of-way (ROW) debris removal eligibility. This allows us to monitor contracts to the smallest detail while concurrently managing and documenting the operation using proven methodologies that maximize FEMA reimbursement.
- **Direct Relationships with FEMA Regional Representatives:** Our team maintains strong relationships with many of the lead federal coordinating officers, debris specialists, Public Assistance (PA) coordinators and officers, and other staff. Regular interface and communication with FEMA at the headquarters, regional, and local levels allow our team to obtain quick responses on disaster-specific guidance and issues. Having been former State and Federal officials, our employees know how to successfully navigate FEMA PA and should issues arise, who to call upon to get quick remedies.
- **Team of Grant Experts to Assist with Funding and Audits:** Our grant management experts have assisted clients with applying for and retaining grant funds, even after closeout and audit processes. Our FEMA appeals and funding specialists have worked with FEMA closeout officers to obtain millions of previously deobligated dollars for communities. While the best course of action is to avoid audits or appeals, there are sometimes unavoidable disagreements with program administrators. We have a bench of accountants, attorneys, and program experts to draw upon to try and come to a resolution outside of the audit or appeals process, or when all else fails, appeal or arbitrate certain unacceptable decisions.

Overview of Recent Federal Grant Funding Experience

Year	Client	Event	Program	Value (\$)	Preliminary Damage Request	Develop Request for Public Assistance	Applicant Briefing	Applicant Kickoff Meeting	Site Visits/Inspections	Project Scoping	Project Cost Estimation & Documentation	PW/Application Development	Alternate/Improved/Pilot Program Projects	Project Cost Reconciliation	Interim Inspections	Funding Disbursement	Grant Closeout	Audit/Appeals Support
2022	Iowa, State of	CV19	CCS	227,500,000						■	■			■		■		
2022	Lexington County, SC	DR 4241	CDBG-MIT	15,000,000	■	■	■	■	■	■	■	■	■	■	■	■	■	■
2022	City of Philadelphia, PA	DR 4618	PA	30,000,000	■	■	■	■	■	■	■	■		■			■	
2021	Texas, State of	CV19	ERAP	1,308,000,000						■	■			■		■		
2021	Richland County SC	CV19	ERAP	12,500,000						■	■			■		■		
2021	Broward County, FL	CV19	ERAP	58,965,000						■	■			■		■		
2021	Pinellas County, FL	CV19	ERAP	21,400,000						■	■			■		■		
2021	St. Petersburg, FL	CV19	ERAP	8,000,000						■	■			■		■		
2021	Leon County, FL	CV19	ERAP	19,600,000						■	■			■		■		
2021	Orlando, FL	CV19	ERAP	8,600,000						■	■			■		■		
2021	Lexington County, SC	DR-4241	CDBG-MIT	15,000,000	■	■	■	■	■	■	■	■	■	■	■	■	■	■
2021	Monroe County, FL	DR-4337	CDBG-DR	15,000,000	■	■	■	■	■	■	■	■	■	■	■	■	■	■
2021	Walton County, FL	CV19	COVID PA	131,470	■	■	■	■	■	■	■	■	■	■	■	■	■	■
2021	Philadelphia, PA	DR 4618	PA	30,000,000	■	■	■	■	■	■	■	■		■			■	
2021	Ft. Myers, FL	DR 4486	PA, CRF	2,748,000						■	■	■		■				
2020	Harris County, TX	DR 4855	FEMA PA	200,000,000	■	■	■	■	■	■	■	■	■	■	■	■	■	■
2020	Miami, FL	DR-4337	Appeals	17,000,000														■
2020	Houston, TX	CV19	CRF	404,000,000							■							
2020	Philadelphia, PA	CV19	CRF	276,400,000							■							
2020	Palm Beach County, FL	CV19	CRF	261,000,000							■							
2020	Brevard County, FL	CV19	CRF	105,000,000							■							
2020	Dunedin, FL	DR 4486	PA	38,000	■	■	■	■	■	■	■	■		■				

Disaster Recovery Program Management Services

Our team is a national leader in providing management and support documentation for all facets of the debris removal monitoring industry, including special disaster recovery program management services.

Disaster Recovery and Special Program Management Capabilities

Disaster Recovery Program Management	
Emergency road clearance	Final debris disposal at a landfill or other end use
Curbside debris collection	Conflict and damage resolution
Operation of citizen drop-off sites	Truck certification
Data management and invoice reconciliation	Right-of-entry administration
Oversight of debris management sites	

**Special Programs Management**

Animal carcass removal and disposal	Marine and waterway debris removal
Asbestos abatement	Private property demolition and debris removal
Beach remediation and restoration	Nuisance abatement ordinance administration
Construction and demolition debris removal	Saltwater killed tree removal
Creosote piling removal	Sediment dredging and removal
Drainage and canal debris removal	Subsurface storm drain debris removal
E-waste debris removal	Vessel and vehicle recovery
Hazardous waste debris removal	Wetland and parkland debris
Hazardous tree and stump removal	White goods and putrescent waste removal

**Private Property/Right-of-Entry Debris Removal**

Our team has administered many of the largest private property debris removal (PPDR) programs in U.S. history. Tetra Tech assists communities with ensuring they have the legal authority via local and state ordinances to enter onto private property. We also assist with preparing submittal packages for FEMA to approve the program, promoting the Right-of-Entry (ROE) program with residents, and ensuring the program is properly documented. Included below is a sample of our PPDR projects.

**65 PRIVATE PROPERTY DEBRIS REMOVAL PROJECTS MANAGED**



**SCOPE TASKS**

- Application Administration
- Data Management
- Debris Removal Monitoring
- Demolition Program Management
- Historical/Environmental Review
- Individual Property Debris Tracking
- Property Close Out
- Property Survey
- Public Advertisement
- Reduction/Disposal Monitoring
- Scheduling

**Client List:**

- Surfside Condo Collapse (2021) 1 client
- Wildfires (2021) 15 clients
- Hurricane Laura (2020) 1 client
- North Branch Wildfires (2020) 9 clients
- Hurricane Michael (2018) 2 clients
- Hurricane Florence (2018) 1 client
- Hurricane Michael (2018) 3 clients
- Camp Wildfire (2018) 1 client
- Mendocino-Complex Fire (2018) 1 client
- Carr Wildfire (2018) 1 client
- Severe Storms/Tornadoes (2017) 1 client
- Hurricane Harvey (2017) 2 clients
- NorCal Wildfires (2017) 4 clients
- Thomas Wildfire (2017) 1 client
- Detwiler Wildfire (2017) 1 client
- Helena Wildfire (2017) 1 client
- Flooding & Severe Storms (2016) 1 client
- Flooding (2016) 1 client
- Erskine Wildfire (2016) 1 client
- Clayton Wildfire (2016) 1 client
- Butte Wildfire (2015) 1 client
- Valley Wildfire (2015) 1 client
- Flooding (2014) 1 client
- Flooding (2013) 1 client
- Hurricane Sandy (2012) 1 client
- Hurricane Isaac (2012) 1 client
- Wildfires (2011) 1 client
- Ice Storm (2009) 1 client
- Flooding (2008) 2 clients
- Hurricane Ike (2008) 2 clients
- Hurricane Gustav (2008) 1 client
- Hurricane Katrina (2005) 2 clients
- Hurricane Wilma (2005) 1 client

**Leaning Trees, Hanging Limbs, and Stump Removal**

Tetra Tech offers expertise in reimbursement for the removal of leaning trees, hanging limbs, and stumps. Our team has extensive experience helping communities avoid the de-obligation of funds or non-reimbursement for these activities due to ineligible work. **In 2020, our team monitored the removal and disposal of nearly 200,000 hazardous trees and hangers following consecutive Hurricanes Laura, Sally, Delta, and Zeta.**

**2.2 million**

**HAZARDOUS TREES AND LIMBS REMOVED**



**1,738,389 HANGING LIMBS**



**245,122 LEANING TREES**



**162,165 STUMPS**



**FEATURED EVENTS**

CA Wildfires (2015 - 2022)	3,777 Limbs   246,140 Trees
Hurricane Sally (2020)	43,692 Limbs   5,888 Trees
Hurricane Laura (2020)	120,198 Limbs   13,160 Trees
Hurricane Zeta (2020)	34,245 Limbs   4,902 Trees
Hurricane Michael (2018)	27,562 Limbs   9,949 Trees
Hurricane Florence (2018)	14,609 Limbs   259 Trees
Hurricane Irma (2017)	316,108 Limbs   94,030 Stumps
Hurricane Matthew (2016)	183,214 Limbs   12,769 Trees
Winter Storm Alfred (2011)	84,135 Limbs   12,355 Trees
Hurricane Ike (2008)	364,860 Limbs   29,489 Trees
Midwest Winter Storm (2007)	99,382 Limbs   2,682 Trees

### Vessel and Vehicle Recovery

Tetra Tech is able to assist the City in documenting the locations and quantities of vessel and vehicle debris in the City and presenting a case to FEMA to approve and fund the program. The City must first show that they have a legal responsibility to remove the debris and that the debris is not the responsibility of another state or federal agency such as the Florida Department of Environmental Protection, USACE, or the NRCS. Vessel and vehicle debris on private land may present unique ingress/egress challenges and require ROE agreements for access.

**Tetra Tech has monitored vessel recovery for several clients, including:**

- **NJDEP** – Hurricane Sandy | 80 vessels
- **Escambia County, FL and Monroe County, FL (Florida Keys)** – Hurricane Wilma | 450 vessels
- **Beaufort County, SC** - Hurricane Matthew | 50+ vessels
- **FDEP** - Hurricanes Matthew, Michael, and Irma | 64 vessels
- **Miami-Dade County** - Surfside Condo Collapse | 100 vehicles

### Hazardous Material Removal

Major disasters, particularly those that involve significant flooding, will result in the need to address hazardous materials. Typically, the U.S. Environmental Protection Agency (EPA) is responsible for identifying and removing large quantities of household hazardous waste (HHW) (containers over 5 gallons such as large commercial/industrial storage tanks, propane tanks, 55-gallon drums, etc.). Local governments are charged with implementing collection programs for HHW, including but not limited to containers with paints, pesticides, household cleaners, oils/solvents, and fuels. Our team has broad experience helping local governments plan, procure, implement, and track disaster-related HHW collection programs at curbside or drop-off locations. **Following Hurricane Ike, a storm surge covered almost all of Galveston Island, Texas. Our team helped the City of Galveston implement one of the largest post-disaster HHW programs in U.S. history, in addition to working cooperatively with the EPA on large quantity HHW recovery.**

### Experience Defending Client's Interests During an Audit

A representative example of past clients we have supported during dispute resolution includes, but is not limited to:

- Our team is currently retained by the Louisiana Governor's Office of Homeland Security and Emergency Preparedness (GOHSEP) to assist on hundreds of appeals related to 11 disasters dating back to Hurricane Katrina in 2005.
- Our team is currently working with FEMA's new VAYGo process for clients in Texas such as Fort Bend County and the City of Houston along with the Commonwealth of Puerto Rico.
- During our work with the State of Vermont, Tetra Tech worked on five (5) appeals for PWs related to Tropical Storm Irene. As a result, four appeals were overturned, and one appeal upheld.
- Our team supported the successful appeal of over \$400,000 of previously deobligated funds in response to the 2004 Hurricanes Charley, Frances, and Jeanne for Lake County, Florida. These funds were associated with debris collected on private roads and gated communities. Our team did a comprehensive GIS analysis of the debris collected in question and was able to appeal the decision and obtain reimbursement from FEMA.

## 2. Qualifications of Key Team Members

Tetra Tech has assembled a project team with the qualifications and expertise necessary to support the City following a disaster. The individuals selected for this project not only have national expertise from having worked on every major disaster in the past decade, but also have **hands-on experience working on prior (or current) Florida-based projects**. As a result, our staff has an in-depth understanding of how disaster response and recovery works in Florida.

### Senior Management and Advisory Team

Our senior management and advisory team will provide expert oversight and assistance at critical junctures. This team is prepared to provide both tactical and strategic guidance for the duration of any disaster recovery operation. These individuals bring decades of disaster debris monitoring and reimbursement expertise. **Abbreviated Resumes for project management and advisory staff have been provided in the Appendix.**



**Mr. Burgiel, President and Senior Advisor.** As president of Tetra Tech Disaster Recovery, Mr. Burgiel will provide executive-level oversight to **help our team meet the City's needs and expectations and serve as an executive sponsor to overcome challenges faced in operation.** Mr. Burgiel's disaster-related work has included serving as principal in charge of over 100 projects, helping clients throughout the country prepare for, respond to, and recover from natural and human-caused disasters. Mr. Burgiel has overseen operations for teams in communities throughout Florida (Hurricane Ian and Nicole); in Puerto Rico (Hurricane Maria); Miami-Dade County and the City of Winter Park (Hurricane Irma); Richland County, South Carolina (Historic 1,000 Flooding Event); the New Jersey Department of Environmental Protection (NJDEP) (Hurricane Sandy); State of Connecticut (Hurricane Sandy); State of Louisiana (Hurricane Isaac); City of New Orleans, LA (Hurricane Katrina Residential Demolition Program); and Harris County, Texas (Hurricane Ike), to name a few.



**Mr. Ralph Natale** is the director of post-disaster programs for Tetra Tech. He leads the practice by developing programs, providing daily project support, and providing oversight and guidance to his team of project managers and projects. Mr. Natale is an expert in FEMA-PA Grant Program reimbursement policies and has administered nearly 70 projects in his 15-year career. Mr. Natale has served as a principal in charge, project manager, data manager, and operations manager in response to some of the country’s largest debris-generating disasters, including Hurricanes Ian, Matthew, Katrina, Ike, and Sandy. Mr. Natale has led operations focused on managing and documenting the removal of over 66 million CYs of debris and over 1.7 million hazardous trees, the program management of over 35,000 demolitions, and over \$4.5 billion of reimbursed invoices.



**Ms. Allison McLeary, JD**, Senior Policy Advisor, will apply her program administration and policy expertise to facilitate procedural and data compliance with FEMA requirements. Ms. McLeary is an Attorney and experienced emergency response and recovery executive with a demonstrated history of building meaningful relationships across all levels of government. As the former **Recovery Bureau Chief of the Florida Division of Emergency Management and Recovery Legal Counsel for GOHSEP**, she offers direct, senior-level experience administering grant programming in coordination with federal agencies.



**Mr. Tommy Webster** has more than 20 years of consulting and operational experience with major field environmental and civil works projects. Mr. Webster brings a unique perspective, having spent many years of his career on the consulting side at Tetra Tech and its preceding organizations, as well as at a major national civil construction and debris contractor (Phillips and Jordan). He brings a strong understanding of Federal Emergency Management Agency (FEMA) Public Assistance (PA) Program policy and how the policy applies to post disaster recovery. Through his experience, Mr. Webster has managed planning, response, and recovery/reconstruction for a wide variety of projects and disasters including hurricanes, floods, ice storms, fires, oil spills, and other disaster incidents. He has worked projects large and small for clientele across the United States including the Army Corps of Engineers (USACE), state government and agencies, counties, cities, water management/flood control districts, and more.

### Project Field Operations Team

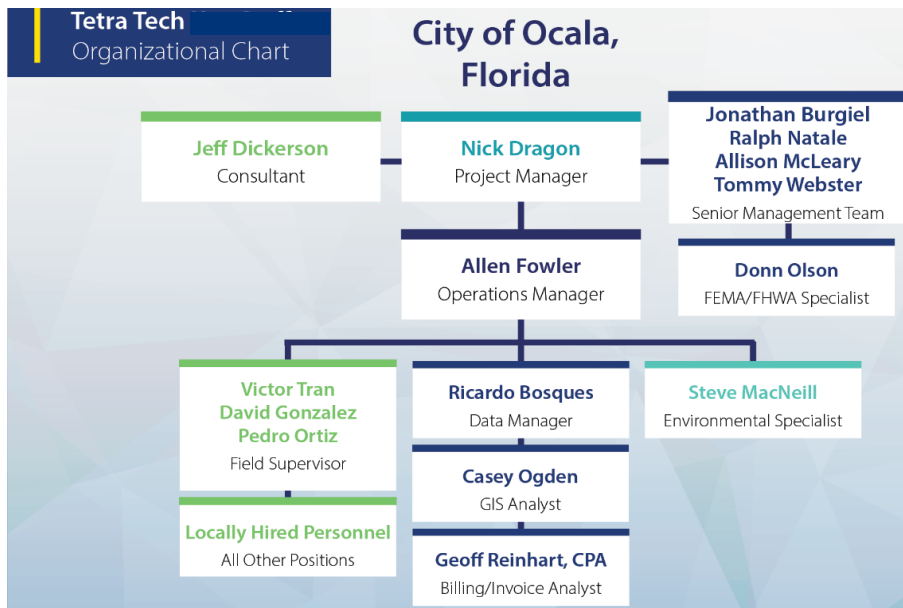
Tetra Tech has identified a team of field staff to support the City. We have selected team members who have previous experience in similar operations. Brief summaries of each team member’s experience are provided below. **Resumes for project field operations staff have been provided at the end of this section.**

Proposed Staff	Summary of Qualifications
<b>Nick Dragon</b> , Project Manager	Mr. Dragon has 13+ years of experience in environmental remediation and debris removal monitoring, responding to major disasters including Hurricanes Laura, Florence, Irma, Harvey, and Ike, and the California Camp Fire. He has overseen some of the largest debris monitoring projects in recent history, including managing Calcasieu Parish, LA’s Hurricane Laura response of nearly 7 million cubic yards of debris. He also has 8+ years of experience in emergency water and fire damage remediation.
<b>Allen Fowler</b> , Operations Manager	Mr. Fowler is responsible for overseeing field operational activities for field monitors, supervisors, and contractors. This includes hiring and training employees and managing quality assurance. Additionally, Mr. Fowler is adept at strategizing process improvements to ensure tasks are completed in a timely and compliant manner.
<b>Ricardo Bosques</b> , Data Manager	Mr. Bosques is a specialist in data and automated debris management system (ADMS) technology at Tetra Tech. He uses his understanding of FEMA requirements to oversee multiple projects, implement Tetra Tech’s ADMS technology, and manage field data managers and invoice analysts. Mr. Bosques ensures auditable datasets that meet project worksheet requirements and establishes quality assurance and project reporting standards for debris monitoring operations.
<b>Jeff Dickerson</b> , Consultant	Mr. Jeffrey Dickerson has more than 30 years of experience in program management, with extensive experience in technical organizational management, training, and readiness exercises. He is a military veteran with skills in leadership, training, and personnel development. As the Technical Applications Manager, Mr. Dickerson is responsible for the planning, development, deployment of technical applications supporting emergency response operations for the firm.
<b>Victor Tran</b> , Field Supervisor	Mr. Tran is experienced in operations and data management for disaster debris removal projects. He joined Tetra Tech as a debris monitor in 2018 in response to Hurricane Michael and has since assisted Tetra Tech clients with disaster debris removal efforts from five additional disasters. As he has

	progressed into a management role, Mr. Tran has maintained a strong focus on worksite safety while effectively assisting clients in restoring their communities.
<b>David Gonzalez,</b> Field Supervisor	Mr. Gonzalez is an experienced field supervisor who has supported several projects for Tetra Tech, including both hurricane and wildfire projects. Involved in all aspects of disaster recovery, Mr. Gonzalez is most familiar with overseeing debris monitoring processes such as training, documentation, eligibility, truck certifications, and data management. Most recently, Mr. Gonzalez served as an operations manager during the Hurricane Ian clean-up efforts.
<b>Pedro Ortiz,</b> Field Supervisor	Pedro Ortiz is a seasoned disaster response professional with extensive experience in task force leadership, operations management, field supervision, and debris monitoring. Throughout his career, Mr. Ortiz has responded to numerous natural disasters, including hurricanes and wildfires, in various locations across the United States.
<b>Casey Ogden,</b> GIS Analyst	Mr. Casey Ogden has more than 20 years of experience in Geographic Information Systems (GIS), with experience with the ESRI suite of products. He holds a Master's degree from the Florida State University with a Certificate of Emergency Management, as well as, a Bachelor's Degree from Louisiana State University in the field of Geography. As the geospatial applications manager, Mr. Ogden manages a team of five GIS personnel and is responsible for developing GIS applications that are efficient, accurate, and cutting edge.
<b>Geoff Reinhart,</b> Billing/Invoice Analyst	Mr. Geoff Reinhart is an experienced CPA with both public and private sector experience. As a billing and invoice analyst at Tetra Tech, Mr. Reinhart is responsible for reconciling contractor invoices and performing quality control on data to ensure than all FEMA guidelines for debris removal monitoring are successfully fulfilled.
<b>Steve MacNeill,</b> Environmental Specialist	With over 35 years of experience, Mr. MacNeill has managed and performed hazardous waste site projects for private, local, state, and federal clients. He has participated in various hazardous waste projects including wildfire-related debris characterization and removal, CERCLA-related activities, and NOA characterization projects. Mr. MacNeill has also prepared and administered numerous Federal, State, and local grant applications and has extensive experience in environmental site assessments, groundwater monitoring, and water production wells.
<b>Donn Olson,</b> FEMA/FHWA Specialist	Mr. Donn Olson at Tetra Tech is a disaster recovery expert who helps clients navigate federal grant programs for disaster recovery. He specializes in maximizing eligible reimbursements through his knowledge of FEMA's Public Assistance Program and extensive experience in Project Worksheet formulation. Mr. Olson is intimately familiar with FEMA policies and technology and has excellent communication skills when working with stakeholders. He also provides audit preparation and closeout assistance to ensure maximum reimbursement for clients.

**Organizational Chart**

The proposed organization structure is based on industry best practices and an understanding of geography and the distinct management responsibilities of each position. Our proposed organizational structure ensures orderly communication, distribution of information, effective coordination of activities, and accountability. Tetra Tech’s project team can scale as needed, coordinate response, establish common processes for planning and managing resources, and adapt organizational structure to match the needs and complexities of projects. **Resúmenes have been included in the at the end of this section.**



### Professional Certifications, Training, and Licensing

Tetra Tech remains abreast of the latest guidance, issues being debated, and current best practices through participation in expert groups, attendance in training and conference sessions, and working with national experts in disaster recovery operations, emergency management, national security, information technology, public health, transportation, and critical infrastructure protection. **Our proposed team possesses key certifications that help them provide quality technical services and have attended numerous training courses related to debris operations and emergency management.**

Some of these include:

- Occupational Safety and Health Administration (OSHA) Disaster Site Worker Course
- OSHA 10-Hour Construction Safety Certification
- OSHA 40-Hour HAZWOPER Certification
- G-202: Debris Management
- IS 100: Introduction to Incident Command System
- IS-120: Introduction to Exercises
- IS 191: ICS/EOC Interface
- IS-200: Basic Incident Command
- IS 242: Effective Communication
- IS-288: Local Volunteer and Donations Management
- IS-230: Fundamentals of Emergency Management
- IS-547: Introduction to Continuity of Operations (COOP)
- IS-631: Public Assistance Operations I
- IS-632: Introduction to Debris Operations
- IS-634: Introduction to FEMA's Public Assistance Program
- IS-700: National Incident Management System
- IS-800: National Response Program
- ICS 300: Intermediate ICS for Expanding Incidents
- Intermediate Workzone Traffic Control (FDOT)

Additionally, all collection and disposal monitors and field supervisors must attend a debris monitoring training session prior to working. In addition, our environmental health and safety training program helps our business operate in a manner that protects the health and safety of our employees, customers, business partners, community neighbors, and the environment. Our field teams attend daily safety sessions with field employees to discuss potential hazards and review safe work practices.

### 3. Financial Stability/Bonding Capacity

Tetra Tech is a stable company with annual operating revenue exceeding \$4.5 billion. Our size, diversity, and financial stability give us the capacity to undertake and successfully complete projects of all sizes and complexities with no financial risk to our clients. Tetra Tech has nearly \$1 billion of liquidity available, allowing us to meet contractual obligations for disaster response operations regardless of funding flows or payment processing during large disasters. We have proven this in management of more than \$12 billion in federal funding across our more than 650 activations in response to over 100 declared disasters. Our record of performance reflects a well-managed, growing, successful, and financially strong and stable company. In an era marked by significant economic upheaval, Tetra Tech has been able to sustain fiscal discipline, maintain a stable and diverse contract and client base, and provide high-quality, cost-effective services. **Tetra Tech has included a letter from our surety company as evidence of bonding capacity on the following page.**

Tetra Tech has **more than \$969 million** available. This allows us to meet contractual obligations, regardless of funding flows or payment processing during disaster activations.

The City of Ocala gains the **stability and resources** of a \$4.5 billion company.

**\$185 million**  
Available Cash

---

**\$784 million**  
Borrowings at our disposal

---

**\$969 million**  
Total liquidity available

“Tetra Tech is grateful for the opportunity to renew our partnership with the City. We are supportive of this proposal from the highest levels of our organization. With nearly \$1 billion of liquidity available, we are confident that **Tetra Tech’s financial capacity and stability exceed the potential financial demands of this contract.**”



– Steven Burdick,  
Chief Financial Officer

## 4. References

Tetra Tech is proud of the relationships held with our clients and believe that the references below are comparable to the City of Ocala and will provide evidence of Tetra Tech's reliability and capacity to perform projects of all sizes. Due to page limitations, additional information will be provided upon request.

### City of New Smyrna Beach, Florida

Mr. David Ray, Director of Maintenance Operations | 124 Industrial Park Avenue New Smyrna Beach, FL 32168 | 386-424-2202 | [dray@cityofnsb.com](mailto:dray@cityofnsb.com)

The City of New Smyrna beach experienced severe damage and catastrophic flooding when Category 4 Hurricane Ian hit Florida in 2022. Tetra Tech was activated by the City to provide disaster debris monitoring services and assisted with damage assessment and debris estimation. Tetra Tech also resolved contractual issues and trained local debris monitors. The team helped activate the debris management site and set up a citizen drop-off site. Over 100,000 cubic yards of debris were removed from the City in approximately 60 days, with Tetra Tech providing invoice reconciliation and FEMA reimbursement support.

### City of Pensacola, Florida

Fred Crenshaw, Interim Solid Waste Director | 2759 North Palafox St. Pensacola, FL 32501 | 850-982-2830 | [FCrenshaw@cityofpensacola.com](mailto:FCrenshaw@cityofpensacola.com)

The City of Pensacola, with a population of 53,600 in northwest Florida has faced numerous disaster events in the past 20 years, including Hurricane Ivan, Hurricane Dennis, the Deepwater Horizon Oil Spill, and Hurricane Sally. In September 2020, Category 2 Hurricane Sally caused significant damage to the City, including wind and storm surge damage, generating large amounts of debris and devastating marine infrastructure. We responded to the City's sanitation department within hours of the hurricane's impact to assess the damage and formulate a debris management mobilization. Within 72 hours, Tetra Tech hired and trained over 75 debris monitors, and monitored the collection and disposal of over 574,000 cubic yards of debris and 4,500 hanging tree limbs. In 2004, the City was hit by a near Category 4 Hurricane Ivan, which brought down a significant portion of the City's oak canopy. Tetra Tech worked with the City's contract debris hauler to develop collection strategies and monitored the removal of almost 1.4 million cubic yards of debris. Additionally, Tetra Tech prepared reports and appeals that helped the City recover approximately \$3 million in FEMA funding that had been initially deobligated.

### City of St. Petersburg, Florida

Bryan Eichler, Assistant Director | 1400 19<sup>th</sup> St. N. St. Petersburg, FL 33713 | 727-647-7715 | [Bryan.eichler@stpete.org](mailto:Bryan.eichler@stpete.org)

St. Petersburg, Florida, is a large city with a population of 264,000 people on the Gulf Coast. In September 2022, Tetra Tech responded to Category 4 Hurricane Ian by providing debris monitoring services for the City's right of way. Tetra Tech hired and trained more than 52 debris monitors. Additionally, in 2017, Tetra Tech was able to anticipate potential challenges during Hurricane Irma and positioned senior staff in the City's emergency operations center. Tetra Tech monitored and documented the removal, reduction, and disposal of over 164,000 cubic yards of eligible debris during both hurricanes. Tetra Tech maximized communication and efficiency by utilizing the same key personnel during both activations.

### City of Gulfport, Mississippi

Wayne Miller, Director of Public Works | P.O. Box 1780 Gulfport, MS 39502 | 228-214-2238 | [wmillier@gulfport-ms.gov](mailto:wmillier@gulfport-ms.gov)

Gulfport, Mississippi, with a population of 68,000, is highly vulnerable to tropical weather impacts. After Category 3 Hurricane Zeta in 2020, Tetra Tech responded quickly to assess damage and manage debris. Over 400,000 cubic yards of debris were monitored, and 25 to 75 debris monitors were hired and trained within 72 hours. Tetra Tech also helped document the City's labor and equipment usage. During Category 4 Hurricane Ida in 2021, Tetra Tech certified trucks, hired and trained monitoring staff, and monitored the collection of over 29,200 cubic yards of debris.

### St. Johns County, Florida

Ashley Mikler, Supervisor - St. Johns County Solid Waste Division | 2750 Industry Center Road St. Augustine, FL 32084 | 904-827-6980 | [amickler@sjcfl.us](mailto:amickler@sjcfl.us)

Tetra Tech has been serving St. Johns County Public Works for almost 15 years, helping develop their disaster debris management plan and providing debris monitoring services for multiple disasters. In 2022, Tetra Tech monitored over 45,000 cubic yards of debris after Category 4 Hurricane Ian, including private property debris removal. We also assisted the County after Category 5 hurricanes Irma (2017) and Matthew (2016), monitoring the removal of almost 675,000 and 720,000 cubic yards of debris, respectively. We also helped with beach debris removal and hazardous tree removal. Tetra Tech provided support for FEMA reimbursement in all cases.

### Volusia County, Florida

Arden Fontaine, Activity Project Manager | 123 W Indiana Avenue, Room 402 Deland, FL 32720 | 386 736 5965 x15621 | [afontaine@volusia.org](mailto:afontaine@volusia.org)

In 2007, Tetra Tech monitored the collection and disposal of 135,000 cubic yards of debris following the Groundhog Day tornadoes. In 2016, Tetra Tech assisted Volusia County in planning and managing Category 5 Hurricane Matthew recovery efforts, monitoring over 1 million cubic yards of debris. Tetra Tech also provided grant management services. In 2022, Tetra Tech assisted Volusia County in debris removal efforts for both Category 4 Hurricane Ian, followed closely by Category 1 Hurricane Nicole, monitoring over 500,000 cubic yards of debris.

### 5. Projects Over 500,000 CYs

Clients count on us to respond in their time of need, and we have never failed to deliver. Our team of debris experts and vast resources allow us to respond to our clients’ deployment and mobilization needs, regardless of size, location, or type of disaster. Tetra Tech understands the special considerations related to large-scale operations. The exhibit below provides an abbreviated experience matrix for projects over 500,000CYs conducted since 2020. Our 95+ activations have yielded grant program management engagements with clients garnering and retaining **99.8 percent** of the funds received.

#### Projects Over 500,000 CYs (2019–Present)

Year	Disaster	Representative Client(s) <i>*Work in Progress</i>	Contract Value	Size (CYs)	Contract Management	Data Management	Collection Monitoring	Disposal Monitoring	Leaner/Hanger/Stub Removal	Private Property Debris Removal	Marine/Waterway	FEMA Reimbursement	
2022	Hurricane Ian Clients Served: 30	<b>City of Cape Coral, FL*</b> Terry Schweitzer (518) 415-9718   tschweitzer@capecoral.gov	Ongoing	1,200,000	■	■	■	■			■	■	
		<b>Charlotte County, FL*</b> John Elias (941) 575-3646   john.elias@charlottecountyfl.gov	Ongoing	4,500,000	■	■	■	■			■	■	
		<b>Collier County, FL*</b> Vanessa Caporale (239) 252-2400	Ongoing	900,000	■	■	■	■			■	■	
		<b>Polk County, FL*</b> Michael Teate MichaelTeate@polk-county.net	Ongoing	1,300,000	■	■	■	■				■	
		<b>Tangipahoa Parish, LA*</b> Missy Cowart (985) 748-3211   mcowart@tangipahoa.org	Invoices Pending	2,930,005 (ongoing)	■	■	■	■	■	■	■	■	■
2020	Hurricane Sally Clients Served: 4	<b>Baldwin County, AL</b> Terri Graham (251) 331-4158   TGraham@baldwincountyal.gov	\$6,910,848	4,425,281	■	■	■	■				■	
		<b>City of Pensacola, FL</b> John Pittman (850) 435-1894   Jpittman@cityofpensacola.com	\$1,109,949	574,579	■	■	■	■					■
2019	Hurricane Laura Clients Served: 17	<b>Calcasieu Parish, LA</b> Theresa Champeaux (337) 540-8094   tchampeaux@calcasieuparish.gov	\$8,552,060	6,950,234	■	■	■	■				■	
		<b>City of Lake Charles, LA</b> Jeff Jones (337) 540-1707   jjones@cityoflc.us	\$5,559,677	4,314,878	■	■	■	■					■
		<b>City of Sulphur, LA</b> Stacy Dowden (337) 764-8044   sdowden@sulphur.org	\$1,264,144	838,412	■	■	■	■					■
		<b>Orange County, TX</b> Leon George (409) 238-9169   lgeorge@co.orange.tx.us	\$1,158,261	723,064	■	■	■	■					■

### 6. Resources/Equipment

Tetra Tech understands the critical nature of asset management and logistics following a disaster. To that end, Tetra Tech maintains a warehouse located in Orlando with over 120 fully stocked bays of debris monitoring supplies capable of supporting over 50 simultaneous recovery operations for over 90 days. **Tetra Tech has consistently deployed large-scale mobilizations of hundreds of staff and thousands of dollars’ worth of equipment to multiple clients in a matter of days and on very short notice.** The exhibit below lists available equipment and facilities readily available upon activation.

#### Resource List

##### Field Documents\* Currently in Our Warehouse

ADMS Handheld Units	6,000
Time and Materials Forms	5,000
Truck Certification Forms (Printer Rolls)	5,000
ADMS Ticket Stubs	800,000
Haul Out Ticket Stubs	300,000
Placards	4,000

Field Documents* Currently in Our Warehouse	
<b>Kits</b>	
Project Manager Kits (1 Per 100 Monitors)	40
Project Coordinator Kits (1 Per 100 Monitors)	40
Human Resources Kits (1 Per 100 Monitors)	40
Collection Monitor Kits (1 Per 25 Monitors)	90
Disposal Monitor Kits (1 Kit Per Disposal Site)	100
Leaner/Hanger/Stump Kits (1 Per 50 Monitors)	40
<b>Equipment**</b>	
Laptops	480
Mifi (Mobile Wireless)	90
High Speed Scanners	70
Printers	45
Mobile Command Office	2
Gas Trucks	To Be Obtained from Pre-contracted Vendor
Modular Work Locations	To be obtained from pre-contracted vendor
Generators	To be obtained from pre-contracted vendor
Portable Facilities	To be obtained from pre-contracted vendor

\*All field documents are replenished as they are needed. Tetra Tech has several emergency vendors with the ability to fulfill supply needs in 24 hours or less.

\*\* ADMS units are readily available and can be ordered as needed on a 24-hour turnaround.

## C. Staffing Plan/Workload

### 1. Staffing Plan

Our team has monitored and obtained FEMA, FHWA, and NRCS reimbursement on over 30 debris removal projects in excess of 1 million CYs of debris and understands the significant resource commitment and effort that is necessary to manage and monitor large-scale debris removal operations for local governments. Our record of success includes serving over 300 state and local government clients in response to over 90 presidential disaster declarations over the last decade. Our team has obtained **over \$12 billion in reimbursement funds** for our clients from federal agencies.

Tetra Tech is committed to providing the City an experienced project manager and consistent project management team that will expedite recovery efforts by establishing a coordinated and organized approach to debris removal. Our dedicated team is available to the City 365 days per year. A full list of personnel assigned to the City of Ocala can be found in section B.2, Qualifications of Key Team Members. Key Personnel listed in this proposal are authorized to give and support information, both in writing and oral presentation, for Tetra Tech. **All staff can be reached via the Tetra Tech Disaster Recovery office at (321) 441-8500 or by email at TDR.Contracts@tetratech.com.** Additionally, Tetra Tech has provided the direct contact information for the proposed project manager, Nick Dragon, below.



**Nick Dragon, Project Manager**  
**Office:** 2301 Lucien Way, STE 120 Maitland, FL 32751  
**Direct Line:** 832-436-7151  
**Email:** Nicky.Dragon@tetratech.com

### Incident Command Structure

Tetra Tech’s emergency management professionals, many of whom are certified ICS instructors, provide guidance to our disaster recovery staff on how to effectively organize and respond to disasters. Our debris project managers have spent many hours in emergency operations centers across the country and understand how ICS works at the local and state level. Our debris project managers know how to apply IC-100, 200, 700, and 800 training in the field.

We understand the value ICS has in organizing for disasters, so we strive to implement these principles into our business processes. Per ICS, during disaster response operations, our structure includes an incident commander and section chiefs for operations, logistics, action planning, and finance and administration. We establish twice daily calls using Microsoft Teams with the incident command team and section chiefs to establish our incident action plan, identify resources needs, and plan for any deficiencies. We have a dedicated health and safety officer who oversees the operation and coordinates with health and safety personnel at each project location.

## Rapid Response Methodology

In many cases, we respond rapidly within 24 hours of receiving notice-to-proceed and fully staff projects within 7 days. Our staffing process has rapidly mobilized project teams for major disaster recovery projects nationwide, leveraging both our in-house and on-call staff with demonstrated disaster response training and experience. We prioritize deploying local staff to the maximum extent practical, which not only benefits the local economy but also reduces mobilization and transportation costs. *Our team has successfully deployed large-scale mobilizations of hundreds of staff and thousands of dollars' worth of equipment to multiple clients in a matter of days and on very short notice.*

Ultimately, the strategy, structure, and staffing requirements for the project organization are based on client expectations and the desired outcome. Tetra Tech's project team can scale as needed, coordinate response, establish common processes for planning and managing resources, and adapt organizational structure to match the needs and complexities of projects. A sample of rapid deployments and timeframes is provided below.

**Representative Tetra Tech Response Deployment**

Event and Year	Staff Mobilized	Mobilization Periods
Hurricane Ian (2022)	1,300	5 days
Hurricane Laura (2020)	600	4 days
Hurricane Michael (2018)	665	4 days
California Wildfires (2018)	1,000	7 days
Hurricane Florence (2018)	450	3 days
Hurricane Harvey (2017)	1,417	10 days
Hurricane Irma (2017)	2,452	10 days
Hurricane Matthew (2016)	800	5 days

## 2. Workload

While Tetra Tech is an organization of over 27,000 employees with the capability to mobilize for numerous communities, we are very careful not to overextend our staff and resource capability to ensure that we can successfully meet our clients' expectations. Upon careful consideration of these contractual obligations and the capacity of our logistics, equipment, staffing, and ability to mobilize across Florida, we certify that the City will receive our full commitment to ensure this contract's success at all times. Moreover, we are intentionally assessing future engagements in the area to ensure that we can successfully respond and deliver with dedicated attention once awarded the work. As elaborated throughout this proposal, we have the existing staff, systems, and policies needed to respond to the City's needs rapidly and effectively.

We have successfully accomplished large-scale, rapid deployment before, and are prepared to do it again. In 2017, Tetra Tech successfully deployed more than 6,000 field staff throughout the country to respond to clients affected by Hurricane Irma in Florida, Hurricane Harvey in Texas, Hurricane Maria in Puerto Rico, and multiple wildfires in California. Due to the nature and deep pool of resources of our firm, we are able to scale to meet the City's need regardless of size or scope of work. As demonstrated by our prior success in multiple simultaneous activations across the country, Tetra Tech's size, depth, and breadth of resources have consistently proven to be an asset for our clients.

We are proud of our local presence and work in Florida, and we want to be known in our hometowns for providing excellent service to our communities. The table below outlines our experience providing a vast range of disaster recovery services to clients throughout the State of Florida. In efforts to serve our local communities, Tetra Tech has recently put full focus on our clients impacted by the devastating effects of Hurricane Ian, as shown by the map on the right.

Although we maintain multiple clients in Florida, our experience successfully managing numerous response and recovery operations in the State is proof that we have the staff, resources, and expertise to execute a safe and quick response and restore the City's normal operations as quickly as possible. Our staff of industry experts has applied the necessary project controls to efficiently document and complete field work and has provided follow-up support, including appeal development

### Hurricane Ian Projects



and closeout audit support months, and in some cases, years after the completion of field work. As requested in the City's request for proposal, the table below summarizes the firm's current and projected workload for debris monitoring projects, including key personnel assigned.

### Scalability and Additional Resources

Our scalable disaster recovery operations are staffed by a deep bench of expert disaster recovery professionals including:

<b>9</b> Project Principals	<b>38</b> Project Managers	<b>42</b> Operations Managers	<b>55</b> Field Supervisors	<b>35</b> Project Coordinators
--------------------------------	-------------------------------	----------------------------------	--------------------------------	-----------------------------------

This core team provides management and oversight to our disaster response and recovery operations. They are seasoned experts in their field, with experience managing disaster recovery projects in response to hurricanes, floods, tornadoes, fires, ice storms, and straight-line wind events in 20 states and simultaneous activations in nine states. While the Tetra Tech senior management team has worked together for more than 15 years, the firm also frequently welcomes new talent to meet client needs. **Positions will be filled using Tetra Tech's vast network of disaster recovery professionals, including full-time employees and local hires.**

## D. Approach/Methodology

### Project Understanding

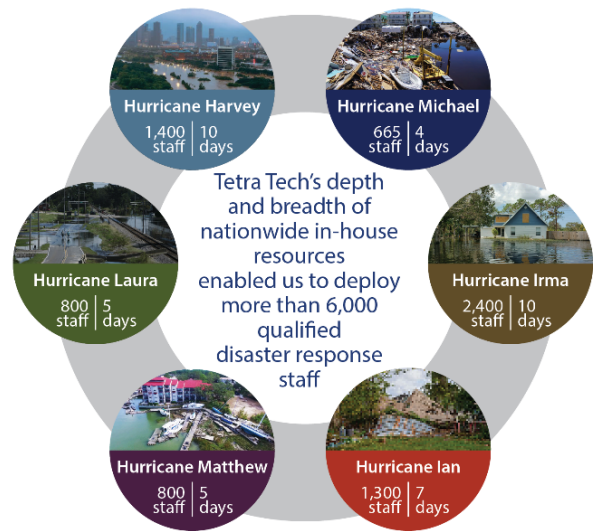
The City of Ocala is located in Marion County, in the north-central region of the state of Florida. With a strong equestrian culture, Ocala is also home to many parks, nature preserves, and lakes, providing plenty of opportunities for outdoor activities such as hiking, fishing, and kayaking. It is crucial to the City's recovery that it maintains a relationship with an experienced and reliable partner. Given the City's location in Florida, it is at risk of facing effects of hurricanes, flooding, and severe storms. The City of Ocala has a municipal solid waste collection system, which means that the city's own crews are responsible for collecting and disposing of garbage, recycling, and yard waste from its customers. This system provides several benefits, including greater efficiency and control over waste management processes, as well as improved environmental sustainability. Tetra Tech has carefully reviewed the scope of work requested in the request for proposal (RFP) and can assure the City that we have the experience, understanding, and knowledge to successfully perform all aspects of the scope of work including execution of the tasks as outlined in the City's Scope of Work.

**We are aware of the magnitude and importance of organizing and directing the necessary resources to define and carry out the tasks associated with the scope of work, and we are committed to providing a consistent and coordinated team to perform these services upon activation. Our project team will continue to dedicate themselves to the City's needs throughout the year, not just during times of activation.**

### Ability/Approach to Manage Activation of Multiple Contracts

**Clients count on us to respond in their time of need, and we have never failed to deliver.** Our ability to respond rapidly is accelerated by utilizing the following:

- Incident Command System (ICS) Structure:** Our projects are operated under the ICS structure and have a proven track record of meeting even the most challenging staffing level requirements. ICS allows the Tetra Tech project team to scale as needed, coordinate response, establish common processes for planning and managing resources, and adapt organizational structure to match the needs and complexities of projects.
- Ability to Hire Rapidly:** Tetra Tech's immediate response staffing plan utilizes our vast network of disaster recovery professionals, including full-time employees, reserve staff from the Tetra Tech Disaster Recovery Unit, and local hires. Our staffing process has rapidly mobilized project teams for major disaster recovery projects nationwide. We prioritize deploying local staff, which benefits the local post-disaster economy and reduces mobilization and transportation costs. In addition to maintaining an extensive field staff database, Tetra Tech can deploy our Field Human Resources (HR) Hiring Center, which is designed to be quickly mobilized, transported, and set up to allow near immediate response for field staffing needs. The number of trained HR representatives can scale up to 20 at a moment's notice, with the ability to hire 200+ staff per day. Under this process, local teams can be hired, trained, and deployed within 24 hours. **No firm has responded to more disaster events with more personnel in a shorter amount of time than Tetra Tech.**



- **Depth of Resources:** Tetra Tech maintains a fully stocked warehouse located in Orlando, Florida with over 120 fully stocked bays of debris monitoring supplies capable of supporting over 50 simultaneous recovery operations for over 90 days. We also have dedicated logistics staff that manages resources and supplies and can have a fully functioning field office in a matter of days, and often several simultaneous offices at once. Tetra Tech has consistently deployed large-scale mobilizations of hundreds of staff and thousands of dollars' worth of equipment to multiple clients in a matter of days and on very short notice.

## Proven Ability to Respond to Multiple Simultaneous Contract Commitments

While Tetra Tech is an organization of over 27,000 employees with the capability to mobilize for numerous communities, we are very careful not to overextend our staff and resource capability to ensure that we can successfully meet our clients' expectations. **Upon careful consideration of these contractual obligations and the capacity of our logistics, equipment, staffing, and ability to mobilize across Florida, we certify that the City will receive our full commitment to always ensure this contract's success. Moreover, we are intentionally assessing future engagements in the area to ensure that we can successfully respond and deliver with dedicated attention once awarded the work.** As elaborated throughout this proposal, we have the existing staff, systems, and policies needed to respond to the City's needs rapidly and effectively.

Due to the nature and deep pool of resources of our firm, we are able to scale to meet the City's need regardless of size or scope of work. As demonstrated by our prior success in multiple simultaneous activations across the country, Tetra Tech's size, depth, and breadth of resources have consistently proven to be an asset for our clients.

Tetra Tech is recognized for its ability to quickly and effectively respond to large-scale projects. Since 1990, Tetra Tech has been providing comprehensive emergency response services to both governmental and private clients. Most notably, we have continuously supported the U.S. Environmental Protection Agency's (EPA) Emergency Response and Removal program since 1995, serving as prime contractor or subcontractor in eight of the ten regions across the country. Over this time, we provided technical consulting expertise on nearly 2,000 emergency response efforts nationwide. We have responded to all types of incidents, including industrial plant explosions, chemical fires, train derailments, oil spills, and pipeline ruptures impacting environmentally sensitive areas, clandestine drug laboratory operations, mercury spills in residences and schools, releases of unknown hazardous substances, chemical and biological agent incidents, and natural disasters, such as floods, tornadoes, and hurricanes.

### Rapid Recruiting

During program ramp-up, we focus on hiring locally. We deploy several methods for outreach and recruitment for local staff, including targeted outreach in community hubs, extensive networking with potential candidates, and coordination with local support groups. We will work closely with our local business partners and project success sponsors to recruit and retain locally-based staff. **Tetra Tech can hire, train, and deploy local teams within 24 hours.** Our onboarding procedures are designed for rapid mobilization, thorough training, and near-immediate execution of work.

### Field Hiring Center

In addition to maintaining an extensive case management and community outreach staff database, Tetra Tech can deploy our Field Human Resources (HR) Hiring Center which is designed to be quickly mobilized to allow near immediate response for staffing needs. In fact, in most cases, Hiring Centers are ready in less than 72 hours from the notice to proceed. The number of trained HR representatives can scale up to 20 at a moment's notice – allowing Tetra Tech to **hire 200+ staff per day.** Under this process, local teams can be hired, trained, and deployed quickly.

## Methods for Mobilization/Demobilization

### Annual Pre-Storm Coordination Meetings

Tetra Tech will meet with the City on an annual basis to provide:

**Annual coordination.** Conduct annual trainings and meetings to plan and test execution protocols and identify potential risks/mitigation opportunities. This will include a half-day debris management training session.

**Contract review.** Review contracts for understanding of contractual requirements and possible cost savings.

**Communication systems checks.** Verify that communication systems function as designed and reporting needs are understood. Tetra Tech will provide a list of key personnel that may be involved in the disaster debris monitoring activities, including contact information.

Tetra Tech can provide comprehensive training and exercises for the City. Our training and exercises include realistic scenarios based on our experience responding to many of our nation's most challenging disasters. We provide detailed case studies of local government responses to disasters and the challenges they had to conquer. For annual exercise(s) to determine the adequacy of the debris removal plan and debris management process, Tetra Tech can provide

**Senior Management Advisory team member Ralph Natale is HSEEP-Certified.** Knowledge of the HSEEP framework allows our team to follow a common approach in program management, design, and development when conducting and evaluating preparedness priorities.

tabletop, functional, or full-scale exercises with Homeland Security Exercise and Evaluation Program (HSEEP)-trained instructors.

## Emergency Push

During the emergency push period, debris removal contractors coordinate with City crews to clear blocked roadways for emergency vehicle passage. Tetra Tech can support the City with emergency push efforts. Tetra Tech services may include the following:

- Coordination with the City to conduct preliminary damage assessments and road closures
- Document blocked roads that require immediate clearance
- Help staff maintain maps or databases to track road clearance progress and other essential tasks, as requested
- Administer the sign-in and sign-out of labor and equipment to track time and materials (T&M) charges
- Maintain reimbursement documentation of emergency push work
- Establish public information protocols to respond to concerns and comments

## Training

In disaster response and recovery, training is not one-size-fits-all. Tetra Tech customizes formal trainings to the duties of each new employee, and hosts trainings in the Hiring Center with a Tetra Tech certified trainer. These trainings include modules specific to each client’s needs and requirements, complete with information to ensure accurate field monitoring and ADMS implementation. By using interactive qualifying tools throughout training modules, Tetra Tech helps trainees better retain information while also screening and selecting the most qualified personnel as field monitors.

To properly instruct newly hired employees, Tetra Tech has developed a training program that includes modules specific to the City. These modules are complete with the information required to facilitate accurate field monitoring and ADMS implementation. Tools included in the training modules assist with the retention of the material and assist Tetra Tech in screening and selecting the most qualified personnel for the monitoring task. Training module topics include truck certification, load site monitor responsibilities, disposal monitor responsibilities, hazardous trees monitor responsibilities, and field supervisor responsibilities. Project managers, data managers, and operations managers follow standard operating procedures and protocols established in our concept of operations plan.

## Safety Plan, Operational Plan and Work Procedures

### Safety and Health Standards

Tetra Tech’s employees are the foundation of our business and protecting them at all work sites is our highest priority. The company subscribes to the philosophy that all occupational incidents can be prevented and that no incident is treated as an acceptable event when we execute our work. To achieve this, the company’s health and safety processes are a vital and integral part of our work. Health and safety addressed in our operations and management systems is supported by strong leadership. Tetra Tech’s leaders understand their responsibility and accountability to plan for safety and to ensure that safety measures are implemented. Preventing incidents also relies on a management system that regularly evaluates performance and identifies necessary adjustments to target continual improvement. The principal objectives of our program are codified in our written health and safety policy, which is endorsed and monitored by the highest levels of our management team.



**\*2022 data will be available by April 2023. Tetra Tech would be pleased to provide updated numbers to the City upon request.**

Tetra Tech is committed to workplace safety. As such, a project-specific health and safety plan will be developed for the scope of work. Field staff assigned to the project will be trained on the health and safety plan. Additionally, Tetra Tech project managers have completed the Occupational Safety and Health Administration (OSHA) Disaster Site Worker course and have their 10-hour Construction Safety Certification. During a debris recovery operation, Tetra Tech project managers and supervisors routinely examine the safety of field and debris staging site

Tetra Tech has incorporated **COVID-19 awareness and safety procedures** into all project Health and Safety Plans since the start of the pandemic. These protocols will be incorporated into the project Health and Safety protocols to support the City in slowing the spread of COVID-19.

operations and have the authority to shut down unsafe operations. Debris staging site monitors are equipped with the appropriate personal protective equipment, which may include hard hats, appropriate footwear, reflective vests, hearing protection, and eye protection. Additionally, Tetra Tech project managers conduct regular tailgate safety sessions with their field employees to alert them of potential work hazards and review safe work practices. *A copy of Tetra Tech's Sample Health and Safety Plan can be provided upon request.*

## Operational Plan and Procedures

Each phase of Tetra Tech project management has documented procedures that govern the execution to provide **scalable, consistent, high quality results**. We use a systematic approach with frequent in-process quality checks to execute our project processes. Our general project approach includes tasks in each of the phases: initiation, mobilization, execution, and closeout.

- **Initiation (Pre-Event)**
  - **Annual coordination** – Conduct annual trainings and meetings to plan and test execution protocols and identify potential risks/mitigation opportunities.
  - **Contract review** – Review contracts for understanding of contractual requirements and possible cost savings.
  - **Communication systems checks** – Verify that communication systems function as designed and reporting needs are understood.
- **Mobilization (Immediately Prior to and Following Event)**
  - **Scope, tasking, and budget** – Determine services required, performance metrics, schedule, and budget constraints.
  - **Deployment and resource requirements** – Develop work plan and safety plans. Update risk matrix for work plan specifics.
  - **Staging of equipment and resources** – Coordinate movement of required support equipment/supplies and setup of communication and information systems.
- **Execution (Post-Event)**
  - **On-boarding and training staff** – Conduct suitability for work checks and provide targeted training program based on work and safety plans.
  - **Monitoring** – Supervise field operations, quality assurance/quality control (QA/QC) in-process checks, prioritization of resource management, and project reporting.
  - **Communication** – Conduct status meetings and communicate project metrics and other pertinent information.
  - **Issue tracking/resolution** – Conduct issue identification, staff communication, and resolution tracking.
- **Closeout (Post-Event)**
  - **Documentation deliverable** – Produce and deliver required documentation to support auditing.
  - **Demobilization** – Manage reduction in staff, post-use maintenance, and movement of equipment and supplies.
  - **Audit support** – Provide continued availability of information systems to support closeout information requests.

## Process for Documenting and Resolving Incidents and Damages

### Vehicle Certification

Tetra Tech uses the *RecoveryTrac™* system to electronically certify all trucks used in an activation. Our team follows a proven vehicle certification procedure that complies with FEMA guidelines and results in maximum reimbursement. Our certification includes:

- Unique truck numbers for contractor crews and equipment
- Automated truck certification form, including:
  - FEMA guidelines on truck certification documentation and volume calculations
  - Barcode for automated ticket scanning
- Vehicle notations on the truck certification form and vehicle placard, informing tower monitors of sideboards, tailgates, or other modifications
- Photographs of vehicles, vehicle cavities, and drivers
- Periodic spot checks and recertification of trucks to identify trucks altered after initial certification

#### Benefits of using Tetra Tech's mobile truck certification application include:

- Electronic volume calculations
- Instantaneous upload to the *RecoveryTrac™* database
- Immediate QA/QC checks to verify the truck certification calculations
- Automated photo-matching of truck and driver photographs

The truck certification application allows us to complete truck certifications in **30% less time than with a paper-based system.**

## Debris Management Site Monitoring

Tetra Tech has industry-leading experience assisting local and state governments with locating and permitting DMS before a disaster event as well as post-disaster. Based on Florida environmental agency guidelines, DMS locations typically require baseline soil testing before use. Following the completion of work at the DMS, the baseline soil testing is used to verify site remediation is complete.

As DMS are activated, Tetra Tech will provide a minimum of two disposal monitors per site, which may scale depending on site layout and operational needs. The disposal monitors will verify that the debris contractor passes through the DMS and will verify accurate and complete documentation. Several daily audits will be performed by project managers and supervisors to verify that load call data is consistent and accurate. Documentation kept by Tetra Tech DMS disposal monitors includes:

- **Load Ticket.** Documents that debris removal complies with all FEMA requirements.
- **Disposal Monitor Log.** Used as backup documentation as required by FEMA.
- **Scale Manifest Tickets.** For weight-based debris hauling contracts, Tetra Tech will digitize and catalog scale tickets.
- **Incident Report.** Tetra Tech will document property damage, arguments, unsafe practices, and injuries.
- **Photographic Documentation.** Tetra Tech disposal supervisors will photograph a DMS frequently to create a visual timeline of the site.
- **QA/QC of Field Tickets.** Disposal monitors review and verify collection monitors' work in the field.

## Stumps and Leaners/Hangers

Guidance established by FEMA requires supporting photo documentation for each ticket issued for hazardous tree or hanger removal services. The previous standard for monitoring firms was to take supporting photographs with a digital camera and manually associate the photos to each tree ticket. Tetra Tech utilizes ADMS technology to automatically associate photographs for all hazardous tree and hanger removal operations, which eliminates the potentially extensive labor associated with this task. Additionally, our ADMS technology and software is designed to manage photo documentation by compressing and securely storing photos for field validations and audits in real time. The ability to associate photo documentation to unit rate tickets is critical for FEMA reimbursement, QA/QC, and fraud deterrence.

As work in the field is completed, the information and supporting photos are uploaded directly to our database for QA/QC checks. A QA/QC manager verifies that the photographs comply with FEMA regulations and that all measurements meet the City's contractual agreement with the contractor.

## Public Information

Tetra Tech is prepared to assist with developing a means for the City to manage inquiries from residents regarding the debris removal process. Tetra Tech has staffed debris hotlines for some of the largest disasters that have impacted the United States and can help the City establish and staff a debris hotline (including supplying equipment, phone lines, etc.) to respond to public inquires and concerns. **Public information for debris operations should focus on two components: safety for handling debris and proper set-out procedures.** Many hurricane-related injuries and deaths occur after the incident because citizens do not safely address disaster damage and debris. Some of these deaths and injuries could be avoided if residents were provided timely information on how to safely address disaster-related damage to their homes. Public information for residents should include safety precautions for assessing their damaged homes and operating dangerous equipment to remove debris. In addition to safety instructions, proper set-out procedures are critical to ensure that the City can maximize recycling opportunities, reduce impacts to landfill capacity, and maintain efficient debris removal operations.

## Describe Your Firm's Processing System

### **RecoveryTrac™ Automated Debris Management System**

Our team has spent years on research and development to streamline the debris collection documentation process, with a focus on minimizing the cost to our clients while improving the visibility of debris project operations. *RecoveryTrac™* ADMS is the result of these efforts. *RecoveryTrac™* ADMS is a scalable and fully featured disaster management application designed to address the operational challenges faced during a disaster recovery project.

**Our proprietary *RecoveryTrac™* ADMS technology is validated by the U.S. Army Corps of Engineers (USACE).** The system provides real-time collection of data and offers multiple solutions to data management, reporting, invoice reconciliation, and project controls that cannot be achieved with a paper-based program.

**Tetra Tech has implemented *RecoveryTrac™* ADMS technology on our last 200 FEMA PA-eligible projects.** On these projects, our clients and FEMA found this state-of-the-art technology to increase efficiency and improve the management of debris removal efforts.



Tetra Tech's *RecoveryTrac*™ ADMS system is regarded as the #1 debris tracking system in the industry for the following reasons:

- **Most Broadly Tested ADMS in the Industry** – *RecoveryTrac*™ ADMS is a proven system that has been used to execute the largest USACE activations involving ADMS technology, including the State of California NORCAL Fire response and the State of Georgia Hurricane Michael statewide activations. **No other system has tracked and documented as much debris as *RecoveryTrac*™.**
- **Stable and Secure ADMS System** – *RecoveryTrac*™ ADMS is the industry leader in secure data systems. The *RecoveryTrac*™ system is securely hosted in the Microsoft Azure Government high-availability, cloud-based data center with restricted access and transaction-level auditing. The database is continually backed up and immediately replicated to an off-site location. The database is geospatially based and is maintained and synchronized with the reporting database in near real-time to maximize system performance, availability, and security.
- **Unmatched Flexibility to Meet the Needs of Any Client** – The system is designed to be fully customizable and allows for multiple data collection methods to streamline the debris collection documentation process with a focus on minimizing the cost to our clients and improving the visibility and transparency of debris project operations.
- **Unrestricted by Hardware** – Because *RecoveryTrac*™ ADMS utilizes readily available hardware, there are no restrictions to the amount of ADMS units our team can provide. Our team stocks thousands of units and can expand to fit any client's needs, including multiple simultaneous activations.

**Benefits of *RecoveryTrac*™ ADMS**

**Ability to Respond.** Combined with the on-hand inventory of thousands of handheld devices and the ability to rapidly procure additional equipment through preferred vendor relationships, the City can rely on our mobilization strategy for zero-day activations in disasters covering large areas with little or no-notice.

**Simple and Intuitive.** The mobile application is simple to understand and intuitive, allowing most users to begin using the device once the standard monitor training is completed.

**Cost Effective.** *RecoveryTrac*™ ADMS combines the advantage of automation and the desire of our customers to control costs by utilizing widely available commercial equipment and increasing the simplicity of operations.

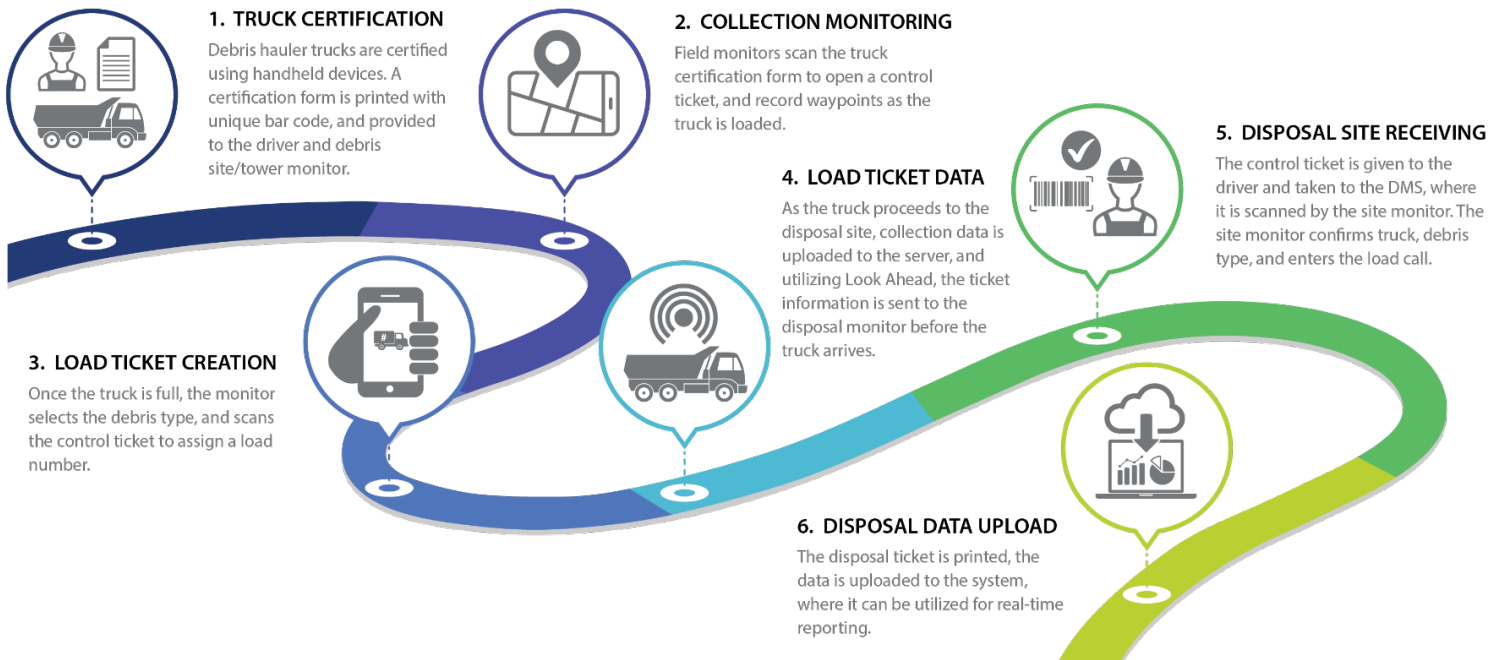
**Reliable and Stable.** Based on the Android operating system, *RecoveryTrac*™ ADMS is secure and reliable, minimizing the interruptions in field operations and reducing the number of support personnel required to maintain the system.

**Technical Support.** *RecoveryTrac*™ ADMS is designed to be self-repairing when possible; most support needs are resolved by field supervisors who are able to reach field monitors within 15–30 minutes in most cases.

**Truck Tracking.** Our system is capable of providing with real-time location data for debris hauler assets.

**Real-Time, Customized Reporting.** The key to successful management of a debris project is the timely availability of relevant information needed to make sound decisions and respond to anomalies before they become issues.

**The *RecoveryTrac*™ Process**



**Even when there is no cellular connection, the handheld devices continue to operate in connected mode; however, the data is stored on the device until a data connection is restored.** The device periodically searches for this connection, and when services are device automatically uploads the stored ticket data.

## RecoveryTrac™ ADMS Features

Tetra Tech brings significant experience and understanding in the design and build of disaster debris removal data management systems that offer data collection, storage, sharing, analysis, and reporting.

**Because of our previous experience, we have several ready-to-use components already built and ready to deploy.** These components can be quickly repurposed saving time and cost while ensuring field work starts quickly. Some examples of these existing capabilities and tools include:

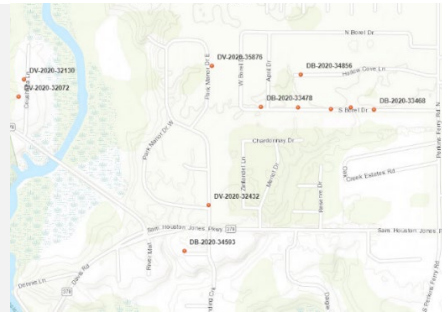
Our operational and data experience with disaster debris monitoring, combined with the best GIS and data professionals in the industry, results in **top-shelf solutions to the most complicated data and tracking needs.**

Industry-standard **ArcGIS Feature Services** delivers *RecoveryTrac™* ADMS data and serves as foundational building block for the applications.

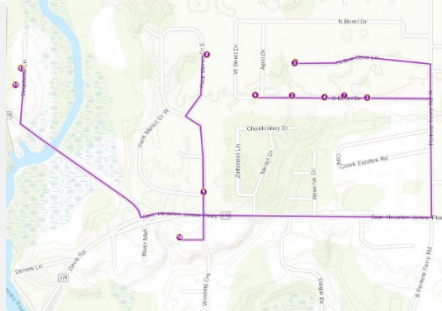
**Services:**

- [RT/RecoveryTrac\\_DebrisAuditData\\_RT2020](#) (FeatureServer)
- [RT/RecoveryTrac\\_DebrisAuditData\\_RT2020](#) (MapServer)
- [RT/RecoveryTrac\\_DebrisRemovalData\\_RT2020](#) (FeatureServer)
- [RT/RecoveryTrac\\_DebrisRemovalData\\_RT2020](#) (MapServer)
- [RT/RecoveryTrac\\_MonitorLocations\\_v1](#) (MapServer)
- [RT/RT2018\\_ProjectBoundaryData\\_v1](#) (FeatureServer)
- [RT/RT2018\\_ProjectBoundaryData\\_v1](#) (MapServer)
- [RT/RT2018\\_ProjectZoneData\\_v1](#) (FeatureServer)
- [RT/RT2018\\_ProjectZoneData\\_v1](#) (MapServer)
- [RT/RT2018\\_SiteObservationsIncidentData\\_v1](#) (FeatureServer)
- [RT/RT2018\\_SiteObservationsIncidentData\\_v1](#) (MapServer)
- [RT/RT2020\\_ProjectZoneData\\_v1](#) (FeatureServer)
- [RT/RT2020\\_ProjectZoneData\\_v1](#) (MapServer)

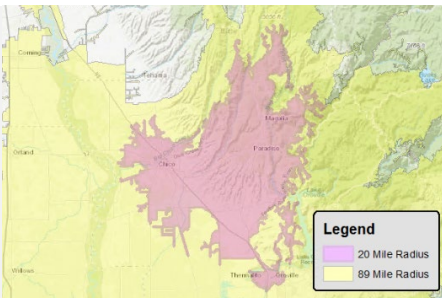
**Initial Work Surveys** document results of initial surveys to quickly collect, display, and summarize data into actionable operations planning. This data, including photographs, can be used to organize and deploy resources to improve speed and efficiency of the operation.



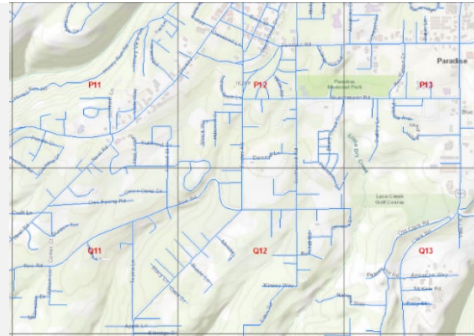
Work lists and **optimized routes** can be generated by the *RecoveryTrac™* system. As the routes are completed, the locations are marked complete.



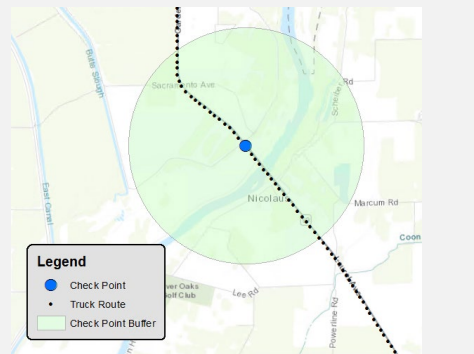
The **Driving Distance Analysis** tool is used to calculate estimated distance and drive time based on the existing road network. This planning tool is used as a parameter to design the shortest route, work list planning, and other operational factors.



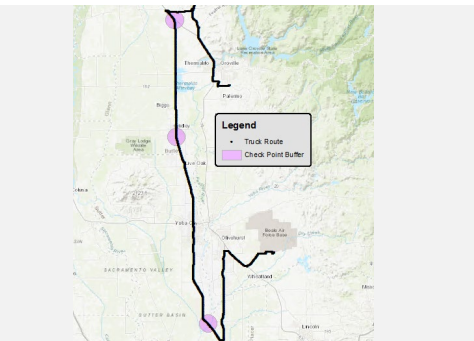
The **Standardized ROW Grid Index** layout is available in several formats, including GIS Mapping applications, mobile data collection apps, and hard copy maps. Map segment areas are configurable for size and allow attribute modification for tasks, including contractor, quality, and safety review tasks.



An **automation tool** built to validate routes taken to TDSRS/DMS. When a vehicle enters a checkpoint buffer area, the position record is annotated as passing the checkpoint. Route maps can be created, along with custom reporting as specified by operational requirements.



**Fleet tracking data** provides complete route information. The data can be made available to show live tracking or view route history. Transportation analysis services are available, or data exports can be provided for City requests.



## Invoicing and Data Management Procedures

### Reporting

Tetra Tech has extensive experience in collecting, managing, and tracking financial and project data. Our firm has a full suite of existing reports to allow for custom reporting on all metrics requested from our clients. Tetra Tech has years of experience tracking invoice amounts and payments, budget forecasting, change order and work order attributable costs, etc. We understand the importance of accurate data and cost tracking and have developed several reports over the years to enhance visibility into essential project aspects. A sample of the variety of reports we are able to issue are summarized on the following pages.

#### Daily Report

Tetra Tech has a suite of reports that are automated from *RecoveryTrac*™ ADMS and available in real-time via PC, tablet, or smart phone. Although the reports are available at any time to the City, Tetra Tech will submit a daily status report that includes daily cubic yards/tons collected by material and program, cumulative cubic yard/tons collected, number of debris monitors in the field, cumulative cubic yards/tons hauled to final disposal, and daily/cumulative hazard removals. Below are samples of these reports created for recent projects. Additionally, Tetra Tech takes pride in the customization of reports to meet our client’s specific needs and provided reports tailored to any metrics not captured in the generic reports.

## Contractor Reconciliation

The *RecoveryTrac*<sup>™</sup> system significantly reduces the amount of time needed for a contractor to generate an invoice and for the subsequent invoice reconciliation with Tetra Tech.

To expedite contractor invoice reconciliation efforts, Tetra Tech requires copies of contracts for all primary debris contractors. After reviewing the necessary contract(s), Tetra Tech sets up the *RecoveryTrac*<sup>™</sup> database to generate transactions applicable to contract terms for tickets issued to each debris contractor. Prior to the start of debris removal operations, Tetra Tech will meet with the debris contractor(s) to review:

- The invoicing processes
- Contract services established in our database
- Tetra Tech data tools available for their use
- Any other accounting needs as tasked by the City

During this meeting, the typical components of the Tetra Tech payment recommendation will be reviewed, the process for adjustment reconciliation will be explained, and the debris contractor(s) will be trained on how to access Tetra Tech's suite of debris hauler reconciliation data reports (including reconciled transactional and live ticket data). If *RecoveryTrac*<sup>™</sup> ADMS will be used to document the debris contractor's work, Tetra Tech will review the automated reports generated by the system to verify that the dataset is sufficient to reconcile with that contractor's subcontractors, and to generate invoices for payment by the City. If another cost tracking system will be used to document the debris contractor's work, Tetra Tech will review the work that has to be documented to verify that our staff will be able to capture the information needed for accounting and invoice review.

Whether using *RecoveryTrac*<sup>™</sup> ADMS or paper logs, Tetra Tech will use our *RecoveryTrac*<sup>™</sup> database to store and review data generated in the field documenting debris contractor work. Several QA and QC checks of data will occur before the dataset is ready for reconciliation with the contractor. Services related to debris contractor work order or change order charges are also tracked within the system.

Tetra Tech will submit invoices within the timeframes determined by the City. The process for contractor invoice reconciliation is as follows:

1. Debris contractor manually enters ticket detail into a contractor database or imports ticket data based on debris contractor reports.
2. Debris contractor generates an invoice for a specified period and submits the invoice and electronic backup to Tetra Tech for review.
3. Tetra Tech reviews the contractor data against *RecoveryTrac*<sup>™</sup> database records:
  - a. If no discrepancies are identified, Tetra Tech notifies the debris contractor of no discrepancies in the data set.
  - b. If discrepancies are identified, Tetra Tech generates a discrepancy report noting ticket numbers and differences between the two data sets.
4. If applicable, Tetra Tech will also perform a full reconciliation of end use/disposal facility data corresponding to debris contractor disposed debris.
5. Tetra Tech submits the discrepancy report for the debris contractor's review. The debris contractor revises its invoice based on the discrepancies and resubmits to Tetra Tech for review.
6. Once a debris contractor's invoice has been reconciled, Tetra Tech generates a payment recommendation and transmittal letter for each invoice and submits the invoice package for review by the City. Tetra Tech's invoice package includes a contractor invoice, Tetra Tech transmittal letter and payment recommendation, and cost allocation data, if applicable.
7. Electronic copies of supporting documentation (i.e., load tickets, unit rate tickets, or time and material logs).

**Our invoicing process includes several real-time QA/QC checks throughout the day**, and a final daily comprehensive data analysis is performed at the close of operations. A final QA/QC check is completed when the debris contractor sends the invoice dataset to Tetra Tech for reconciliation. Incongruencies in the debris contractor's data are flagged for review and must be resolved prior to the issuance of a final invoice.

## Final Report/Closeout

Tetra Tech has extensive experience completing final reports for disaster debris removal projects. The Final Report will summarize the pre-debris removal, pre-tree removal, and post-debris and post-tree removal conditions. The Final Report typically includes the initial and final assessments, ROE, summary of quantities of materials removed, environmental sampling information, pre and post-work photographs, and final sign off.

In addition, data can be downloaded directly from the *RecoveryTrac*<sup>™</sup> system using ESRI's ArcGIS feature services. These feature services allow location base selection and download of the data contained within the selected area. *RecoveryTrac*<sup>™</sup> Fleet history, including individual route history can be downloaded and is available over the life of the project. Upon project closeout, geospatial data will be provided in an ESRI File Geodatabase (FGDB). Non-geospatial data would be provided in Microsoft Excel format, as directed by the City. The data formats provided do not require a *RecoveryTrac*<sup>™</sup> license. ***Tetra Tech will be available to address questions from the City, FEMA and FHWA both during and after services have been performed. Our data management and document storage procedures are tailored to facilitate FEMA review and the generation of project worksheet versions throughout the entire project.***

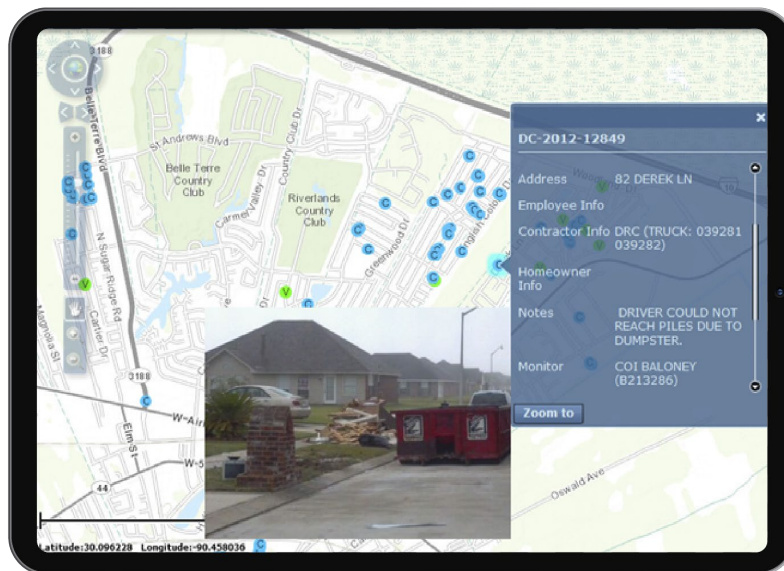
## E. Quality Control and Assurance

Implementing comprehensive QA/QC protocols and technologies is critical to a debris monitoring effort. Proper QA/QC protocols reduce the amount of work associated with back-end data management, reduce invoice reconciliation timeframes, prevent fraud, and establish a sound dataset for future audits. Throughout years of experience assisting local governments with recovering from disasters and the subsequent audits, Tetra Tech has developed industry-leading QA/QC standards and protocols. The use of our ADMS technology expedites the QA/QC process and drastically reduces ticket errors that can result from traditional manual (paper and pen) debris monitoring operations. For example, monitors no longer have to carry a GPS device and manually write in GPS coordinates because this is logged automatically.

Due to the real-time information collected by our ADMS technology, Tetra Tech can establish a virtual command center to audit project information during the collection process and correct issues as they appear. For example, our ADMS technology provides reporting and tracking on any missed debris piles. This allows Tetra Tech to improve our responsiveness to resident complaints and provide real-time tracking tools to manage removal of these missed piles to the City.

Our ADMS technology expedites the QA/QC process and **drastically reduces ticket errors** that can result from traditional manual (paper and pen) debris monitoring operations.

### Missed Piles Tracking



### Fraud Prevention

Several practices are used to prevent debris haulers from committing fraud both in the field and remotely by real-time data monitoring. At DMS locations, Tetra Tech disposal monitors or supervisors will randomly recertify a previously certified truck. Recalculating the truck hauling capacity helps verify that the original work was accurate and that nothing has been altered since certification. Additionally, ADMS technology displays a photo of the truck as a ticket is scanned by the disposal monitor. This makes it nearly impossible for a debris hauler to switch truck certifications between trucks or alter their truck configuration (i.e., remove sideboards).

Fraud prevention reports are run daily to identify data anomalies that may be a result of fraud. The load call report shows all load calls for a given day/monitor to confirm no trucks are receiving extraordinarily high load calls. The load ticket report and unit rate daily ticket report determine if monitors are issuing an excessive number of tickets in relation to the average number of tickets per day. The *RecoveryTrac™* system includes built-in project controls that alert the data manager to anomalies that may be indicative of fraud. For example, the following data features are flagged:

- **Truck Turn-Around-Time.** The time between last pick-up location and arrival of a truck at the DMS is tracked. A time that is too short may indicate that the debris hauler is not filling the vehicle to capacity.
- **Out-of-Bounds.** The municipality boundaries are programmed geospatially to confirm that debris pick-up remains within the eligible bounds of the City.
- **Debris Type.** Discrepancies between the debris type noted by the collection monitor and the debris type noted by the disposal monitor are flagged for review.



# Jonathan Burgiel

Senior Management Team



**30+** YEARS OF  
EXPERIENCE

**100+** PROJECTS

**\$8B** GRANT  
FUNDING

### Areas of Expertise

Disaster Recovery Program Design and Management

Federal Grant Management

Solid and Hazardous Waste Management

### Grant Experience

FEMA PA

CDBG-DR

HMGP

### Disasters

4337 FL HURRICANE IRMA  
4332 TX HURRICANE HARVEY  
4286 SC HURRICANE MATTHEW  
4344 CA WILDFIRES  
4084 HURRICANE ISAAC  
4029 TX WILDFIRES  
4024 HURRICANE IRENE  
4106 CT WINTER STORM  
1791 HURRICANE IKE  
1679 FL TORNADOS  
1602 HURRICANE KATRINA  
1539 HURRICANE CHARLEY  
& SEVERAL MORE

### Education

University of Central Florida, Master of Business Administration, 1989

Tufts University, Bachelor of Arts, Economics, 1984

## EXPERIENCE SUMMARY

As President of Tetra Tech's Disaster Recovery Business Unit, Mr. Burgiel manages the business operations of all disaster recovery efforts, including preparedness planning, project staffing, logistics, grant administration and agency reimbursement support, program accounting/auditing oversight, and contract negotiations. Mr. Burgiel is dedicated to helping communities plan for and recover from disasters and provide the necessary documentation to receive the maximum allowable reimbursement from federal and state emergency management agencies.

Mr. Burgiel has 30+ years of solid waste and disaster recovery experience. His disaster-related work has included serving as principal in charge of over 100 projects, helping clients throughout the country prepare for, respond to, and recover from natural and human-caused disasters.

Mr. Burgiel is intimately familiar with local, state, and federal solid waste and hazardous waste regulations, as well as U.S. Department of Housing and Urban Development (HUD), Federal Emergency Management Agency (FEMA), and Federal Highway Administration (FHWA) policies and reimbursement procedures as they relate to disaster management and recovery.

## RELEVANT EXPERIENCE

### Mr. Burgiel has provided senior management oversight to the following projects:

- 30 communities and over 1,500 staff in Florida – Hurricane Ian
- Rental and Mortgage Assistance - rental assistance to 120k homeowners across 5 states; and mortgage assistance in Florida and Maryland resulting from COVID pandemic
- Hurricane Maria debris mission supporting the Commonwealth of Puerto Rico Department of Transportation, comprehensive support including environmental; grant management; homeowner and infrastructure support w/HUD funding
- 67 communities and over 2,400 staff in Florida – Hurricane Irma
- 38 communities and over 1,400 staff in Texas – Hurricane Harvey
- CalRecycle/CalOES - State of California Camp Fire Response
- Multiple communities in South and North Carolina – Hurricane Matthew
- Richland County & Lexington County, South Carolina - South Carolina 1,000-year Flooding Event - Comprehensive Disaster Recovery Services
- Hays County/City of Wimberley, Texas – Severe Flooding Disaster Recovery Assistance
- New Jersey Department of Environmental Protection (NJDEP) – Hurricane Sandy Disaster Vessel Recovery Program
- State of Connecticut – Hurricane Sandy Disaster Debris Program
- State of Louisiana – Hurricane Isaac Disaster Debris Program Management
- City of New Orleans, Louisiana – Hurricane Katrina Residential Demolitions
- Bastrop County, Texas – Wildfires
- City of Cedar Rapids, Iowa – Severe Flooding

**Principal in Charge (2018 - Present)****Camp Fire Response**

Mr. Burgiel is responsible for oversight of debris and environmental work related to the hazardous material removal of over 12,000 parcels located in the County of Butte. This is possibly the largest debris operation in history.

**Principal in Charge (2017)****Numerous Florida Jurisdictions | Hurricane Irma**

Following Hurricane Irma in September of 2017, Mr. Burgiel oversaw debris monitoring operations for over 67 communities and 2,400 personnel across Florida. This included Miami Dade County, where at peak Tetra Tech had nearly 900 monitors working in the field. Documentation was created for almost 110,000 load tickets and over 78,000 unit rate tickets. In total, Tetra Tech monitored over 4,000,000 cubic yards of debris for the County.

**Principal in Charge (October 2019 - Present)****St. Johns County, Florida | HUD CDBG-DR Housing Rehabilitation Program Management**

Mr. Burgiel was engaged with the County immediately following contract execution to assist with managing the CDBG-DR funds for St. John's Housing Rehabilitation and Reconstruction Program. To support the long-term recovery and restoration of the impacted areas, Mr. Burgiel managed the grant allocated to the recovery activities for over 300 properties including repair and elevation; reconstruction of properties, repair/replacement of damaged manufactured homes or mobile home units (MHUs), relocation of homeowners, and mortgage payment assistance.

**Principal in Charge (October 2018 – Present)****North Carolina Department of Public Safety | Hurricane Matthew HUD CDBG-DR Program Management**

Serving as Principal-in-Charge for all environmental services for this \$400 million CDBG-DR program addressing 3,400 homes for rehabilitation. Tetra Tech will be performing an estimated 3,400 Tier 2 Reviews, 25 Tier 1 Reviews, 1,700 lead and asbestos risk assessments, and other required specialized environmental services (e.g., CESTs, EAs, etc.) as subcontractor to IEM Inc.

**Principal in Charge (November 2018 – Present)****Florida Department of Economic Opportunity | HUD CBDG-DR Rehab/Reconstruction Program**

Mr. Burgiel serves as program manager for Tetra Tech's performance of housing rehabilitation and reconstruction related environmental services associated with the State of Florida's \$615.9 million HUD CDBG-DR grant associated with Hurricane Irma.

- Overseeing Tetra Tech staff's development of approximately 6,000 Tier 2s.
- 3,000 lead risk assessments.
- Review of 8 Tier 1s, and other specialized environmental services (e.g., CESTs, EAs, etc.) as a subcontractor to IEM, Inc.

**Senior Project Manager (June 2017 – Present)****Restore Louisiana | HUD CDBG-DR Housing Rehabilitation**

Served as Project Manager over the preparation of over 25,500 Tier 2 environmental reviews and over 6,000 lead risk assessment and clearance inspections. This \$20 million project performed by Tetra Tech utilized state of the art technology and cloud based technology to decrease the cost of performing a Tier 2 review by over 50% from prior state led residential rehab projects.

**Principal in Charge (October 2018 – Present)****Texas General Land Office | HUD CBDG-DR Housing Rehab/Reconstruction Program**

Mr. Burgiel is currently serving as program manager for Tetra Tech's performance of housing rehab and reconstruction related environmental services associated with the State of Texas' \$5.024 billion HUD CDBG-DR grant associated with Hurricane Harvey. Overseeing Tetra Tech staff's development of approximately 3,500 Tier 2s, 1,700 lead risk assessments, and other specialized environmental services (CESTs, EAs, etc.) as a subcontractor to IEM, Inc.



**15+** YEARS OF EXPERIENCE

**250+** PROJECTS

**\$4.5B** REIMBURSED INVOICES

#### Areas of Expertise

Program Development  
Documentation Management  
Private Property Debris Removal  
Debris Removal Planning  
Debris Removal Monitoring  
Packet Management  
Geospatial Reporting

#### Grant Experience

FEMA-PA  
NRCS-EWP  
FHWA-ER  
CDBG-DR

#### Disasters

4240 VALLEY AND BUTTE FIRES  
4084 HURRICANE ISAAC  
1971 AL TORNADOES  
1791 HURRICANE IKE  
1763 IA FLOODING  
1609 HURRICANE WILMA  
1602 HURRICANE KATRINA  
& SEVERAL MORE

#### Certifications

OSHA 40-Hour Asbestos Training  
IS-632: Debris Operations  
HSEEP-Certified  
OSHA Asbestos Health and Safety  
IS-30: Mitigation Grants System  
IS-100, 200, and 700: ICS and NIMS  
IS-630: Intro to the PA Process

## Ralph Natale

Senior Management Team

### EXPERIENCE SUMMARY

Mr. Ralph Natale is the director of post-disaster programs for Tetra Tech, Inc. He leads the practices by developing programs, providing daily project support, and providing oversight and guidance to his team of project managers and projects. Mr. Natale is an expert in Federal Emergency Management Agency-Public Assistance (FEMA-PA) Grant Program reimbursement policies and has administered nearly 250 projects in his 15-year career.

Mr. Natale specializes in large scale responses and has served as a principal in charge or project manager in response to some of the country's largest debris-generating disasters, including 19 state level responses after major hurricanes, floods, and fire events. This includes managing and documenting the removal of over 66 million cubic yards (CYs) of debris, 1.7M hazardous trees, and the program management of debris collection and demolition of over 35,000 parcels on fire removal projects and over 200,000 environmental samples. These programs equate to over \$4.5B dollars of reimbursed invoices.

### RELEVANT EXPERIENCE

#### Subject Matter Expert (Debris Documentation, Program Management, Grant Management)

Mr. Natale has served as a program manager and grant consultant for state and local governments during his extensive career in disaster debris industry. This includes the largest debris projects since Katrina for federal, State and local government work. Mr. Natale also supports missions as a senior consultant serving as a member of the State of Connecticut Emergency Operations Debris Task Force, where he was activated during the recovery operations following Hurricane Irene and Winter Storm Alfred.

Mr. Natale has also served on the following projects:

- Hurricane Ian (2022-Current)
- State of California Dixie Fire Response (2021 - current)
- Hurricane Ida (2021 - current)
- Hurricane Laura (2021 - current)
- State of California Camp Fire Response (2018- 2020)
- Hurricane Michael local and USACE response (2018-2019)
- NorCal Wildfires | USACE (2017-2018)
- Hurricane Harvey (2017-2018)
- Hurricane Ike, Severe Droughts, Floods | City of Houston, Texas (June 2009-Present)
- Winter Storms | State of Connecticut, Interagency Debris Management Task Force (August 2010-Present)

## Principal in Charge/Senior Program Manager

As director of post-disaster programs for Tetra Tech, Mr. Natale has focused on developing and improving program management processes. These processes ensure the most efficient methods of managing debris removal programs to maximize federal reimbursement via the FEMA 325, and 327 guidelines. As a senior program manager, Mr. Natale ensures quality control and quality assurance of project managers' deliverables on all Tetra Tech projects. A representative list of projects he has worked on is included below.

### Hurricane Ian

Following Hurricane Laura in September of 2022, Mr. Natale oversaw debris monitoring operations for many of Tetra Tech's Gulf Coast clients, including Collier County and associated cities with over 3,000 damaged homes and \$2 billion in damage. Documentation required simultaneous tracking of right-of-way (ROW), leaner/hanger/stumps (LHS), parks, and private road debris streams from multiple applicants, with the County alone generating over 1.3 billion cubic yards of storm debris.

### Hurricane Laura

Following Hurricane Laura in August of 2020, Mr. Natale oversaw debris monitoring operations for over 11 communities and 1,000 personnel across Louisiana. This included the Calcasieu Parish/Lake Charles area, where at peak Tetra Tech had nearly 600 monitors working in conditions typical of a category 4 hurricane. Without power or infrastructure, the operational response plan was implemented, and our team had to mobilize and establish power and infrastructure for all the projects. This was completed successfully without any debris haulers having to wait on monitoring resources.

### Hurricane Michael

Following Hurricane Michael in September of 2018, Mr. Natale oversaw debris monitoring operations for several communities in the Florida Panhandle and a USACE response in Georgia that covered 12 counties. The devastation was 250 miles wide for this category 5 storm, which included working in areas that had no power or electricity for well over a month. At peak, Tetra Tech had nearly 600 monitors working in the field. Documentation was created for almost 10 million cubic yards of debris. Work also included NRCS funding of nearly 25 miles of waterways through Bay County, FL.

### Camp Fire Response

Mr. Natale serves as project manager and is responsible for oversight of debris and environmental work related to the hazardous material removal of over 12,000 parcels located in the County of Butte. This is possibly the largest debris operation in history with over 2 billion dollars in costs.

### Northern California (NORCAL) Wildfire Response (November 2017-Present)

Mr. Natale serves as principal in charge for USACE ADMS services for all the work completed after the Northern California wildfires in 2015. This included debris and environmental services of over 8,000 homes and over 1 billion dollars in costs. Mr. Natale oversees the overall project management team and assists with staffing and logistics for this four-county response.

### Florida Department of Environmental Protection (2016-2018)

Mr. Natale serves as principal in charge for FDEP waterways debris removal programs (wet debris). Unlike conventional debris removal programs that are well established every waterways program needs a level of customization. Mr. Natale has provided this oversight working with the State of Florida, FEMA, and the local counties that recovery was being conducted. Counties worked post Matthews and Irma include Nassau, St. Johns, Ventura, Brevard, Monroe, Collier, Lee.

### California | Valley and Butte Fire (October 2015-2016)

Mr. Natale helped create and implement programs for several projects after the Valley and Butte fires of 2015, which burned over 150,000 acres of forests and destroyed over 2,000 homes, with recovery costs of over \$300 million. Each program developed was unique but necessary for the community as a whole to recover. Programs included geospatial live tracking of work completed and equipment deployed; mitigation of hazardous trees from rights of ways and private property that was fully funded by CalOES and FEMA; private property debris removal packet management and database support; and management of a unique mix of environmental scientists and debris specialists to provide documentation for remediation of asbestos and other contaminants left behind, including debris quantities. These clients included Lake County Public Works, CalRecycle (AJ Diani), CalRecycle (Sukut), and PG&E.



**18** YEARS OF  
EXPERIENCE

#### **Areas of Expertise**

Disaster Response & Recovery  
Grant Administration  
Stafford Act Compliance  
Alternative Procedures

#### **Grant Experience**

FEMA Public Assistance  
CARES Act  
USDA Agriculture Recovery Block  
Grants  
HUD CDBG  
ARPA

#### **Education**

Auburn University, Bachelor of Arts,  
March 2000

Louisiana State University- Paul M.  
Hebert Law Center, Juris Doctorate,  
May 2004

Louisiana State University- Paul M.  
Hebert Law Center, Bachelor of Civil  
Law, May 2004

## Allison McLeary, Esq.

Senior Management Team

### EXPERIENCE SUMMARY

Ms. Allison McLeary is an experienced emergency response and recovery executive with a demonstrated history of building meaningful relationships across all levels of government. As former Recovery Bureau Chief of the Florida Division of Emergency Management, she offers more than 3 years of direct experience administering grant programming throughout the State of Florida. She also served as **Recovery Counsel for the Louisiana Governor's Office of Homeland Security and Emergency Preparedness (GOHSEP)**. She is a steadfast advisor in planning for, responding to, and recovering from challenges and disasters.

### RELEVANT EXPERIENCE

#### **Director, Disaster Recovery Programs (March 2021 – Present)** **Tetra Tech, Inc.**

Ms. McLeary serves as Director of Disaster Recovery Programs, providing policy guidance and program support. Ms. McLeary is an expert in FEMA policies, building and maintaining relationships with FEMA representatives. She analyzes policy and provides policy guidance to clients. She supports the Tetra Tech team to build programs that align with federal expectations and comply with client/federal requirements. She maximizes operational efficiencies by analyzing individual projects with a holistic lens, leveraging best practices from Tetra Tech debris management operations throughout the Nation. Additionally, Ms. McLeary coordinates relationships with funding agencies and local partners to streamline project operations.

#### **Recovery Bureau Chief (March 2020 – February 2021)** **Compliance and Appeals Officer (December 2018 – February 2020)** **Florida Division of Emergency Management**

- Administered all FEMA Stafford Act programs for the State of Florida (\$9.8+ Billion over 26 federally declared events under management)
- Validated and Paid through FDEM an unprecedented \$4.1 Billion in Recovery funds in the period January 2019-February 2021, including \$2.7 Billion in PA and over \$300 Million in USDA Agriculture Recovery Block Grants
- Developed and implemented the State strategy for \$1.275 Billion in CARES-Coronavirus Relief Fund payments to 55 medium and small counties. (\$1.07 Billion validated and paid June 2020-February 2021)
- Served as Alternate Governor's Authorized Representative and Deputy State Coordinating Officer for all FEMA declared events in Florida
- Created a comprehensive FEMA PA Compliance program, including risk assessments, monitoring, and technical assistance and programmatic guidance tailored to address specific compliance risks

**Recovery Legal Counsel (January 2017 – November 2018)****Louisiana Governor's Office of Homeland Security and Emergency Preparedness**

- Served as Recovery counsel- advising on all matters of emergency management and whole community Recovery
  - Programs included FEMA/Stafford Act programs and HUD-Community Development Block Grants (CDBG-DR)
- Audit liaison to US Department of Homeland Security- Office of Inspector General and FEMA
- Developed and delivered a comprehensive outreach and education technical assistance strategy to grant subrecipients in Louisiana

**FirstNet Program Manager (February 2015 – January 2017)****Louisiana Division of Administration, Office of Technology Services**

- Oversaw a team effort to identify needs, perform gap analyses, and plan for the buildout of the State's portion of the Nationwide Broadband network, known as FirstNet.
- Identified the needs and expectations of the State's 62,000+ first responders and worked with the US Department of Commerce and the FirstNet Authority to include those inputs in the \$7 Billion RFP for the buildout and operation of the FirstNet network.

**State Police Legal Counsel (August 2003 – May 2013)****Louisiana Department of Public Safety and Corrections, Louisiana State Police, Office of Legal Affairs**

- Counsel to State Police on matters of policy, operations, public records law, personnel management, emergency management/crisis response, and investigations
- Served as legislative liaison and helped draft numerous bills and testified in committee on several measures including revisions to the electronic surveillance framework and the regulation of private security, and the role of volunteers in emergency response.
- Represented the Louisiana Oil Spill Coordinator's Office and was assigned Attorney Supervisor throughout the response to the Deepwater Horizon event
  - Led a multi-agency team of in house, state agency lawyers in the early days of the disaster
  - Coordinated efforts among state agency counsel to ensure that necessary inputs needed for the response, damage assessment and claims under the Oil Pollution Act of 1990, Clean Water Act and other applicable federal and state laws were supported.



**20+** YEARS OF  
EXPERIENCE

### Areas of Expertise

Project Management  
Debris Monitoring/Removal  
FEMA PA  
Construction Management  
Private Property Debris Removal  
Cost of Service Evaluations  
Emergency Management  
Damage Assessment  
Utility Engineering/Consulting  
Public Outreach/ Communications  
Procurement (2CFR)  
Grant Management

### Training/Certifications

DHS/FEMA/PIA-017 Federal Emergency Response Official. Effective date 9/4/2018 – 9/02/2024  
North Carolina General Contractor's License  
USACE Construction Quality Management for Contractors-Certified  
FEMA 325 Public Assistance Debris Management Guide  
FEMA E0202 Debris Management Planning Certified  
FEMA ICS-100 Incident Command System Certified  
FEMA ICS-200 Initial Action Incident Certified  
FEMA IS-800 National Response Framework Certified  
FEMA IS-700 National Incident Management System (NIMS)-Certified  
Qualified Technical Tree Safety Supervisor  
Electrical Hazard Awareness Training  
OSHA 40-Hour HAZWOPER  
OSHA 30-Hour  
First Aid / CPR

## Tommy Webster

Senior Management Team

### EXPERIENCE SUMMARY

Mr. Tommy Webster has more than 20 years of consulting and operational experience with major field environmental and civil works projects. Mr. Webster brings a unique perspective, having spent many years of his career on the consulting side at Tetra Tech and its preceding organizations, as well as at a major national civil construction and debris contractor (Phillips and Jordan). He brings a strong understanding of Federal Emergency Management Agency (FEMA) Public Assistance (PA) Program policy and how the policy applies to post disaster recovery. Through his experience, Mr. Webster has managed planning, response, and recovery/reconstruction for a wide variety of projects and disasters including hurricanes, floods, ice storms, fires, oil spills, and other disaster incidents. He has worked projects large and small for clientele across the United States including the Army Corps of Engineers (USACE), state government and agencies, counties, cities, water management/flood control districts, and more. Mr. Webster is a pragmatic, results oriented professional with a proven history of leadership on highly successful projects. **Mr. Webster was chosen for this project due to his ability to interact with clients, governmental agencies, employees, and contractors and his leadership skills to negotiate contracts, train clients and employees, submit realistic schedules, motivate staff, and track results.**

### RECENT EXPERIENCE

#### Program Manager (May 2022 - Present)

##### Tetra Tech

Mr. Webster is responsible for the day-to-day operations of the engagement including field operations and contractual/business aspects. He is tasked with providing assistance to the Principal-in-Charge in the administration of contracts; enforcement of the provisions of the Client's contract with collection contractors; serving as the primary point of contact for Client staff, Contractors and FEMA representatives; maintaining appropriate staffing levels; implementing quality assurance and control measures; review of daily contractor activity; review/submittal of contractor invoices.

#### Program Manager (July 2014 – May 2022)

##### Phillips & Jordan

Mr. Webster was responsible for the following tasks:

- Initial deployment and operational project setup for natural and man-made disasters across the CONUS
- Subcontractor negotiation and claims management
- Line-item project reviews and approvals with Project Managers and third-party representatives
- Liaison between operations and overhead departments, as well as municipalities and governmental agencies

**Operations Manager (January 2012 – June 2014)****ATKINS Global**

Daily responsibilities included:

- Initial deployment and operational project setup for natural and man-made disasters across the CONUS
- Managed & monitored debris removal operations
- Employee/Client training
- Contractor invoice reviews and approvals
- Liaison between operations and overhead departments, as well as municipalities and governmental agencies
- Customer maintenance and satisfaction

**Project Manager (August 2010 – January 2012)****Andrew Consulting**

Daily responsibilities included:

- Received and reviewed construction documents and contractor/vendor submittals
- Responsible for creating and implementing construction schedules
- Quality control management for all construction activity
- Oversight of over \$285 Million in public and private commercial construction projects
- Periodic construction inspections

**Project Manager (September 2008 – July 2010)****Beck Disaster Recovery**

Daily responsibilities included:

- Initial deployment and operational project setup for natural and man-made disasters across the CONUS
- Manage ongoing project and employee activity
- Liaison between operations personnel and overhead departments, as well as municipalities and governmental agencies
- Employee/Client training
- Execute company policy and procedures

**Project Manager (December 2002 - September 2008)****Beck Disaster Recovery**

Daily responsibilities included:

- Initial deployment and operational project setup for natural and man-made disasters across the CONUS
- Manage ongoing project and employee activity
- Responsible for employee financial reimbursement and contractor invoice reviews and approvals
- Liaison between operations and overhead departments, as well as municipalities and governmental agencies

**NOTABLE PROJECTS**

**2022 | Hurricane Ian** – *Charlotte County, FL and City of Cape Coral, FL*

**2021 | Virginia Winter Ice Storm** - *VDOT Richmond District, VA*

**2018 | Hurricane Florence Debris Management** - *Craven County, Cities of Boiling Spring Lakes and New Bern, Towns of River Bend and Trent Woods, North Carolina and City of Briarcliff Acres, South Carolina*

**2017 | Hurricane Irma Debris Management** - *Highlands, Hillsborough, Palm Beach and Volusia Counties; Cities of Coral Springs, Kenneth City, and Pinellas Park; and Town of Belleair, Florida*

**2017 | Hurricane Harvey Land and Waterway Debris Management** - *Harris County Flood Control District, Texas*



# Nick Dragon

Project Manager

**13+** YEARS OF  
EXPERIENCE

**8** DISASTERS

### Areas of Expertise

Field Operations and Oversight  
QA/QC  
Environmental Remediation  
Debris Monitoring  
Project Management  
Scheduling and Dispatch  
Truck Certification  
Automated Debris Management System (ADMS)  
Environmental Cleanup

### Disasters

VDOT Severe Winter Storm  
Hurricane Nicolas  
4559 Hurricane Laura  
5278 Camp Fire  
4393 Hurricane Florence  
4337 Hurricane Irma  
4332 Hurricane Harvey  
1791 Hurricane Ike

### Key Training/Certifications

OSHA HAZWOPER 40-hour  
8 Hr HAZWOPER Supervisor  
FEMA ICS-100  
FEMA ICS-200  
FEMA ICS-700  
FEMA ICS-800

## EXPERIENCE SUMMARY

Mr. Dragon has over 13 years of experience on over 8 disasters in environmental remediation, cleanup, and debris removal monitoring. **Mr. Dragon has responded to several major hurricanes (Hurricanes Laura, Florence, Irma, Harvey, and Ike), and California Camp Fire for clients involving over 250,000 CYs of debris, including: Virginia Department of Transportation; Calcasieu Parish, LA; Harris County, TX; City of Houston, TX on 2 projects and Miami-Dade County, FL.** He has experience verifying eligibility and compliance; overseeing collection and disposal operations, and coordinating directly with debris contractors, data managers, and project managers to facilitate the success of fast-moving debris operations projects. Projects have included some of the nation's largest debris monitoring projects in recent history including serving as project manager for Calcasieu Parish, Louisiana's Hurricane Laura response, which accounted for nearly 7 million cubic yards of debris. He also served as project manager assisting the City of Beaufort, NC following Hurricane Florence. In addition to debris management experience, Mr. Dragon has over eight years of experience overseeing emergency commercial and residential emergency water and fire damage remediation work.

**Mr. Dragon was chosen for this project due to his experience in successfully leading large debris removal monitoring projects.**

## RELEVANT EXPERIENCE

### Regional Project Manager (October 2022 – Present)

#### Collier County, FL | Hurricane Ian

Tetra Tech provided disaster response monitoring services to the state of Florida following Hurricane Ian in October 2022. Making landfall as a category 4 storm, Hurricane Ian left a path of destruction which devastated the area. Mr. Dragon mobilized to Collier County and is serving as Regional Project Manager, overseeing all facets of debris removal operations. He is actively recruiting and training new local monitoring staff, Overseeing project financials, as well as gauging the respective client satisfaction and contract requirement fulfillment, ensuring the project runs smoothly and efficiently.

### Regional Project Manager (January 2022 – Present)

#### State of Virginia Department of Transportation | Severe Winter Storm 2022

Serves as the Regional Manager for the 3 project areas, overseeing all facets of debris removal operations. Conducted and coordinated initial damage and debris quantification surveys for initial debris estimates. Coordinating recruiting and training of new local monitoring staff. Developed debris removal operations plans for all 3 district areas with the respective Project Managers for the cutting and removal of downed and broken trees throughout the areas. Oversees project financials and overall project health, as well as gauging the respective client satisfaction and contract requirement fulfillment.

**Project Manager (August 2021 – September 2021)****Harris County, TX | Hurricane Nicholas**

Served as the Project Manager for Harris County TX following Hurricane Nicholas. Mr. Dragon was responsible for staffing, training, field supervision, and the health and safety of field monitors. He also oversaw collection and disposal monitoring operations.

**Project Manager (September 2020 – Present)****Calcasieu Parish, LA | Hurricane Laura**

Following Hurricane Laura in September 2020, Calcasieu Parish was completely devastated. The Tetra Tech team was in contact with Parish officials before, during, and immediately after the Hurricane's impact. As part of the project management team, Mr. Dragon was quickly deployed to coordinate with Parish Officials, initiate operations, and oversee the training and hiring of more than 470 local debris monitors. The project also required identification and permitting of 15 debris management sites. Our team **monitored the removal over nearly 7 million cubic yards of debris** and over 40,000 hazardous limbs and trees. Mr. Dragon opened the PPDR intake center to collect applications and oversaw the intake process. Following intake center operations, field property surveys were completed to collect private property debris quantities and evaluate structural damage for potential demolitions. Currently, the project is in the final QA/QC stages for FEMA submission to seek parcel improvements to prepare for debris removal operations to commence thereafter.

**Environmental Project Manager (September 2019 – Present)****State of Texas GLO and Harris County Texas | Hurricane Harvey CDBG-DR Program**

Oversight of all inspections scheduling for various inspectors conducting inspections from lead based paint testing, environmental assessments, and interior damage assessments for the reconstruction/rehabilitation and reimbursement programs for damage resulting from the flooding during Hurricane Harvey in 2018. Coordinated with various staff to ensure timely production and submission of the final deliverable documentation. Coordinated and conducted weekly meetings with the clients to ensure contract requirements and timelines were tightly adhered to.

**Deputy Operations Section Chief – Inside Paradise West (January 2019-September 2019)****CalRecycle | Camp Fire, CA**

Mr. Dragon served as the Deputy Operations Section Chief overseeing the debris removal operations for the west portion of the City of Paradise, CA following the November 2018 Camp Fire. The project was projected to require the demolition and debris removal of nearly 17,000 structures.

**General Foreman****PG&E | Accelerated Wildfire Risk Reduction (AWRR) Program**

Mr. Dragon served as a general foreman overseeing quality assurance and quality control (QA/QC) of vegetation removal near PG&E powerlines. As a general foreman, Mr. Dragon was responsible for coordination dispatch and field oversight of over 50 certified arborists performing QA/QC of designated tree and brush removal.

**Project Manager****City of Beaufort, NC | Hurricane Florence**

Mr. Dragon served as the initial project manager for the City of Beaufort following Hurricane Florence. Mr. Dragon met with the City once dangerous conditions subsided and worked with the City to develop a debris removal plan. He also trained the field right-of-way and disposal monitors for the project.

**Deputy Project Manager****City of Houston, TX Waterways | Hurricane Harvey**

Hurricane Harvey severely impacted the City of Houston. Even after the debris was cleared from the residential right-of-way, disaster debris remained in waterways within the City. Mr. Dragon served as a deputy project manager where he was responsible for field supervision, coordination, health and safety, and QA/QC of field monitors documenting waterways debris removal.



**Allen Fowler**  
Operations Manager

**5** YEARS OF  
EXPERIENCE

**8** DISASTERS

#### **Areas of Expertise**

Pre-Season Truck Certification  
Disaster Debris Monitoring  
Scheduling Dispatch  
Training  
Disposal  
Documentation  
Reporting  
Supervision of Field Operations

#### **Education**

Hardee County High School Diploma

## **EXPERIENCE SUMMARY**

Mr. Fowler is responsible for overseeing field operational activities for field monitors, supervisors, and contractors. This includes hiring and training employees and managing quality assurance. Additionally, Mr. Fowler is adept at strategizing process improvements to ensure tasks are completed in a timely and compliant manner.

## **RELEVANT EXPERIENCE**

### **Deputy Project Manager (September 2022 – Present)**

#### **Hurricane Ian | Polk County, FL**

Serving as the deputy project manager for Polk County during the response to Hurricane Ian, Mr. Fowler was responsible for facilitating smooth coordination between Tetra Tech staffing and contractor needs, the management of field supervisors, and the quality control of project documentation.

### **Operations Manager (September 2021)**

#### **Hurricane Ida | City of Central, LA**

Mr. Fowler joined the City of Central project to oversee the last leg of debris cleanup following Hurricane Ida. As the operations manager, he was responsible for training and dispatch of monitors, project documentation quality control, and day-to-day oversight.

### **Operations Manager (June 2021 – August 2021)**

#### **Lake Charles Flood | Lake Charles, LA**

Following flooding in Lake Charles, Mr. Fowler was responsible for day-to-day operations of debris monitoring, which included the training of debris monitors and tracking of flooding debris. His oversight involved field issue resolution, and the design and implementation of processes for monitoring.

### **Operations Manager (December 2020 – May 2021)**

#### **Hurricane Ida | Rapides Parish, LA**

Mr. Fowler oversaw the day-to-day operations of Tetra Tech's response to Rapides Parish following Hurricane Ida. He was responsible for training and scheduling of the disposal site staff for the removal of over 97,000 CYs of debris from the Parish.

### **Operations Manager (September 2020 – November 2020)**

#### **Hurricane Sally | Okaloosa County, FL**

Following Hurricane Sally, Tetra Tech provided disaster response monitoring services to various Alabama and Florida communities. Mr. Fowler was responsible for overseeing operations of disposal sites and training staff in Okaloosa County.

### **Operations Manager (August 2020 – September 2020)**

#### **Hurricane Laura | Sulphur, LA**

Making landfall as a Category 4 storm, Hurricane Laura had a devastating impact throughout the State of Louisiana. Mr. Fowler was responsible for overseeing, scheduling, and training staff, and truck certifications during the recovery efforts in Sulphur.

**Operations Manager (October 2018-March 2020)****Hurricane Michael | North Florida**

Mr. Fowler served as operations manager in the Cities of Parker, Callaway, and Springfield, where he was responsible for the training of monitors and overseeing daily operations. The project included waterways and private property debris removal (PPDR) recovery efforts. He was responsible for verifying eligibility, compliance, and collection and disposal operations oversight, and coordinating directly with our project manager daily with progress reports and on specific issues.

**Field Monitor (September 2017-September 2018)****Hurricane Irma | Highlands & Polk County, FL**

Serving as a field monitor, Mr. Fowler was responsible for data management, documentation of debris, and truck certifications during the response to Hurricane Irma in Highlands and Polk counties. He was also responsible for making volumetric load calls and maintaining backup logs.



# Ricardo Bosques

Data Manager

**6+** YEARS OF EXPERIENCE

**10** DISASTERS

**8.2M+** CBYS DEBRIS REMOVED

### Areas of Expertise

Disaster Debris Management  
Data Collection, Utilization, and Validation  
Data Management  
Report designs  
Reimbursement Policies and Procedures  
Public Relations  
Invoice Reconciliation

### Disasters

5278 California Camp Fire  
5259 California Carr Fire  
5192 California Detwiler Fire  
4332 Hurricane Harvey  
4286 Hurricane Matthew  
4272 Severe Storms and Flooding  
4269 Severe Storms and Flooding  
4240 CA Wildfires  
4245 Texas Severe Storms

### Education

University of Texas at San Antonio,  
Bachelor of Science  
Biology with a concentration in  
Microbiology/Immunology  
San Antonio, TX, May 2013

## EXPERIENCE SUMMARY

Mr. Bosques is a data and automated debris management system (ADMS) technology specialist for Tetra Tech, where his understanding of Federal Emergency Management Agency (FEMA) eligibility and documentation requirements for public assistance debris removal programs have aided him in quality control and oversight of multiple projects. Mr. Bosques is responsible for the implementation of Tetra Tech's *RecoveryTrac*™ ADMS technology as well as oversight and management of field data managers and invoice analysts. He supports the implementation of ADMS in the field, as well as establishing quality assurance and project reporting standards for disaster debris monitoring operations. Mr. Bosques has focused on providing complete auditable datasets that maximize reimbursement and are project worksheet ready.

## RELEVANT EXPERIENCE

### Senior Data Manager (September 2022 - Present)

#### Various Locations, FL | Hurricane Ian

Making landfall as a category 4 hurricane, Hurricane Ian ripped through the state of Florida. Mr. Bosques handles overall project setup for various Tetra Tech disaster response monitoring operations through *RecoveryTrac*™ ADMS. He also creates and oversees specialized reporting requested by the clients, handles debris contractor invoicing data and documentation, provides client demonstrations of the geoportal GIS tracking system, abiding and following FEMA compliance pertaining to the debris removal operations and data tracking. Mr. Bosques is currently serving as a Senior Data Manager for right-of-way collection projects for the following clients:

- Sarasota County
- Charlotte County
- City of Cape Coral
- Collier County
- Polk County
- Manatee County
- Volusia County
- Highlands County
- Seminole County
- Orange County

### Senior Data Manager (January 2022 - Present)

#### Various Locations | Kentucky Severe Winter Storm

Mr. Bosques handled overall project setup through Tetra Tech's *RecoveryTrac*™ ADMS, created and oversaw specialized reporting requested by the clients, handled debris contractor invoicing data and documentation, provided client demonstrations of the geoportal GIS tracking system, and sat in on initial project meetings with clients to answer and advise on any questions regarding their FEMA compliance pertaining to the debris removal operations and data tracking.

### Senior Data Manager (December 2021 – April 2022)

#### City of Houston, Texas | Lake Houston Silt Removal

Mr. Bosques handled overall project setup through Tetra Tech's ADMS (*RecoveryTrac*™), created and oversaw specialized reporting requested by the clients, handled debris contractor invoicing data and documentation, provided client demonstrations of the geoportal GIS tracking system, and sat in on initial project meetings with clients to answer and advise on any questions regarding their FEMA compliance pertaining to the debris removal operations and data tracking.

### Senior Data Manager (December 2021 – February 2022)

#### Various Locations | Kentucky Severe Storms & Tornadoes (DR-4630)

Mr. Bosques handled overall project setup through Tetra Tech's ADMS (RecoveryTrac™), created and oversaw specialized reporting requested by the clients, handled debris contractor invoicing data and documentation, provided client demonstrations of the geoportal GIS tracking system, and sat in on initial project meetings with clients to answer and advise on any questions regarding their FEMA compliance pertaining to the debris removal operations and data tracking.

- **Kentucky:** Bowling Green, Warren County

### Senior Data Manager (August 2021 - Present)

#### Various Locations | Hurricane Ida

Mr. Bosques handled overall project setup through Tetra Tech's ADMS (RecoveryTrac™), created and oversaw specialized reporting requested by the clients, handled debris contractor invoicing data and documentation, provided client demonstrations of the geoportal GIS tracking system, and sat in on initial project meetings with clients to answer and advise on any questions regarding their FEMA compliance pertaining to the debris removal operations and data tracking.

- **Louisiana:** Audubon Nature Institute, Central, Covington, Iberville Parish, St. John the Baptist Parish, St. Helena Parish, St. James Parish, Tangipahoa Parish, Gramercy, Litcher

### Senior Data Manager (November 2020 – June 2021)

#### Various Locations | Hurricane Zeta

Mr. Bosques handled overall project setup through Tetra Tech's ADMS (RecoveryTrac™), created and oversaw specialized reporting requested by the clients, handled debris contractor invoicing data and documentation, provided client demonstrations of the geoportal GIS tracking system, and sat in on initial project meetings with clients to answer and advise on any questions regarding their FEMA compliance pertaining to the debris removal operations and data tracking.

- **Alabama:** Dallas County, Marengo County, Wilcox County
- **Mississippi:** Diamondhead, Gulfport, Hancock County

### Senior Data Manager (September 2020 – October 2021)

#### Various Locations | Hurricane Laura

Mr. Bosques handled overall project setup through Tetra Tech's ADMS (RecoveryTrac™), created and oversaw specialized reporting requested by the clients, handled debris contractor invoicing data and documentation, provided client demonstrations of the geoportal GIS tracking system, and sat in on initial project meetings with clients to answer and advise on any questions regarding their FEMA compliance pertaining to the debris removal operations and data tracking.

- **Louisiana:** Lake Charles, Calcasieu Parish Acadia Parish, Rapides Parish, Jefferson Davis Parish, Dequincy, Crowley, Sulphur, Vinton, Westlake, Iowa
- **Texas:** Orange County

### Invoice Reconciliation Manager (January 2019-December 2019)

#### CalRecycle | Camp Fire

Mr. Bosques served as the invoice reconciliation manager for the prime debris contractor Ceres Environmental, Inc. following the Camp Fire incident.

- Provided oversight, quality control, and guidance during the invoice reconciliation process for over 6.6 million cubic yards of debris removed across 2,800 parcels.

### Regional ADMS / Data Manager (August 2017- Present)

#### City of Houston, Texas | Hurricane Harvey

While Hurricane Harvey made landfill near Rockport, TX, the slow moving tropical system brought bands of heavy rain. An average of 40 inches of total rainfall, the equivalent of 1.2 trillion gallons of water, dropped onto Harris County and the City of Houston. As a result, the City experienced widespread flooding and activated program management and monitoring services from Tetra Tech.

- Mr. Bosques, a local resident of the City, was designated as the lead data manager and has overseen the documentation of over 1.4 million cubic yard of debris removed.
- He oversaw the reconciliation with the multiple prime contractors the City tasked with debris removal following Hurricane Harvey.

#### **Data Manager (October 2016 – May 2017)**

##### **Town of Hilton Head, South Carolina | Hurricane Matthew Debris Program Management**

Mr. Bosques was deployed to the Town of Hilton Head, South Carolina after Hurricane Matthew affected the area causing flooding and extensive damage. Mr. Bosques has been overseeing data management efforts and validating the documentation being reported for 2.1 million cubic yards of debris and over 40,000 hazardous trees.

#### **Data Manager (August 2016 – October 2016)**

##### **CalRecycle | Erskine Fire Remediation and Disaster Recovery Services**

Following catastrophic fires that impacted California in August 2016, Tetra Tech was contracted through CalRecycle to provide project management and oversight of the Erskine wildfire recovery efforts. Mr. Bosques served as the data manager for the environmental and debris project involving over 200 parcels.

#### **PPDR Data Manager (January 2016-August 2016)**

##### **Calaveras County, California | Catastrophic Fires**

The catastrophic fires that impacted Calaveras County left severe destruction and damage. As part of the selected contractor's team, Tetra Tech provided data management and administrative functions to support debris removal efforts of fire related debris and hazards from private property in the impacted areas.

- Mr. Bosques was deployed as the PPDR data manager for over 300 parcels.

#### **Data Manager (October 2015 – January 2016)**

##### **San Marcos, Texas | Severe Storms and Flooding Disaster Debris Program Management**

Mr. Bosques was deployed to the City of San Marcos, Texas following severe storms and flooding that resulted in concentrated volumes of disaster debris in the City. As data manager,

- Mr. Bosques managed a variety of projects related to Post-Event recovery and monitoring services, and also interacted with clients, consultants, staff members and strategic partners to accurately document and efficiently recover disaster debris.
- Produced reports, documents, graphs and other management tools for tracking project process, and provided ongoing communication and project management tasks for both client and company use, utilizing a variety of technology to ensure both client satisfaction and project success.
- Responsible for monitoring site safety and maintaining safety awareness to ensure safe working environment.

#### **Data Manager (October 2015 – March 2016)**

##### **Hays County, Texas | Memorial Day Flooding Disaster Debris Management**

- Provided quality assurance and quality control (QA/QC) of debris monitoring documentation.
- Prepared daily status reports to provide the County with visibility into debris removal operations, and worked with the County and FEMA to meet supporting documentation requests needed for the development of PWs.

#### **Assistant Data Manager (June 2015 – August 2015)**

##### **City of Houston, Texas | Severe Storms and Flooding Disaster Debris Program Management**

Mr. Bosques served as Assistant Data Manager for the City of Houston, Texas following severe storms and flooding that resulted in 300,000 cubic yard of disaster debris in the City.

- Worked alongside the data manager of the FEMA funded destruction relief program for the City of Houston and was also in charge of zone clearances as well as the daily input of collection logs and data documentation.



# Jeffrey Dickerson

Consultant



**30+** YEARS OF EXPERIENCE  
**1,000+** MANAGED FIELD MONITORS  
**5M** CYS OF DEBRIS

### Areas of Expertise

Solid Mobile and GIS Technology  
 Resource Deployment and Tracking  
 Readiness Training and Exercises  
 Disaster Operations Support  
 20+ Years Military Experience

### Grant Experience

CDBG-DR

### Key Training/Certifications

FEMA IS-632, IS-700, IS-922  
 MCDBA, Microsoft Certified Database Administrator  
 MCSE, Microsoft Certified Network Engineer  
 MCT, Microsoft Certified Trainer

### Disasters

4340 HURRICANE MARIA  
 4240 CA WILDFIRES  
 4223 TX FLOODING  
 4145 CO FLOODING  
 4115 SD WINTER STORM  
 4087 HURRICANE SANDY  
 4024 HURRICANE IRENE  
 4106 CT WINTER STORM  
 1609 HURRICANE WILMA  
 1602 HURRICANE KATRINA

### Education

Thomas Edison University, Associate of Science, Nuclear Engineering Technology, 1997

## EXPERIENCE SUMMARY

Mr. Jeffrey Dickerson has more than 30 years of experience in program management, with extensive experience in technical organizational management, training, and readiness exercises. He is a military veteran with skills in leadership, training, and personnel development. As the Technical Applications Manager, Mr. Dickerson is responsible for the planning, development, deployment of technical applications supporting emergency response operations for the firm.

Mr. Dickerson has extensive experience in process improvement and application of advanced technology to boost efficiency post-disaster field and data operations. He recently presented at the National Hurricane Conference on the use and application of technology to improve disaster response cost efficiency.

Mr. Dickerson has led the development and support of Tetra Tech's *RecoveryTrac*™ Automated Debris Management System (ADMS). As one of only three systems validated by the USACE, it is the preferred provider by the USACE debris contractors, providing ADMS services to 6 of 8 USACE districts globally. *RecoveryTrac*'s flexibility and GIS capabilities provide best-in-class reporting and analysis tools. Additionally, *RecoveryTrac*™ ADMS technology web-based data feeds enable direct integration into client GIS and emergency management systems.

## RELEVANT EXPERIENCE

### Senior Project Manager (March 2021 – Present)

#### Emergency Rental Assistance Program | Various Clients

Established the infrastructure for 2 project offices supporting Call Center and Application Review services. The offices supported over 400 team members providing Internet connectivity and workstation equipment. Communications included VOIP phone system, Call Center call handlers, Email and SMS tools.

### Program Manager (July 2019 – Present)

#### Puerto Rico Department of Housing (PRDOH) R3 Puerto Rico CDBG Program

Mr. Dickerson managed technical program and staffing for the HUD-mandated environmental reviews (Tier II Site Specific Reviews), Damage Assessment Inspection/Cost Estimate, LBP, and Asbestos Inspection program in accordance with 24 CFR Part 58 and the current Puerto Rico PRDOH R3 Program Environmental Review (Tier II) Procedures for an estimated 60,000 hurricane and flood damaged properties.

### Program Manager (Oct 2019 – Present)

#### Harris County, Project Recovery CDBG Program

Mr. Dickerson managed technical program and staffing for the HUD-mandated environmental reviews (Tier II Site Specific Reviews), Damage Assessment Inspection/Cost Estimate, and LBP program in accordance with 24 CFR Part 58 for an estimated 2,500 hurricane and flood damaged properties.

### Project Manager (December 2018 – Present)

#### State of Florida, Rebuild FL CDBG Program

Mr. Dickerson managed technical program and staffing for the HUD-mandated environmental reviews (Tier II Site Specific Reviews), Damage Assessment Inspection/Cost Estimate and LBP Inspection program in accordance with 24 CFR Part

58 and the current Florida Department of Economic Opportunity (DEO) Program Environmental Review (Tier II) Procedures for an estimated 7,000 flood damaged properties.

**Project Manager (Nov 2018 – Present)****State of Texas, Rebuild TX CDBG Program**

Mr. Dickerson managed the HUD-mandated environmental reviews program and staffing (Tier II Site Specific Reviews), Damage Assessment Inspection/Cost Estimate and LBP Inspection program in accordance with 24 CFR Part 58 and the Texas General Land Office (GLO) Program Environmental Review (Tier II) Procedures for an estimated 1,200 flood damaged properties.

**Project Manager (Jul 2018 – Oct 2019)****State of North Carolina, Rebuild NC CDBG-DR Program**

Mr. Dickerson managed the HUD-mandated environmental reviews program and staffing (Tier II Site Specific Reviews) and LBP/Asbestos Inspection program in accordance with 24 CFR Part 58 and the NCEM/NCORR Program Environmental Review (Tier II) Procedures for an estimated 1,300 flood damaged properties.

**Deputy Project Manager (May 2017 – Present)****State of Louisiana, Restore Louisiana (ReLa) CDBG Program**

Mr. Dickerson managed the HUD-mandated environmental reviews (Tier II Site Specific Reviews) in accordance with 24 CFR Part 58 and the current Restore Louisiana Program Environmental Review (Tier II) Procedures for over 24,500 flood damaged properties.

**GIS/Mobile Data Collection Manager (October 2017 – June 2018)****Sonoma, Napa, Lake and Mendocino Counties, CA | Wildfire Disaster Debris Private Property Debris Removal (PPDR) Program Management**

As part of a FEMA-Army Corps of Engineers (ACE) contractor team, Mr. Dickerson supported the deployment and data management of the ACE compliant ADMS and GIS technologies to automate documentation of the private property hazard removal and fire debris removal mission. Mission assignment also included site assessment and environmental remediation sampling. Completed assessment, sampling and fire debris removal generating nearly 1.657MM tons of debris for nearly 7,900 properties. Advanced GIS mapping, document, and data analysis portals were used extensively to document FEMA, ACE, and California environmental requirements.

**GIS/ADMS Applications Manager (October 2016 – May 2017)****States of Florida, Georgia, South Carolina and North Carolina | Hurricane Matthew Disaster Debris Public and Private Property Debris Removal (PPDR) Program Management**

Mr. Dickerson managed the deployment of customized GIS-enabled ADMS technology. The system documented removal of over 8.5 million CYs of debris and 198,000 tree hazards while supporting 720 ADMS field employee and 47 debris management sites at a removal rate of nearly 165,000 CYs/day.

**Project Manager (August 2016 – Present)****Miami-Dade County, FL | Zika Mosquito Transmission Outreach and Remediation Program**

Mr. Dickerson designed, deployed, and managed 10 technical support staff and a GIS-based field data collection and reporting application to track the activities of 80 contractors assigned to reduce mosquito habitats and educate the public. The GIS database tracked over 300K outreach and remediation activities on nearly 650K parcels throughout the County.

**GIS/ADMS Applications Manager (October 2015 – Present)****Lake and Calaveras Counties, CA | Wildfire Disaster Debris Private Property Debris Removal (PPDR) Program Management**

Mr. Dickerson managed the development and deployment of customized GIS-enabled ADMS technology to automate a private and commercial property hazard removal and demolition program, including environmental remediation sampling. Over 4,000 hazardous tree were removed, and 1,000 structures were demolished, generating nearly 100,000 cubic yards of mixed debris. Advanced GIS mapping, document, and data analysis portals were used extensively to document California environmental requirements.



# David Gonzalez

Field Supervisor

**5** YEARS OF  
EXPERIENCE

**8** DISASTERS

### Areas of Expertise

Dispatch  
Disposal Site Management  
Field Training  
QA/QC Disposal Documentation

### Key Training/Certifications

HAZWOPER 40  
FEMA ICS 100  
FEMA ICS 200

### Education

Port Richmond High School, Diploma

## EXPERIENCE SUMMARY

Mr. Gonzalez is an experienced field supervisor who has supported several projects for Tetra Tech, including both hurricane and wildfire projects. Involved in all aspects of disaster recovery, Mr. Gonzalez is most familiar with overseeing debris monitoring processes such as training, documentation, eligibility, truck certifications, and data management. Most recently, Mr. Gonzalez served as a operations manager during the Hurricane Ian clean-up efforts.

## RELEVANT EXPERIENCE

### Operations Manager (October 2022 –December 2022)

#### Hurricane Irma | Collier County, FL

Making landfall as a large category 4, Hurricane Ian left devastating effects to the state of Florida. Mr. Gonzalez deployed to Collier County, FL as an operations manager where he oversaw debris removal and disposal operations, as well as hazardous tree removal activity. He trained staff on FEMA eligibility criteria concerning hazardous tree removal and was also responsible for:

- Overseeing field monitors
- Quality assurance and quality control (QA/QC) such as health and safety, and field documentation
- Operational dispatch
- QC and verifying times in timekeeper
- Hiring and training monitors

### Operations Manager (November 2021 – September 2022)

#### CalRecycle Dixie Fire | El Dorado County, CA

Mr. Gonzalez was an operations manager for CalRecycle's Dixie Fire response project, which included hazardous tree assessment and removal. He managed a team of disposal monitors in both debris and hazardous tree removal across 9 counties. Mr. Gonzalez tasks also included:

- Working closely with the project management and data staff
- Operational dispatch
- Overseeing field operations

### Field Supervisor Lead (October 2021 – November 2021)

#### CalRecycle Northern Branch Fire | Greenville, CA

Mr. Gonzalez served as field supervisor for Tetra Tech's response to the CalRecycle Northern Branch wildfires. He oversaw the day-to-day field operations tasks, such as training and scheduling of disposal site staff. He also coordinated with program management staff to ensure the client's needs were met and that the project ran smoothly.

### Division Supervisor (February 2021 – October 2021)

#### CalRecycle Northern Branch Fires | Oroville, CA |

Mr. Gonzalez served as a division supervisor supporting the oversight of debris disposal following the Wildfire in Oroville, CA.

**Field Supervisor (November 2020 – February 2021)****Hurricane Laura | Gulfport, MS and Lake Charles, LA**

Making landfall as a Category 4 storm, Hurricane Laura had a devastating impact throughout the State of Louisiana and Mississippi. Mr. Gonzalez served as field supervisor, where he managed a team of disposal monitors in the removal of both debris and hazardous trees.

- City of Gulfport (November 2020 – February 2021)
- Lake Charles, LA (August 2020 – October 2020)

**Operations Manager (October 2020 –November 2020)****Hurricane Laura | Sulphur, LA**

Following the events of Hurricane Laura, Mr. Gonzalez was deployed to the Sulphur, LA as an operations manager. He oversaw debris removal and disposal operations, as well hazardous tree removal activity. He also trained staff on FEMA eligibility criteria concerning hazardous tree removal.

**Division Supervisor (October 2018 – January 2020)****CalRecycle Carr Fire | Chico, CA**

Mr. Gonzalez served as a division supervisor supporting the oversight of debris disposal following the Carr wildfire. He oversaw a division of 6 task force leaders, as well as the operations within his division to ensure operations ran smoothly.

**Task Force Leader (2017-2018)****CalRecycle Thomas Fire | Redding, CA**

Mr. Gonzalez was deployed as a task force leader for Tetra Tech's response to the Thomas Fire project. He oversaw private property debris removal and hazardous tree removal operations.



# Pedro Ortiz

## Field Supervisor

**5** YEARS OF  
EXPERIENCE

**12** DISASTERS

### Areas of Expertise

Field Supervision

QA/QC

Debris Removal Monitoring

Truck Certification

Dispatch and Scheduling

### Key Training/Certifications

Hazwopper 40

FEMA ICS 100

FEMA ICS 200

### Disasters

Hurricane Irma

Tubbs Fire

Woolsey Fire

Carr Fire

Camp Fire

Hurricane Hanna

Hurricane Laura

Northern Complex Fire

Hurricane Ida

Dixie-Caldor Fire

Hurricane Ian

Siskiyou Fires

## EXPERIENCE SUMMARY

Pedro Ortiz is a seasoned disaster response professional with extensive experience in task force leadership, operations management, field supervision, and debris monitoring. Throughout his career, Mr. Ortiz has responded to numerous natural disasters, including hurricanes and wildfires, in various locations across the United States. In his most recent role as a task force leader for Tetra Tech's response to the Siskiyou Fires in California, he has been responsible for supervising a team of disposal monitors, conducting hazardous tree assessments, and training monitors on FEMA guidelines.

## RELEVANT EXPERIENCE

### Task Force Leader (January 2023– Present)

#### California | Siskiyou Fires

Mr. Ortiz currently serves as a task force leader for Tetra Tech's response to the wildfires of 2022 in Siskiyou County. He works closely with field monitors, supervisors, and contactors, coordinating with program management to ensure hazardous debris and tree inspection needs are met. In this role, Mr. Ortiz is responsible for tasks such as:

- Supervising a team of disposal monitors
- Hazardous tree assessment
- Training monitors on FEMA guidelines

### Field Supervisor, Operations Manager, Project Manager (September 2022 – January 2023)

#### Florida | Hurricane Ian

Mr. Ortiz served as a Field Supervisor, Operations Manager, or Project Manager for multiple counties following Tetra Tech's response to Hurricane Ian in September of 2022. Mr. Ortiz led debris removal operations where his responsibilities consisted of the following:

- Trained and oversaw field monitors
- Quality Assurance and Quality Control (QA/QC) such as health and safety, and field documentation.
- Creating dispatch

### Area Leader (October 2021 – July 2022)

#### California | Dixie-Caldor Fire

Mr. Ortiz served as an Area Leader for CalRecycle's Dixie-Caldor Fire response, which included hazardous tree assessment and hazardous tree removal. He managed a team of task force leaders and disposal monitors in the removal of both debris and hazardous trees across various counties.

### Operations Manager (September 2021 – October 2021)

#### Louisiana | Hurricane Ida

Mr. Ortiz oversaw the day-to-day operations of Tetra Tech's response to multiple parishes following Hurricane Ida. He was responsible for the daily oversight of field staff, as well as their training and scheduling.

**Task Force Leader (January 2021 – July 2021)****California | Northern Complex Fire**

Mr. Ortiz was a Task Force Leader for Northern Branch Fire response project which includes hazardous tree assessment and hazardous tree removal. He supervised a team of crew leaders in the removal of both debris and hazardous trees across multiple counties in California.

**Operations Manager (September 2020 – January 2021)****Louisiana | Hurricane Laura**

Immediately following Hurricane Laura, Mr. Ortiz supported projects across multiple parishes in Louisiana. As field supervisor, he managed a team of debris monitors in the removal of both storm debris and hazardous trees.

**Field Supervisor (August 2020 – September 2020)****Hidalgo Co, TX | Hurricane Hanna**

Tetra Tech provided an immediate response to the Hidalgo County following Hurricane Hanna. Mr. Ortiz served as a Field Supervisor where he was responsible for staff training, scheduling, operational coordination, and the removal of over 187,000 CYs of debris.

**Debris Monitor (June 2020 – July 2020)****Houston, TX | Houston Silt Removal**

Mr. Ortiz served as a debris monitor during this time where he was responsible for monitoring and documentation of silt and sand removal for the City of Houston.

**Division Supervisor (November 2017 – August 2019)****California | Woolsey, Tubbs, Carr, and Camp Fire**

From November 2017 to 2019, Mr. Ortiz responded to various fire incidents across the state of California working as a Task Force Leader and Supervisor with Jesco. During this time, he was responsible for monitoring the removal of hazardous debris and ensuring quality assurance of project documentation.

**Field Supervisor (September 2017 – August 2019)****St Pete, FL | Hurricane Irma**

Following Hurricane Irma in September of 2017, Mr. Ortiz served as a field supervisor for disaster response projects in St. Pete, FL. Here he was responsible for overseeing debris removal operations and field staff, ensuring that the project ran smoothly and efficiently.



**Victor Tran**  
Field Supervisor

**9+** YEARS OF  
EXPERIENCE

**7** DISASTERS

**5.9M+** CBYS  
DEBRIS  
REMOVED

#### **Areas of Expertise**

Disaster Debris Monitoring

Job Site Safety

Quality Assurance

Waterway Debris Removal

Hazardous Tree Removal

Data Entry & Management

Computer Programming

#### **Disasters**

4630 Kentucky Tornadoes

4611 Hurricane Ida

4559 Hurricane Laura

4573 Hurricane Zeta

5278 California Camp Fire

4399 Hurricane Michael

#### **Certifications & Training**

Hazwoper 40 – August, 2018

Hazwoper 8 hour Refresher – July,  
2019 and November, 2020

## **EXPERIENCE SUMMARY**

Mr. Tran is experienced in operations and data management for disaster debris removal projects. He joined Tetra Tech as a debris monitor in 2018 in response to Hurricane Michael and has since assisted Tetra Tech clients with disaster debris removal efforts from five additional disasters. As he has progressed into a management role, Mr. Tran has maintained a strong focus on worksite safety while effectively assisting clients in restoring their communities.

Mr. Tran was specifically chosen for this assignment due to his familiarity with disaster debris removal efforts and his prior experience with management of debris monitoring services.

## **RELEVANT EXPERIENCE**

### **Field Supervisor (October 2022 –Present)**

#### **Polk County, FL | Hurricane Ian**

Making landfall as a large category 4 storm, Hurricane Ian left devastating effects across the state of Florida. Mr. Tran serves as field supervisor to Polk County, FL. He oversees debris removal and disposal operations as well hazardous tree removal activity. Training staff on FEMA eligibility criteria concerning hazardous tree removal. Mr. Tran's responsibilities include:

- Overseeing field monitors
- Quality Assurance and Quality Control (QA/QC) such as health and safety, and field documentation.
- Creating dispatch
- QC and verifying times in timekeeper

### **Operations Manager; Data Manager (December 2021 – February 2022)**

#### **City of Bowling Green and Warren County, Kentucky | Kentucky Tornadoes**

Mr. Tran reported directly to the project manager to ensure work instructions were completed for the client while maintaining proper safety standards. Mr. Tran assisted with compiling reports to be sent to the client. He conducted right-of-way (ROW) training classes, scheduled dispatch monitors to designated drivers, set up systems to coordinate volunteers, and established and managed the overall communication medium of the project.

### **Field Supervisor (August 2021 – December 2021)**

#### **Various Clients | Hurricane Ida**

Mr. Tran served as a field supervisor to assist several clients in response to Hurricane Ida. He helped with recruitment efforts, scheduled and dispatched monitors, and presided over survey tasks required to close out different parts of each of the projects he was a part of. Mr. Tran performed these duties to uphold client satisfaction and necessary safety measures.

The projects Mr. Tran participated in included:

- City of Covington, Louisiana
- Tangipahoa Parish, Louisiana
- City of Gulfport, Mississippi

**Field Supervisor (August 2020 – March 2021)****Various Clients | Hurricane Laura, Zeta**

Mr. Tran assisted several Tetra Tech clients to assist in recovery efforts following Hurricanes Laura and Zeta. As field supervisor, Mr. Tran aided in recruitment of staff, provided quality assurance services to ensure data integrity of project logs, assisted with leaner/hanger/stump (LHS) programs, and supervised monitors during ROW clean up initiatives throughout client jurisdictions.

The projects Mr. Tran participated in included:

- City of Lake Charles, Louisiana
- Sulphur Parks & Recreation, Louisiana
- City of Iowa, Louisiana
- City of Crowley, Louisiana

**Task Force Leader (March 2018 – November 2019)****Butte County, California | Camp Fire**

Mr. Tran followed the guidelines set forth by the Debris Removal Operations Plan to lead crews of staff tasked with debris removal following the 2018 Camp Fire. Mr. Tran and his crews assisted homeowners affected by the disaster by clearing debris around their communities. He maintained compliance with OSHA safety standards at each job site. Mr. Tran also followed proper documentation protocol to protect data integrity.

**Waterway Field Supervisor (January 2019 – March 2019)****Bay County, FL | Hurricane Michael**

Mr. Tran oversaw and documented the efforts of crews clearing eligible debris from Ecofina Creek in the wake of Hurricane Michael. He demonstrated the ability to navigate the watercraft and record data simultaneously as well as alongside other debris monitoring staff as needed. Mr. Tran also collaborated with leadership to communicate and implement policy and procedure updates to all staff members while upholding safety measures and keeping staff well-equipped for debris removal duties.

**Debris Monitor (October 2018 – January 2019)****Bay County, Florida | Hurricane Michael**

Mr. Tran observed and documented crews clearing debris from ROW caused by Hurricane Michael. He would accept debris trucks at disposal sites and properly process RecoveryTrac tickets for proper tracking. Mr. Tran also documented the clearing of leaning trees and hanging tree limbs to determine eligibility.

**Debris Monitor (September 2017 – December 2017)****Aerotek for Tetra Tech | City of Belleair Bluffs & Pinellas County, Florida**

Mr. Tran monitored debris removal efforts for two separate projects in the City of Belleair Bluffs and Pinellas County, Florida. He participated in disaster debris disposal, stump surveys, and stump removal.



**Casey Ogden**  
GIS Analyst

**20** YEARS OF  
EXPERIENCE

#### **Areas of Expertise**

GIS Programming  
ESRI Enterprise Geodatabase and Services  
GNSS Survey Grade Data Collection  
ArcGIS Pro / ArcMap Operation and Support  
ArcGIS Server and AGOL Administration

#### **Training/Certification**

GISP - URISA

#### **Education**

Florida State University  
Master of Science, Geography,  
2004

Louisiana State University  
Bachelor of Science, Geography,  
1999

## **EXPERIENCE SUMMARY**

Mr. Casey Ogden has more than 20 years of experience in Geographic Information Systems (GIS), with experience with the ESRI suite of products. He holds a Master's degree from the Florida State University with a Certificate of Emergency Management, as well as, a Bachelor's Degree from Louisiana State University in the field of Geography. As the geospatial applications manager, Mr. Ogden manages a team of five GIS personnel and is responsible for developing GIS applications that are efficient, accurate, and cutting edge.

## **RELEVANT EXPERIENCE**

### **GIS Applications Manager (September 2022 – Present)**

#### **Hurricane Ian Response | Multiple Jurisdictions**

Making landfall as a large category 4 storm, Hurricane Ian left devastating effects across the state of Florida. Mr. Ogden serves as a GIS Applications Manager and has authored web applications using ESRI's web app builder and dashboard platforms to depict live debris pick-up locations and incident reporting. Of these, custom dashboards were created per client specification to meet the public needs both internally and externally.

### **GIS Applications Manager (July 2022 – Present)**

#### **Ashbritt | USACE**

Mr. Ogden has initiated a Smartsheet/web application integration for real-time property status updates. Additionally, he has introduced site assessment and tree tag mapping automation techniques.

### **GIS Applications Manager (April 2022 – Present)**

#### **CA, Office of Emergency Services**

Mr. Ogden has produced a toolset for boundary maps that aid in wildfire management for the Office of Emergency Services in California. This includes functions that calculate tree hazard status, provide buffer analysis, and generate parcel boundary maps.

### **GIS Applications Manager (April 2022 – August 2022)**

#### **Harris County**

Mr. Ogden is responsible for automating day/night noise level reporting to include measurements to nearest roadways, railroads, airports, and managing map book production for debris zone map books.

### **GIS Developer (June 2021–May 2022)**

#### **NASA (Genex Systems)**

Mr. Ogden created an ArcGIS web app builder site that links data submitted for personnel to the reserved parking dataset by applying immediate calculation attribute rules developed using Arcade expressions in ArcGIS Pro. This application also incorporates validation attribute rules and smart editor rules to restrict editing capability and manage data content. This JSC Parking Application includes an editor, security viewer and viewer site, and replaces the existing parking management system.

**Assistant CTO and GIS Team Lead (Jan 2017–May 2017)**

Mr. Ogden automated Coastal Risk Rapid Assessment / Risk Footprint reports by utilizing ArcGIS Modelbuilder and Python scripts, turning a 3-hour process into a 1 minute runtime, and allowing the user the ability to enter an address and receive a comprehensive flood report for any address in the United States. Established various property specific tools that determine flood vulnerability by analyzing Parcels, Light Detection and Ranging (LIDAR), Tidal Gauges, Flood Zones (NFHL), and Storm Surge models (SLOSH). Product outputs include graphs, tables, and maps in a variety of formats, csv, excel, pdf, and images.

**GIS Manager (Nov 2015–Sept 2016)****NAVY, NRJ (Capstone Corporation)**

Mr. Ogden assisted Navy Region Japan's Emergency Management Division by maintaining the 'One Clear Picture' GIS web application. Duties included providing training to military personnel on techniques to broadcast Emergency Incidents to the region and establishing links/feeds from Disaster Monitoring Agencies.

**GIS Specialist (Oct 2014–Oct 2015)****NOAA, (Cyberdata Technologies)**

Mr. Ogden created and fully automated GIS tools that parse ASCII files to display Tropical Cyclone Rainfall and Hurricane Best Track operational products. The mapping product that he developed, and is now in production, is the Arrival of Tropical Storm Force Winds.

**GIS/Mobile Data Collection Manager (August 2012–June 2014)****Cablevision Systems**

As GIS lead, Mr. Ogden managed contracts related to LIDAR and high-resolution aerial imagery in South Florida, Los Angeles, and New York. With this technology, he performed Equivalent Power Flux Density (EPFD) analysis of potential service towers and directed site survey efforts to determine possible interference with alternative Direct Broadcast Satellite (DBS) providers. Additionally, he was responsible for identifying serviceable homes based on line of sight/diffraction analysis and parcel/tax roll databases, which were the drivers for site selection, sales territory development and the mapping application utilized by door-to-door sales team. He also developed process to automate publishing of ArcGIS Server web services to report Wi-Fi antenna performance changes, as well as co-developed Wi-Fi coverage prediction tool to measure dB loss from access point to potential customer residences.



# Geoff Reinhart

Billing/Invoice Analyst

**13** YEARS OF  
EXPERIENCE

### Areas of Expertise

Accounting  
Fixed Assets  
Oracle  
Peoplesoft

### Key Training/Certifications

Certified Public Accountant

### Education

Bachelor of Science in Accounting  
in Managerial Accounting, Florida  
State University, 2006

## EXPERIENCE SUMMARY

Mr. Geoff Reinhart is an experienced CPA with both public and private sector experience. As a billing and invoice analyst at Tetra Tech, Mr. Reinhart is responsible for reconciling contractor invoices and performing quality control on data to ensure that all FEMA guidelines for debris removal monitoring are successfully fulfilled.

## RELEVANT EXPERIENCE

### Billing and Invoice Analyst (April 2019 - Present)

#### Tetra Tech | Orlando, FL

Responsible for reconciling contractor invoices for debris removal and corresponding services. Ensured contractor invoice payment packages were submitted to the client in a timely manner.

- Performed QA/QC on data points required for payment recommendation
- Managed team of analysts to ensure QA/QC processes were performed accurately and efficiently
- Verified FEMA guidelines for debris removal were met

### Audit Senior (July 2018 to April 2019)

#### Forehand & Associates | PA - Orlando, FL

- Oversee multiple full-cycle financial statement audits and reviews from the planning stage through issuance.
- Financial Statement preparation for all assigned engagements, including Income Statement, Balance Sheet, Statement of Cash Flow, Disclosures & Supplementary Information required by the users of the Financial Statements.
- Design and perform analytical procedures/analysis to detect unusual financial statement relationships.
- Perform internal control analysis and substantive procedures. Identify and communicate accounting and auditing matters to managers and partners.
- Identify and communicate accounting and auditing matters to managers and partners.
- Propose adjusting journal entries and discuss audit findings with key management and / or owners.
- Document audit procedures and cross reference work papers.
- Key role in launching two firm-wide software implementation projects.

### Accounting Manager (January 2017 to July 2018)

#### Lowndes, Drosdick, Doster, Kantor & Reed, PA | Orlando, FL

- Lead and manage five of the Firm's ten Finance professionals, including selection/hiring, delegation of duties, performance management, development and training with indirect oversight of the remaining five members.
- Responsible for overseeing all aspects of the month-end and year-end close as well as maintenance of all accounting ledgers including monthly review of all account reconciliations and journal entries.
- Review all Operating account disbursements on a weekly basis prior to sending to the Admin. Committee for approval.
- Perform analytical procedures/analysis on the preliminary financial statements prior to close.
- Complete oversight and preparation of the annual budget.

- Prepare the monthly and quarterly Board of Directors reporting package.
- Prepare the weekly financial cash forecast.
- Ongoing assessment of current controls to ensure accuracy of financial reporting and develop controls as needed.
- Manage and lead special projects and prepare ad-hoc reports as needed.
- Oversight and management of the Firm's new Accounts Payable application as well as the implementation of the Trust Reserve feature and Direct Deposit program for employee Expense Reimbursements.

#### **Assistant Controller (May 2016 to December 2016)**

##### **Transaction Data Systems | Orlando, FL**

- Oversee all aspects of month-end close for parent company and three subsidiaries.
- Prepare GAAP & Proforma Financial Statement Reporting Package, including: Income Statements, Balance Sheets, Statements of Cash Flow, Key performance Indicator Reports, Quality of Earnings Reports, and various Ad Hoc reports as needed.
- Review the work completed by the Parent Company's Accounting Manager & subsidiary's controller, including the monthly reconciliation package and all journal entries.
- Perform analytical procedures/analysis on the financial statements.
- Assist in the preparation of the annual budget using key assumptions and prior year knowledge.
- Prepare monthly and quarterly financial update presentations for the Board of Directors.
- Prepare weekly financial snapshots for the CEO & Controller.
- Manage the needs of the external auditors to ensure the process is as efficient and effective as possible.

#### **Staff Auditor II (April 2014 to May 2016)**

##### **EY | Orlando, FL**

- Conduct comprehensive financial audits and agreed-upon procedures.
- Perform analytical procedures/analysis to detect unusual financial statement relationships.
- Perform internal control and substantive procedures. Identify and communicate accounting and auditing matters to seniors and managers.
- Propose adjusting journal entries and discuss audit findings with clients. Identify and communicate accounting and auditing matters to seniors and managers.
- Prepare PBC lists and confirmation requests.
- Document audit procedures and cross reference work papers.
- Create management representation letter comments and recommendations and draft audit reports for management review.

#### **Lead Staff Accountant (December 2007 to March 2014)**

##### **Stanton & Gasdick, PA | Orlando, FL**

- Oversee firm-wide accounting including the daily activities of three staff accountants.
- Personally manage seven timeshare escrow accounts and oversee all postings.
- Responsible for month-end General Ledger review and adjustments as well as yearly 1099 preparations.
- Oversee Accounts Payable and Accounts Receivable as well as firm-wide billing.
- Ensure all trust accounts are in compliance with Florida's trust account guidelines.
- Simultaneously complete timeshare funding as well as firm-wide incoming and outgoing wires.



# Steve MacNeill

## Environmental Specialist

**35+** YEARS OF  
EXPERIENCE

**5** DISASTERS

### Areas of Expertise

Project/Program Management  
Disaster Response/Debris Cleanup Management  
Grant Development /Management and Administration  
Document Quality Control  
Naturally Occurring Asbestos Assessments  
Watershed Management  
Stream Restoration / Fisheries Enhancement  
TMDL Development  
Clean Water Act Support  
Water Quality Assessment  
Hazardous Waste Investigation and Remediation

### Key Training/Certifications

ICS 100, 200, 700, 800  
40 Hour OSHA HAZWOPER Certification, 1986  
8 Hour OSHA Supervisor Training Course, 1988  
8 Hour OSHA Health and Safety Refresher Course, 2021  
EPA Training, Bioremediation of Hazardous Waste Sites, 1989  
EPA Groundwater Monitoring Training Course, 1988  
NRCS Training, Proper Functioning Condition of Riparian-Wetland Areas, 2001  
Hansen Lotic Wetland Health Assessment Training, 2002  
Environmental Monitoring and Assessment Program (EMAP) training, 2002

### Education

University of California at Davis, B.S.  
Soil and Water Science, 1985

## EXPERIENCE SUMMARY

Mr. MacNeill has more than 35 years of experience managing and performing environmental and hazardous waste site projects for private, local, state and federal clients. Mr. MacNeill's responsibilities have included all field and management aspects of hazardous waste projects.

His field work experience includes geophysical investigations, multi-media environmental sample collection, UST removals, and installation of groundwater monitoring networks and water production wells. Mr. MacNeill has served as an office team leader for the past ten years, responsible for overseeing up to fifteen team members to ensure compliance with Tetra Tech policies, continued training requirements, and daily performance, and completion of yearly reviews and salary adjustments.

## RELEVANT EXPERIENCE

### Incident Commander (October 2021 – Present)

#### CalRecycle | Northern and Central Fires

Mr. MacNeill has served as the Consultant Incident Commander on the 2021 California Northern and Central Division Fire Response. The two divisions are comprised of 15 California Counties covering a large portion of Northern and Central California. In this capacity, Mr. MacNeill is responsible for overall direction of environmental and debris operations and staff performing site assessments, asbestos assessments and abatement, biological and archaeological assessments, debris and hazardous tree removal, air monitoring operations, and confirmation soil sampling. Mr. MacNeill provides overall staffing and logistical guidance for the movement of crews and equipment between the 15 counties to provide CalRecycle with maximized efficiency of staff and resources. Mr. MacNeill is also responsible for implementation of strategy and tactics to meet incident objectives for assessment, monitoring, and completion of debris removal operations. He provides coordination with debris contractor operational staff and management of environmental issues resulting from debris removal operations. Mr. MacNeill is responsible for day-to-day interaction with the State Incident Management Team, providing technical guidance on environmental and debris removal issues, and updates of debris cleanup progress.

### Branch Director (2019-2020)

#### CalRecycle | Northern Branch

Mr. MacNeill served as a Branch Director and Debris Group Supervisor on the 2020 California Northern Branch Fire Response. The Northern Branch is comprised of nine California Counties covering a large portion of Northern California. In this capacity, Mr. MacNeill is responsible for overall direction of environmental operations and staff performing site assessments, asbestos assessments and abatement, air monitoring operations, and confirmation soil sampling. Mr. MacNeill provides daily logistical guidance for the movement of crews and equipment between the nine counties to provide CalRecycle with maximized efficiency of staff and resources. Mr. MacNeill is also responsible for implementation of strategy and tactics to meet incident objectives for assessment, monitoring, and completion of debris removal operations. He provides coordination with debris contractor operational staff and management of environmental issues resulting from debris removal operations. Mr. MacNeill is

responsible for day-to-day interaction with CalRecycle Operations and Planning staff, providing technical guidance on environmental issues, and updating CalRecycle on debris cleanup progress. On occasion, Mr. MacNeill has stepped in to run Operational Tactics meetings in the absence of the State Debris Group Supervisor.

### **Environmental Branch Director (2018-2019)**

#### **CalRecycle | Camp Fire**

Mr. MacNeill has served as both an Environmental Branch Director and Incident Commander on the 2019 Camp Fire Incident response. In this capacity, Mr. MacNeill is responsible for overall direction of environmental operations and staff performing site assessments, asbestos assessments and abatement, air monitoring operations, and confirmation soil sampling. Mr. MacNeill is also responsible for coordination with debris operations staff and management of environmental issues resulting from debris removal operations. Mr. MacNeill is responsible for day-to-day interaction with CalRecycle Operations and Planning staff, providing technical guidance on environmental issues, and updating CalRecycle on debris cleanup progress.

During debris removal operations, Mr. MacNeill directed evaluation of over 600 commercial properties impacted by the Camp Fire for the potential to contain both California, and Resource Conservation and Recovery Act (RCRA) hazardous waste. The evaluation identified 113 parcels that required pre-removal profile sampling; resulting in identification of 13 parcels containing RCRA hazardous waste. These parcels have been addressed separately, with waste being transported to a Class 1 landfill.

Mr. MacNeill also provided technical guidance and oversight for the abandonment of historic hand-dug wells identified during debris removal operations. As no state/local guidance for abandonment of hand-dug wells existed, he worked with the local County government to develop a protocol and implemented the abandonment of 66 wells to alleviate physical hazards and to protect groundwater resources.

### **Environmental Branch Director (2017-2018)**

#### **CalRecycle | Carr Fire**

Mr. MacNeill served as an Environmental Branch Director during the 2018 Carr Fire Incident response. In this capacity, Mr. MacNeill was responsible for overall direction of environmental operations and staff performing site assessments, asbestos assessments and abatement, air monitoring operations, and confirmation soil sampling. Mr. MacNeill was also responsible for day-to-day interaction with CalRecycle Operations and Planning staff, providing technical guidance, and updating CalRecycle on debris cleanup progress.

Mr. MacNeill also provided coordination with the California Department of Fish and Wildlife (Cal F&W), preparing stream crossing notifications for areas made inaccessible due to loss of bridges in the fire. The Redding area is home to the Sierra Nevada Yellow-Legged Frog, a species of special concern. Mr. MacNeill also coordinated with Cal F&W for identification and relocation of the frogs prior to construction of stream crossings. Stream reaches proposed for crossings were isolated with exclusion fencing and frogs captured and relocated to prevent injury during crossing construction activities.

### **Senior Field Team Lead (2017)**

#### **U.S. Army Corps of Engineers | Northern California Wildfire Response**

Mr. MacNeill served as a senior field team lead and staff trainer during response to the 2017 Northern California Wildfires in Sonoma, Napa, and Mendocino counties, with the majority of his time spent in Santa Rosa, California in the Coffey Park, Larkfield/Wikiup, and Fountaingrove neighborhoods devastated by the fires. In this role, Mr. MacNeill provided senior leadership of tasks including: 1) assessment, mapping, and documentation of greater than 300 fire-impacted properties, including identification and flagging of major site utilities and hazards, 2) direction of construction contractors during debris removal and site cleanup activities, and 3) post-debris removal confirmation soil sampling to document completeness of site cleanup. During his more than three months in Northern California, Mr. MacNeill was responsible for training dozens of Tetra Tech and subcontracted responders in site documentation, debris removal oversight, and confirmation soil sampling protocols and documentation.



# Donn Olson

FEMA/FHWA Specialist

**13** YEARS OF  
EXPERIENCE

**4** DISASTERS

### Areas of Expertise

FEMA Public Assistance Consulting

Cost Analysis

Project Worksheet Formulation

Audit Preparation

### Grant Experience

FEMA Public Assistance

HUD Community Development Block Grant (CDBG) Program

FEMA Community Disaster Loan (CDL)

### Key Training/Certifications

FEMA IS-630 – Public Assistance

FEMA IS-632 – Public Assistance Operations

FEMA IS-632 – Debris

Operations

### Education

University of Phoenix Bachelor of Science, Accounting, 2012

Houston Community College Associate of Applied Science, Accounting, 2007

## EXPERIENCE SUMMARY

Mr. Donn Olson is a member of Tetra Tech's disaster recovery operations. In this role, Mr. Olson assists Tetra Tech clients in navigating federal grant programs for financial recovery from disasters. His knowledge of the Federal Emergency Management Agency (FEMA) Public Assistance (PA) Program assists the applicant with maximizing eligible reimbursements. Mr. Olson is a cross-cutting disaster recovery expert and has worked extensively in Project Worksheet (PW) formulation in areas such as debris removal, emergency protective measures, force account labor and equipment, and permanent work. During the PA process, he specializes in document analysis, eligibility requirements, audit preparation, and closeout assistance, which allows the client to maximize reimbursement. Mr. Olson is intimately familiar with FEMA policies, expectations, and technology, including the FEMA GrantsPortal. **Due to his extensive experience working directly with clients and subgrantees, Mr. Olson has excellent soft skills when interfacing with stakeholders.**

Mr. Olson is also a leader of Tetra Tech's Disaster Policy Working Group, a thinktank focusing on the latest policy changes in the disaster recovery grant space. In addition to PA consulting, he assists clients with fraud prevention policy formulation for Federal grant programs such as the Community Development Block Grant (CDBG) program.

## RELEVANT EXPERIENCE

### Document Specialist (August 2017 – Present)

#### Houston, Texas | Hurricane Harvey

Mr. Olson is currently working with the City of Houston to determine damages and effects of Hurricane Harvey, collecting and compiling data of the affected items and areas, interpreting the rules and guidelines in place for remedies. Responsibilities include:

- Assisting with financial recovery efforts as a result of Hurricane Harvey, Mr. Olson assists with the preparation of the Project Worksheets (PW) to FEMA
- Assessing City of Houston (COH) documents for eligibility
- Determining and documenting COH eligible costs
- Assigning team members for PW processing
- Writing of and quality control of PW documentation
- Coordinating teams for PW processing work flow
- Training FEMA PA policies and PW writing to team members
- Responding to PA policy and eligibility questions from team members
- Preparing PW's including damage descriptions, scope of work for repairs, repair cost estimates and activities to support development of project worksheets from formulation through closeout
- Quality control of cost estimates for building repairs/replacement
- Subject matter expert for policy considerations and eligibility reviews

### Consultant (January 2010 – October 2017)

#### Port of Galveston, Texas | Hurricane Ike

Hurricane Ike made landfall in Galveston, Texas, on September 13, 2008. The Port

of Galveston (Port) maritime infrastructure (piers, docks, apron, bulkheads, underground utilities, and roadways) was heavily impacted by up to 20-foot tidal surge forces carried over and past Galveston Island to the northern reaches of Galveston Bay and channels. Mr. Olson was a specialist working on the Port of Galveston project for the eight years and supported the identification of additional damage not captured by FEMA. Mr. Olson assisted with the preparation of the PWs to FEMA and supervised the processes of obligation and closeout of over 150 PWs.

#### **Document Specialist (April 2010 – June 2010)**

##### **City of Galveston, Texas | Hurricane Ike**

Tetra Tech was hired by the City of Galveston, through a standing contract with the State of Texas Department of Rural Affairs, to help administer federal CDBG disaster recovery funds allocated for damage to City infrastructure sustained during Hurricane Ike. To repair damage from the storm, the City of Galveston completed 16 projects funded by CDBG program funds. Mr. Olson helped to provide complete grant application, administration, program management, and project delivery services for all CDBG program funded projects. Mr. Olson was also part of the team that provided assistance and oversight services for application development, environmental review, procurement, status reporting, compliance monitoring, project closeout, and audit.

#### **Document Specialist (September 2008 – December 2008)**

##### **Fort Bend County, Texas | Hurricane Ike**

On September 12, 2008, Hurricane Ike impacted Fort Bend County with hurricane force winds and heavy rain, causing damage and debris across the County. With estimated damage of more than \$15.3 million, the County requested that our team assist with applying for, administering, and managing FEMA PA funding for categories A–G.

Mr. Olson assisted the Fort Bend County Auditor Office with financial recovery due to Hurricane Ike. He identified and gathered the documentation for Category A–G PWs, including reviewing all Force Account Labor and Force Account Equipment costs to ensure they were accounted for.

#### **Document Specialist (September 2008 – December 2008)**

##### **City of Bellaire, Texas | Hurricane Ike**

On September 13, 2008, Hurricane Ike made landfall resulting in debris strewn throughout the City, public buildings damaged, public property damaged. With estimated damage of more than \$300,000, the City requested that Tetra Tech assist with applying for, administering, and managing FEMA PA funding for categories B-G. Mr. Olson acted as the documentation specialist to gather and review all pre- and post-storm Category B force account equipment and labor. This resulted in the swift development of 2 FEMA PA PWs for categories Category B totaling approximately \$300,000.

#### **Document Specialist (September 2008 – August 2011)**

##### **City of Houston Solid Waste | Hurricane Ike**

On September 12, 2008, Hurricane Ike made landfall in Texas, leaving behind massive amounts of debris from high winds, inland flooding, and storm surge. The City of Houston was faced with the overwhelming task of managing their labor and equipment hours to seek reimbursement through the FEMA PA program. Mr. Olson was an instrumental member of the team that documented, organized, and processed this intricate set of data into the required FEMA format. This information was then evaluated by a team of industry experts to request full reimbursement of damage related costs.