

**PROFESSIONAL SERVICES AGREEMENT BETWEEN  
TETRA TECH OF MICHIGAN, PC  
AND THE CITY OF ANN ARBOR  
FOR GENERAL ENGINEERING AND CONSULTING SERVICES**

The City of Ann Arbor, a Michigan municipal corporation, having its offices at 301 E. Huron St. Ann Arbor, Michigan 48104 ("City"), and Tetra Tech of Michigan, PC ("Contractor") a Michigan Corporation with its address at 710 Avis Drive, Ann Arbor, MI 48108 agree as follows on this 7<sup>th</sup> day of August, 2015.

The Contractor agrees to provide services to the City under the following terms and conditions:

**I. DEFINITIONS**

Administering Service Area/Unit means Field Operations Services Unit.

Contract Administrator means Field Operations Services Unit Manager, acting personally or through any assistants authorized by the Administrator/Manager of the Administering Service Area/Unit.

Deliverables means all Plans, Specifications, Reports, Recommendations, and other materials developed for and delivered to City by Contractor under this Agreement

Project means General Engineering & Consulting Services, RFP No. 928.

**II. DURATION**

- A. This Agreement shall become effective on August 7, 2015, and shall remain in effect until June 30, 2017 unless terminated as provided for in Article XI. The second fiscal year of the contract from July 1, 2016 to June 30, 2017 shall be subject to the availability of funding.
- B. Subject to the availability of funding in each of the two years, the term of this contract may be renewed for one additional two-year period upon the mutual agreement of the parties. Should the City wish to renew this contract, it shall provide notice to the Contractor no later than sixty days prior to the expiration of the current contract term. If renewal is acceptable, the Contractor agrees to provide acknowledgement of same no later than fourteen days after receipt of notice by the City. The parties agree to execute a renewal agreement under the same terms and conditions as the current contract, subject to possible rate adjustments as provided below.
- C. If the contract is extended, a onetime cost escalator at the time of contract renewal of no more than 3% may be added to the original submitted rates. A written request from the Contractor accompanying the acknowledgement of contract renewal will be required to consider any rate adjustments. Rate adjustment requests are subject to negotiation by the City prior to contract renewal.

### **III. SERVICES**

- A. The Contractor agrees to provide general engineering and consulting services ("Services") in connection with the Project as described in Exhibit A. The City retains the right to make changes to the quantities of service within the general scope of the Agreement at any time by a written order. If the changes add to or deduct from the extent of the services, the contract sum shall be adjusted accordingly. All such changes shall be executed under the conditions of the original Agreement.
- B. Quality of Services under this Agreement shall be of the level of quality performed by persons regularly rendering this type of service. Determination of acceptable quality shall be made solely by the Contract Administrator.
- C. The Contractor shall perform its Services for the Project in compliance with all statutory, regulatory and contractual requirements now or hereafter in effect as may be applicable to the rights and obligations set forth in the Agreement.
- D. The Contractor may rely upon the accuracy of reports and surveys provided to it by the City (if any) except when defects should have been apparent to a reasonably competent professional or when it has actual notice of any defects in the reports and surveys.

### **IV. INDEPENDENT CONTRACTOR**

The Parties agree that at all times and for all purposes under the terms of this Agreement each Party's relationship to any other Party shall be that of an independent contractor. Each Party will be solely responsible for the acts of its own employees, agents, and servants. No liability, right, or benefit arising out of any employer/employee relationship, either express or implied, shall arise or accrue to any Party as a result of this Agreement.

### **V. COMPENSATION OF CONTRACTOR**

- A. The Contractor shall be paid on the basis of reasonable time spent and materials used at the rates and prices specified in Exhibit B for acceptable work performed and acceptable deliverables received. The total fee to be paid the Consultant for the Services shall not exceed \$100,000 per fiscal year. Payment shall be made monthly following receipt of invoices submitted by the Contractor, and approved by the Contract Administrator.
- B. The Contractor will be compensated for Services performed in addition to the Services described in Section III, only when the scope of and compensation for those additional Services have received prior written approval of the Contract Administrator.

- C. The Contractor shall keep complete records of work performed (e.g. tasks performed/hours allocated) so that the City may verify invoices submitted by the Contractor. Such records shall be made available to the City upon request and submitted in summary form with each invoice.

## **VI. INSURANCE/INDEMNIFICATION**

- A. The Contractor shall procure and maintain during the life of this contract such insurance policies, including those set forth in Exhibit C, as will protect itself and the City from all claims for bodily injuries, death or property damage which may arise under this contract; whether the act(s) or omission(s) giving rise to the claim were made by the Contractor, any subcontractor or anyone employed by them directly or indirectly. In the case of all contracts involving on-site work, the Contractor shall provide to the City, before the commencement of any work under this contract, documentation satisfactory to the City demonstrating it has obtained the policies and endorsements required by Exhibit C.
- B. Any insurance provider of Contractor shall be admitted and authorized to do business in the State of Michigan and shall carry and maintain a minimum rating assigned by A.M. Best & Company's Key Rating Guide of "A-" Overall and a minimum Financial Size Category of "V". Insurance policies and certificates issued by non-admitted insurance companies are not acceptable unless approved in writing by the City.
- C. To the fullest extent permitted by law, Contractor shall indemnify, defend and hold the City, its officers, employees and agents harmless from all suits, claims, judgments and expenses, including attorney's fees, resulting or alleged to result, from any acts or omissions by Contractor or its employees and agents occurring in the performance of or breach in this Agreement, except to the extent that any suit, claim, judgment or expense are finally judicially determined to have resulted from the City's negligence or willful misconduct or its failure to comply with any of its material obligations set forth in this Agreement.

## **VII. COMPLIANCE REQUIREMENTS**

- A. Nondiscrimination. The Contractor agrees to comply, and to require its subcontractor(s) to comply, with the nondiscrimination provisions of MCL 37.2209. The Contractor further agrees to comply with the provisions of Section 9:158 of Chapter 112 of the Ann Arbor City Code and to assure that applicants are employed and that employees are treated during employment in a manner which provides equal employment opportunity.

- B. Living Wage. If the Contractor is a “covered employer” as defined in Chapter 23 of the Ann Arbor City Code, the Contractor agrees to comply with the living wage provisions of Chapter 23 of the Ann Arbor City Code. The Contractor agrees to pay those employees providing Services to the City under this Agreement a “living wage,” as defined in Section 1:815 of the Ann Arbor City Code, as adjusted in accordance with Section 1:815(3); to post a notice approved by the City of the applicability of Chapter 23 in every location in which regular or contract employees providing services under this Agreement are working; to maintain records of compliance; if requested by the City, to provide documentation to verify compliance; to take no action that would reduce the compensation, wages, fringe benefits, or leave available to any employee or person contracted for employment in order to pay the living wage required by Section 1:815; and otherwise to comply with the requirements of Chapter 23.

#### **VIII. WARRANTIES BY THE CONTRACTOR**

- A. The Contractor warrants that the quality of its Services under this Agreement shall conform to the level of quality performed by persons regularly rendering this type of service.
- B. The Contractor warrants that it has all the skills, experience, and professional licenses necessary to perform the Services specified in this Agreement.
- C. The Contractor warrants that it has available, or will engage, at its own expense, sufficient trained employees to provide the Services specified in this Agreement.
- D. The Contractor warrants that it is not, and shall not become overdue or in default to the City for any contract, debt, or any other obligation to the City including real and personal property taxes.
- E. The Contractor warrants that its proposal for services was made in good faith, it arrived at the costs of its proposal independently, without consultation, communication or agreement, for the purpose of restricting completion as to any matter relating to such fees with any competitor for these Services; and no attempt has been made or shall be made by the Contractor to induce any other perform or firm to submit or not to submit a proposal for the purpose of restricting competition.

#### **IX. OBLIGATIONS OF THE CITY**

- A. The City agrees to give the Contractor access to the Project area and other City-owned properties as required to perform the necessary Services under this Agreement.

- B. The City shall notify the Contractor of any defects in the Services of which the Contract Administrator has actual notice.

## **X. ASSIGNMENT**

- A. The Contractor shall not subcontract or assign any portion of any right or obligation under this Agreement without prior written consent from the City. Notwithstanding any consent by the City to any assignment, Contractor shall at all times remain bound to all warranties, certifications, indemnifications, promises and performances, however described, as are required of it under the Agreement unless specifically released from the requirement, in writing, by the City.
- B. The Contractor shall retain the right to pledge payment(s) due and payable under this Agreement to third parties.

## **XI. TERMINATION OF AGREEMENT**

- A. If either party is in breach of this Agreement for a period of fifteen (15) days following receipt of notice from the non-breaching party with respect to a breach, the non-breaching party may pursue any remedies available to it against the breaching party under applicable law, including but not limited to, the right to terminate this Agreement without further notice. The waiver of any breach by any party to this Agreement shall not waive any subsequent breach by any party.
- B. The City may terminate this Agreement, on at least thirty (30) days advance notice, for any reason, including convenience, without incurring any penalty, expense or liability to Contractor, except the obligation to pay for Services actually performed under the Agreement before the termination date.
- C. Contractor acknowledges that, if this Agreement extends for several fiscal years, continuation of this Agreement is subject to appropriation of funds for this Project. If funds to enable the City to effect continued payment under this Agreement are not appropriated or otherwise made available, the City shall have the right to terminate this Agreement without penalty at the end of the last period for which funds have been appropriated or otherwise made available by giving written notice of termination to Contractor. The Contract Administrator shall give Contractor written notice of such non-appropriation within thirty (30) days after it receives notice of such non-appropriation.
- D. The provisions of Articles VI and VIII shall survive the expiration or earlier termination of this Agreement for any reason. The expiration or termination of this Agreement, for any reason, shall not release either party from any obligation or liability to the other party, including any payment obligation that has already accrued and Contractor's obligation to deliver all Deliverables due as of the date of termination of the Agreement.

## **XII. REMEDIES**

- A. This Agreement does not, and is not intended to, impair, divest, delegate or contravene any constitutional, statutory and/or other legal right, privilege, power, obligation, duty or immunity of the Parties.
- B. All rights and remedies provided in this Agreement are cumulative and not exclusive, and the exercise by either party of any right or remedy does not preclude the exercise of any other rights or remedies that may now or subsequently be available at law, in equity, by statute, in any agreement between the parties or otherwise.
- C. Absent a written waiver, no act, failure, or delay by a Party to pursue or enforce any rights or remedies under this Agreement shall constitute a waiver of those rights with regard to any existing or subsequent breach of this Agreement. No waiver of any term, condition, or provision of this Agreement, whether by conduct or otherwise, in one or more instances, shall be deemed or construed as a continuing waiver of any term, condition, or provision of this Agreement. No waiver by either Party shall subsequently effect its right to require strict performance of this Agreement.

## **XIII. NOTICE**

All notices and submissions required under this Agreement shall be delivered to the respective party in the manner described herein to the address stated in this Agreement or such other address as either party may designate by prior written notice to the other. Notices given under this Agreement shall be in writing and shall be personally delivered, sent by next day express delivery service, certified mail, or first class U.S. mail postage prepaid, and addressed to the person listed below. Notice will be deemed given on the date when one of the following first occur: (1) the date of actual receipt; (2) the next business day when notice is sent next day express delivery service or personal delivery; or (3) three days after mailing first class or certified U.S. mail.

If Notice is sent to the CONTRACTOR, it shall be addressed and sent to:

OHM Advisors  
34000 Plymouth Road  
Livonia, Michigan 48150

If Notice is sent to the CITY, it shall be addressed and sent to:

City of Ann Arbor  
Craig Hupy, Public Services Area Administrator  
301 E. Huron St.  
Ann Arbor, Michigan 48104

#### **XIV. CHOICE OF LAW AND FORUM**

This Agreement will be governed and controlled in all respects by the laws of the State of Michigan, including interpretation, enforceability, validity and construction, excepting the principles of conflicts of law. The parties submit to the jurisdiction and venue of the Circuit Court for Washtenaw County, State of Michigan, or, if original jurisdiction can be established, the United States District Court for the Eastern District of Michigan, Southern Division, with respect to any action arising, directly or indirectly, out of this Agreement or the performance or breach of this Agreement. The parties stipulate that the venues referenced in this Agreement are convenient and waive any claim of non-convenience.

#### **XV. OWNERSHIP OF DOCUMENTS**

Upon completion or termination of this Agreement, all documents (i.e., Deliverables) prepared by or obtained by the Contractor as provided under the terms of this Agreement shall be delivered to and become the property of the City. Original basic survey notes, sketches, charts, drawings, partially completed drawings, computations, quantities and other data shall remain in the possession of the Contractor as instruments of service unless specifically incorporated in a deliverable, but shall be made available, upon request, to the City without restriction or limitation on their use. The City acknowledges that the documents are prepared only for the Project. Prior to completion of the contracted Services the City shall have a recognized proprietary interest in the work product of the Contractor.

Unless otherwise stated in this Agreement, any intellectual property owned by Contractor prior to the effective date of this Agreement (i.e., Preexisting Information) shall remain the exclusive property of Contractor even if such Preexisting Information is embedded or otherwise incorporated in materials or products first produced as a result of this Agreement or used to develop Deliverables. The City's right under this provision shall not apply to any Preexisting Information or any component thereof regardless of form or media.

#### **XVI. CONFLICTS OF INTEREST OR REPRESENTATION**

Contractor certifies it has no financial interest in the Services to be provided under this Agreement other than the compensation specified herein. Contractor further certifies that it presently has no personal or financial interest, and shall not acquire any such interest, direct or indirect, which would conflict in any manner with its performance of the Services under this Agreement.

Contractor agrees to advise the City if Contractor has been or is retained to handle any matter in which its representation is adverse to the City. The City's prospective consent to the Contractor's representation of a client in matters adverse to the City, as identified above, will not apply in any instance where, as the result of Contractor's representation, the Contractor has obtained sensitive, proprietary or otherwise confidential information of a non-public nature that, if known to another client of the Contractor, could be used in any such other matter by the other client to the material disadvantage of the City. Each matter will be reviewed on a case by case basis.

## **XVII. SEVERABILITY OF PROVISIONS**

Whenever possible, each provision of this Agreement will be interpreted in a manner as to be effective and valid under applicable law. However, if any provision of this Agreement or the application of any provision to any party or circumstance will be prohibited by or invalid under applicable law, that provision will be ineffective to the extent of the prohibition or invalidity without invalidating the remainder of the provisions of this Agreement or the application of the provision to other parties and circumstances.

## **XVIII. EXTENT OF AGREEMENT**

This Agreement, together with any affixed exhibits, schedules or other documentation, constitutes the entire understanding between the City and the Contractor with respect to the subject matter of the Agreement and it supersedes, unless otherwise incorporated by reference herein, all prior representations, negotiations, agreements or understandings whether written or oral. Neither party has relied on any prior representations, of any kind or nature, in entering into this Agreement. No terms or conditions of either party's invoice, purchase order or other administrative document shall modify the terms and conditions of this Agreement, regardless of the other party's failure to object to such form. This Agreement shall be binding on and shall inure to the benefit of the parties to this Agreement and their permitted successors and permitted assigns and nothing in this Agreement, express or implied, is intended to or shall confer on any other person or entity any legal or equitable right, benefit, or remedy of any nature whatsoever under or by reason of this Agreement. This Agreement may only be altered, amended or modified by written amendment signed by the Contractor and the City. This Agreement may be executed in counterparts, each of which shall be deemed an original, but all of which together shall be deemed to be one and the same agreement.



**FOR CONTRACTOR**

By \_\_\_\_\_

Its \_\_\_\_\_

**FOR THE CITY OF ANN ARBOR**

By \_\_\_\_\_  
Christopher Taylor, Mayor

By \_\_\_\_\_  
Jacqueline Beaudry, City Clerk

**Approved as to substance**

\_\_\_\_\_  
Steven D. Powers, City Administrator

\_\_\_\_\_  
Craig Hupy, Public Services Area  
Administrator

**Approved as to form and content**

\_\_\_\_\_  
Stephen K. Postema, City Attorney

**EXHIBIT A  
SCOPE OF SERVICES**



## Section C. Proposed Work Plan

We have organized this section as requested on Page 11 of the RFP. Tetra Tech anticipates that the City will contract directly for material testing services, but we have relationships with these firms should this type of service be needed.

### 1. Project Management, Scheduling and Delivery

#### PROJECT MANAGEMENT

Tetra Tech delivers our commitment to be available 24/7 to the City. Tetra Tech's approach to each project has the same bottom-up methodology—we complete each service entirely focused around the needs and constraints of our clients.

Our Philosophy can best be described as: **Listen, Think, Act, Adjust.**

**Listen** – Each project Tetra Tech completes is a custom project solely focused on meeting the specific needs of each client. Therefore, we will initiate each project by listening to the needs of the citizens, businesses, elected officials, and staff who will be using the completed project. We recognize that these individuals will be using the completed project long after the consulting engineer has finished. Therefore, our project execution must be based on the needs of the project users.

**Think** – A successful project must be properly conceived and studied or designed only once. Therefore, we must carefully plan the work and work our plan. Each project begins with a detailed work plan prepared by a senior discipline leader. This way the proper, most efficient procedures can be implemented throughout the development of the project. While most projects we envision for the City will be completed by Michigan-based staff, this could involve the use of national experts if the project is especially complex or unique.

**Act** – This step involves the study, design, or construction of the project. Each engineering step is done under the guidance of a senior engineer. Although we do use junior engineers to help lower costs, the supervision

of a senior engineer ensures the completed project is technically sound, on time, and within budget. We have also included a description within this submittal outlining Tetra Tech's quality assurance and project management approach.

**Adjust** – This is the step that separates Tetra Tech from our competitors. The adjustment involves team members listening to the client throughout the project to ensure what we are delivering meets the City's needs. It also involves oversight by senior management to ensure our team is on track. This takes the form of a few periodic interviews with City staff responsible for the project and subsequent corrections. Most of the project references provided have gone through these interviews and can attest to their effectiveness at delivering final projects that exceed expectations. Additional details of these interviews are described in the QA/QC write-up elsewhere in this submittal.

### 2. Communication and Coordination

Tetra Tech tailors our communication to the needs of each client and project. We will review the approach desired by the City prior to starting any assignment. Our communication norms are listed below:

- ◆ Monthly project reports summarizing each project's status.
- ◆ Conduct/Attend pre-construction and progress meetings and prepare minutes for distribution, which are transmitted within 24 hours to ensure accurate information and a timely review.
- ◆ Attend/Participate in public information meetings.
- ◆ Daily Construction Progress Reports e-mailed at the conclusion of each business day.
- ◆ Client staff interviews to ensure our project team is meeting client expectations.





### 3. Working Relationship Between Consultant and City Staff

Tetra Tech envisions a working relationship where we are an extension of the City of Ann Arbor's staff. Our consistent team members will lead to a working understanding of the City's expectations and technical practices. The relationship we enjoy with communities like Brighton and Northfield Township allow us to coordinate project execution within multiple departments/units of each community, thereby reducing the burden of the staff of clients we serve.

Tetra Tech's Ann Arbor office is located two miles from the Wheeler Center next to the Ann Arbor Airport. Mr. Rubel drives by the Wheeler Center to and from the office each day. This proximity makes it convenient and efficient for Tetra Tech's staff to meet.

Tetra Tech's Ann Arbor office and proximity to all City buildings make us ideally suited to schedule a needed meeting with any City employee. We invite our clients to review our performance annually (or more frequently) so we can make necessary adjustments to improve and exceed our clients' expectations.

### 4. On-Call Services Plan

Tetra Tech is committed to being available 24/7 to the City. Key elements include:

- Serving the City from our office at 710 Avis Drive, Ann Arbor.
- Our project manager, Brian Rubel, is an Ann Arbor resident and homeowner. He can generally be mobilized to any Ann Arbor site within 10 minutes. He is a dedicated employee who monitors his cell phone and e-mail in the evenings and weekends. We invite you to contact him at any time to confirm this commitment:

[brian.rubel@tetratech.com](mailto:brian.rubel@tetratech.com) | Cell Phone: 734.649.4546

Brian is an operations manager for Tetra Tech's Michigan services and thus has the authority to assign Tetra Tech resources to best meet the needs of the City of Ann Arbor both during regular office hours and beyond. Joe Siwek, also an Ann Arbor resident, will be Brian's deputy and has the same level of commitment monitoring his correspondence.

### 5. General Philosophy

Tetra Tech's approach for this contract includes:

- Developing a thorough scope of work and schedule at the beginning of each assignment for mutual agreement to avoid conflicts regarding the project definition.
- A project start meeting at the beginning of each assignment to further refine the problem statement and to understand our clients' goal and objectives.
- A Tetra Tech internal kickoff meeting where the specific project technical standards are discussed (i.e., review of drawing standards and client specifications).
- In-person progress meetings (monthly or more) to discuss the project and adjust Tetra Tech's execution to arrive at our clients' goals. These periodic workshops allow clients to give their technical input to ensure satisfaction with the work.
- To the extent practical and acceptable to the City, Tetra Tech will assign the same staff to multiple projects so that we consistently meet the expectations and standards of the City.
- Other communication approaches as outlined in Item 2 above.

### 6. Project Execution

Tetra Tech's approach to managing projects is depicted in the graphic above. The graphic shows Tetra Tech's quality assurance/quality control procedures that are used to produce a technically sound product. Since each project we complete is customized to our clients' needs, client input is clearly defined at most steps to ensure a successful project outcome.

### 7. Quality Assurance/Quality Control (QA/QC)

Tetra Tech's QA/QC program is exercised on all projects to ensure our deliverables are technically sound, high quality, cost-effective, and tailored to project objectives. The QA/QC program includes several milestones prior to submittal of deliverables. We will review each document in accordance with the program and document each review to verify implementation of the procedures. The QA/QC program consists of two distinct but interdependent components:



**Quality Assurance (QA):** The QA process is used to ensure we understand the project from the client's perspective and that their goals and objectives have been met. QA representatives consist of individuals not directly involved in the project who provide an independent perspective. Each reviewer will document their results on a checklist or questionnaire, which is then shared with the project team for possible implementation. This provides a means to continually identify opportunities for improvement. The QA process consists of:

- ◆ **Client Satisfaction Process Interview:** A Tetra Tech representative, not associated with the project, meets with the client at the beginning of the project to establish measurable and periodic milestones to evaluate our performance. We also perform a follow-up evaluation with the client upon completion of the project to confirm that we met or exceeded their expectations. Our clients consistently tell us few consulting firms have such a process and that these interviews do deliver projects with a higher level of satisfaction.
- ◆ **Report Enhancement Process:** A representative reviews the report outline and draft report and compares the client's objectives with our approach to ensure clarity and thoroughness.
- ◆ **Key Concept Review:** A team of discipline experts review project concepts, looking for design ideas and alternatives that may not have been considered or potential innovative solutions to enhance the project.
- ◆ **Constructability Review:** Reviewers look specifically for cost-avoidance opportunities to ensure that the design promotes the most cost-effective construction operations.

**Quality Control (QC):** The QC process consists of detailed checking procedures and is performed by experienced professionals who are familiar with the client's standards and practices. It consists of:

- ◆ **Technical Reviews:** Each discipline is represented by a Lead Engineer who is responsible for developing, updating, and maintaining our document and design standards.
- ◆ **Calculations:** We review all calculations to ensure proper application of design criteria and technical standards and to verify the mathematical correctness of the results.
- ◆ **Checklists:** We use checklists during the review of calculations and report/construction documents to ensure proper application of city, state, and federal design criteria and standards.
- ◆ **Report Consistency:** All report documents developed by Tetra Tech are reviewed for consistency of format and standards.
- ◆ **Construction Documents:** We check construction plans and supplemental specifications for accuracy, consistency, constructability, and conformance with the standards of our clients.
- ◆ **Conforming to Construction Record Drawings:** Our construction inspectors, design engineers, and independent CAD staff review final record drawings to confirm accuracy, consistency, and conformance with client standards.

Our broad base of satisfied clients includes major branches of the U.S. government, numerous state and local agencies, international government and funding agencies, and many of the world's leading corporations.

## 8. Technical Scopes of Work and Service Description

Tetra Tech is a full-service engineering firm with most of our experts located in Ann Arbor. A brief summary of our engineering specialties and general approach follows:

### Underground Utilities



Tetra Tech is familiar with all underground utilities that may be present in a municipality. Our staff routinely design sanitary, storm and potable water systems using a variety of pipeline materials. We have an equally diverse skill set in trenchless techniques for both new construction and rehabilitation including pipe bursting, directional drilling and cured-in-place lining. Because no two projects have the same goals and constraints, pipe materials and construction techniques are carefully selected for each project to provide the most value at the lowest life cycle cost.

### Asset Management



Tetra Tech has been at the forefront of asset management plans having prepared an MDEQ approved asset management plan in 2006 for Bay County. We have prepared asset management plans for storm sewers, sanitary sewers, water mains and wastewater treatment plants. Some plans have been prepared entirely with Tetra Tech labor and some with Tetra Tech's oversight using client staff. Tetra Tech is familiar with all asset management components and has developed databases that facilitate gathering of needed data. Members of the team also have direct familiarity with GIS compatible software such as CityWorks and experience in analyzing these types of data for use in asset management plans.

### Bridge and Structural Engineering



Tetra Tech has a proven track record in all bridge engineering services with municipal governments and with the Michigan Department of Transportation (MDOT). Our MDOT prequalifications include all of the bridge-related design and construction observation categories. Our wide variety of project experience includes bridge replacements and rehabilitations, bridge maintenance, bridge construction engineering, National Bridge Inventory (NBI) bridge safety inspections, scour evaluations, bridge scoping, bridge load rating, and local bridge program funding applications.

Through our experience with NBI bridge inspections, bridge load ratings, and scour action plans, we have become familiar with both the Michigan Bridge Inventory System (MBIS) and the Michigan Bridge Reporting System (MBRS).

Our staff experience in performing bridge/culvert load ratings is second to none in the state and our recent load rating projects reflects MDOT's confidence in our skills.

We routinely design and rehabilitate road and pedestrian bridges for municipalities throughout southeastern Michigan and Northwest Ohio. We have enclosed a summary of the footbridge Tetra Tech designed for Saline within this submittal.

Tetra Tech can and does perform routine structural engineering on all types of municipal projects. This includes such things as building design, retaining wall repair, and roof replacement.

Tetra Tech also embraces new technology, which is shown by our extensive experience in three-dimensional modeling of structures using RIVET. This software is a valuable tool for bridge rehabilitation projects and/or new complex projects. Tetra Tech can deliver projects as a traditional design-bid-build project, design-build project, or maintenance crew project. Additional transportation structure-related capabilities



*Tetra Tech has designed and administered construction on countless road and bridge projects requiring federal aid, and are prequalified with MDOT in all service categories required for this contract.*

includes designing specialty walls, pedestrian structures and unique foundations, and performing technical reviews.



**Mechanical Engineering**

Tetra Tech's mechanical engineers are located in Ann Arbor and can assist in heating, ventilating, air conditioning, and plumbing need for any type of building. Our mechanical engineers work closely with our electrical engineers to ensure the HVAC systems are properly controlled.



**Electrical Engineering**

Tetra Tech has a full-service electrical engineering department specializing in providing reliable electrical systems for municipal infrastructure. This includes designing exterior lighting systems for security, parking lots, and roads. Our team is familiar with the most energy efficient lighting and control systems (such as occupancy actuation) to reduce the cost of operating clients' infrastructure. Our staff can perform studies to determine the likely hazard and required personal protective equipment.

**Green/Sustainable Stormwater Design**

Tetra Tech has been a regional and national leader in the Pittsfield Township retained Tetra Tech to install a rain garden at their City Hall.



**Solar Power**

Our staff has experience in permitting and designing over 100 solar projects in North America, comprising over half a million acres of proposed and implemented development. Tetra Tech partners with solar energy developers to quickly and cost-effectively evaluate potential sites; successfully negotiates the regulatory environment; designs financeable, highly productive facilities; and ensures construction is completed within the agreed timeframe and in complies with applicable delivery and performance requirements.



**Wind Power**

Tetra Tech is the first truly full-service wind energy environmental, engineering, and construction firm in North America. Within the last few years, we have worked on approximately 500 wind projects worldwide, with over 25,000 MW presently in operation or under construction. Tetra Tech provides support to 20 of the top 25 wind power project developers and owners in North America. With extensive experience in the wind construction market, we have provided construction services to 30 wind projects since 2007, totaling over 3,000 MW and nearly \$1 billion in revenue. Our complete and integrated range of services—from initial siting through resource studies, permitting, engineering, procurement, construction, operations, and even retrofitting turbines—is provided by some of the most experienced wind energy experts in the industry.



**Geotechnical Engineering**

Tetra Tech employs a local geotechnical engineer who can provide services such as building foundation design, retaining wall design, and other specialty geotechnical engineering services. Tetra Tech may subcontract with local drillers to obtain soil data for some types of projects.



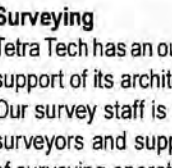
**Energy Efficiency**

Tetra Tech is frequently retained by municipalities to conduct energy evaluations for its infrastructure and to provide recommendations for reducing energy consumption. Adrian, Ypsilanti Community Utilities Authority, and Albion are three of the numerous local communities we have served in this capacity. Our local multidisciplinary experts allow us to complete these evaluations efficiently and effectively. Our evaluations have identified improvements in lighting, HVAC systems, control methodologies, insulation, electrical motors and many other systems.



**Fire Suppression**

All of the commercial buildings designed by Tetra Tech have fire suppression systems installed. Several international automobile manufacturers hire Tetra Tech's Ann Arbor staff to lead annual fire suppression upgrades to their manufacturing facilities. We have both the electrical engineering experience to design the initiation and notification devices and the mechanical engineers to design the fire water conveyance systems.



**Surveying**

Tetra Tech has an outstanding surveying department in support of its architectural and engineering activities. Our survey staff is made up of licensed professional surveyors and support personnel to handle a variety of surveying operations.



Tetra Tech's surveying staff has demonstrated strong experience in planning, directing, and performing field surveys and office work for horizontal and vertical control surveys for a wide variety of projects. This experience includes establishing primary and secondary horizontal and vertical control networks for local governmental agencies, photo control surveys, MDOT design and construction surveys, route/right-of-way surveys, and private development projects.

Tetra Tech's survey department uses seven robotic and reflectorless total stations, with on-board electronic data collectors that give simultaneous distance and angle measurements with a single pointing; eight GPS units tied to the MDOT Continuously Operating Reference Station towers for the establishment of horizontal control, based on the Michigan State Plane Coordinate System (Michigan SPCS), and the North American Vertical Datum of 1988 (NAVD88), (which is quickly becoming the standard for most municipal and federal projects); and five digital levels with on-board data collection for efficient, error-free recording of level loops to a higher level of accuracy than can be achieved by conventional leveling methods.



### Parking Lots/Site Design/Transportation

Tetra Tech is well qualified to complete site improvements needed for a City park or buildings. Our MDOT experience speaks to our transportation skills. MDOT requires that consultants pass through a rigorous prequalification process in engineering categories before being allowed to complete state projects. MDOT has recognized Tetra Tech's credentials and have prequalified us to complete work in 39 categories of work.



### Environmental Permitting

The Tetra Tech team has extensive experience working with federal, state and local regulatory and permitting agencies, such as the Environmental Protection Agency, Federal Emergency Management Agency, Michigan Department of Environmental Quality (MDEQ), and the U.S. Army Corps of Engineers. We employ wetland scientists in our Ann Arbor office who are respected by the MDEQ and can define the wetland and wetland permit requirements for any project. We can facilitate meetings with regulatory agencies and with the City to negotiate the terms and conditions for any permits or permit modifications necessary. We invite you to review our work for wetland mitigation for Detroit Edison. This was one of the most complex permit applications submitted to MDEQ and it was approved without a single public comment. A key approach was holding preapplication meetings with MDEQ so the complex permit application could be prepared in an approvable manner.



### Construction Observation and Administration

Construction observation, administration, and inspection are responsibilities that Tetra Tech takes seriously. We recognize the construction professional has a large role in managing risk and minimizing cost overruns and scheduling delays on projects. They are the last set of eyes on a project before and during the construction, and should be able to anticipate issues and resolve them before they become problems. Additionally, construction professionals must accurately and diligently document issues that occur during construction so the client's risk is managed. For many projects, the construction professional maintains the records of elevations and locations for the completion of an accurate, reliable set of conforming-to-construction-records drawings (i.e., as-builts). However, the construction professional's role is more than that. They must be the liaison between the public and the city. They must possess interpersonal skills to listen to the public, understand their concerns, and resolve issues that impact them.

We have a proven track record of working with clients to determine a role for construction professionals that fit the client's needs. Some examples include:

- ◆ Providing experienced engineering and construction professionals to represent clients as "expert witnesses" on their behalf;
- ◆ Emailing daily reports to our clients;
- ◆ Using laptops to reference record drawings that are useful to the project;
- ◆ Conducting post construction review meetings with client staff to identify and document issues discovered during construction that lead directly to improved design documents/construction procedures;
- ◆ Meeting with commercial businesses and private homeowners in affected areas to educate, inform, and discuss project issues such as access, safety, etc.; and

- ◆ Preparing newsletters, press releases, and letters for the public and businesses that may be affected by the construction activities.

Daily construction observation is performed by a resident project representative (RPR). Some responsibilities include:

- ◆ Observe/Monitor contractor's installation methods and operations to ensure conformance with contract requirements/approved submittals.
- ◆ Liaison between the contractor and the public.
- ◆ Review shop drawings to verify materials on site are correct per specifications.
- ◆ Coordinate material testing and survey staking.
- ◆ Perform quality checks on staking/cut sheets.
- ◆ Monitor material testing and assure that they are completed in accordance to standards.
- ◆ Review contractor's proposed costs for changes in work.



### Public Engagement

Tetra Tech recognizes the importance of an involved and educated public. We incorporate public engagement in most of our design projects and many important studies. We can complete this service internally or involve specialty consultants like Kerry Sheldon of Bridgeport Consulting if the project warrants a dedicated public engagement professional and intensive effort.



### Repairs of Existing Building and Other Structures (Architecture)

Tetra Tech has a deep bench of engineers and architects who understand the needs of municipal buildings, including construction and maintenance. Our architects and mechanical, structural, and electrical engineers stand ready to serve the City of Ann Arbor's needs. Recent projects include:

- ◆ Repair to a façade and canopy in Adrian;
- ◆ Major pump station improvements (structural and mechanical) for YCUA and Oakland County; and
- ◆ Numerous architectural improvements at Selfridge National Guard Base.

Understanding that some of Ann Arbor's facilities date back to the 1930s and earlier, extending older facilities' useful life will be a challenge until significant upgrades can be made. Tetra Tech has experience with various engineering studies on maintenance, operation, and construction feasibility for repairs and restoration. Tetra Tech's recent experience ensures we have a detailed cost database which allows us to prepare accurate and dependable cost opinions.

Tetra Tech has experts in concrete repair and rehabilitation, with the ability to solve almost any issue that may be encountered. Our professionals understand local and federal codes and regulations and are able to pull from international experience to offer unique solutions to common infrastructure and building integrity problems. For instance, our thorough understanding of the Americans with Disabilities Act ensures the proper accessibility is incorporated into each project. Our architects keep abreast of the latest construction materials and specialize seamless blending of improvement into an existing building.

## **EXHIBIT B COMPENSATION**

### General

Contractor shall be paid for those Services performed pursuant to this Agreement inclusive of all reimbursable expenses (if applicable), in accordance with the terms and conditions herein. The Compensation Schedule below/attached states nature and amount of compensation the Contractor may charge the City:





# FEE SCHEDULE

Tetra Tech's multiplier for these projects will be approximately 3.00 times the base rate. Our overhead rate is approximately 1.6754.

We have listed the credentials of our task leaders within the fee proposal. On most assignments, our task leaders oversee the work of junior staff members. This provides a high quality of work at a reduced cost. Thus, we have also included typical rates for junior staff who are likely to work on these projects.

Name	Title	Base Rate	Loaded Base Rate
Tim Ard	Construction Manager	\$ 43.71	\$ 140.00
Quinin Biagi, RA	Architect	\$ 48.08	\$ 145.00
Ana Bickley, PE	Transportation Engineer	\$ 36.57	\$ 110.00
Scott Buchholz, PE	Bridge Engineer	\$ 58.65	\$ 180.00
Arvin Butterfield, PS	Surveyor	\$ 29.75	\$ 95.00
Bill Kramer, PE	Mechanical Engineer	\$ 47.32	\$ 145.00
Brian Rubel, PE, PMP	Sr Project Manager	\$ 78.90	\$ 195.00
Joe Siwek, PE	Civil Engineer	\$ 34.33	\$ 110.00
Chris Wilson, PE	Electrical Engineer	\$ 46.01	\$ 140.00
Patti McCall, CPG	Geologist/Wetland Scientist	\$ 36.78	\$ 120.00
Chitta Gangopadhyay, PE, PhD	Geotechnical Engineer	\$ 46.67	\$ 140.00
Anne Thomas, PE	Civil Engineer	\$ 41.90	\$ 130.00
Emily Schlanderer, PE	Civil Engineer	\$ 37.88	\$ 115.00
Admin. Assistant I			\$ 65.00
Admin. Assistant II			\$ 70.00
Engineer I			\$ 85.00
Engineer II			\$ 110.00
Engineer III			\$ 125.00
Technician I			\$ 55.00
Technician II			\$ 75.00
Technician III			\$ 90.00

**EXHIBIT C**  
**INSURANCE REQUIREMENTS**

Effective the date of this Agreement, and continuing without interruption during the term of this Agreement, Contractor shall have, at a minimum, the following insurance, including all endorsements necessary for Contractor to have or provide the required coverage.

A. The Contractor shall have insurance that meets the following minimum requirements:

1. Professional Liability Insurance or Errors and Omissions Insurance protecting the Contractor and its employees in an amount not less than \$1,000,000.
  
2. Worker's Compensation Insurance in accordance with all applicable state and federal statutes. Further, Employers Liability Coverage shall be obtained in the following minimum amounts:  
  
Bodily Injury by Accident - \$500,000 each accident  
Bodily Injury by Disease - \$500,000 each employee  
Bodily Injury by Disease - \$500,000 each policy limit
  
3. Commercial General Liability Insurance equivalent to, as a minimum, Insurance Services Office form CG 00 01 07 98 or current equivalent. The City of Ann Arbor shall be an additional insured. There shall be no added exclusions or limiting endorsements which diminish the City's protections as an additional insured under the policy. Further, the following minimum limits of liability are required:  
  
\$1,000,000 Each occurrence as respect Bodily Injury Liability or Property Damage Liability, or both combined  
\$2,000,000 Per Job General Aggregate  
\$1,000,000 Personal and Advertising Injury
  
4. Motor Vehicle Liability Insurance, including Michigan No-Fault Coverages, equivalent to, as a minimum, Insurance Services Office form CA 00 01 07 97 or current equivalent. Coverage shall include all owned vehicles, all non-owned vehicles and all hired vehicles. The City of Ann Arbor shall be an additional insured. There shall be no added exclusions or limiting endorsements which diminish the City's protections as an additional insured under the policy. Further, the limits of liability shall be \$1,000,000 for each occurrence as respects Bodily Injury Liability or Property Damage Liability, or both combined.
  
5. Umbrella/Excess Liability Insurance shall be provided to apply in excess of the Commercial General Liability, Employers Liability and the Motor Vehicle coverage enumerated above, for each occurrence and for aggregate in the amount of \$1,000,000.

- B. Insurance required under A.3 and A.4 above shall be considered primary as respects any other valid or collectible insurance that the City may possess, including any self-insured retentions the City may have; and any other insurance the City does possess shall be considered excess insurance only and shall not be required to contribute with this insurance. Further, the Contractor agrees to waive any right of recovery by its insurer against the City.
- C. Insurance companies and policy forms are subject to approval of the City Attorney, which approval shall not be unreasonably withheld. Documentation must provide and demonstrate an unconditional 30 day written notice of cancellation in favor of the City of Ann Arbor. Further, the documentation must explicitly state the following: (a) the policy number; name of insurance company; name and address of the agent or authorized representative; name and address of insured; project name; policy expiration date; and specific coverage amounts; (b) any deductibles or self-insured retentions which shall be approved by the City, in its sole discretion; (c) that the policy conforms to the requirements specified. Contractor shall furnish the City with satisfactory certificates of insurance and endorsements prior to commencement of any work. Upon request, the Contractor shall provide within 30 days a copy of the policy(ies) to the City. If any of the above coverages expire by their terms during the term of this contract, the Contractor shall deliver proof of renewal and/or new policies and endorsements to the Administering Service Area/Unit at least ten days prior to the expiration date.