

**PROFESSIONAL SERVICES AGREEMENT BETWEEN
TETRA TECH, INC.
AND THE CITY OF ANN ARBOR
FOR 2018 ANN ARBOR LANDFILL MONITORING AND MAINTENANCE PROGRAM**

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 Inc. ("Contractor") with its address at 710 Avis Drive, Suite 100, Ann Arbor, MI 48108 agree as follows on this 5th day of July, 2017.

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

I. DEFINITIONS

Administering Service Area/Unit means Project Management.

Contract Administrator means Nicholas Hutchinson, P.E., City Engineer, 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 2018 Ann Arbor Landfill Monitoring and Maintenance Program.

II. DURATION

This Agreement shall become effective on July 5th, 2017, and shall remain in effect until satisfactory completion of the Services specified below unless terminated as provided for in Article XI.

III. SERVICES

- A. The Contractor agrees to provide professional 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 in the manner set forth in Exhibit B. The total fee to be paid to the contractor for the Services shall not exceed \$297,511. Payment shall be made monthly, unless another payment term is specified in Exhibit B, 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 person 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.

Tetra Tech, Inc.
710 Avis Drive
Ann Arbor, MI 48108

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

City of Ann Arbor
Attn: Anne M. Warrow, P.E.
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 TETRA TECH, INC.

By ADW

Its **ANA V. TURMERO-MADRIZ
CONTRACTS MANAGER**

FOR THE CITY OF ANN ARBOR

By [Signature]
Christopher Taylor, Mayor

By [Signature]
Jacqueline Beaudry, City Clerk

Approved as to substance

[Signature]
Howard S. Lazarus, City Administrator

[Signature]
Craig Hupy, Public Services Area Administrator

Approved as to form and content

[Signature]
Stephen K. Postema, City Attorney

EXHIBIT A SCOPE OF SERVICES

BACKGROUND

The Ann Arbor Landfill (AALF), located south of Ellsworth Road, west of Platt Road and north of the railroad right-of-way, is separated into two phases. The older phase of the landfill (Phase I) originated as an old gravel pit, which later accepted municipal and industrial waste and is located on the eastern portion of the landfill parcel. Of the approximately 110 acres, which comprise Phase I, the western third of the landfill is clay lined. The remaining easterly two-thirds are unlined allowing groundwater to come in direct contact with the refuse. The City purchased this operation in 1959. In 1984, Phase I was closed and capped. The city then began landfilling efforts within the remaining 60 acres known as Phase II. Phase II is an engineered, lined landfill with leachate and gas collection systems. In 1992, Phase II was closed and capped. The Ann Arbor Landfill holds approximately 2.75 million tons of refuse.

In the early-1990s, the city completed an investigation that discovered elevated levels of certain chemicals, including vinyl chloride and 1,4-dioxane, in the groundwater near the Phase I landfill. In response, the city first installed several purge wells to pump up the affected groundwater and discharge it through the sanitary sewer to the Wastewater Treatment Plant. The purge wells effectively stopped the further migration of the contaminated water. In 1995-96 the city installed a 1.75-mile long "slurry wall" around 4/5ths of the closed landfill area. A slurry wall was constructed from ground level downwards until it reached impermeable clay. The slurry wall ranges from 20 to 70 feet deep and was constructed using hundreds of tons of specialized bentonite clay. The purge wells continue to remove water from the area outside the landfill. The slurry wall essentially diverts the groundwater around the landfill, instead of through the landfill. Reduction in the levels of contamination within the purge wells has been observed.

A Capture Zone Analysis demonstrates that the three purge wells effectively capture contamination leaving the landfill, which was summarized in the report titled, Capture Zone Analysis and Conceptual Site Model Update for the Ann Arbor Landfill, and dated March 10, 2009. Purge rates have been adjusted based on this analysis to focus capture efforts on vinyl chloride.

Landfill gas is actively being recovered at the AALF by a methane gas recovery facility, the collection system is owned by the city and the generator is owned and operated by Aria Energy. The gas recovery facility was installed in October 1996 and collects landfill gas that is used to fuel an electricity-producing engine. This generator is capable of producing 500 kilowatt/hour of electricity, which is then sold directly to DTE customers through power lines.

In addition, a methane control and collection system was installed in the spring of 2005, along a portion of the north side of the AALF. Operation of this facility began on July 19, 2005. The purpose of this system is to capture methane at the landfill property boundary and prevent off-site migration. There are a total of 10 perimeter extraction wells (PEW) that are designed to capture methane gas through a well screen at the property boundary. The gas is piped back to the system's blower skid, which contains a condensation tank, one 600 pound carbon tank and blower. The air from the wells is pushed through a condensation tank, where moisture in the air is condensed. The

air then travels to the carbon tanks, where organic molecules adhere to the granulated active carbon before venting the cleaner air through a stack.

SCOPE OF SERVICES

The Scope of Services for environmental monitoring and maintenance at the AALF will begin in July 2017, corresponding to start of the City's fiscal year and end on June 30, 2021, if the original two year contract is optioned for two more years.

TASK 1: GROUNDWATER MONITORING PROGRAM

Groundwater monitoring consists of the collection of static groundwater elevations and groundwater samples from groundwater monitoring wells specific to individual contaminant plumes, i.e., 1,4 dioxane and vinyl chloride within the upper aquifer at the AALF. The frequency of monitoring varies from semi-annually to annually and may change based on future findings. Groundwater monitoring at the AALF shall be completed in accordance with the *Ann Arbor Landfill Revised Hydrogeological Monitoring Plan, dated December 18, 2015*.

Task 1.1: Collection of Static Groundwater Levels

This task includes the work effort necessary to collect static water levels from 50 locations, listed in *Table 1 - Groundwater Monitoring Program*. The static water level measurement shall be obtained from each location with an electronic water level meter accurate to ± 0.01 -foot. The water level meter shall be thoroughly disinfected following each use to minimize the potential for cross contamination between sampling points. Static water levels are to be collected on a semi-annually basis in accordance with Table 1. At each monitor well, the depth-to-water shall be recorded, referenced to the top of the well casing and used with existing information to calculate the volume of standing water in each well.

Water level data shall be used to generate a groundwater elevation contour map. This contour map, as well as static water levels collected across the slurry wall, shall be used to demonstrate that the hydraulic barrier system (slurry wall and purge wells) is maintaining an inward hydraulic gradient. If new wells are installed as part of this contract, the contractor shall work with city staff to have the new well surveyed and added to the GIS database.

Task 1.2: Sample Groundwater Monitoring Wells

Sampling shall occur in the months of April and October. Personnel conducting the sampling shall have completed the required Occupational Safety and Health Act (OSHA) safety 1910.120 training with annual refreshers. Groundwater samples that are representative of groundwater quality shall be collected at the frequencies noted from the wells identified on *Table 1 - Groundwater Monitoring Program*.

All samples obtained shall be collected in a manner to ensure results are representative of actual groundwater quality. Prior to collection of groundwater samples, water will be evacuated from

each well using low flow purging techniques until a stabilized water level is achieved. The majority of the wells will be purged using well wizard pumps dedicated to the wells however a few require a submersible pump. Well purging shall be accomplished with well wizard pumps dedicated to the wells, portable purge pumps or bailers. Following removal of at least three well volumes, field measurements of pH, specific conductance, oxidation reduction potential (ORP) and temperature shall be continuously recorded from water samples extracted from the well to determine if stable conditions have been achieved (i.e., two consecutive measurements of +/- 5-percent). After stable conditions have been achieved, samples representative of the groundwater shall then be collected. For wells that bail dry during purging, field measurements of pH, specific conductance, ORP and temperature shall be recorded after the well recharges.

Task 1.3: Perform Laboratory Analysis

The groundwater samples shall be placed directly into clean laboratory provided containers and stored in ice-packed coolers. Upon completion of all sampling activities, samples for 1,4-dioxane analysis shall be submitted to a laboratory, approved by the Engineer and capable of analysis using Method 522, under chain-of-custody procedures for analysis. All other groundwater samples may be submitted to an approved and certified laboratory, under chain-of-custody procedures for analysis. Analytical laboratories shall serve as subcontractors to Consultant during the duration of this project. Fees for the laboratory analysis shall be included in the fee schedule.

Analyses to be completed on groundwater samples collected from the monitoring wells shall include various inorganic and organic constituents as identified on *Table 1 - Groundwater Monitoring Program, List of Sample Locations and Analytical Parameters*. In addition to analysis of groundwater samples, various quality assurance/quality control (QA/QC) samples, including field blanks and trip blanks, shall be collected and submitted to the laboratories for analysis.

Task 1.4: Review and Analysis of Results

The consultant shall evaluate analytical data, as well as QA/QC data, supplied by the analytical laboratories. Evaluations shall include an estimation of the direction of groundwater flow, determination of general groundwater quality trends and an evaluation pertaining to the hydraulic performance of the purge wells and slurry wall.

Task 1.5: Prepare and Submit Monitoring Report

A copy of each semi-annual report shall be submitted to the Michigan Department of Environmental Quality (MDEQ) within 60-days of sample collection. Two hard copies and one electronic copy shall also be submitted to the City. Data presented in the report shall include groundwater contour elevation map, isoconcentration maps, analytical data summary table(s) and an evaluation regarding the hydraulic gradient across the slurry wall. These reports shall be reviewed in person with city staff prior to submittal to regulatory agencies.

Table 1 - Groundwater Monitoring Program

Sample Location	SWL	Field Parameters	VOCs	1,4-Dioxane
W-14-84	SA			
W-46-89	SA			
W-47-89	SA	SA	SA	SA
W-48-89	SA			
W-50-89	SA			
W-51-89	SA			
W-64-90	SA			
W-68-90	SA			
W-70-92	SA			
W-72-90	SA			
W-84-92	SA	SA	SA	
W-85-92	SA	SA	SA	
W-87-92	SA	SA	SA	SA
W-88-92	SA	SA	SA	
W-89-92	SA	SA	SA	
W-90-92	SA	SA	SA	
W-92-92	SA	SA	SA	
W-94-92	SA	SA	SA	
W-96-92	SA	SA	SA	
W-99-93	SA	SA	SA	
W-100-93	SA	SA	SA	
W-101-93	SA			
W-102-93	A*	A*	A*	SA
PW-1R-12	SA	SA	SA	SA
PW-2R-01	SA	SA	SA	SA
PW-3R-12	SA	SA	SA	SA
OW-31-08	SA			
OW-32-08	SA			
OW-33-08	SA			
P-0U	SA			
P-0D	SA			
P-1U	SA			
P-1D	SA			
P-2U	SA			
P-2D	SA			
P-3U	SA			
P-3D	SA			
P-4U	SA			
P-4D	SA			
P-5U	SA			
P-5D	SA			
P-6U	SA			
P-6D	SA			
P-7UR-05	SA			
P-7D	SA			
P-8U	SA			
P-8D	SA			
P-9U	SA			
P-9D	SA			
P-10U	SA			
P-10D	SA			
Totals :	SWL	Field Parameters	VOCs	1,4- Dioxane
Semi Annually (April & October)	50	15	15	5
Every 5 years	1	1	1	1

SA = Semi-annual event: April and October

A* = Annual event: Monitoring well W-102-93 will be sampled as part of the SA in April every five years for VOCs. The first sample was collected in November 2015 and the next sampling shall be collected in April 2020.

Task 1.6: Regulatory and/or Public Meetings

This task includes preparation for and attendance at either regulatory or public meetings. It is anticipated that a total of two meetings per year for the contract duration shall be necessary. It is anticipated that consultant will prepare various meeting agendas, overview documents, graphical representations of analytical data and prepare meeting minutes. Consultant's principal-in-charge and/or a project manager shall attend meetings.

Task 1.7 – Delineation of 1,4 Dioxane

This task includes work necessary to delineate the groundwater impacts of 1,4 dioxane beyond the existing monitoring well network.

Five soil borings will be completed by direct push techniques. Soil samples will be continuously collected using dual tube or macro-core samplers continuously logged for lithology and screened using a photoionization detector with a 10.6 eV lamp. Direct push soil samples will be collected to the depth of the clay underlying the water bearing formation to determine the aquifer thickness.

A temporary monitoring well will be installed at each boring location. If soil sampling is completed at a depth that is deeper than the desired total depth of the temporary monitoring well, a second soil boring will be advanced adjacent to the first, and the well will be installed in that location. Temporary monitoring wells will be constructed of one inch diameter polyvinyl chloride (PVC) riser with a one inch diameter, five foot long, ten slot (0.010 inch), PVC screen. Wells will be screened according to the lithology observed at each location, with three to four feet of the well screen set below the encountered water table. Review of abandoned soil boring logs (W-66-90, W-67-90, W-69-90 and W-77-91) and current soil boring logs of nearby locations suggests groundwater is expected to be encountered at depths between 14 to 22 feet below the surface grade.

Once installed, the temporary monitoring wells will be developed with a peristaltic pump to remove fine sediments. After development, groundwater will continue to be purged with a peristaltic pump until stabilized water level and field parameters are achieved. Field parameters (temperature, pH, dissolved oxygen, specific conductance, oxidation-reduction potential and turbidity) will be monitored using a QED Environmental Systems MP20DT flow cell. Flow cell calibration will be performed and documented prior to the start of sampling activities. Readings of the groundwater parameters will be recorded every three minutes until three stable measurements are recorded. Once the parameters have stabilized, a groundwater sample will be collected, using clean laboratory provided bottles, for 1,4-dioxane analysis. All samples will be placed into ice-packed coolers. Upon completion of all sampling activities, the sample containers will be shipped overnight to Eurofins Eaton Analytical, Inc. for analysis using United States Environmental Protection Agency Method 522.

After collection of the groundwater sample, each temporary monitoring well will be removed. The borehole will be filled to the ground surface with bentonite chip and then hydrated. Boring locations will be labeled and marked with pin flags for survey. Upon review of the 1,4-dioxane data, a determination will be made about the location of permanent monitoring wells or additional delineation if necessary.

Task 1.8: Update of Capture Zone Analysis

This task recognizes that a Capture Zone analysis was prepared and submitted to MDEQ in 2010. As a result, our monitoring and groundwater extraction program were modified. The Capture Zone Analysis shall be updated during the second year of this contract, following the delineation of 1,4-dioxane.

TASK 2: LANDFILL GAS MONITORING PROGRAM

The City of Ann Arbor conducts quarterly gas monitoring surveys to fulfill the requirements of the Natural Resources and Environmental Protection Act (NREPA), 1994 PA 451, as amended and the rules promulgated under Part 115 R 299.4433. Currently, quarterly gas monitoring at the AALF shall be completed in accordance with a *Gas Monitoring Plan Revision, dated March 28, 2008 and Addendum to Gas Monitoring Plan Revision, dated May 1, 2008*. In addition, the gas sampling locations are listed with the sample frequency in *Table 2 - Gas Sampling Location and Frequency*. In addition, the Consultant shall also complete monthly landfill gas monitoring surveys in the vicinity of the Southeast Area Park, including the concession building and nearby utility manholes, as listed below in Table 3.

In addition, an annual methane gas monitoring survey shall be performed at three homes in the University Townhouses and two homes in the Forest Hills Cooperative, which are located north of the AALF.

Task 2.1: Complete Field Monitoring

Landfill gas monitoring occurs concurrently with the groundwater monitoring schedule in the months of January, April, July and October. Personnel conducting the monitoring shall have completed the required OSHA safety training. Landfill gas measurements shall be collected as described in Tables 2 and 3.

If necessary, and when requested by the City, the consultant shall also perform methane monitoring at select locations that are not part of the normal routine quarterly monitoring locations.

Ambient methane concentrations shall be measured with a combustible gas indicator and infrared sensor. Instruments shall display the lower explosive limit (LEL) and percent by volume methane as calibrated to methane in ambient air. The meter shall be calibrated prior to each use with the accompanying calibration kit supplied by the manufacturer.

Gas monitoring data collected in the field shall be recorded on field data sheets. Information collected at each gas monitoring location shall include date, time, personnel, weather conditions, LEL, percent methane, carbon dioxide and oxygen readings. In addition, calibration information shall be recorded. In addition, to ensure the system is working, pressure readings with magnehelic gauges are taken during each methane sampling survey.

Table 2 - Gas Sampling Location and Frequency

Monitoring Location	Number of Monitoring Points	Location as Identified on Map	Frequency
Sanitary Sewer	2	S1 and S3	January and July
	6	S1 through S6	April and October
Storm Sewer	2	R1 and R2	January and July
	3	R1, R2 and R6	October
	6	R1 through R6	April
Indoor Locations*	29	MP-1 through MP-29	January and July
	28	MP-1 through MP-29	April and October
Gas Probes	14	GP-1S/1D through GP-5S/5D; GP-7S-98; GP-7D-98; GP-8SR-05; and GP-8D-98	January and July
	22	GP-1S/1D though GP-5S/5D; GP-6SR-99; GP-7S-98; GP-7D-98; GP-8SR-05; GP-8D-98; GP-10-99 through GP-13-99 and GP-14-02 through GP-16-02	April
	19	GP-1S/1D through GP-5S/5D; GP-6SR-99; GP-7S-98; GP-7D-98; GP-8SR-05; GP-8D-98; GP-13-99; and GP-14-02 through GP-16-02	April and October
Temporary Gas Probes	1	TGP-2	January and July
	2	TGP-1 and TGP-2	April and October
Piezometers	1	P-3U	January and July
	1	P-3U	April and October
Water Manhole	1	W	April and October
Meter Pit	1	MP	April and October

*Indoor Locations include: Materials Recovery Facility (MRF), Former Maintenance Building, Ann Arbor Drop-off Station and the Waste Transfer Station

Table 3 - Concession Building and Southeast Area Park Storm and Sanitary Manholes

Gas Monitoring Locations
Women's Bathroom Drain
Men's Bathroom Drain
Utility Room Drain
Utility Room Sump
Kitchen Drain - East
Kitchen Drain - West
Sanitary Sewer - Outside
Storm Sewer - Outside West
Storm Sewer - Outside East, South
Storm Sewer - Outside East, North
Storm Sewer - Outside North
Storm Sewer - Outside South

Federal and state regulations prohibit methane gas concentrations in landfill facility structures in excess of 25-percent of the LEL. The concentration of methane gas is to be measured and recorded in the site's operating record on a quarterly basis.

Task 2.2: Prepare and Submit Monitoring Report

Quarterly monitoring reports shall review and analyze the data collected and shall be submitted to the MDEQ within 60-days of gas monitoring data collection. Two hard copies and one electronic copy shall also be submitted to the City. Data presented in the report shall include field data sheets and a summary of current and previous gas monitoring data. These reports shall be reviewed in person with city staff prior to submittal to regulatory agencies.

Task 2.3: Regulatory and/or Public Meetings

This task includes preparation for and attendance at either regulatory or public meetings. For budgetary purposes, it is anticipated that a total of four meetings per year for the contract duration shall be necessary. It is anticipated that the consultant shall prepare meeting agendas, overview documents, graphical representations of analytical data and meeting minutes. Meetings shall be attended by consultant's principal-in-charge and/or a project manager.

Task 2.4: Southeast Park Landfill Gas Monitoring Survey

This task includes the completion of landfill gas monitoring survey quarterly within the vicinity of Southeast Area Park. The Consultant shall complete this survey within the concession stand and nearby utility manholes, as described in *Table 3 - Concession Building and Southeast Area Park Utilities Annual Gas Monitoring Locations*.

A monitoring report, complete with data tables and details regarding monitoring procedures, shall be prepared and submitted to the City.

Task 2.5: Methane Gas Collection System Monitoring

The Consultant shall complete a monthly inspection of the blower skid, located at the north side methane extraction system, and perform routine operation and maintenance. In addition, the ten perimeter extraction wells shall be inspected and flow adjustments shall be performed quarterly. The Consultant shall provide technical assistance to the City of Ann Arbor regarding issues related to the north side methane gas collection system.

Task 2.6: Michigan Air Emission Reporting System

The AALF has not been required to obtain an air permit, as landfills are exempt from permitting. However, MDEQ may require reporting an emission inventory using the Michigan Air Reporting System (MAERS). Consultant shall, if necessary, prepare annual MAERS reports.

Task 2.7: Annual Methane Gas Monitoring Survey

An annual methane gas monitoring survey shall be performed at three homes in the University Townhouses and two homes in the Forest Hills Cooperative, which are located north of the AALF. It is the Consultants responsibility to contact the property owners and/or the property management to schedule a time to access these homes to conduct the survey. Measurements are obtained from the basements of the homes along electrical and/or heating conduits and floor drains.

Task 2.8: Federal Greenhouse Gas Reporting

The AALF is currently required to report greenhouse gas emissions (GHG) annually to USEPA. The consultant shall obtain the information necessary for this reporting, review this information with city staff prior to submittal, and obtain the necessary access to the EPA electronic reporting site.

TASK 3: WASTEWATER MONITORING PROGRAM

Wastewater monitoring sampling procedures and analytical requirements are provided within the *Revised Industrial User Permit No.: 07012014LF-A*, dated July 1, 2014, and the revision dated February 4, 2016 that removed molybdenum analysis. Sampling consists of the collection of quarterly wastewater samples from five wastewater discharge locations identified as:

- Outfall 001: Groundwater Purge Well PW-1R-01
- Outfall 003: Leachate Discharge from Manhole MH-A
- Outfall 004: Leachate Discharge from Manhole MH-B
- Outfall 005: Groundwater Purge Well PW-2R-01
- Outfall 006: Groundwater Purge Well PW-3R-01

In addition, monthly manual discharge readings are obtained, data evaluated, discharge volume adjusted as necessary and 1,4-dioxane mass balance calculations performed.

Task 3.1: Collection of Monthly Discharge Readings

To assure that the purge wells are functioning properly, manual monthly discharge readings shall be obtained. These readings shall be compared to automated readings to assure that the wells are functioning and that the meters and purge wells are operating properly.

Task 3.2: Collection of Quarterly Wastewater Samples

Quarterly water samples shall be collected from the five outfalls. Field measurements of pH, specific conductance and temperature shall be recorded from water samples extracted from each sampling location.

Task 3.3: Laboratory Analysis

Samples for 1,4-dioxane analysis shall be submitted to a laboratory, approved by the Engineer and capable of Method 522, under chain-of-custody procedures for analysis. Analyses to be completed on wastewater samples collected from the outfalls shall include various inorganic and organic constituents as identified in the *Revised Industrial User Permit No.: 07012014LF-A, dated July 1, 2014*. In addition, various QA/QC samples, including field blanks, trip blanks and duplicate samples shall be collected and submitted to analytical laboratories for analysis.

Task 3.4: Submittal of Quarterly Reports

Two hard copies and one electronic copy of the quarterly and annual monitoring reports shall be submitted to the City within 45-days of the sampling event. Data presented in the reports shall include field data sheets and a summary of current and previous monitoring data. These reports shall be reviewed in person with city staff prior to submittal to regulatory agencies. In addition, an annual report is due by July 31 of each year.

Task 3.5: Renewal of Industrial Use Permit

The Consultant shall prepare and coordinate the renewal of the Industrial Use Permit in 2019. In addition, an annual site inspection shall be coordinated with the City of Ann Arbor's Wastewater Treatment Plant staff and a laboratory of their choosing to collect representative samples for analysis. A report from this on-site inspection shall be directed to WWTP.

Task 3.6: Groundwater Remediation

The City of Ann Arbor may undertake a pilot bioaugmentation project or other groundwater remediation project to evaluate potential effectiveness in destroying 1,4 dioxane or vinyl chloride in situ. The scope for this task will be delineated in the future.

TASK 4: ENVIRONMENTAL SYSTEM MAINTENANCE ACTIVITIES

In addition to the periodic sampling, the purge wells, observation wells, test wells, monitoring wells and methane detection system wells associated with the AALF require periodic maintenance. During the course of on-site activities, the Consultant shall monitor all landfill systems, evaluate periodic system maintenance needs and communicate these needs in detail to City staff. In addition, the landfill gas monitoring and methane collection system requires periodic evaluation and maintenance, and waste removal. The Consultant shall identify all required maintenance, prepare detailed cost estimates and coordinate all necessary repairs. An annual maintenance report shall be prepared and submitted electronically to the City.

TASK 5: PROJECT ADMINISTRATION AND OVERSIGHT

Consultant shall include the necessary fees to oversee and coordinate the entirety of the environmental monitoring program for the AALF. These tasks may include but are not limited to monthly progress meetings with City staff; periodic communication with the Project Manager(s) for the MDEQ; troubleshooting landfill issues; and preparation of future project work plans.

Task 5.1: Landfill Inspection

City of Ann Arbor Field Service staff performs weekly inspections of the landfill, which are stored in the City Works. The consultant shall review these reports quarterly and incorporate them into the quarterly landfill monitoring reports, as needed. Periodically the Michigan Department of Environmental Quality (MDEQ) will conduct an inspection of the AALF. The Consultant shall coordinate this inspection and prepare a work plan to address any deficiencies. This may include follow-up visits with MDEQ staff. The Consultant shall also complete a landfill cap inspection annually, independent of the MDEQ, to identify any deficiencies.

Task 5.2: Health and Safety Plan

The Consultant shall also be required to prepare and update a Health and Safety Plan. This Health and Safety Plan shall address all systems in operation at the AALF, list all emergency contact personnel and shall be updated annually.

Task 5.3: Project Manager

The Consultant must propose a Project Manager who is available to respond in a timely matter, in the event of an emergency at the landfill. Due to the unpredictable nature of these events, the Consultant shall be reimbursed based on time and materials for required staff as bid in the contract.

Task 5.4: Deliverables

The Consultant shall provide a flash drive with the electronic versions of program documents at the end of each fiscal year. These documents include but are not limited to: the annual, quarterly and monthly reports; meeting agendas; meeting minutes; outside correspondences; and project work plans. The consultant shall also establish a secure website to share electronic work products with city staff. In addition, the consultant shall assist the City in maintaining an accurate and up-to-date GIS layer of all landfill assets.

**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:

	FY2018	FY2019
GROUNDWATER MONITORING PROGRAM		
1		
1.1	\$2,772.00	\$2,772.00
1.2	\$9,063.00	\$9,063.00
1.3	\$2,386.00	\$2,386.00
1.4	\$1,874.00	\$1,874.00
1.5	\$4,294.00	\$4,294.00
1.6	\$6,762.00	\$6,762.00
1.7	\$12,500.00	\$0.00
1.8	\$0.00	\$19,544.00
		\$86,346.00

LANDFILL GAS MONITORING PROGRAM		
2		
2.1	\$5,945.00	\$5,945.00
2.2	\$6,236.00	\$6,236.00
2.3	\$8,047.00	\$8,047.00
2.4	\$252.00	\$252.00
2.5	\$8,940.00	\$8,940.00
2.6	\$4,645.00	\$800.00
2.7	\$800.00	\$800.00
2.8	\$3,940.00	\$3,940.00
		\$72,965.00

WASTEWATER MONITORING PROGRAM		
3		
3.1	\$4,666.00	\$4,666.00
3.2	\$3,601.00	\$3,601.00
3.3	\$2,058.00	\$2,058.00
3.4	\$5,060.00	\$5,060.00
3.5	\$564.00	\$1,691.00
3.6	\$0.00	\$0.00
		\$33,025.00

ENVIRONMENTAL SYSTEM MAINTENANCE ACTIVITIES		
4		
4.1	\$3,706.00	\$7,986.00
4.2	\$14,824.00	\$24,243.00
4.3	\$3,111.00	\$3,111.00
4.4	\$1,076.00	\$1,076.00
		\$59,133.00

PROJECT OVERSIGHT		
5		
5.1	\$1,313.00	\$1,313.00
5.2	\$1,008.00	\$1,008.00
5.3	\$6,226.00	\$6,226.00
5.4	\$974.00	\$974.00
		\$19,042.00

	\$126,643.00	\$143,868.00
	\$27,000.00	\$27,000.00
CONTINGENCY	NOT TO EXCEED TOTAL	\$297,511.00

**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.



CERTIFICATE OF LIABILITY INSURANCE

DATE(MM/DD/YYYY)
07/28/2017

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Aon Risk Insurance Services West, Inc. Los Angeles CA Office 707 Wilshire Boulevard Suite 2600 Los Angeles CA 90017-0460 USA	CONTACT NAME: PHONE (A/C. No. Ext): (866) 283-7122 FAX (A/C. No.): (800) 363-0105		
	E-MAIL ADDRESS:		
INSURED Tetra Tech, Inc. 45610 Woodland Road, Suite 400 Sterling VA 20166 USA	INSURER(S) AFFORDING COVERAGE		NAIC #
	INSURER A: Lexington Insurance Company		19437
	INSURER B: National Union Fire Ins Co of Pittsburgh		19445
	INSURER C: The Insurance Co of the State of PA		19429
	INSURER D: American Home Assurance Co.		19380
	INSURER E: AIG Europe Limited		AA1120841
INSURER F:			

COVERAGES **CERTIFICATE NUMBER: 570067783300** **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS. **Limits shown are as requested**

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
B	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PROJECT <input checked="" type="checkbox"/> LOC OTHER:			GL6051604	10/01/2016	10/01/2017	EACH OCCURRENCE \$2,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$1,000,000 MED EXP (Any one person) \$10,000 PERSONAL & ADV INJURY \$2,000,000 GENERAL AGGREGATE \$4,000,000 PRODUCTS - COMP/OP AGG \$4,000,000
B	AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO OWNED AUTOS ONLY <input type="checkbox"/> HIRED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS NON-OWNED AUTOS ONLY			CA 319-45-11	10/01/2016	10/01/2017	COMBINED SINGLE LIMIT (Ea accident) \$2,000,000 BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)
E	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> DED <input checked="" type="checkbox"/> RETENTION \$100,000			TH1600053	10/01/2016	10/01/2017	EACH OCCURRENCE \$1,000,000 AGGREGATE \$1,000,000
C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR / PARTNER / EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N	N/A	WC014629374 WC014629378 WC014629379 WC014629380	10/01/2016 10/01/2016 10/01/2016 10/01/2016	10/01/2017 10/01/2017 10/01/2017 10/01/2017	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTHER E.L. EACH ACCIDENT \$1,000,000 E.L. DISEASE-EA EMPLOYEE \$1,000,000 E.L. DISEASE-POLICY LIMIT \$1,000,000
A	Env Contr Prof			028182375 Prof/Poll Liab SIR applies per policy terms & conditions	10/01/2015	10/01/2017	Each Claim \$1,000,000 Aggregate \$1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)
 RE: Professional Services Agreement for 2018 Ann Arbor Landfill Monitoring and Maintenance Program. City of Ann Arbor is included as Additional Insured in accordance with the policy provisions the General Liability and Automobile Liability policies as required by written contract. General Liability and Automobile Liability policies evidenced herein are Primary and Non Contributory to other insurance available to an Additional Insured but only in accordance with the policy's provisions as required by written contract. A waiver of subrogation is granted in favor of City Of Ann Arbor in accordance with the policy Provisions of the General Liability, Automobile Liability, Umbrella Liability and workers' compensation policies as required by written contract. Stop Gap coverage for the following states: OH, WA, ND, WY.

CERTIFICATE HOLDER

CANCELLATION

City of Ann Arbor Attn: Anne M, Warrow 301 E. Huron St. Ann Arbor MI 48104 USA	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE <i>Aon Risk Insurance Services West, Inc.</i>
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Holder Identifier : ABCDFGHLM2Z

Certificate No : 570067783300



ENDORSEMENT

This endorsement, effective 12:01 AM 10/01/2015

Forms a part of policy no.: 028182375

Issued to: TETRA TECH, INC., ET AL

By: LEXINGTON INSURANCE COMPANY

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

This policy is amended as follows:

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

1. The cancellation effective date is prior to this policy's expiration date;
2. The **First Named Insured** is under an existing contractual obligation to notify a certificate holder when this policy is canceled (hereinafter, the "Certificate Holder(s)"); and has provided to the Insurer, either directly or through its broker of record, the email address of the contact at such entity,

and the Insurer received this information after the **First Named Insured** receives notice of cancellation of this policy and prior to this policy's cancellation effective date, via an electronic spreadsheet that is acceptable to the Insurer,

the Insurer will provide advice of cancellation (the "Advice") via e-mail to such Certificate Holders.

Proof of the Insurer emailing the Advice, using the information provided by the **First Named Insured**, will serve as proof that the Insurer has fully satisfied its obligations under this endorsement.

This endorsement does not affect, in any way, coverage provided under this policy or the cancellation of this policy or the effective date thereof, nor shall this endorsement invest any rights in any entity not insured under this policy.

The following Definitions apply to this endorsement:

1. **First Named Insured** means the Named Insured shown on the Declarations Page of this policy.
2. **Insurer** means the insurance company shown in the header on the Declarations Page of this policy.

All other terms, conditions and exclusions shall remain the same.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

This endorsement changes the policy to which it is attached effective on the inception date of the policy unless a different date is indicated below.

(The following "attaching clause" need be completed only when this endorsement is issued subsequent to preparation of the policy).

This endorsement, effective 12:01 AM 10/01/2016 forms a part of Policy No. WC 014-62-9379

**LIMITED ADVICE OF CANCELLATION PROVIDED VIA E-MAIL
TO ENTITIES OTHER THAN THE NAMED INSURED
(WORKERS' COMPENSATION ONLY)**

This policy is amended as follows:

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

1. the cancellation effective date is prior to this policy's expiration date;
2. the **Named Insured** or, if applicable, any other employers named in Item 1 of the Information Page is under an existing contractual obligation to notify a certificate holder when this policy is canceled (hereinafter, the "Certificate Holder(s)") and the **Named Insured** has provided to the **Insurer**, either directly or through its broker of record, the email address of a contact at each such entity; and
3. the **Insurer** received this information after the **Named Insured** receives notice of cancellation of this policy and prior to this policy's cancellation effective date, via an electronic spreadsheet that is acceptable to the **Insurer**,

the **Insurer** will provide advice of cancellation (the "Advice") via e-mail to each such Certificate Holders within 30 days after the **Named Insured** provides such information to the **Insurer**; provided, however, that if a specific number of days is not stated above, then the Advice will be provided to such Certificate Holder(s) as soon as reasonably practicable after the **Named Insured** provides such information to the **Insurer**.


Proof of the **Insurer** emailing the Advice, using the information provided by the **First Named Insured**, will serve as proof that the **Insurer** has fully satisfied its obligations under this endorsement.

This endorsement does not affect, in any way, coverage provided under this policy or the cancellation of this policy or the effective date thereof, nor shall this endorsement invest any rights in any entity not insured under this policy.

The following definitions apply to this endorsement:

1. **Named Insured** means the insured first named employer in Item 1 of the Information Page of this policy.
2. **Insurer** means the insurance company shown in the header on the Information Page of this policy.

All other terms, conditions and exclusions shall remain the same.



AUTHORIZED REPRESENTATIVE

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

This endorsement changes the policy to which it is attached effective on the inception date of the policy unless a different date is indicated below.

(The following "attaching clause" need be completed only when this endorsement is issued subsequent to preparation of the policy).

This endorsement, effective 12:01 AM 10/01/2016 forms a part of Policy No. WC 014-62-9378

**LIMITED ADVICE OF CANCELLATION PROVIDED VIA E-MAIL
TO ENTITIES OTHER THAN THE NAMED INSURED
(WORKERS' COMPENSATION ONLY)**

This policy is amended as follows:

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

1. the cancellation effective date is prior to this policy's expiration date;
2. the **Named Insured** or, if applicable, any other employers named in Item 1 of the Information Page is under an existing contractual obligation to notify a certificate holder when this policy is canceled (hereinafter, the "Certificate Holder(s)") and the **Named Insured** has provided to the **Insurer**, either directly or through its broker of record, the email address of a contact at each such entity; and
3. the **Insurer** received this information after the **Named Insured** receives notice of cancellation of this policy and prior to this policy's cancellation effective date, via an electronic spreadsheet that is acceptable to the **Insurer**,

the **Insurer** will provide advice of cancellation (the "Advice") via e-mail to each such Certificate Holders within 30 days after the **Named Insured** provides such information to the **Insurer**; provided, however, that if a specific number of days is not stated above, then the Advice will be provided to such Certificate Holder(s) as soon as reasonably practicable after the **Named Insured** provides such information to the **Insurer**.

Proof of the **Insurer** emailing the Advice, using the information provided by the **First Named Insured**, will serve as proof that the **Insurer** has fully satisfied its obligations under this endorsement.

This endorsement does not affect, in any way, coverage provided under this policy or the cancellation of this policy or the effective date thereof, nor shall this endorsement invest any rights in any entity not insured under this policy.

The following definitions apply to this endorsement:

1. **Named Insured** means the insured first named employer in Item 1 of the Information Page of this policy.
2. **Insurer** means the insurance company shown in the header on the Information Page of this policy.

All other terms, conditions and exclusions shall remain the same.



AUTHORIZED REPRESENTATIVE

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

This endorsement changes the policy to which it is attached effective on the inception date of the policy unless a different date is indicated below.

(The following "attaching clause" need be completed only when this endorsement is issued subsequent to preparation of the policy).

This endorsement, effective 12:01 AM 10/01/2016 forms a part of Policy No. WC 014-62-9374

**LIMITED ADVICE OF CANCELLATION PROVIDED VIA E-MAIL
TO ENTITIES OTHER THAN THE NAMED INSURED
(WORKERS' COMPENSATION ONLY)**

This policy is amended as follows:

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

1. the cancellation effective date is prior to this policy's expiration date;
2. the **Named Insured** or, if applicable, any other employers named in Item 1 of the Information Page is under an existing contractual obligation to notify a certificate holder when this policy is canceled (hereinafter, the "Certificate Holder(s)") and the **Named Insured** has provided to the **Insurer**, either directly or through its broker of record, the email address of a contact at each such entity; and
3. the **Insurer** received this information after the **Named Insured** receives notice of cancellation of this policy and prior to this policy's cancellation effective date, via an electronic spreadsheet that is acceptable to the **Insurer**,

the **Insurer** will provide advice of cancellation (the "Advice") via e-mail to each such Certificate Holders within 30 days after the **Named Insured** provides such information to the **Insurer**; provided, however, that if a specific number of days is not stated above, then the Advice will be provided to such Certificate Holder(s) as soon as reasonably practicable after the **Named Insured** provides such information to the **Insurer**.

Proof of the **Insurer** emailing the Advice, using the information provided by the **First Named Insured**, will serve as proof that the **Insurer** has fully satisfied its obligations under this endorsement.

This endorsement does not affect, in any way, coverage provided under this policy or the cancellation of this policy or the effective date thereof, nor shall this endorsement invest any rights in any entity not insured under this policy.

The following definitions apply to this endorsement:

1. **Named Insured** means the insured first named employer in Item 1 of the Information Page of this policy.
2. **Insurer** means the insurance company shown in the header on the Information Page of this policy.

All other terms, conditions and exclusions shall remain the same.



AUTHORIZED REPRESENTATIVE

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

ENDORSEMENT

This endorsement, effective 12:01 A.M. 10/01/2016

forms a part of

Policy No. CA 319-45-11

LIMITED ADVICE OF CANCELLATION PROVIDED VIA E-MAIL
TO ENTITIES OTHER THAN THE FIRST NAMED INSURED

This policy is amended as follows:

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

1. the cancellation effective date is prior to this policy's expiration date;
2. the **First Named Insured** is under an existing contractual obligation to notify a certificate holder when this policy is canceled (hereinafter, the "Certificate Holder(s)") and has provided to the Insurer, either directly or through its broker of record, the email address of a contact at each such entity; and
3. the Insurer received this information after the **First Named Insured** receives notice of cancellation of this policy and prior to this policy's cancellation effective date, via an electronic spreadsheet that is acceptable to the Insurer,

the Insurer will provide advice of cancellation (the "Advice") via e-mail to each such Certificate Holders within [30] days after the **First Named Insured** provides such information to the Insurer; provided, however, that if a specific number of days is not stated above, then the Advice will be provided to such Certificate Holder(s) as soon as reasonably practicable after the **First Named Insured** provides such information to the Insurer.

Proof of the Insurer emailing the Advice, using the information provided by the **First Named Insured**, will serve as proof that the Insurer has fully satisfied its obligations under this endorsement.

This endorsement does not affect, in any way, coverage provided under this policy or the cancellation of this policy or the effective date thereof, nor shall this endorsement invest any rights in any entity not insured under this policy.

The following Definitions apply to this endorsement:

1. **First Named Insured** means the Named Insured shown on the Declarations Page of this policy.
2. **Insurer** means the insurance company shown in the header on the Declarations page of this policy.

All other terms, conditions and exclusions shall remain the same.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

ENDORSEMENT

This endorsement, effective 12:01 A.M. 10/01/2016

forms a part of

Policy No. GL 605-16-04

LIMITED ADVICE OF CANCELLATION PROVIDED VIA E-MAIL
TO ENTITIES OTHER THAN THE FIRST NAMED INSURED

This policy is amended as follows:

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

1. the cancellation effective date is prior to this policy's expiration date;
2. the **First Named Insured** is under an existing contractual obligation to notify a certificate holder when this policy is canceled (hereinafter, the "Certificate Holder(s)") and has provided to the **Insurer**, either directly or through its broker of record, the email address of a contact at each such entity; and
3. the **Insurer** received this information after the **First Named Insured** receives notice of cancellation of this policy and prior to this policy's cancellation effective date, via an electronic spreadsheet that is acceptable to the **Insurer**,

the **Insurer** will provide advice of cancellation (the "Advice") via e-mail to each such Certificate Holders within [30] days after the **First Named Insured** provides such information to the **Insurer**; provided, however, that if a specific number of days is not stated above, then the Advice will be provided to such Certificate Holder(s) as soon as reasonably practicable after the **First Named Insured** provides such information to the **Insurer**.

Proof of the **Insurer** emailing the Advice, using the information provided by the **First Named Insured**, will serve as proof that the **Insurer** has fully satisfied its obligations under this endorsement.

This endorsement does not affect, in any way, coverage provided under this policy or the cancellation of this policy or the effective date thereof, nor shall this endorsement invest any rights in any entity not insured under this policy.

The following Definitions apply to this endorsement:

1. **First Named Insured** means the Named Insured shown on the Declarations Page of this policy.
2. **Insurer** means the insurance company shown in the header on the Declarations page of this policy.

All other terms, conditions and exclusions shall remain the same.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

This endorsement changes the policy to which it is attached effective on the inception date of the policy unless a different date is indicated below.

(The following "attaching clause" need be completed only when this endorsement is issued subsequent to preparation of the policy).

This endorsement, effective 12:01 AM 10/01/2016 forms a part of Policy No. WC 014-62-9380

**LIMITED ADVICE OF CANCELLATION PROVIDED VIA E-MAIL
TO ENTITIES OTHER THAN THE NAMED INSURED
(WORKERS' COMPENSATION ONLY)**

This policy is amended as follows:

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

1. the cancellation effective date is prior to this policy's expiration date;
2. the **Named Insured** or, if applicable, any other employers named in Item 1 of the Information Page is under an existing contractual obligation to notify a certificate holder when this policy is canceled (hereinafter, the "Certificate Holder(s)") and the **Named Insured** has provided to the **Insurer**, either directly or through its broker of record, the email address of a contact at each such entity; and
3. the **Insurer** received this information after the **Named Insured** receives notice of cancellation of this policy and prior to this policy's cancellation effective date, via an electronic spreadsheet that is acceptable to the **Insurer**,

the **Insurer** will provide advice of cancellation (the "Advice") via e-mail to each such Certificate Holders within 30 days after the **Named Insured** provides such information to the **Insurer**; provided, however, that if a specific number of days is not stated above, then the Advice will be provided to such Certificate Holder(s) as soon as reasonably practicable after the **Named Insured** provides such information to the **Insurer**.

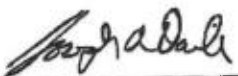
Proof of the **Insurer** emailing the Advice, using the information provided by the **First Named Insured**, will serve as proof that the **Insurer** has fully satisfied its obligations under this endorsement.

This endorsement does not affect, in any way, coverage provided under this policy or the cancellation of this policy or the effective date thereof, nor shall this endorsement invest any rights in any entity not insured under this policy.

The following definitions apply to this endorsement:

1. **Named Insured** means the insured first named employer in Item 1 of the Information Page of this policy.
2. **Insurer** means the insurance company shown in the header on the Information Page of this policy.

All other terms, conditions and exclusions shall remain the same.



AUTHORIZED REPRESENTATIVE

ENDORSEMENT

This endorsement, effective 12:01 A.M. 10/01/2016 forms a part of

policy No. CA 319-45-11

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

WAIVER OF TRANSFER OF RIGHTS OF RECOVERY AGAINST OTHERS TO US

This endorsement modifies insurance provided under the following:

BUSINESS AUTO COVERAGE FORM

Section IV - Business Auto Conditions, A. - Loss Conditions, 5. - Transfer of Rights of Recovery Against Others to Us, is amended to add:

However, we will waive any right of recover we have against any person or organization with whom you have entered into a contract or agreement because of payments we make under this Coverage Form arising out of an "accident" or "loss" if:

- (1) The "accident" or "loss" is due to operations undertaken in accordance with the contract existing between you and such person or organization; and
- (2) The contract or agreement was entered into prior to any "accident" or "loss".

No waiver of the right of recovery will directly or indirectly apply to your employees or employees of the person or organization, and we reserve our rights or lien to be reimbursed from any recovery funds obtained by any injured employee.



AUTHORIZED REPRESENTATIVE

ENDORSEMENT

This endorsement, effective 12:01 A.M. 10/01/2016 forms a part of

policy No. CA 319-45-11

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

INSURANCE PRIMARY AS TO CERTAIN ADDITIONAL INSURED

This endorsement modifies insurance provided under the following:

BUSINESS AUTO COVERAGE FORM

Section IV - Business Auto Conditions, B., General Conditions, 5., Other Insurance, c., is amended by the addition of the following sentence:

The insurance afforded under this policy to an additional insured will apply as primary insurance for such additional insured where so required under an agreement executed prior to the date of accident. We will not ask any insurer that has issued other insurance to such additional insured to contribute to the settlement of loss arising out of such accident.

All other terms and conditions remain unchanged.

ENDORSEMENT

This endorsement, effective 12:01 A.M. 10/01/2016 forms a part of

Policy No. CA 319-45-11

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

ADDITIONAL INSURED - WHERE REQUIRED UNDER CONTRACT OR AGREEMENT

This endorsement modifies insurance provided under the following:

BUSINESS AUTO COVERAGE FORM

SCHEDULE

ADDITIONAL INSURED:

ANY PERSON OR ORGANIZATION FOR WHOM YOU ARE CONTRACTUALLY BOUND TO PROVIDE ADDITIONAL INSURED STATUS BUT ONLY TO THE EXTENT OF SUCH PERSON'S OR ORGANIZATION'S LIABILITY ARISING OUT OF THE USE OF A COVERED "AUTO".

I. SECTION II - COVERED AUTOS LIABILITY COVERAGE, A. Coverage, 1. - Who Is Insured, is amended to add:

d. Any person or organization, shown in the schedule above, to whom you become obligated to include as an additional insured under this policy, as a result of any contract or agreement you enter into which requires you to furnish insurance to that person or organization of the type provided by this policy, but only with respect to liability arising out of use of a covered "auto". However, the insurance provided will not exceed the lesser of:

- (1) The coverage and/or limits of this policy, or
- (2) The coverage and/or limits required by said contract or agreement.


AUTHORIZED REPRESENTATIVE

ENDORSEMENT

This endorsement, effective 12:01 A.M. 10/01/2016 forms a part of

policy No. GL 605-16-04

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

CONTRACTOR'S COMMERCIAL PRIME ENDORSEMENT

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE FORM

Coverage afforded under this endorsement does not apply to any person or organization covered as an additional insured on any other endorsement now or hereafter attached to this Coverage Part.

I. ADDITIONAL INSURED

Section II - WHO IS AN INSURED, 1. is amended to include as an insured any person or organization described in paragraphs A through I below, whom you are required to add as an additional insured under a written contract or agreement. The written contract or agreement must be:

1. Currently in effect or becoming effective during the term of this policy; and
2. Executed prior to "bodily injury", "property damage," or "personal injury and advertising injury".

A. BY CONTRACT

Any person or organization to whom you become obligated to include as an additional insured under this policy, as a result of any contract or agreement you enter into which requires you to furnish insurance to that person or organization of the type provided by this policy, but only with respect to liability arising out of your operations or premises owned by or rented to you. However, the insurance provided will not exceed the lesser of:

1. The coverage and/or limits of this policy, or
2. The coverage and/or limits required by said contract or agreement.

B. CONTROLLING INTEREST

1. Any person or organization having a greater than a 50% interest in you, but only with respect to their liability arising out of:
 - a. Their financial control of you; or
 - b. Premises they own, maintain or control while you lease these premises.
2. The insurance afforded to these additional insureds under Paragraph I.B.1 does not apply to structural alterations, new construction or demolition operations performed by or for that person or organization.

C. CO-OWNER OR INSURED PREMISES

A Co-owner of insured premises co-owned by you and covered by this insurance but only with respect to their liability as co-owner of the premises.

D. LESSOR OF LEASED EQUIPMENT

1. Any person or organization from whom you lease equipment, but only with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" caused, in whole or in part, by your maintenance, operation or use of such equipment leased to you by such person(s) or organization(s).

2. With respect to the insurance afforded to these additional insureds under Paragraph I.D.1, this insurance does not apply to any "occurrence" which takes place:

- a) after the equipment lease expires, or
- b) after the equipment is returned or no longer in your possession,

whichever takes place later.

E. MANAGERS OR LESSORS OF PREMISES

Managers or Lessors of premises but only with respect to liability arising out of the ownership, maintenance or use of that part of the premises leased to you and subject to the following additional exclusions:

This insurance under this paragraph does not apply to:

1. Any "occurrence" which takes place after you cease to be a tenant in that premises.
2. Structural alterations, new construction or demolition operations performed by or on behalf of such Managers or Lessors.

F. MORTGAGEE, ASSIGNEE, OR RECEIVER

1. A mortgagee, assignee, or receiver but only with respect to their liability as mortgagee, assignee, or receiver and arising out of the ownership, maintenance, or use of the premises by you.
2. The insurance afforded to the additional insureds under Paragraph I.F.1 does not apply to structural alterations, new construction or demolition operations performed by or for that mortgagee, assignee, or receiver.

G. OWNERS, LESSEES, OR CONTRACTORS - COMPLETED OPERATIONS

- (1) Any Owner, Lessee or Contractor, but only with respect to liability arising out of "your work" performed for that additional insured and included in the "products-completed operations hazard".

H. OWNERS, LESSEES, OR CONTRACTORS - ONGOING OPERATIONS

Any Owners, Lessees, or Contractors, but only with respect to liability arising out of your ongoing operations performed for that additional insured.

This insurance does not apply to "bodily injury" or "property damage" occurring after:

- (1) all work, including materials, parts or equipment furnished in connection with such work, on the project (other than service, maintenance or repairs) to be performed by or on behalf of the additional insured(s) has been completed; or,
- (2) that portion of "your work" out of which the injury or damage arises has been put to its intended use by any person or organization other than another contractor or subcontractor engaged in performing operations for a principal as a part of the same project.

I. STATE OR POLITICAL SUBDIVISION - PERMITS

Any State or Political Subdivision, subject to the following provisions:

1. This insurance applies only with respect to operations performed by you or on your behalf for which the state or political subdivision has issued a permit.

2. This insurance does not apply to:

- a. "Bodily injury," "property damage" or "personal and advertising injury" arising out of operations performed for the state or municipality; or
- b. "Bodily injury" or "property damage" included within the "products-completed operations hazard".

II. PRIMARY INSURANCE - ADDITIONAL INSUREDS

Where persons or organizations have been added to your policy as additional insureds to comply with insurance requirements of written contracts mandating primary coverage for such additional insureds relative to:

- a) the performance of your ongoing operations for the additional insureds; or
- b) "your work" performed for the additional insureds and included in the "products-completed operations hazard,

then with respect to these additional insureds as defined above in this Section only.
SECTION IV - COMMERCIAL GENERAL LIABILITY CONDITIONS, Paragraph 4. - Other Insurance, a. - Primary Insurance, is deleted in its entirety and replaced with the following:

This insurance is primary over any similar insurance available to any person or organization we have added to this policy as an additional insured to comply with insurance requirements of written contracts mandating primary coverage for such additional insureds relative to (a) the performance of your ongoing operations for the additional insureds, or (b) "your work" performed for the additional insureds and included in the "products-completed operations hazard. However, this insurance is primary over any other similar insurance only if the additional insured is designated as a named insured of the other similar insurance. We will not require contribution of limits from the other similar insurance if the insurance afforded is primary.

III. INCIDENTAL MEDICAL MALPRACTICE LIABILITY COVERAGE

SECTION II - WHO IS AN INSURED, 2. a. (1) (d) is deleted in its entirety and replaced with the following:

- (d) Arising out of his or her providing or failing to provide professional health care services, except for "bodily injury" arising out of "Incidental Medical Malpractice Injury" by any physician, dentist, nurse or other medical practitioner employed or retained by you unless such "bodily injury" is covered by another primary policy. However, the insurance provided hereunder to such persons will not apply to liability arising out of services performed outside of the scope of their duties as your "employees." Any series of continuous, repeated or related acts will be treated as the occurrence of a single negligent professional healthcare service, which will be assignable to the same policy and policy year in which the originating act occurred.

SECTION V - DEFINITIONS - is amended to add:

"Incidental Medical Malpractice Injury" means "Bodily Injury" arising out of the rendering of or failure to render the following services:

- a. medical, surgical, dental, x-ray or nursing service or treatment or the furnishing of food or beverages in connection therewith; or
- b. the furnishing or dispensing of drugs or medical, dental or surgical supplies or appliances.

The Coverage provided by this endorsement does not apply to you or any insured if you are engaged in the business or occupation of providing any of the services described in the definition of "Incidental Medical Malpractice Injury".

IV. JOINT VENTURES / PARTNERSHIPS / LIMITED LIABILITY COMPANIES

The paragraph under **SECTION II - WHO IS AN INSURED** which states:

No person or organization is an insured with respect to the conduct of any current or past partnership, joint venture or limited liability company that is not shown as a Named Insured in the Declarations.

is hereby deleted and replaced with the following:

No person or organization, other than you, is an insured with respect to the conduct of any current or past partnership, joint venture or limited liability company that is not shown as a Named Insured in the Declarations.

Coverage under this policy, however, will not apply:

- a. Prior to the termination date of any joint venture, partnership or limited liability company; or
- b. If there is valid and collectible insurance purchased specifically to insure the partnership, joint venture or limited liability company.

V. SUPPLEMENTARY PAYMENTS

Under **SECTION I - SUPPLEMENTARY PAYMENTS - COVERAGES A AND B**, Paragraph 1.b., is deleted in its entirety and replaced with the following:

- b. Up to \$2,500 for cost of bail bonds required because of accidents or traffic law violations arising out of the use of any vehicle to which the Bodily Injury Liability Coverage applies. We do not have to furnish these bonds.

VI. LIBERALIZATION CLAUSE

If we revise or replace our standard policy form to provide more coverage, your policy will automatically provide the additional coverage as of the day the revision is effective in your state.

VII. UNINTENTIONAL ERRORS AND OMISSIONS

SECTION IV - COMMERCIAL GENERAL LIABILITY CONDITIONS, 6. - Representations is amended by adding:

- d. The unintentional failure by you or any Insured to provide accurate and complete nonmaterial representations as of the inception of the policy will not prejudice the coverages afforded by this policy.

VIII. AMENDMENT OF DUTIES IN THE EVENT OF OCCURRENCE, OFFENSE, CLAIM OR SUIT

SECTION IV - COMMERCIAL GENERAL LIABILITY CONDITIONS, 2. - Duties in the Event of Occurrence, Offense, Claim or Suit, a. is hereby deleted and replaced with the following:

- a. You must see to it that we are notified as soon as practicable of any "occurrence" or an offense, which may result in a claim. Knowledge of an "occurrence" or an offense by your agent, your servant, or your employee will not in itself constitute knowledge to you unless the Director of Risk Management (or one with similar or equivalent title) or his/her designee will have received such notice. To the extent possible notice should include:

- (1) How, when and where the "occurrence" or offense took place;
- (2) The names and addresses of any injured persons and witnesses; and
- (3) The nature and location of any injury or damage arising out of the "occurrence" or offense.

IX. AMENDMENT OF EXPECTED OR INTENDED INJURY EXCLUSION

SECTION 1 - COVERAGES, COVERAGE A - BODILY INJURY AND PROPERTY DAMAGE LIABILITY, 2. - Exclusions, a. - Expected or Intended Injury, is deleted and replaced by the following:

- a. "Bodily injury" or "property damage" expected or intended from the standpoint of the insured. This exclusion does not apply to "bodily injury" or "property damage" resulting from the use of reasonable force to protect persons or property.

X. CONTRACTUAL LIABILITY - RAILROADS

Only with respect to (i) operations performed within 50 feet of railroad property and (ii) for which a Railroad Protective Liability Policy in the name of the railroad has been provided, then

A. SECTION V - DEFINITIONS, Paragraph 9, is deleted in its entirety and replaced with the following:

9. "Insured Contract" means:

- a. A contract for a lease of premises. However, that portion of the contract for a lease of premises that indemnifies any person or organization for damage by fire to premises while rented to you or temporarily occupied by you with permission of the owner is not an "insured contract";
- b. A sidetrack agreement;
- c. Any easement or license agreement;
- d. An obligation, as required by ordinance, to indemnify a municipality, except in connection with work for a municipality;
- e. An elevator maintenance agreement;
- f. That part of any other contract or agreement pertaining to your business (including an indemnification of a municipality in connection with work performed for a municipality) under which you assume the tort liability of another party to pay for "bodily injury" or "property damage" to a third person or organization. Tort liability means a liability that would be imposed by law in the absence of any contract or agreement.

Paragraph f. does not include that part of any contract or agreement:

(1) That indemnifies an architect, engineer or surveyor for injury or damage arising out of:

- (a) Preparing, approving or failing to prepare or approve maps, shop drawings, opinions, reports, surveys, field orders, change orders or drawings and specifications; or

(b) Giving directions or instructions, or failing to give them, if that is the primary cause of the injury or damage; or

(2) Under which the insured, if an architect, engineer or surveyor, assumes liability for an injury or damage arising out of the insured's rendering or failure to render professional services, including those listed in Paragraph (1) above and supervisory, inspection, architectural or engineering activities; and

B. SECTION IV - COMMERCIAL GENERAL LIABILITY CONDITIONS, 4. - Other Insurance, b. Excess Insurance, (1) (a), is amended to include the following:

(v) That is a Railroad Protective Insurance Policy or similar coverage.

XI. COVERAGE FOR YOUR SUPERVISORY OR MANAGERIAL EMPLOYEES RELATING TO CO-EMPLOYEE INJURIES

SECTION II - WHO IS AN INSURED, 2.a. (1), (a) and (b) are clarified to hold that:

Your supervisory or managerial "employees" are insureds for "bodily injury" to "co-employees" while in the course of their employment or performing duties related to the conduct of your business if claims or suits arise out of liability assumed by an insured under an "insured contract" as provided by **SECTION I - COVERAGES, COVERAGE A BODILY INJURY AND PROPERTY DAMAGE LIABILITY, 2. Exclusions, e. Employer's Liability.**

XII. WAIVER OF TRANSFER OF RIGHTS OR RECOVERY AGAINST OTHERS TO US

SECTION IV - COMMERCIAL GENERAL LIABILITY CONDITIONS, 8. - Transfer of Rights of Recovery Against Others To Us, is amended by the addition of the following:

We waive any right of recovery we may have against any person or organization pursuant to applicable written contract or agreement you enter into because of payments we make for injury or damage arising out of your ongoing operations or "your work" done under a contract with that person or organization and included in the "products-completed operations hazard".

XIII. AMENDMENT OF OTHER INSURANCE

A. SECTION IV - COMMERCIAL GENERAL LIABILITY CONDITIONS, 4.- Other Insurance, b. - Excess Insurance, (1), is amended to include the following:

This insurance shall not be excess where (i) such other insurance is specifically purchased to apply as excess of this policy, or (ii) where you are obligated by contract to provide primary insurance to an additional insured, unless there is other additional insurance coverage available to that additional insured.

B. SECTION IV - COMMERCIAL GENERAL LIABILITY CONDITIONS, 4.- Other Insurance, b. - Excess Insurance, (2), is deleted in its entirety and replaced with the following:

When this insurance is excess, we will have no duty under Coverages A or B to defend any claim or "suit" that any other insurer has a duty to defend. If no other insurer defends, we will undertake to do so, but we will be entitled to the insured's rights against all those other insurers.

XIV. AMENDMENT AGGREGATE LIMITS PER PROJECT

A. For all sums which the insured becomes legally obligated to pay as damages caused by "occurrences" under COVERAGE A (SECTION I), offense under COVERAGE B (SECTION 1) and for all medical expenses caused by accidents under COVERAGE C (SECTION I), which can be attributed only to ongoing operations at a single designated construction project:

1. A separate Per Construction Project General Aggregate Limit applies to each construction project, and that limit is equal to the amount of the General Aggregate Limit shown in the Declarations.
 2. The Per Construction Project General Aggregate Limit is the most we will pay for the sum of (i) all damages under COVERAGE A, except damages because of "bodily injury" or "property damage" included in the "products-completed operations hazard", (ii) all damages under COVERAGE B and (iii) all medical expenses under COVERAGE C regardless of the number of:
 - a. Insureds;
 - b. Claims made or "suits" brought; or
 - c. Persons or organizations making claims or bringing "suits".
 3. Any payments made under COVERAGE A or B for damages or under COVERAGE C for medical expenses shall reduce the Per Construction Project General Aggregate Limit for that construction project. Such payments shall not reduce the General Aggregate Limit shown in the Declarations nor shall they reduce any other Per Construction Project General Aggregate Limit for any other construction project covered under this policy.
 4. The limits shown in the Declarations for Each Occurrence, Fire Damage and Medical Expense continue to apply. However, instead of being subject to the General Aggregate Limit shown in the Declarations, such limits will be subject to the applicable Per Construction Project General Aggregate Limit.
- B. For all sums which the insured becomes legally obligated to pay as damages caused by "occurrences" under COVERAGE A (SECTION I), offenses under COVERAGE B (SECTION 1) and for all medical expenses caused by accidents under COVERAGE C (SECTION I), which cannot be attributed only to ongoing operations at a single construction project:
1. Any payments made under COVERAGE A or B for damages or under COVERAGE C for medical expenses shall reduce the amount available under the General Aggregate Limit or the Products-Completed Operations Aggregate Limit, whichever is applicable; and
 2. Such payments shall not reduce any Construction Project General Aggregate Limit.
- C. When coverage for liability arising out of the "products-completed operations hazard" is provided, any payments for damages because of "bodily injury" or "property damage" included in the "products-completed operations hazard" will reduce the Products-Completed Operations Aggregate Limit, and not reduce the General Aggregate Limit nor the Construction Project General Aggregate Limit.
- D. If the applicable construction project has been abandoned, delayed, or abandoned and then restarted, or if the authorized contracting parties deviate from plans, blueprints, designs, specifications or timetables, the project will still be deemed to be the same construction project.
- E. The provisions of Limits of Insurance (SECTION III) not otherwise modified by this endorsement shall continue to apply as stipulated.