AMENDMENT NUMBER 3 TO AGREEMENT FOR PROFESSIONAL SERVICES BETWEEN TETRA TECH, INC. (formerly known as TETRA TECH GEO, INC.) AND THE CITY OF ANN ARBOR

The City of Ann Arbor, a Michigan municipal corporation, having its offices at 100 North Fifth Avenue, Ann Arbor, Michigan 48104 ("City"), and <u>Tetra Tech, Inc. (formerly known as Tetra Tech GEO, Inc.</u>, a <u>Virginia Corporation</u>, with its address at <u>710 Avis Drive</u>, Ann Arbor, Michigan, 48108 ("Consultant"), agree this <u>1st</u> day of June, 2015, to amend the original agreement between them dated July 2, 2012, as amended by Amendment No. 1 dated July 15, 2013 and by Amendment No. 2 dated July 21, 2014, as follows:

Article III.A., SERVICES, is amended to read as follows: The Consultant agrees to provide professional engineering services ("Services") in connection with the Project as described in the existing Exhibit A, A2 and A3, together with Exhibit A4, which is attached hereto, provided that work identified as "Annual Landfill Monitoring and Maintenance - Year 5" shall be subject to the availability of funding in the City's FY17 budget. 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.

Article IV.A., The Consultant shall be paid in the manner set forth in Exhibit B, B2 and B3, together with Exhibit B4, which is attached hereto. Payment shall be made monthly, unless another payment term is specified in Exhibit B, Exhibit B2, Exhibit B3 or Exhibit B4, following receipt of invoices submitted by the Consultant, and approved by the Contract Administrator, provided that work identified as "Annual Landfill Monitoring and Maintenance - Year 5" shall be subject to the availability of funding in the City's FY17 budget.

All terms, conditions, and provisions of the original agreement between the parties dated July 2, 2012, as amended by Amendment No. 1 dated July 15, 2013 and by Amendment No. 2 dated July 21, 2014, unless specifically amended above, are to apply to this amendment and are made a part of this amendment as though expressly rewritten, incorporated, and included herein.

This amendment to the agreement between the parties shall be binding on the heirs, successors and assigns of the parties.

Dated this: June 1, 2015.

For Tetra Tech, Inc.

For City of Ann Arbor

Approved as to substance

By_____

Christopher Taylor, Mayor

By_____ Jacqueline Beaudry, City Clerk

Approved as to form and content

By_____

Its

By_____Stephen D. Powers, City Administrator

By_____

Craig Hupy, Public Services Area Administrator

By_____Stephen K. Postema, City Attorney

EXHIBIT A4 SCOPE OF SERVICES

Landfill Plume Remediation

This task includes costs to complete additional remediation pilot test(s) in the Southeast Area Park north of the Landfill. The proposed pilot tests include three different treatment technologies to treat the co-mingled plume of 1,4-dioxane and vinyl chloride. The pilot testing will help determine if a more sustainable approach to remediation can reduce the contaminant mass in less time than the existing use of a pump and treat method. Preliminary bench scale testing of the treatment technology has shown a reduction in concentrations in the groundwater. Costs include MDEQ coordination for approval of pilot testing; additional methane monitoring after injections; performance groundwater monitoring; attendance and presentation to Park Advisory Committee and area citizens; subcontractor costs for injection, well installation, treatment chemical, well permits, city water hydrant connection fees and laboratory costs; letter report of findings to MDEQ.

Methane Gas Recovery Project - Design

Task 3 is optimization of the current landfill gas to energy system. After determining optimization needs, 30, 60 and 90% complete design drawings will be drafted and will include two meetings with City personnel. The optimization included in the design drawings will be included in the City of Ann Arbor's RFP. Design drawings will include 13 sheets for electrical contractor bids and seven sheets for mechanical contractor bids. High level specifications for electrical installation will be provided.

Landfill Cap Repairs

The landfill cap repairs were identified by MDEQ personnel during an annual inspection and include a leachate outbreak area. Both repairs are located within Phase 1 of the landfill. Costs include coordination of work plan implementation with the MDEQ, subcontractor charges, oversight and documentation, and a letter report to the state documenting the repairs.

EXHIBIT B4 FEE SCHEDULE

Task	<u>Total</u>
Annual Landfill Monitoring and Maintenance - Year 4	\$ 134,080.00
Annual Landfill Monitoring and Maintenance - Year 5	\$ 124,117.00
Landfill Plume Remediation Pilot Test	\$ 72,686.00
Methane Gas Recovery Project	\$ 57,110.00
Landfill Cap Repairs	\$ 53,510.00
	\$ 441,503.00