BENCHMARK
ENVIRONMENTAL
ENGINEERING &
SCIENCE, PLLC

February 6, 2019

Mr. Maurice Moore
NYSDEC Division of Environmental Remediation
270 Michigan Avenue
Buffalo, NY 14203

Re: Emerging Contaminants Groundwater Sampling Work Plan
1176 South Park Site 3, Buffalo, NY (Site)
NYSDEC Site No. 915301

Dear Mr. Moore:

On behalf of our client, John W Danforth Construction, LLC (JWD), Benchmark Environmental Engineering and Science, PLLC (Benchmark) has prepared this emerging contaminant groundwater sampling work plan for the above referenced Site. On March 30, 2018, JWD received a letter from the Department requiring the Site be sampled as part of the State-wide initiative to better understand the risk posed by 1,4-dioxane and per- and polyfluoroalkyl substances (PFAS).

Benchmark proposes to conduct the emerging contaminant sampling in Spring 2019 (April/May 2019) after the winter weather conditions improve. The emerging contaminants sampling will be completed on three (3) monitoring wells at the Site, MW-1 (upgradient location), MW-3 and MW-5 (downgradient locations), see attached figure.

Sampling Preparation
Sampling equipment, components, and containers will be handled to avoid contact with aluminum foil, low density polyethylene (LDPE), glass, or polytetrafluoroethylene (PTFE, aka. teflon) materials including sample bottle cap liners with a Teflon layer. Clothing to be worn by sampling personnel will be laundered multiple times and will not contain PTFE material (including GORE-TEX®) or that which has been waterproofed with perfluorinated compounds (PFC) materials.

Many food and drink packaging materials contain PFCs. If consumption of food and drink occurs prior to and/or during the sampling event, sample personnel will use a standard two (2) step decontamination procedure using detergent and clean water rinse to wash hands prior to starting and/or resuming sampling.

Sampling Procedures
Prior to well purge sample collection, static water levels will be measured and recorded. The groundwater wells will be developed using a plastic submersible pump (containing nitrile seals) and PVC tubing prior to sampling the groundwater at the three (3) locations, starting with the upgradient location first (MW-1). The wells will be purged using low-flow sampling techniques to minimize water level draw down within the well until groundwater quality parameters (pH, temperature, turbidity, DO, ORP, specific conductance) stabilize and at least a minimum of three (3) well volumes have been removed.

In general, stability is defined as variation between field measurements of 10 percent or less and no overall upward or downward trend in the measurements. Upon stabilization of field parameters, groundwater samples for the emergent contaminants will be collected from the submersible pump and PVC tubing. Sampling personnel will wear nitrile gloves while handling empty sample containers, filling sample containers, sealing sample containers, and placement into sample coolers. Samples will be placed on ice prior to transportation to the laboratory.

If sampling equipment and/or sampling personnel's hands come in contact with PFC materials, a standard two (2) step decontamination process using detergent and clean water rinse will be performed on the equipment prior to reuse or the sampling personnel's hands prior to continuing with the sampling. It is recommended that clean nitrile gloves be worn while handling sample containers, during the groundwater sampling, and sealing/placement of samples into the laboratory supplied cooler.

Sample Analysis

Groundwater samples will be analyzed by an Environmental Laboratory Accreditation Program (ELAP) certified laboratory which will provide a Category B deliverable package for preparation of a Data Validation Usability Summary Report (DUSR) by a third party data validator.

Samples collected for 1,4-dioxine analysis will be collected into laboratory provided containers: two (2) 500 milliliter (ml) unpreserved amber bottles for each well location. The samples will be analyzed via EPA Method 8270 Selective Ion Monitoring (SIM) mode. The method detection limit (MDL) for the 1,4-dioxane analysis will be no higher than 0.28 micrograms per liter (µg/l), assuming there is no sample matrix interference. The samples have a holding time of 7 days till extraction and 40 days for the extract. Standard turnaround time will be used for the analysis.

Samples collected for PFAS analysis will be collected into laboratory provided containers: three (3) 250 ml plastic bottles preserved with Trizma for each well location. The samples will be analyzed via a modified EPA Method 537 to achieve reporting limits of 2 nanograms per liter (ng/l). The samples have a holding time of 14 days for analysis. Standard turnaround time will be used for the analysis.

Sample Reporting

The sample results will be tabularized and provided to NYSDEC. An electronic data deliverable (EDD) will also be provided to NYSDEC. The detection limits will be provided within the table in lieu of "non-detect" or "ND" reporting. Any matrix interferences reported for the sampling will also be noted.

Please contact us if you have any questions or require additional information.

Sincerely,

BENCHMARK ENVIRONMENTAL ENGINEERING AND SCIENCE, PLLC

Christopher Boron
Sr. Project Manager

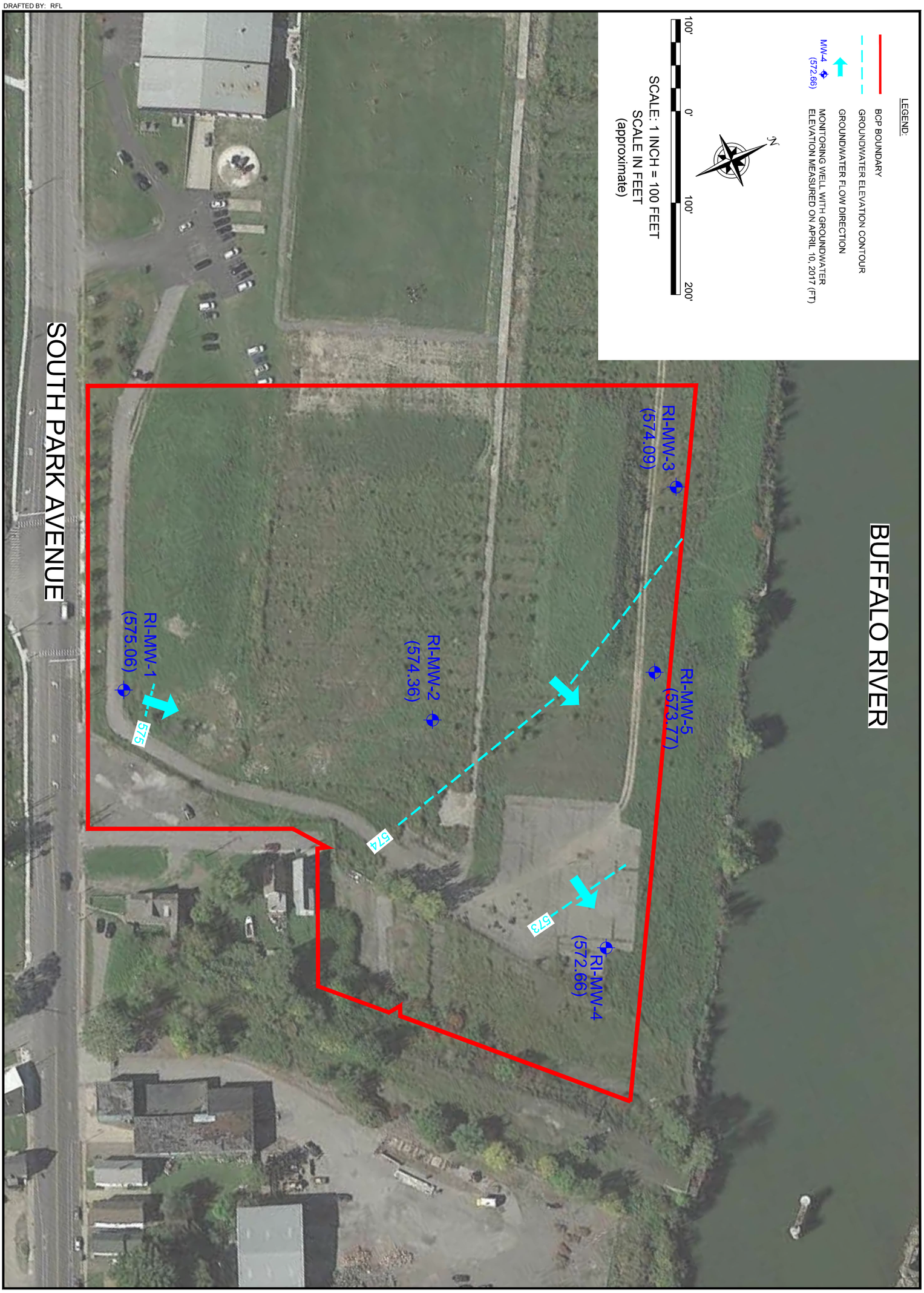
Attachment: Figure

File: 0350-015-001

ec: Brian Tubin (JWD)
Jenniffer Rothchild (JWD)

F:\CAD\Benchmark\UT Vaeth, LLC\1176 South Park Site\Remedial Investigation\Figure 7A; April 10 2017 GW Isopential Map.dwg

DATE: JUNE 2017
DRAFTED BY: RFL



APRIL 10, 2017 GW ISOPOTENTIAL MAP

BROWNFIELD CLEANUP PROGRAM
RI-IRM-AA REPORT
1176 SOUTH PARK AVENUE SITE 3
BCP SITE NO. C915301
BUFFALO, NEW YORK
PREPARED FOR
JOHN W. DANFORTH CONSTRUCTION, LLC

FIGURE 7A

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JOB NO.: 0350-015-001