SUPPLEMENTAL REMEDIAL ACTION WORK PLAN

300 OHIO STREET SITE
BCP SITE No. C915257

August 2018 0136-018-010

Prepared for:

4216 Group, LLC

Prepared by:

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

In Association With:

TURNKEY ENVIRONMENTAL RESTORATION, LLC

SUPPLEMENTAL REMEDIAL ACTION WORK PLAN

300 OHIO STREET SITE
BCP SITE NO. C915257

Table of Contents

LIST OF TABLES

LIST OF FIGURES

APPENDICES

1.0 INTRODUCTION

Benchmark Environmental Engineering and Science, PLLC (Benchmark), in association with TurnKey Environmental Restoration, LLC (TurnKey), referred to herein as Benchmark-TurnKey, has prepared this Supplemental Remedial Action (SRA) Work Plan on behalf of 4216 Group, LLC to assess the existing site information and completed remedial activities and evaluate if additional remedial measures are necessary to allow for Restricted Residential land use at the 300 Ohio Street Site.

A Notification of Site Change of Use form has been submitted to the New York State Department of Environmental Conservation (NYSDEC) in accordance with 6NYCRR Part 375 and the approved Site Management Plan (SMP).

1.1 Background

4216 Group, LLC, acting as a non-responsible volunteer, elected to undertake investigation and remediation of the 300 Ohio Street Site under the NYS Brownfield Cleanup Program (BCP). Environmental investigations found that the Site had been contaminated by past uses of the Site, including petroleum sales and distribution, and manufacturing operations. Remedial activities were completed at the Site between 2014 and 2017 and achieved a Track 4 Commercial Use cleanup. NYSDEC approved the Site Management Plan (SMP) and the Final Engineering Report (FER) and issued the Certificate of Completion (COC) on December 29, 2017.

1.2 Environmental History

Previous environmental investigations identified the presence of petroleum contamination on-Site. Remedial activities commenced in 2014 and were completed in 2016. A brief summary of the remedial activities is presented below.

- Excavation, cleaning and removal of 16 underground storage tanks (USTs), eight (8) former pump islands, and associated distribution lines.
- Excavation and off-site disposal of approximately 18,650-tons of non-hazardous petroleum impacted soil/fill. The excavation was continued from surface to approximately 13-fbgs, and backfilled with department approved gravel.

- Excavation and off-site disposal of approximately 222 tons of non-hazardous PAH contaminated soil/fill in the vicinity of MW-1.
- Excavation and off-site disposal of approximately 387 tons of non-hazardous metal contaminated soil-fill from the vicinity of TP-13.
- Excavation and off-site disposal of approximately 770 tons of shallow non-hazardous metal contaminated soil/fill in the vicinity of SS-10.

Based on the results of the remedial investigation (RI) and completed remedial activities, including the construction of 12-inch minimum thickness soil cover system, the Site achieved a Track 4 Commercial Use cleanup, and NYSDEC issued the Certificate of Completion in December 2017.

1.3 Purpose

During the prior completed BCP process, the planned reuse of the property was a Commercial Use scenario. Since completion of the BCP program, the planned reuse has changed to include residential apartments, requiring a modification to a Restricted Residential Use scenario under the BCP.

The purpose of this SRA Work Plan is to assess the remaining on-Site soil/fill located beneath the cover system and evaluate the Site under a planned Track 4 Restricted Residential Use scenario. This SRA Work Plan provides details of the evaluation, and the supplemental remedial measures necessary to achieve a track 4 Restricted Residential Use.

2.0 EVALUATION OF POST-REMEDIAL REMAINING SOIL/FILL

As described in the NYSDEC's Decision Document (March 2014), remedial measures were implemented to address known petroleum impacts related to the former Fuel System and grossly contaminated soils, metals and polycyclic aromatic hydrocarbons (PAHs) in on-Site soil/fill. Based on the results of the RI and remedial activities, no supplemental groundwater remediation was necessary.

2.1 Remaining Subsurface Soil/Fill Assessment

After completion of the approved remedial measures, residual contamination remaining in on-Site soil/fill above Restricted Residential Use SCOs (RRSCOs) is located beneath the NYSDEC approved cover system. Tables 1, 2, and 3 summarizes the approved RI and post-excavation laboratory analytical results and Figure 3 identifies the sample locations.

2.1.1 Volatile Organic Compounds

No VOCs were detected above RRSCOs, with the vast majority of analytes reported below Unrestricted Use SCOs. Only acetone was detected at one location exceeding its USCO.

2.1.2 Semi-Volatile Organic Compounds

Individual PAHs were detected above their respective RRSCOs at multiple locations across the site beneath the cover system. Total PAHs were all below 100 ppm, with the minor exception of MW-6 (6-8) of 132 ppm.

2.1.3 Inorganic Compounds

Select metals remain beneath the cover system exceeding the Restricted Residential Use SCOs. Arsenic, cadium, chromium, manganese, and lead were detected at certain locations exceeding the Commercial Use SCOs (CSCOs). These samples were collected from non-native urban fill materials, which are ubiquitous across the Site.

Two (2) post-excavation samples, related to the SS-10 excavation (WW-1r2 and F-4), exceed Commercial Use SCOs for barium and lead.

2.1.4 Pesticides, Herbicides and Polychlorinated Biphenyls

No PCBs, herbicides or pesticides were detected above RRSCOs.

2.1.5 Post-Remedial Subsurface Soil/Fill Summary

As described above, no VOCs, PCBs, herbicides, or pesticides were detected above Restricted Residential Use SCOs, with the vast majority being reported below Unrestricted Use SCOs.

Total PAHs were all below 100 ppm, with one minor exception. Certain metals were detected above CSCOs, particularly associated with the SS-10 remedial excavation.

3.0 SUPPLEMENTAL REMEDIAL ACTIVITIES

Supplemental remedial activities will be completed in accordance with he approved Site Management Plan (SMP), including Excavation Work Plan, Health and Safety Plan, and Community Air Monitoring Plan (CAMP). Details of the additional remedial activities are described below.

Based on the contaminant concentrations, locations, and depth of the remaining contamination on-Site, the following supplemental remedial measures are planned to achieve a Restricted Residential Use.

3.1 SS-10 Excavation Area – Restricted Residential Use

After completion of the SS-10 area remedial excavation in 2016, two (2) post-excavation samples, WW-1r2 and F-4, had remaining soil/fill with elevated concentrations of barium and lead exceeding the CSCOs. Based on the shallow nature of the soil/fill, and the likely uncovering as part of the planned redevelopment activities, the remaining soil/fill will be excavated and transported off-site for disposal at a licensed commercial landfill. Excavation activities will be completed in accordance with the SMP.

Post excavation confirmatory samples will be collected after the excavation is complete, including a floor sample to replace F-4, and sidewall samples to replace WW-1r2. A minimum of one (1) sample per 30 linear feet of sidewall and one (1) sample for each 900 square feet of excavation bottom will be collected. All samples will be analyzed by a NYSDOH ELAP certified analytical laboratory for metals COPCs in accordance with USEPA Methodology with an equivalent Category B deliverables package to facilitate data evaluation by a third-party validation expert.

3.2 Restricted Residential Use – Cover System Modification

Based on the review and assessment of remaining on-Site soil/fill under a Restricted Residential Use scenario, analytical results indicate that certain metals and PAHs are present beneath the existing cover system above Part 375 Restricted Residential SCOs. Concentrations are typically low-level and consistent with the presence of urban soil/fill. Based on the conversion from a Commercial Use to Restricted Residential Use, modification

of the existing cover system requirement to minimum of 24-inches clean surface cover material is required to limit exposure to the underlying remaining contaminants.

The Restricted Residential Use cover system will be comprised of:

- **Non-Vegetated (Hardscape) Areas:** These areas will be covered by asphalt, concrete and/or building foundations. Subbase materials brought to the Site will be assessed in accordance with DER-10, SMP, or as otherwise approved by NYSDEC.

  Select components of the redevelopment are also elements of the BCP cover system, including asphalt and concrete covered areas. Therefore, those specific components of the cover system, that are also part of the redevelopment, will be constructed in general accordance with the municipally approved building details. Construction details will be provided to the Department.

- **Vegetated Areas:** A minimum of 24 inches of imported material in accordance with DER-10 requirements, will be placed above the demarcation layer placed on the remaining in-place soil/fill. The demarcation layer (e.g., snow fence, plastic mesh, etc.) will be placed where hardscape (concrete/asphalt) will not be present.

The planned cover system includes different cover types, including the new building(s), asphalt and concrete, with non-hardscaped areas, including landscaped beds and grass areas. Cover system construction details where soil cover system transitions to hardscape, and/or at the limits of the BCP property are shown on Figure 4. Additional construction details related to future building(s), asphalt, concrete, and landscaping, will be provided to the Department in accordance with the SMP and Excavation Work Plan as they become available.

3.3 Backfill Materials

3.3.1 On-Site Reuse

Reuse on-site of material that originates at the site and which does not leave the Site during the excavation. The criteria under which soil/fill originating on-Site may be used on-Site are presented below.

- **Clean Cover stone:** Approved cover stone above the demarcation layer will be removed and stockpiled on-Site, as necessary. Cover stone will be reused, as needed for backfill for the redevelopment, and/or cover system restoration above demarcation layer.
- **Excavated, Non-Impacted On-Site Soil/Fill:** Non-impacted soil/fill (i.e., soil/fill that does not exhibit visible evidence of contamination, and is not grossly contaminated (as described in Part 375), and does not exhibit PID readings that exceed 50 parts per million (ppm) that is excavated from the Site, may be used on-Site as subgrade backfill beneath the cover system without special handling. The qualified environmental professional will ensure that procedures defined for materials reuse in the SMP are followed and that unacceptable material does not remain on-Site.
- **Excavated, Potentially Impacted on-Site Soil/Fill:** Potentially impacted soil/fill (i.e., soils that exhibit field visual and/or olfactory evidence of contamination, or with elevated PID readings (above 50 ppm) may not be used on-Site unless tested and determined to meet the chemical criteria for Restricted Residential Use SCOs per 6NYCRR Part 375 and DER-10 Appendix 5. Potentially impacted material will be segregated and sampled to determine acceptance for reuse. The material reuse analyses will be discussed with the Department, and may include those constituents identified in 6NYCRR Part 375 for VOCs, SVOCs, metals, PCBs, pesticides and herbicides, in accordance with applicable USEPA SW846 analytical methodology.

On-site material, including historic fill, that is acceptable for reuse on-site will be placed below the demarcation layer or impervious surface, and will not be reused within a cover soil layer, within landscaping berms. No grossly-impacted materials shall be reused onsite; such materials must be disposed of offsite in accordance with applicable local, state, and federal regulations.

3.3.2 Imported Backfill

Imported soil backfill must meet the Restricted Residential Use criteria as presented in Appendix 5 – Allowable Constituent Levels for Imported Fill or Soil in DER-10. Imported material will also meet the following criteria:

- Off-site soil/fill will originate from known sources having no evidence of disposal or releases of hazardous substances, hazardous, toxic or radioactive wastes, or petroleum.

- No off-site materials meeting the definition of a solid waste as defined in 6NYCRR, Part 360-1.2(a) shall be used as backfill.

3.3.2.1 Soil Characterization Requirements

In addition to the above criteria, backfill materials which requires laboratory analysis, will be subject to the following DER-10 characterization requirements:

- Off-site material will be sampled according to the following schedule:
  - 1 composite per 500 cubic yards of soil for the first 1,000 cubic yards
  - 1 composite per 1,000 cubic yards of soil thereafter.

Each composite will be comprised of a minimum of three grab samples (samples for VOC analysis will be collected as individual grabs in lieu of composites). Samples will be analyzed for the following constituents in accordance with USEPA SW-846 methodology:

- Target Compound List (TCL) VOCs - Method 8260B
- TCL SVOCs - Method 8270C
- TCL Organochlorine Pesticides and PCBs - Method 8081A/8082
- TAL Metals – Method 6010B
- Cyanide - Method 9013
- Herbicides – Method 8051A

Only materials that contain concentrations of these organic compounds and metals at or below concentrations for Restricted Residential Use found in Appendix 5 of DER-10 will be permitted. Characterization testing for off-site sources will be performed by an independent, NYSDOH ELAP-approved laboratory.

3.3.3 Sub-grade Stone

Potential sources of off-site sub-grade backfill material are listed below. In accordance with DER-10, Section 5.4(e)(5)(i and ii), the sources will not require chemical testing.

- Structural stone / 2" Run of Crush – New Enterprise (Buffalo Crushed Stone), Wehrle Pit. This is the same approved virgin-source stone that was used during remedial activities.

3.4 Non-reusable Excavated Material

Any excavated material, which is deemed unacceptable for reuse as backfill beneath the cover system in accordance with the SMP and DER-10, is planned for off-Site disposal at Waste Management's, Chaffee Landfill, located in Chaffee New York. Landfill disposal documents, including the application, approval letter, and weight manifests will be provided to the Department.

4.0 SUPPORT DOCUMENTS

4.1 Health and Safety Protocols

The approved SMP includes an example Health and Safety Plan (HASP). The HASP, provided in Appendix E of the SMP, includes the following site-specific information:

- A hazard assessment.
- Training requirements.
- Definition of exclusion, contaminant reduction, and other work zones.
- Monitoring procedures for site operations.
- Safety procedures.
- Personal protective clothing and equipment requirements for various field operations.
- Disposal and decontamination procedures.

The HASP also includes an Emergency Response Plan (ERP) included as Appendix A, that addresses potential site-specific emergencies.

4.2 Community Air Monitoring Plan

A Community Air Monitoring Plan (CAMP) was prepared as part of the approved SMP for the Site. The CAMP describes the required particulate and vapor monitoring to protect the neighboring community during intrusive activities is included in Appendix C of the SMP.

The CAMP is consistent with the requirements for community air monitoring at remediation sites as established by the New York State Department of Health (NYSDOH) and NYSDEC. Accordingly, it follows procedures and practices outlined under NYSDEC's DER-10 (May 2010) Appendix 1A (NYSDOH's Generic Community Air Monitoring Plan) and Appendix 1B (Fugitive Dust and Particulate Monitoring).

5.0 REPORTING

Upon completion of the redevelopment activities, a comprehensive report will be completed summarizing the tasks completed as described below.

5.1.1 Construction Monitoring

Standard daily reporting procedures will include preparation of a daily report and, when appropriate, problem identification and corrective measures reports. Information that may be included on the daily report form includes:

- Processes and locations of construction under way.
- Equipment and personnel working in the area, including subcontractors.
- Number and type of truckloads of soil/fill removed from the site.
- A description of off-site materials received, if any

The completed reports will be included as part of the Construction Closeout Report. The NYSDEC will be promptly notified of problems requiring modifications to this Work Plan prior to proceeding or completion of the construction item.

Photo documentation of the intrusive activities will be prepared by TurnKey throughout the duration of the project as necessary to convey typical work activities and whenever changed conditions or special circumstances arise.

5.1.2 Construction Closeout

A summary of the construction will be included in the report submitted to the NYSDEC. The report will include:

- A Site or area planimetric map showing the parcel;
- Summaries of unit quantities, including: volume of soil/fill excavated; disposition of excavated soil/fill; and volume/type/source of backfill.
- Text describing that the excavation activities were performed in accordance with this Work Plan.

6.0 REFERENCES

1. 6NYCRR Part 375, Environmental Remediation Programs. December 14, 2006.

2. New York State Department of Environmental Conservation. *DER-10 - Technical Guidance for Site Investigation and Remediation*, dated May 2010.

3. New York State Department of Environmental Conservation. *Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations Division of Water Technical and Operational Guidance Series (TOGS) 1.1.1.* June 1998 (April 2000 addendum).

4. Benchmark Environmental Engineering & Science, PLLC, in association with TurnKey Environmental Restoration, LLC. Remedial Investigation Work Plan, 300 Ohio Street Site (C915257), Buffalo, New York. Revised May 2012.

5. Benchmark Environmental Engineering & Science, PLLC, in association with TurnKey Environmental Restoration, LLC, Remedial Investigation/Alternative Analysis Report (RI/AAR) Report, 300 Ohio Street Site, Buffalo, NY, BCP Site No. C915257, prepared for 4216 Group, LLC. Revised November 2013.

6. Benchmark Environmental Engineering & Science, PLLC, in association with TurnKey Environmental Restoration, LLC, Remedial Action Work Plan, 300 Ohio Street Site, Buffalo, NY, BCP Site No. C915257, prepared for 4216 Group, LLC. Revised July 2014.

7. Benchmark Environmental Engineering & Science, PLLC in association with Turnkey Environmental Restoration, LLC, *Site Management Plan,* 300 Ohio Street Site, Buffalo, New York, prepared for 4216 Group, LLC. December 2017.

8. Benchmark Environmental Engineering & Science, PLLC, *Final Engineering Report,* 300 Ohio Street Site, Buffalo, New York, prepared for 4216 Group, LLC. December 2017.

TABLES

TABLE 1

SUMMARY OF REMAINING HISTORIC AND RI SOIL ANALYTICAL RESULTS

300 OHIO STREET SITE

BUFFALO, NEW YORK

PARAMETER[1]	Unrestricted Use SCOs [2]	Restricted Residential Use SCOs [2]	SAMPLE LOCATIONS																					
			HISTORIC SAMPLE LOCATION (DEPTH)										REMEDIAL INVESTIGATION SAMPLE LOCATION (DEPTH)											
			BH-1 (8-10')	BH-43 (2-4')	BH-44 (2-4')	BH-46 (8-10')	BH-47 (2-4')	BH-48 (4-6')	BH-50 (4-6')	BH-62 (4-8')	BH-64 (4-8')	BH-65 (2-4')	SS-2	SS-3	SS-4	SS-5	SS-6	SS-7	SS-8	SS-9	TP-18 (5-7)	TP-19 (4-6)	MW-4 (5-7)	MW-6 (6-8)
			03/31/2010	07/26/2010	07/26/2010	07/26/2012	07/26/2010	07/26/2010	07/26/2010	07/27/2010	07/27/2010	07/27/2010	07/12/2012	07/12/2012	07/12/2012	07/12/2012	07/12/2012	07/12/2012	07/12/2012	07/12/2012	07/10/2012	07/10/2012	07/11/2012	07/11/2012
Volatile Organic Compounds (VOCs) - mg/Kg [3]																								
Acetone	**0.05**	**100**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.052**	ND	--	ND
Isopropylbenzene (Cumene)	**--**	**--**	ND	ND	ND	ND	ND	ND	ND	0.97	ND	ND	--	--	--	--	--	--	--	--	ND	ND	--	ND
n-Butylbenzene	**12**	**100**	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	--	--	--	--	--	--	--	--	ND	ND	--	ND
n-Propylbenzene	**3.9**	**100**	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	--	--	--	--	--	--	--	--	ND	ND	--	ND
sec-Butylbenzene	**11**	**100**	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	--	--	--	--	--	--	--	--	ND	ND	--	ND
Semi-Volatile Organic Compounds (SVOCs) - mg/Kg [3]																								
2-Methylnaphthalene	**--**	**--**	--	--	--	--	--	--	--	--	--	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.15 J	1.2	ND
3-Methylphenol/4-Methylphenol	**--**	**--**	--	--	--	--	--	--	--	--	--	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3 J	ND
Acenaphthene	**20**	**100**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.1	1.6
Acenaphthylene	**100**	**100**	--	--	--	--	--	--	--	--	--	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	1.2 J
Anthracene	**100**	**100**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3 J	ND	ND	1.3 J	ND	0.77 J	ND	0.11 J	6.1	5.7
Benzo(a)anthracene	**1**	**1**	ND	ND	ND	ND	ND	ND	**8.3**	ND	ND	ND	ND	**1.6 J**	**13**	ND	ND	**4.2 NJ**	**1.1**	**2.4 J**	ND	0.42	**7.3**	**11**
Benzo(a)pyrene	**1**	**1**	0.8 J	ND	ND	ND	ND	ND	**6.3**	ND	ND	ND	ND	ND	**11**	ND	ND	**3.9 J**	**1.2 J**	**2.3 J**	ND	0.4	**5.8**	**9.4**
Benzo(b)fluoranthene	**1**	**1**	ND	ND	ND	ND	ND	ND	**6.3**	ND	ND	ND	ND	**3.1 J**	**17**	**3.2 J**	**2.3 J**	**5.6 J**	**1.9**	**3.8**	ND	0.6	**6.9**	**11**
Benzo(ghi)perylene	**100**	**100**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7	ND	ND	2.8 J	0.99 J	1.9 J	ND	0.26 J	2.7	ND
Benzo(k)fluoranthene	**0.8**	**3.9**	ND	ND	ND	ND	ND	ND	**6.2**	ND	ND	ND	ND	ND	**6.4**	ND	ND	**2.1 J**	0.62 J	**1.4 J**	ND	0.2 J	**2.5**	**4.4**
Carbazole	**--**	**--**	--	--	--	--	--	--	--	--	--	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.95 J	1.7 J
Chrysene	**1**	**3.9**	ND	ND	ND	ND	ND	ND	**7.3**	ND	ND	ND	ND	**2 J**	**14**	**2.7 J**	**1.6 J**	**4.4 J**	**1.2**	**2.6**	ND	0.58	**6.3**	**9.5**
Dibenzo(a,h)anthracene	**0.33**	**0.33**	--	--	--	--	--	--	--	--	--	--	ND	ND	**1.9 J**	ND	ND	**0.73 J**	ND	ND	ND	0.079 J	**0.97**	**1.6**
Dibenzofuran	**7**	**59**	--	--	--	--	--	--	--	--	--	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5	ND
Fluoranthene	**100**	**100**	ND	ND	6.1	ND	5.1	7.4	17	5.2	7.9	ND	ND	2.9 J	29	3.5 J	2.2 J	8.5 J	2	4.9	ND	0.83	15 NJ	24
Fluorene	**30**	**100**	ND	ND	ND	ND	ND	ND	ND	5.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.1	2.3
Indeno(1,2,3-cd)pyrene	**0.5**	**0.5**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**8.2**	ND	ND	**3.3 J**	**1.2 J**	**2.2 J**	ND	0.28 J	**3.5**	**6.4**
Naphthalene	**12**	**100**	ND	0.018	ND	ND	ND	ND	ND	0.62	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.088 J	ND	3.2	1.3 J
Phenanthrene	**100**	**100**	ND	ND	5.2	ND	ND	8	15	13	6.8	ND	ND	ND	10	ND	ND	4.7 J	0.64 J	2.8	0.036 J	0.62	16	21
Phenol	**0.33**	**100**	--	--	--	--	--	--	--	--	--	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.32 J	ND
Pyrene	**100**	**100**	ND	ND	5.9	ND	4.9	6.3	16	4.9	7.1	ND	ND	2.5 J	26	3.3 J	2 J	7 J	1.8	4	ND	0.72	12	20
Total PAHs	**--**	**--**	0.8	0	17.2	0	10	21.7	82.4	28.7	21.8	0	0	12.1	146.5	12.7	8.1	48.53	12.65	29.07	0.124	5.099	99.52	132.1
Metals - mg/Kg																								
Aluminum	**--**	**--**	--	--	--	--	--	--	--	--	--	--	21000	12000	12000	16000	10000	17000	21000	28000	--	5800 J	--	12000
Antimony	**--**	**--**	--	--	--	--	--	--	--	--	--	--	1.8 J	1.1 J	3.4 J	3.2 J	5.5 J	5.1 J	2.8 J	7.1 J	--	22 J	--	2.4 J
Arsenic	**13**	**16**	--	--	--	--	--	--	--	--	--	--	2.4	2.8	7.4	3.7	4.5	11	5	5.8	--	**30**	--	4.3
Barium	**350**	**400**	--	--	--	--	--	--	--	--	--	--	200	110	190	190	110	260	180	**370**	--	230	--	89
Beryllium	**7.2**	**72**	--	--	--	--	--	--	--	--	--	--	4.1	2	1.6	2.5	0.93	1.9	2.3	3.2	--	1.5	--	0.49
Cadmium	**2.5**	**4.3**	--	--	--	--	--	--	--	--	--	--	0.65 J	**15**	**3.7**	1.3	1.1	**3.6**	0.68 J	2.5	--	0.44 J	--	0.29 J
Calcium	**--**	**--**	--	--	--	--	--	--	--	--	--	--	160000 J	160000 J	120000 J	130000 J	120000 J	110000 J	140000 J	140000 J	--	6000	--	58000
Chromium	**30**	**180**	--	--	--	--	--	--	--	--	--	--	13 J	18 J	26 J	**87 J**	18 J	**49 J**	**43 J**	**330 J**	--	12	--	15
Cobalt	**--**	**--**	--	--	--	--	--	--	--	--	--	--	1.2 J	1.4 J	3.4	3.1	4.4	4	5.6	2.5	--	9.3	--	7.3
Copper	**50**	**270**	--	--	--	--	--	--	--	--	--	--	20	23	**80**	**71**	40	**78**	43	**68**	--	**95**	--	24
Iron	**--**	**--**	--	--	--	--	--	--	--	--	--	--	8600	9000	18000	27000	15000	32000	21000	38000	--	33000	--	20000
Lead	**63**	**400**	--	--	--	--	--	--	--	--	--	--	26	30	**280**	**140**	**200**	**230**	**75**	**160**	--	**540**	--	36
Magnesium	**--**	**--**	--	--	--	--	--	--	--	--	--	--	34000	430000	17000	32000	17000	12000	20000	20000	--	620 J	--	22000
Manganese	**1600**	**2000**	--	--	--	--	--	--	--	--	--	--	**2600 J**	1300 J	940 J	**3300 J**	820 J	**2300 J**	**2700 J**	**12000 J**	--	170	--	410
Mercury	**0.18**	**0.81**	--	--	--	--	--	--	--	--	--	--	0.04 J	0.06 J	**0.56 J**	0.08 J	0.13 J	**0.45 J**	0.09 J	0.15 J	--	**0.23**	--	0.15 J
Nickel	**30**	**310**	--	--	--	--	--	--	--	--	--	--	5.8	6	16	21	14	20	17	16	--	23	--	17
Potassium	**--**	**--**	--	--	--	--	--	--	--	--	--	--	2300 J	1300 J	1300 J	1400	1300	2500	1900 J	2300 J	--	470 J	--	2600
Selenium	**3.9**	**180**	--	--	--	--	--	--	--	--	--	--	2.2	1.4 J	1.4 J	2.4	1.3 J	2.6	2.6	**7.2**	--	3	--	1.5
Silver	**2**	**180**	--	--	--	--	--	--	--	--	--	--	0.26 J	0.22 J	1.4	0.49 J	0.27 J	0.56 J	0.46 J	1.1	--	0.2 J	--	ND
Sodium	**--**	**--**	--	--	--	--	--	--	--	--	--	--	1300 J	2200 J	820 J	930 J	380 J	800 J	640 J	1000 J	--	460	--	380
Vanadium	**--**	**--**	--	--	--	--	--	--	--	--	--	--	11 J	12 J	18 J	32 J	16 J	29 J	23 J	80 J	--	23	--	22
Zinc	**109**	**10000**	--	--	--	--	--	--	--	--	--	--	99 J	**4400 J**	**1100 J**	**220 J**	**180 J**	**300 J**	**140 J**	**200 J**	--	**280**	--	87 J
PCBs - mg/Kg [3]																								
Aroclor 1248	**--**	**--**	--	--	--	--	--	--	--	--	--	--	--	--	ND	--	--	0.451	ND	--	--	ND	--	ND
Aroclor 1254	**--**	**--**	--	--	--	--	--	--	--	--	--	--	--	--	0.0384	--	--	0.298	0.0197 J	--	--	ND	--	ND
Aroclor 1260	**--**	**--**	--	--	--	--	--	--	--	--	--	--	--	--	0.0402	--	--	0.165	0.0245 J	--	--	ND	--	ND
Total PCBs	**0.1**	**1**	--	--	--	--	--	--	--	--	--	--	--	--	0.0786	--	--	**0.914**	0.0442 J	--	--	--	--	--
Pesticides and Herbicides - mg/Kg [3]																								
Endrine ketone	**--**	**--**	--	--	--	--	--	--	--	--	--	--	--	--	ND	--	--	UJ	ND	--	--	0.0109	--	ND
Methoxychlor	**--**	**--**	--	--	--	--	--	--	--	--	--	--	--	--	ND	--	--	0.0151 J	ND	--	--	ND	--	ND

Notes:

1. Only those parameters detected at a minimum of one sample location are presented in this table; all other compounds were reported as non-detect.
2. Values per NYSDEC Part 375 Soil Cleanup Objectives (SCOs).
3. Sample results were reported by the laboratory in ug/kg and converted to mg/kg for comparisons to SCOs

Definitions:

ND = Parameter not detected above laboratory detection limit.
"--" = No value available for the parameter. Or parameter not analysed for.
J = Estimated value; result is less than the sample quantitation limit but greater than zero.
NJ = The detection is tentative in identification and estimated in value. Although there is presumptive evidence of the analyte, the result should be used with caution as a potential false positive and/or elevated quantitative value.
U = The analyte was analyzed for, but was not detected above the level of the associated reported quantitation limit.

Bold	= Result exceeds Unrestricted Use SCOs.
Bold	= Result exceeds Restricted Residential Use SCOs.

TABLE 2

SUMMARY OF GPCS POST-EXCAVATION SOIL ANALYTICAL RESULTS

300 OHIO STREET SITE

BUFFALO, NEW YORK

PARAMETER [1]	Unrestricted Use SCOs[2]	Restricted Residential Use SCOs[2]	SAMPLE LOCATIONS																					
			GPCS AREA REMEDIAL EXCAVATION																					
			BOTTOM 1	BOTTOM 2	BOTTOM 3	BOTTOM 4	BOTTOM 5	BOTTOM 6	BOTTOM 7	BOTTOM 8	BOTTOM 9	BOTTOM 10	BOTTOM 11	BOTTOM 12	BOTTOM 13	BOTTOM 14	BOTTOM 15	BOTTOM 16	BOTTOM 17	BOTTOM 18	BOTTOM 19	BOTTOM 20	BOTTOM 21	BOTTOM 22	BOTTOM 23
			08/21/2014		08/26/2014		08/28/2014				09/02/2014			09/02/2014		09/02/2014		09/08/2014						09/11/2014	
Volatile Organic Compounds (VOCs) - mg/Kg [3]																								
1,2,4-Trimethylbenzene	**3.6**	**52**	ND	ND	ND	0.00078 J	ND	ND	0.00087 J	ND	ND	ND	0.08	0.14	ND	ND	0.0038 J	ND	ND	0.16	0.11	0.0081	0.00032 J	ND	ND
1,3,5-Trimethylbenzene	**8.4**	**52**	ND	ND	ND	0.00037 J	ND	0.0003 J	0.00037 J	ND	ND	ND	0.013 J	0.051	ND	ND	0.0016 J	ND	ND	0.042	0.028	0.0042 J	ND	ND	ND
2-Butanone (MEK)	**0.12**	**100**	ND	0.0086 J	0.024	0.0075 J	ND	0.0075 J	0.046	0.0072 J	ND	0.01 J	0.045 J	ND	0.023 J	0.013 J	0.016 J	0.013 J	0.004 J	0.02	0.021	0.02	0.018	0.0021 J	0.0028 J
Acetone	**0.05**	**100**	0.02	**0.083**	**0.17**	0.048	0.032	**0.06**	**0.34**	0.032	0.0034 J	**0.071**	**0.25**	**0.19**	**0.16**	**0.12**	**0.12**	**0.16**	**0.071**	**0.12**	**0.13**	**0.11**	**0.12**	0.024	0.029
Benzene	**0.06**	**4.8**	ND	ND	**0.22**	0.0054	ND	ND	**0.89 D**	0.00034 J	ND	0.0045	**0.12**	**0.12**	ND	ND	0.0029	0.00092 J	ND	0.016	0.0059	0.026	ND	ND	ND
Cyclohexane	**--**	**--**	ND	ND	0.00027 J	0.0023 J	ND	0.0057 J	ND	0.029	ND	0.003 J	0.015 J	0.12 J	0.0032 J	0.0059 J	0.029 J	ND	ND	0.011 J	0.011 J	0.011 J	0.0064 J	ND	ND
Ethylbenzene	**1**	**41**	ND	ND	0.00087 J	ND	ND	ND	0.0041	ND	0.00051 J	0.0022 J	0.0045 J	0.084	ND	ND	0.0025 J	0.0019 J	ND	0.081	0.079	0.004	ND	ND	ND
Isopropylbenzene (Cumene)	**--**	**--**	ND	ND	ND	ND	ND	ND	ND	0.033	ND	ND	0.0055 J	0.017	ND	ND	0.00059 J	ND	ND	0.0072	0.005	0.025	0.0068	ND	ND
Methyl tert butyl ether (MTBE)	**0.93**	**100**	ND	0.06	0.14	0.0024 J	ND	0.00055 J	0.19	ND	0.01	0.23	**1.4**	0.53	0.26	0.3	0.29	ND	ND	0.075	0.11	0.031	0.048	ND	ND
Methylcyclohexane	**--**	**--**	ND	ND	ND	ND	0.0024 J	0.0053 J	ND	0.0055	ND	0.00047 J	0.026 J	0.18	0.0028 J	0.00089 J	0.012	ND	ND	0.015	0.011	0.03	0.024	ND	ND
Methylene chloride	**0.05**	**100**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.022 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Butylbenzene	**12**	**100**	ND	ND	ND	ND	0.00076 J	ND	ND	ND	ND	ND	ND	0.0068	ND	ND	ND	ND	ND	0.00078 J	0.00028 J	0.019	0.004	ND	ND
n-Propylbenzene	**3.9**	**100**	ND	ND	ND	ND	ND	ND	ND	0.057	ND	ND	0.0095	0.054	ND	ND	0.00053 J	ND	ND	0.025	0.016	0.12	0.013	ND	ND
p-Isopropyltoluene	**--**	**--**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0015 J	0.0027 J	ND	ND	ND	ND	ND	0.0004 J	ND	0.00087 J	ND	ND	ND
sec-Butylbenzene	**11**	**100**	ND	ND	ND	ND	0.00042 J	ND	ND	0.0005 J	ND	ND	ND	0.0032 J	ND	ND	ND	ND	ND	0.00075 J	0.00038 J	0.011	0.0028	ND	ND
tert-Butylbenzene	**5.9**	**100**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	**0.7**	**100**	ND	ND	0.0012 J	0.00028 J	0.00031 J	0.00037 J	0.0086	0.00058 J	0.00027 J	0.0025 J	0.0083 J	0.009 J	0.00082 J	0.00064 J	0.00087 J	ND	ND	0.0066	0.023	0.0012 J	ND	0.00054 J	0.00049 J
Total Xylenes	**0.26**	**100**	ND	ND	0.00362 J	0.0004 J	ND	0.00049 J	0.0076 J	0.0015 J	ND	0.0108 J	0.0397 J	0.142	0.0022 J	0.0038 J	0.02	0.00316 J	0.0012 J	**0.514**	**0.57**	0.00354 J	0.003 J	0.00048 J	ND
Semi-Volatile Organic Compounds (SVOCs) - mg/Kg [3]																									
2-Methylnaphthalene	**--**	**--**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.23 J	0.1 J	0.12 J	ND
Acenaphthene	**20**	**100**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	**100**	**100**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	**100**	**100**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.037 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	**1**	**1**	ND	ND	ND	ND	ND	ND	ND	ND	0.087 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)pyrene	**1**	**1**	ND	ND	ND	ND	ND	ND	ND	ND	0.078 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	**1**	**1**	ND	ND	ND	ND	ND	ND	ND	ND	0.092 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(ghi)perylene	**100**	**100**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	**0.8**	**3.9**	ND	ND	ND	ND	ND	ND	ND	ND	0.042 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	**1**	**3.9**	ND	ND	ND	ND	ND	ND	ND	ND	0.078 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzo(a,h)anthracene	**0.33**	**0.33**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	**100**	**100**	ND	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	0.098 J	ND	ND	ND	ND	0.039 J	ND	ND	ND	ND	ND	ND
Fluorene	**30**	**100**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	**0.5**	**0.5**	ND	ND	ND	ND	ND	ND	ND	ND	0.043 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	**12**	**100**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.14 J	ND	0.11 J	ND
Phenanthrene	**100**	**100**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	**100**	**100**	ND	ND	ND	ND	ND	ND	ND	ND	0.093 J	ND	ND	0.081 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total PAHs	**--**	**--**	ND	ND	ND	ND	ND	ND	ND	ND	0.613 J	ND	ND	0.316 J	ND	ND	ND	ND	0.039 J	ND	ND	0.37 J	0.1 J	0.23 J	ND

Notes:

1. Only those parameters detected at a minimum of one sample location are presented in this table; all other compounds were reported as non-detect.
2. Values per NYSDEC Part 375 Soil Cleanup Objectives (SCOs).
3. Sample results were reported by the laboratory in ug/kg and converted to mg/kg for comparisons to SCOs.
4. BOTTOM 33 was labeled as "TANK C AREA" in the analytical report.

Definitions:

ND = Parameter not detected above laboratory detection limit.
"--" = No value available for the parameter. Or parameter not analysed for.
J = Estimated value; result is less than the sample quantitation limit but greater than zero.
D = Compounds were identified in an analyisis at the secondary dilution factor.

Bold	= Result exceeds Unrestricted Use SCOs
Bold	= Result exceeds Restricted Residential Use SCOs.

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

TURNKEY ENVIRONMENTAL RESTORATION, LLC

TABLE 2

SUMMARY OF GPCS POST-EXCAVATION SOIL ANALYTICAL RESULTS

300 OHIO STREET SITE

BUFFALO, NEW YORK

PARAMETER [1]	Unrestricted Use SCOs[2]	Restricted Residential Use SCOs[2]	SAMPLE LOCATIONS																					
			GPCS AREA REMEDIAL EXCAVATION																					
			BOTTOM 24	BOTTOM 25	BOTTOM 26	BOTTOM 27	BOTTOM 28	BOTTOM 29	BOTTOM 30	BOTTOM 31	BOTTOM 32	BOTTOM 33 [4]	NORTHWALL 1	NORTHWALL 2	NORTHWALL 3	NORTHWALL 4	EASTWALL 1	EASTWALL 2	EASTWALL 3	EASTWALL 4	EASTWALL 5	WESTWALL 1	SOUTHWALL 1	SOUTHWALL 2
			09/11/2014					09/17/2014			09/17/2014	09/23/2014	09/17/2014				08/26/2014		09/02/2014	09/17/2014		08/21/2014		
Volatile Organic Compounds (VOCs) - mg/Kg [3]																								
1,2,4-Trimethylbenzene	**3.6**	**52**	0.0078	0.00084 J	ND	0.012	0.098	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	0.0073	ND	ND	ND	0.36	0.001 J
1,3,5-Trimethylbenzene	**8.4**	**52**	0.0038 J	0.00036 J	ND	0.0039 J	0.016	ND	ND	ND	ND	0.31	ND	ND	ND	ND	ND	ND	0.0077	ND	ND	ND	0.1	0.00097 J
2-Butanone (MEK)	**0.12**	**100**	0.028	0.018	0.014	0.0092 J	0.11	ND	0.015	0.015	0.04	ND	ND	ND	0.0054 J	0.0071 J	0.014	0.0029 J	0.0092 J	ND	0.0047 J	ND	0.068	0.027
Acetone	**0.05**	**100**	**0.18**	**0.16**	**0.14**	**0.067**	**0.32**	0.029	**0.052**	**0.13**	**0.22**	**0.2 J**	0.011 J	0.024	0.07	**0.062**	**0.064**	0.024	0.025	ND	**0.058**	0.012 J	**0.32**	**0.12**
Benzene	**0.06**	**4.8**	ND	ND	ND	0.0006 J	0.037	ND	0.00066 J	0.00047 J	ND	0.027 J	ND	0.00027 J	0.00031 J	0.00063 J	ND	ND	0.0021	0.00065 J	0.00039 J	ND	**0.067**	0.012
Cyclohexane	**--**	**--**	0.0058 J	0.0012 J	ND	0.0029 J	0.057	ND	0.0058 J	ND	ND	0.22 J	ND	ND	ND	ND	ND	ND	0.0056 J	ND	ND	ND	0.021 J	0.0056 J
Ethylbenzene	**1**	**41**	ND	ND	ND	0.0088	0.11	ND	0.00049 J	ND	ND	0.13	ND	ND	ND	ND	ND	ND	0.0024	ND	ND	ND	0.28	0.00046 J
Isopropylbenzene (Cumene)	**--**	**--**	0.0022	ND	ND	0.0011 J	0.011	ND	0.021	ND	ND	0.032 J	ND	ND	ND	ND	ND	ND	0.0033	ND	ND	ND	0.018	0.0031
Methyl tert butyl ether (MTBE)	**0.93**	**100**	0.00081 J	0.0003 J	0.00061 J	0.0052	0.0021 J	ND	0.00038 J	ND	ND	ND	ND	ND	ND	ND	ND	0.0003 J	0.0044	ND	ND	0.0038	ND	0.00087 J
Methylcyclohexane	**--**	**--**	0.044	0.0076	ND	0.0027 J	0.044	ND	0.047	ND	0.0011 J	0.3	ND	ND	ND	ND	0.0068	ND	0.008	0.00068 J	ND	ND	0.018 J	0.0093
Methylene chloride	**0.05**	**100**	0.0031 J	ND	ND	0.0026 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0083 J	ND	ND	ND	ND	ND
n-Butylbenzene	**12**	**100**	0.0004 J	ND	ND	0.00039 J	0.00029 J	ND	0.055	ND	ND	0.22	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.011	0.0028
n-Propylbenzene	**3.9**	**100**	0.003	ND	ND	0.0028	0.031	ND	0.046	ND	0.00039 J	0.14	ND	ND	ND	ND	ND	ND	0.0014	ND	ND	ND	0.052	0.014
p-Isopropyltoluene	**--**	**--**	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.068	ND	ND	ND	ND	ND	ND	0.0006 J	ND	ND	ND	0.0024 J	ND
sec-Butylbenzene	**11**	**100**	0.00094 J	ND	ND	0.00029 J	ND	ND	0.043	ND	ND	0.063	ND	ND	ND	ND	0.00045 J	ND	ND	ND	ND	ND	0.0037 J	0.0012
tert-Butylbenzene	**5.9**	**100**	0.0005 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	**0.7**	**100**	0.00054 J	0.00055 J	0.0004 J	0.00091 J	0.01	ND	ND	0.00026 J	ND	0.062 J	ND	0.00028 J	ND	0.00034 J	ND	ND	0.0028	ND	ND	ND	0.021	0.001 J
Total Xylenes	**0.26**	**100**	0.0037 J	0.0011 J	0.00074 J	0.0183	**0.37**	ND	0.00139 J	0.00027 J	ND	**0.63**	ND	0.00027 J	ND	0.00029 J	ND	ND	0.0177	ND	ND	ND	**1.34**	0.0048 J
Semi-Volatile Organic Compounds (SVOCs) - mg/Kg [3]																								
2-Methylnaphthalene	**--**	**--**	ND	ND	ND	ND	ND	0.12 J	0.86	ND	ND	1.4	ND	ND	ND	ND	ND	ND	1.2	0.46	ND	ND	ND	ND
Acenaphthene	**20**	**100**	ND	ND	ND	ND	ND	ND	0.049 J	ND	ND	0.14 J	ND	ND	ND	ND	ND	ND	0.42	0.45	ND	ND	ND	ND
Acenaphthylene	**100**	**100**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.37	0.28	ND	ND	ND	ND
Anthracene	**100**	**100**	ND	ND	ND	ND	ND	0.063 J	0.035 J	ND	ND	0.18	ND	ND	ND	ND	ND	ND	1.1	1.4	ND	ND	ND	ND
Benzo(a)anthracene	**1**	**1**	ND	ND	ND	ND	ND	0.29	0.082 J	ND	ND	0.62	ND	ND	ND	0.12	ND	ND	**1.7**	**2.9**	0.051 J	ND	ND	ND
Benzo(a)pyrene	**1**	**1**	ND	ND	ND	ND	ND	0.51	0.078 J	ND	ND	0.58	ND	ND	ND	0.1 J	ND	ND	**1.6**	**3.6**	ND	ND	ND	ND
Benzo(b)fluoranthene	**1**	**1**	ND	ND	ND	ND	ND	0.76	0.099 J	ND	ND	0.75	ND	ND	ND	0.14	ND	ND	**2**	**4.4**	0.048 J	ND	ND	ND
Benzo(ghi)perylene	**100**	**100**	ND	ND	ND	ND	ND	0.56	0.052 J	ND	ND	0.35	ND	ND	ND	0.062 J	ND	ND	0.98	2.4	ND	ND	ND	ND
Benzo(k)fluoranthene	**0.8**	**3.9**	ND	ND	ND	ND	ND	0.26	ND	ND	ND	0.33	ND	ND	ND	0.068 J	ND	ND	0.76	**1.5**	ND	ND	ND	ND
Chrysene	**1**	**3.9**	ND	ND	ND	ND	ND	0.42	0.075 J	ND	ND	0.64	ND	ND	ND	0.12	ND	ND	**1.6**	**3.3**	0.048 J	ND	ND	ND
Dibenzo(a,h)anthracene	**0.33**	**0.33**	ND	ND	ND	ND	ND	0.13	ND	ND	ND	0.086 J	ND	ND	ND	ND	ND	ND	0.26	**0.66**	ND	ND	ND	ND
Fluoranthene	**100**	**100**	ND	ND	ND	ND	ND	0.32	0.15	ND	ND	1.2	ND	ND	ND	0.21	ND	ND	3.7	7.1	0.086 J	ND	0.047 J	ND
Fluorene	**30**	**100**	ND	ND	ND	ND	ND	ND	0.09 J	ND	ND	0.17 J	ND	ND	ND	ND	ND	ND	0.67	0.63	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	**0.5**	**0.5**	ND	ND	ND	ND	ND	**0.56**	**0.058 J**	ND	ND	0.4	ND	ND	ND	0.072 J	ND	ND	**1**	**2.6**	ND	ND	ND	ND
Naphthalene	**12**	**100**	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.32	ND	ND	ND	ND	ND	ND	0.45	0.43	ND	ND	ND	ND
Phenanthrene	**100**	**100**	ND	ND	ND	ND	ND	0.17	0.22	ND	ND	0.86	ND	ND	ND	0.12	ND	ND	3	6.1	0.057 J	ND	0.045 J	ND
Pyrene	**100**	**100**	ND	ND	ND	ND	ND	0.35	0.14	ND	ND	1	ND	ND	ND	0.19	ND	ND	3.1	6.5	0.072 J	ND	ND	ND
Total PAHs	**--**	**--**	ND	ND	ND	ND	ND	4.513 J	1.988 J	ND	ND	9.026 J	ND	ND	ND	1.202 J	ND	ND	23.91 J	44.71 J	0.362 J	ND	0.092 J	ND

Notes:

1. Only those parameters detected at a minimum of one sample location are presented in this table; all other compounds were reported as non-detect.
2. Values per NYSDEC Part 375 Soil Cleanup Objectives (SCOs).
3. Sample results were reported by the laboratory in ug/kg and converted to mg/kg for comparisons to SCOs.
4. BOTTOM 33 was labeled as "TANK C AREA" in the analytical report.

Definitions:

ND = Parameter not detected above laboratory detection limit.
"--" = No value available for the parameter. Or parameter not analysed for.
J = Estimated value; result is less than the sample quantitation limit but greater than zero.
D = Compounds were identified in an analyisis at the secondary dilution factor.

Bold	= Result exceeds Unrestricted Use SCOs
Bold	= Result exceeds Restricted Residential Use SCOs.

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

TURNKEY ENVIRONMENTAL RESTORATION, LLC

TABLE 3

SUMMARY OF REMEDIAL EXCAVTION POST-EXCAVATION SOIL ANALYTICAL RESULTS

300 OHIO STREET SITE

BUFFALO, NEW YORK

PARAMETER [1]	Unrestricted Use SCOs [2]	Restricted Residential Use SCOs [2]	SAMPLE LOCATIONS																	
			TP-13 EXCAVATION AREA					MW-1 EXCAVATION AREA					SS-10 EXCAVATION AREA							
			BOTTOM 1	NORTHWALL 1	EASTWALL 1	SOUTHWALL 1	WESTWALL 1	BOTTOM 1	NORTHWALL 1	EASTWALL 1	SOUTHWALL 1	WESTWALL 1	EW-1 r (1.5')	EW-2 r (1.5')	WW-1 r 2 (1.5')	WW-2 r (1.5')	F1 (2.5')	F2 (3')	F3 r (3.5')	F4 (3')
			10/13/2014					10/14/2014					10/07/2016	10/11/2016	10/14/2016	10/11/2016	10/03/2016	10/04/2016	10/11/2016	10/14/2016
Semi-Volatile Organic Compounds (SVOCs) - mg/Kg [3]																				
Benzo(a)anthracene	**1**	**1**	--	--	--	--	--	ND	0.1 J	ND	ND	0.09 J	--	--	--	--	--	--	--	--
Benzo(a)pyrene	**1**	**1**	--	--	--	--	--	ND	0.09 J	ND	ND	0.072 J	--	--	--	--	--	--	--	--
Benzo(b)fluoranthene	**1**	**1**	--	--	--	--	--	ND	0.081 J	ND	ND	0.055 J	--	--	--	--	--	--	--	--
Benzo(ghi)perylene	**100**	**100**	--	--	--	--	--	ND	0.059 J	ND	ND	ND	--	--	--	--	--	--	--	--
Benzo(k)fluoranthene	**0.8**	**3.9**	--	--	--	--	--	ND	0.077 J	ND	ND	0.069 J	--	--	--	--	--	--	--	--
Chrysene	**1**	**3.9**	--	--	--	--	--	ND	0.11 J	ND	ND	0.086 J	--	--	--	--	--	--	--	--
Fluoranthene	**100**	**100**	--	--	--	--	--	ND	0.15	ND	ND	0.14	--	--	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	**0.5**	**0.5**	--	--	--	--	--	ND	0.057 J	ND	ND	ND	--	--	--	--	--	--	--	--
Naphthalene	**12**	**100**	--	--	--	--	--	ND	0.53	ND	ND	ND	--	--	--	--	--	--	--	--
Phenanthrene	**100**	**100**	--	--	--	--	--	ND	0.083 J	ND	ND	0.058 J	--	--	--	--	--	--	--	--
Pyrene	**100**	**100**	--	--	--	--	--	ND	0.14	ND	ND	0.12	--	--	--	--	--	--	--	--
Total PAHs	**--**	**--**	--	--	--	--	--	ND	1.477	ND	ND	0.69	--	--	--	--	--	--	--	--
Metals - mg/Kg																				
Aluminum	**--**	**--**	6300	6500	8000	5900	3700	--	--	--	--	--	ND	ND	ND	ND	ND	ND	ND	ND
Antimony	**--**	**--**	ND	4.6 J	2.4	ND	8.4	--	--	--	--	--	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	**13**	**16**	5.4	9	11	3.9	12	--	--	--	--	--	6.5	2.4	**19**	3.6	9.3	3.6	3.2	**16**
Barium	**350**	**400**	36	120	150	35	150	--	--	--	--	--	100	61	**500**	49	140	57	57	250
Beryllium	**7.2**	**72**	0.32 J	0.41 J	0.45 J	0.33 J	0.51	--	--	--	--	--	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	**2.5**	**4.3**	ND	ND	0.98 J	ND	0.19 J	--	--	--	--	--	ND	ND	ND	ND	ND	ND	ND	ND
Calcium	**--**	**--**	1700	25000	33000	3800	110000	--	--	--	--	--	ND	ND	ND	ND	ND	ND	ND	ND
Chromium	**30**	**180**	9.1	10	17	9.8	6.9	--	--	--	--	--	ND	ND	ND	ND	ND	ND	ND	ND
Cobalt	**--**	**--**	4.9	6.6	6.3	5.3	3.5	--	--	--	--	--	ND	ND	ND	ND	ND	ND	ND	ND
Copper	**50**	**270**	13	34	**80**	18	43	--	--	--	--	--	ND	ND	ND	ND	ND	ND	ND	ND
Iron	**--**	**--**	1300	20000	19000	12000	13000	--	--	--	--	--	ND	ND	ND	ND	ND	ND	ND	ND
Lead	**63**	**400**	7	**140**	**290**	9.3	**190**	--	--	--	--	--	40	8	**1400**	37	**350**	59	24	**720**
Magnesium	**--**	**--**	1300	6600	11000	2100	5300	--	--	--	--	--	ND	ND	ND	ND	ND	ND	ND	ND
Manganese	**1600**	**2000**	160	360	320	120	300	--	--	--	--	--	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	**30**	**310**	12	14	18	14	10	--	--	--	--	--	ND	ND	ND	ND	ND	ND	ND	ND
Potassium	**--**	**--**	840	1400	1200	850	1000	--	--	--	--	--	ND	ND	ND	ND	ND	ND	ND	ND
Selenium	**3.9**	**180**	ND	0.86 J	0.39 J	ND	1.2 J	--	--	--	--	--	ND	ND	ND	ND	ND	ND	ND	ND
Silver	**2**	**180**	ND	ND	0.41 J	ND	ND	--	--	--	--	--	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	**--**	**--**	76 J	200 J	240	70 J	170 J	--	--	--	--	--	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	**--**	**--**	15	15	17	16	11	--	--	--	--	--	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	**109**	**10000**	32	69	**390**	36	78	--	--	--	--	--	ND	ND	ND	ND	ND	ND	ND	ND
Mercury	**0.18**	**0.81**	0.03 J	**0.42**	**2.3**	0.05 J	**0.51**	--	--	--	--	--	ND	ND	ND	ND	ND	ND	ND	ND

Notes:

1. Only those parameters detected at a minimum of one sample location are presented in this table; all other compounds were reported as non-detect.
2. Values per NYSDEC Part 375 Soil Cleanup Objectives (SCOs).
3. Sample results were reported by the laboratory in ug/kg and converted to mg/kg for comparisons to SCOs.

Definitions:

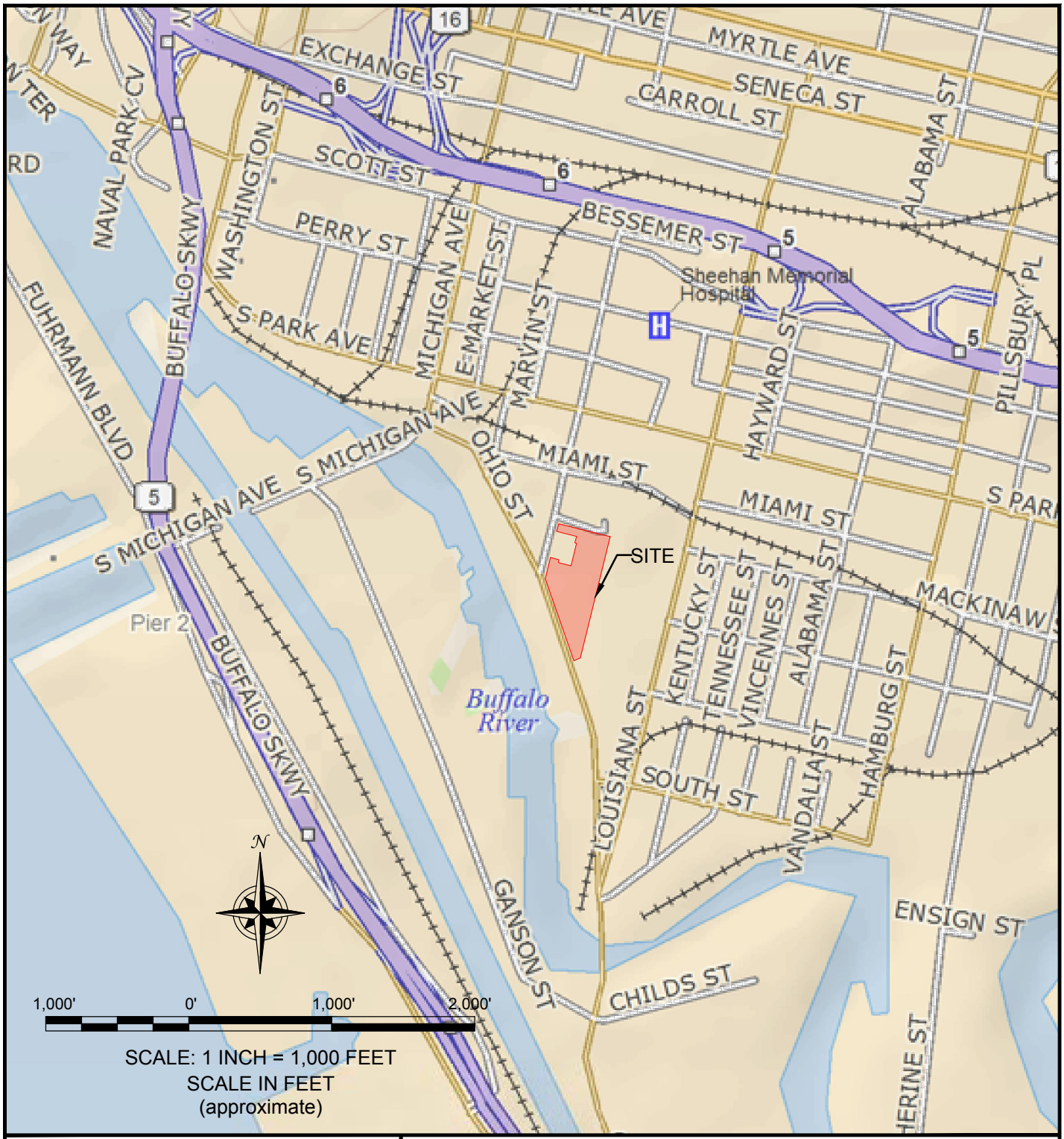
ND = Parameter not detected above laboratory detection limit.
"--" = No value available for the parameter. Or parameter not analysed for.
J = Estimated value; result is less than the sample quantitation limit but greater than zero.

Bold	= Result exceeds Unristricted Use SCOs.
Bold	= Result exceeds Restricted Residential Use SCOs.

FIGURES

F:\CAD\TurnKey\Ellicott Development\300 Ohio Street\Supplemental Remedial Action Work Plan\Figure 1; Site Location and Vicinity Map.dwg

FIGURE 1



BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC
TURNKEY ENVIRONMENTAL RESTORATION, LLC
2558 HAMBURG TURNPIKE, SUITE 300, BUFFALO, NY 14218, (716) 856-0599

PROJECT NO.: 0136-018-010

DATE: OCTOBER 2018

DRAFTED BY: CMC

SITE LOCATION AND VICINITY MAP

SUPPLEMENTAL REMEDIAL ACTION WORK PLAN

300 OHIO STREET SITE
BCP SITE NO. C915257
BUFFALO, NEW YORK

PREPARED FOR

4216 GROUP, LLC

F:\CAD\TurnKey\Ellicott Development\300 Ohio Street\Supplemental Remedial Action Work Plan\Figure 2; Site Plan (Aerial).dwg

DATE: OCTOBER 2018
DRAFTED BY: CMC

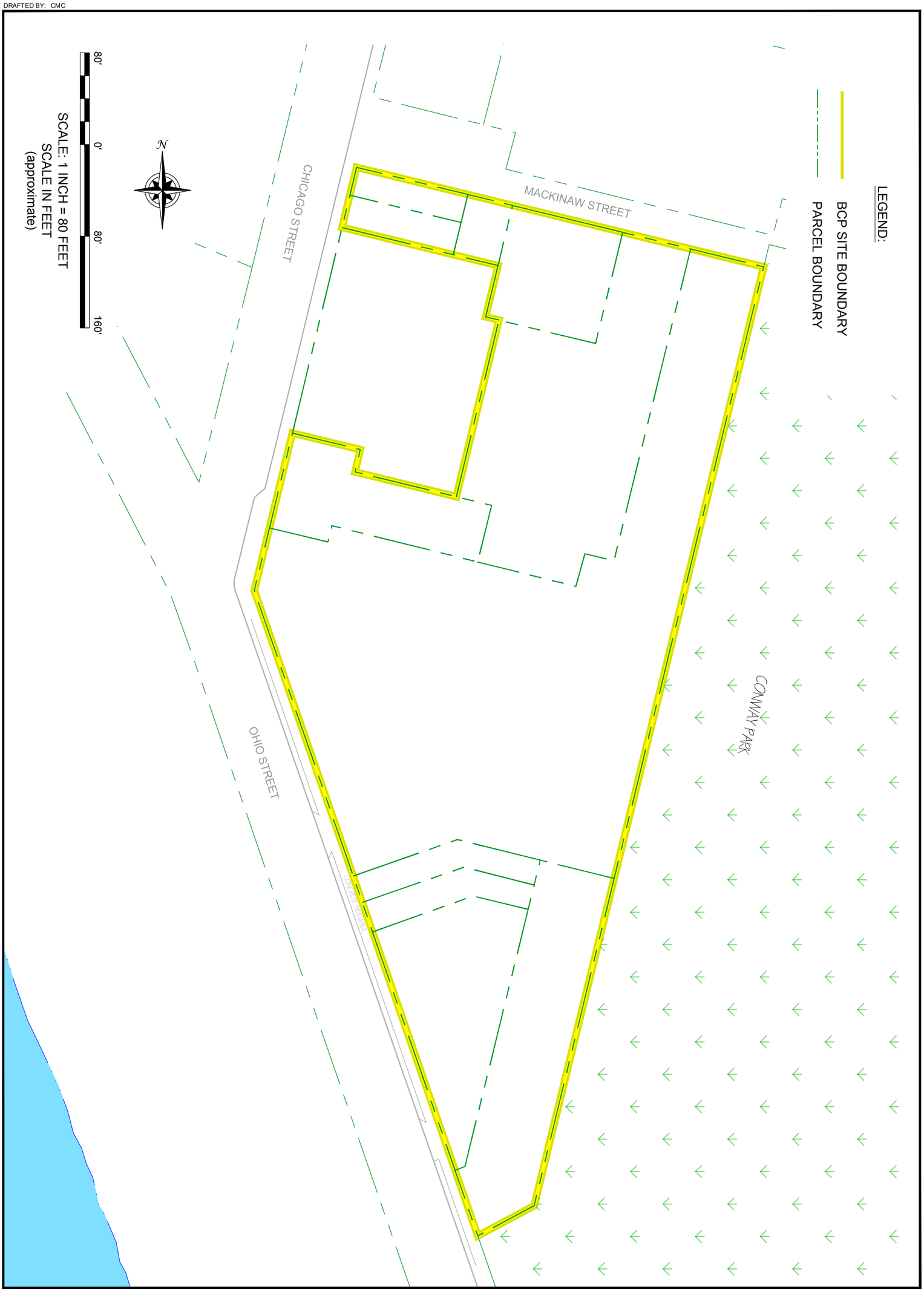


FIGURE 2

SITE PLAN (AEIAL)

SUPPLEMENTAL REMEDIAL ACTION WORK PLAN

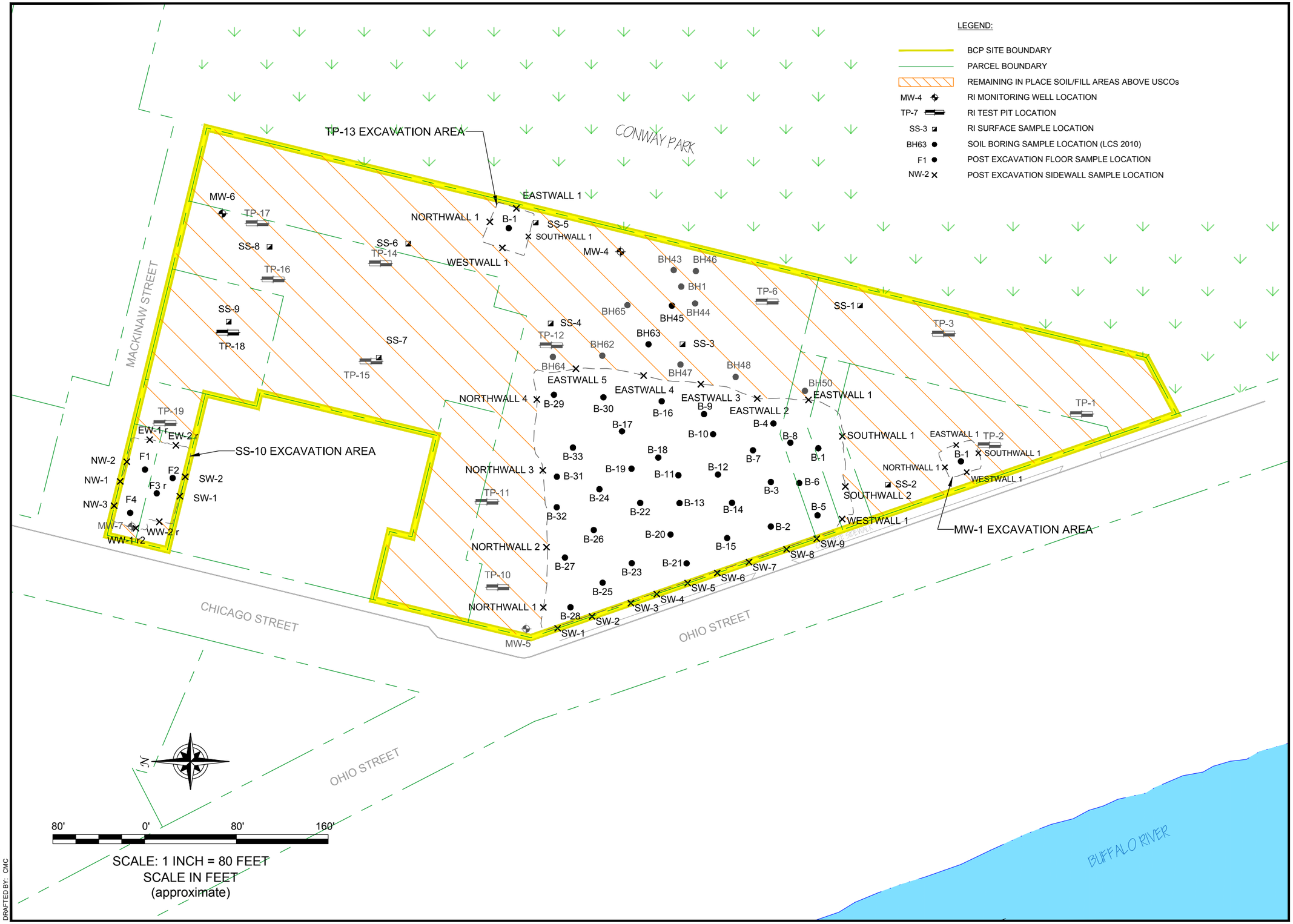
300 OHIO STREET SITE
BCP SITE NO. C915257
BUFFALO, NEW YORK

PREPARED FOR
4216 GROUP, LLC

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC
TURNKEY ENVIRONMENTAL RESTORATION, LLC
2558 HAMBURG TURNPIKE, SUITE 300, BUFFALO, NY 14218, (716) 856-0599

JOB NO.: 0136-018-010

F:\CAD\TurnKey\Elliott Development\300 Ohio Street\Supplemental Remedial Action Work Plan\Figure 3; Remaining Soil_Fill Exceeding USCOs.dwg



DATE: OCTOBER 2018
DRAFTED BY: CMC

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC
TURNKEY ENVIRONMENTAL RESTORATION, LLC
2558 HAMBURG TURNPIKE, SUITE 300, BUFFALO, NY 14218, (716) 856-0599

JOB NO.: 0136-018-010

REMAINING SOIL/FILL SAMPLE LOCATIONS

SUPPLEMENTAL REMEDIAL EXCAVATION WORK PLAN

300 OHIO STREET SITE
BCP SITE NO. C915257
BUFFALO, NEW YORK

PREPARED FOR
4216 GROUP, LLC

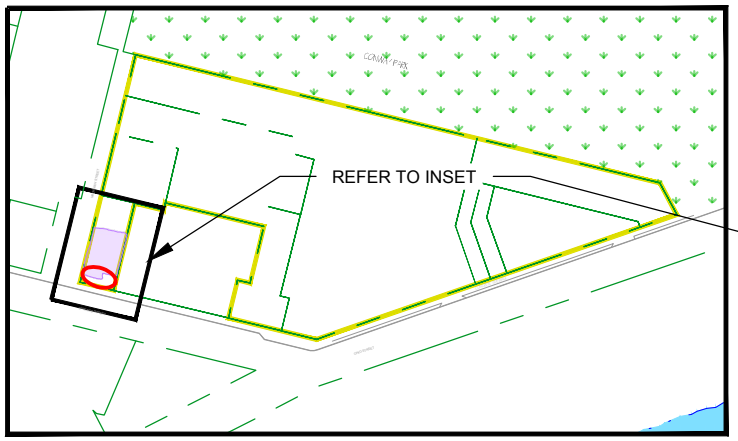
FIGURE 3

F:\CAD\TurnKey\Ellicott Development\300 Ohio Street\Supplemental Remedial Action Work Plan\Figure 4; Additional Remedial Excavation of SS-10.dwg

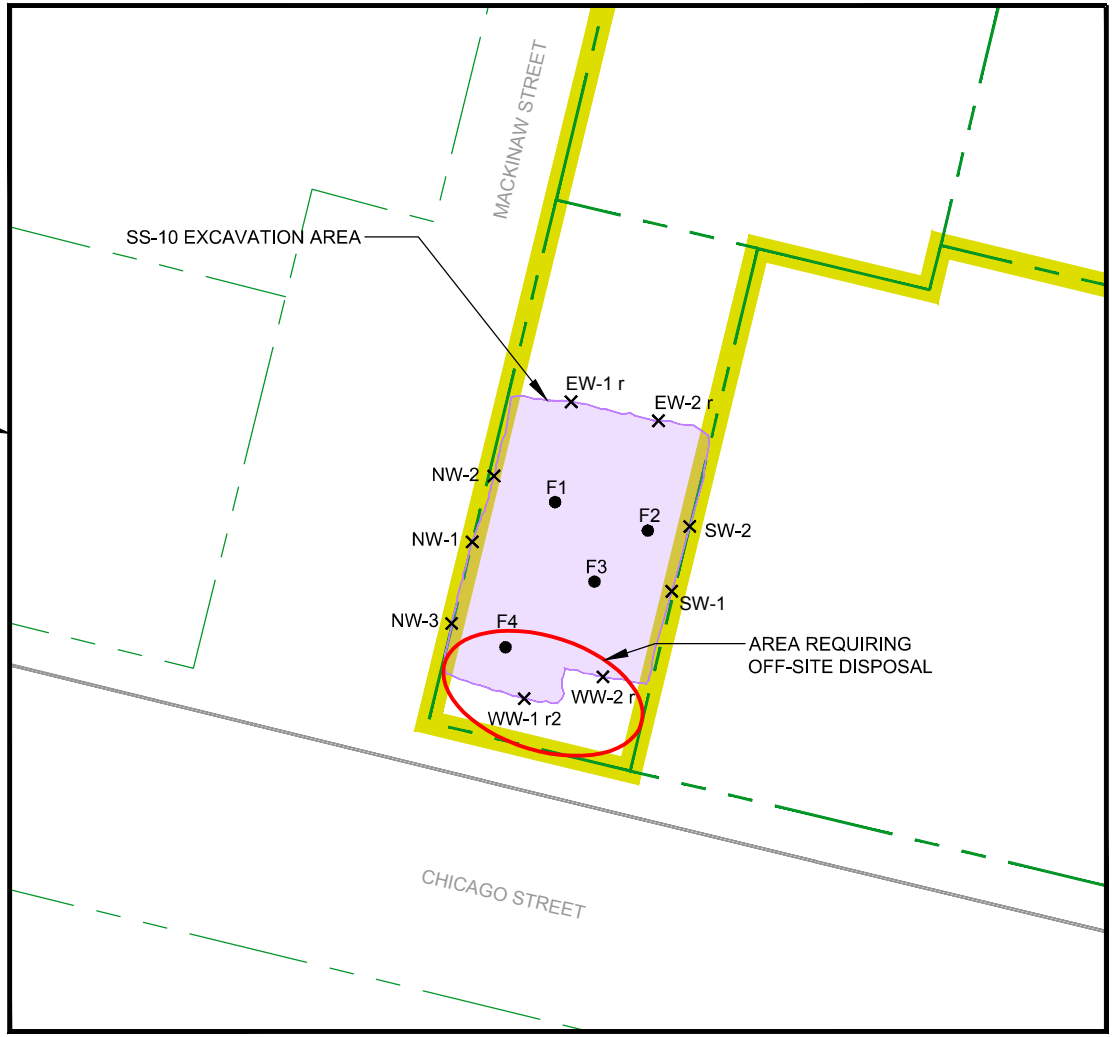
LEGEND:

PROPERTY BOUNDARY

PARCEL BOUNDARY



PLAN VIEW SITE
NOT TO SCALE



N

50' 0' 50' 100'

SCALE: 1 INCH = 50 FEET
SCALE IN FEET
(approximate)

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

TURNKEY ENVIRONMENTAL RESTORATION, LLC

2558 HAMBURG TURNPIKE, SUITE 300, BUFFALO, NY 14218, (716) 856-0599

PROJECT NO.: 0136-018-010

DATE: OCTOBER 2018

DRAFTED BY: CMC

ADDITIONAL REMEDIAL EXCAVATION OF SS-10

SUPPLEMENTAL REMEDIAL ACTION WORK PLAN

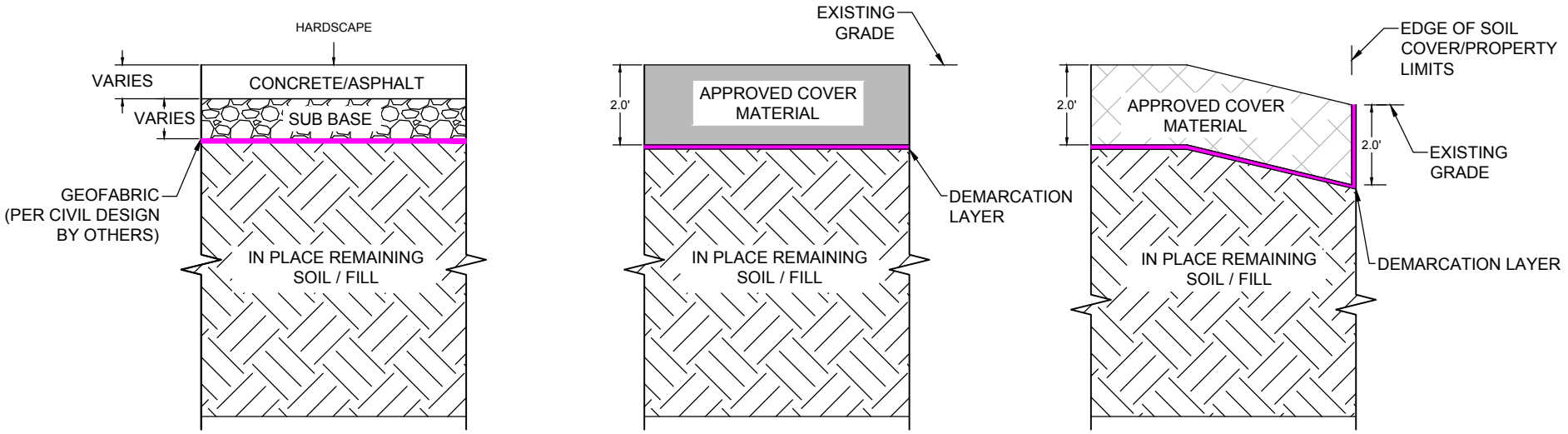
300 OHIO STREET SITE
BCP SITE NO. C915257
BUFFALO, NEW YORK

PREPARED FOR

4216 GROUP, LLC

FIGURE 4

F:\CAD\TurnKey\Ellicott Development\300 Ohio Street\Supplemental Remedial Action Work Plan\Figure 5; Cover System Details.dwg



NOTE A: THICKNESS VARIES BY COVER TYPE AND DESIGNATED USE PER CIVIL CONSTRUCTION DETAILS (BY OTHERS);

NOTE: COVER SYSTEM KEYED-IN AT TRANSITIONS FROM HARDSCAPE AND/OR SITE BOUNDARY (24-INCH MINIMUM PER DER-10)

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

TURNKEY ENVIRONMENTAL RESTORATION, LLC

2558 HAMBURG TURNPIKE, SUITE 300, BUFFALO, NY 14218, (716) 856-0599

PROJECT NO.: 0136-018-010

DATE: OCTOBER 2018

DRAFTED BY: CMC

TRACK 4 RESTRICTED RESIDENTIAL COVER SYSTEM DETAILS

SUPPLEMENTAL REMEDIAL ACTION WORK PLAN

300 OHIO STREET SITE
BCP SITE NO. C915257
BUFFALO, NEW YORK

PREPARED FOR

4216 GROUP, LLC

FIGURE 5

APPENDIX A

CIVIL CONSTRUCTION DRAWINGS AND DETAILS