LANGAN **SITE OBSERVATION REPORT – Supplemental Remedial Investigation – Day 05**

PROJECT No.:	170390001	**CLIENT:**		**DATE:**	Thursday, 09 February 2023
PROJECT:	141 3rd Street	Third Street Owner LLC and 155 Third St., LLC		**WEATHER:**	Partly Cloudy, 38-52 ^{0}F Wind: W @ 0-5 mph
LOCATION:	Brooklyn, New			**TIME:**	6:30 a.m. – 15:30 p.m.
BCP SITE ID:	C224336			**MONITOR:**	Ali Reach

EQUIPMENT:
Geoprobe® 8150 LS Sonic Drill Rig
Mini RAE 3000 x3
TSI Dust Trak x2
Hand tools
Interface Probe

PRESENT AT SITE:
Langan: Ali Reach
AARCO Environmental Services Inc. (AARCO): Daybi Pacheco and two assistants
Monadnock Construction, Inc. (Monadnock): James Castore and Matt Albert
New York State Department of Environmental Conservation: Scott Deyette, Marnie Chancey
WSP: Sunlei Yang

OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.:
Langan Engineering, Environmental, Surveying, Landscape Architecture and Geology, D.P.C. (Langan) was present to implement the Supplemental Remedial Investigation (SRI) in accordance with the New York State Department of Environmental Conservation (NYSDEC)-approved Supplemental Remedial Investigation Work Plan (SRIWP), dated 7 February 2023. The purpose of this investigation was to further delineate coal tar impacts.

Site Activities

- AARCO used a submersible pump to develop two monitoring well couplets (MW15-N and MW15-S) and one deep monitoring well (MW13-S).
- AARCO used a Geoprobe® 8150LS sonic drill rig to advance three soil borings (SB15-NW1, SB15-W3 and SB13-S3) in the eastern part of the site. SB15-NW1 was advanced about 20 feet to the north and west of RI parent boring SB15, SB15-W3 was advance about 20 feet west of SRI soil boring SB15-W2, and SB13-S3 was advanced about 20 feet to the west of SRI boring SB13-S2. Langan documented the work and screened the recovered soil continuously for evidence of environmental impacts (e.g., grossly contaminated material [GCM]/non-aqueous phase liquids [NAPL]) using visual and olfactory methods and with a calibrated photoionization detector (PID).
    - **SB15-NW1** was advanced to 60 feet below grade surface (bgs). Coal tar impacts (dark brown staining, moderate naphthalene-like odor, and/or isolated sheen on soil) were identified between 28.5 and 35 feet bgs. Additional coal tar impacts (faint to strong naphthalene-like odor, and/or saturated soil) were identified between 42 and 45 feet bgs. The presence of NAPL was confirmed positive between 28.5 and 30 feet bgs, and negative between 40 and 42 feet bgs using shake tests equipped with hydrophobic red SUDAN IV dye. A maximum PID reading of 117.5 parts per million (ppm) was recorded at 43 feet bgs.
    - **SB15-W3** was advanced to a depth of about 60 feet bgs. Coal tar impacts were not observed, and a maximum PID reading of 0.0 ppm was recorded throughout the boring.
    - **SB13-S3** was advanced to a depth of about 60 feet bgs. Coal tar impacts were not observed, and a maximum PID reading of 0.0 ppm was recorded throughout the boring.
- Langan used an interface probe to gauge remedial investigation monitoring well MW-15 for NAPL accumulation. NAPL was not identified.

Material Tracking:

- Fifteen 55-gallon drums containing soil cuttings and/or soil-grout mixture from soil borings SB15-N1, SB15-W1, SB15-S1, SB15-SW1, SB15-SW2, SB13-N1, SB13-S1, SB13-W1, SB15-SW2, SB13-S2, SB15-NW1, SB15-W3, and SB13-S3 are staged in the eastern part of the site.
- Three 55-gallon drums containing purged groundwater from MW15-S1, MW15-N1, and MW13-S1

Sampling

- Langan collected the following remedial investigation soil samples for laboratory analysis. The samples were submitted to Alpha Analytical Laboratories, a New York State Department of Health (NYSDOH) Environmental Laboratory Accredited Program (ELAP)-certified laboratory under standard chain-of-custody protocols. The following soil samples were submitted for Part 375/Target Compound List (TCL) volatile organic compounds (VOC) and semivolatile organic compounds:

    - SB15-NW1_29-30
    - SB13-NW1_43-44*
    - SB15-NW1_45-46

    *additionally placed on hold for PIANO volatiles analysis

Soil samples were placed on a 48-hour turnaround time. Three soil samples (SB15-NW1_43-44, SB15-W3_29-30 and SB13-S3_36-37) from soil borings SB15-NW1, SB15-W3, and SB13-S3, respectively, were collected and placed on hold.

Community Air Monitoring Plan (CAMP) Activities

- Langan implemented the CAMP at upwind and downwind locations to monitor VOCs and particulate matter (PM10). 15-minute-average concentrations of VOCs and PM10 were not recorded above the action levels. No fugitive dust and odors associated with intrusive activities were observed migrating off site.

Particulate Monitoring (mg/m^3)			**Organic Vapor Monitoring (ppm)**		
Averaging Period	Upwind	Downwind	Averaging Period	Upwind	Downwind
Maximum 15-min Average	0.077	0.099	Maximum 15-min Average	0.0	0.7
Minimum 15-min Average	0.061	0.040	Minimum 15-min Average	0.0	0.0
Minimum 1-min Instant Reading	0.060	0.038	Minimum 1-min Instant Reading	0.0	0.0
Maximum 1-min Instant Reading	0.080	0.099	Maximum 1-min Instant Reading	0.0	1.4

mg/m^3= milligrams per cubic meter ppm= parts per million

Anticipated Activities

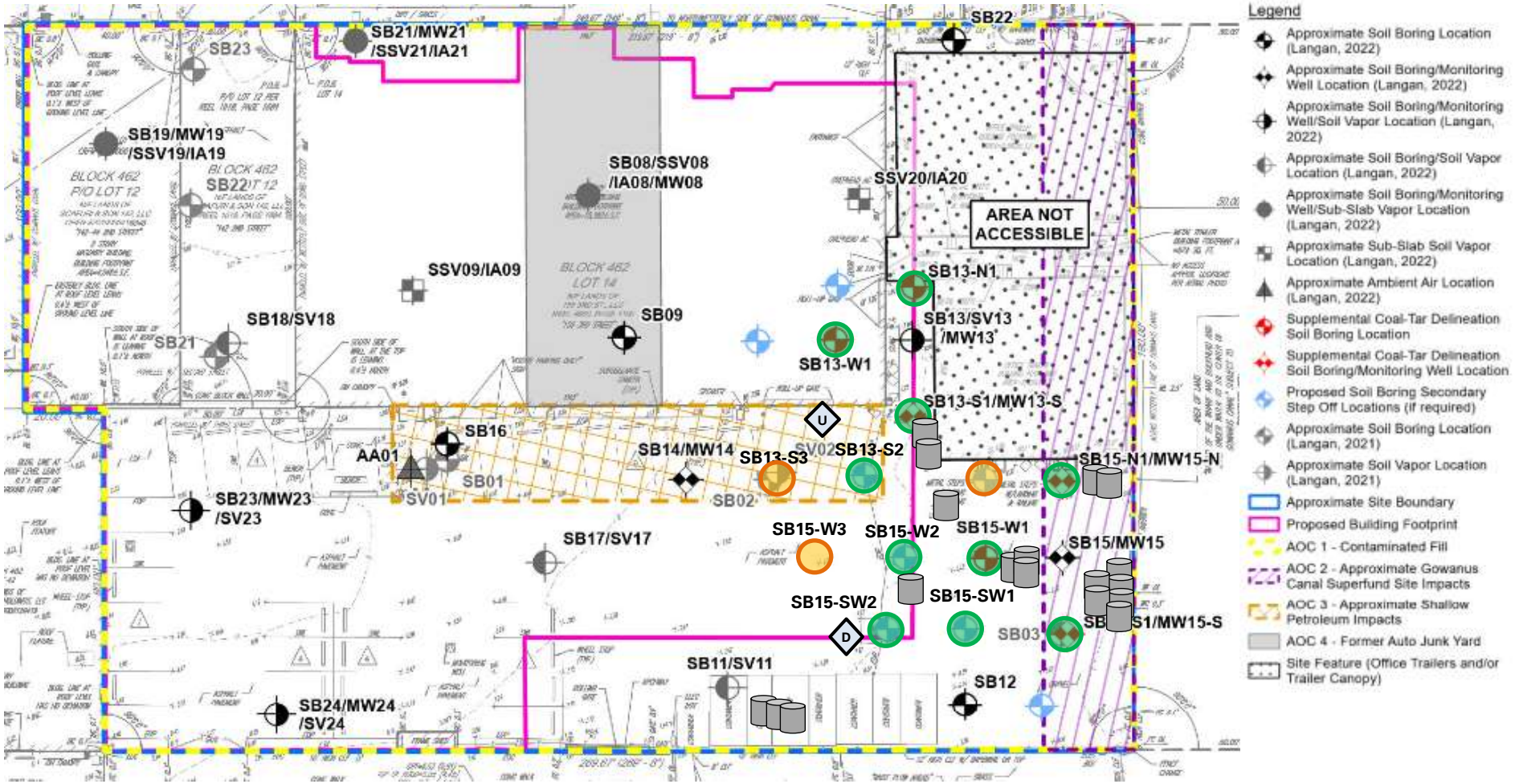
- AARCO will continue to advance soil borings in the eastern part of the site.

SITE PHOTOGRAPHS:

Photo 1: AARCO developing monitoring well couplet MW15-N1 (facing north).

Photo 2: AARCO advancing soil boring SB13-W3 (facing southwest).

SITE MAP:



INVESTIGATION KEY

- Completed Soil Boring
- Completed Soil Boring/Monitoring Well Installation Location
- Previously Completed Soil Boring and/or Monitoring Well Installation Location
- Upwind CAMP Station Location
- Downwind CAMP Station Location
- Drum Location