SITE OBSERVATION REPORT

PROJECT No.:	170552901		**DATE:**	Tuesday, November 8, 2022	
PROJECT:	159 Boerum Street	**CLIENT:** SPG Boerum LLC	**WEATHER:**	Sunny, 47-58 °F Wind: N @ 2.5 -6.6 mph	
LOCATION:	Brooklyn, NY		**TIME:**	6:30 am to 5:30 pm	
CONTRACTOR:	SD Builders		**LANGAN REP. :**	Lauren Roper, Andrew Ashley	

CONTRACTOR'S EQUIPMENT:	**PRESENT AT SITE:**
Hitachi ZX 160LC Excavator Deere 300G Excavator Casagrande C9 Drill Rig Geoprobe 6620DT Drill Rig	Lauren Roper, Andrew Ashley – Langan James Hsu – SD Builders - General Contractor Lucas Alvarez – Rise Concrete (Rise) – Foundation Contractor Able Siquij – Anel Queens Construction Inc. (Anel) – Drilling Contractor Adam Hutchinson – Lakewood Environmental Services Corp. (Lakewood) - Driller

OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.:

Langan was present to observe environmental protocols in accordance with the New York State Department of Environmental Conservation (NYSDEC)-approved Remedial Action Work Plan (RAWP) for Brownfield Cleanup Program (BCP) site C224291 at 159 Boerum Street (Block 3071, Lot 40). Observed activities were as follows:

Site Activities

- Anel used a Casagrande drill rig to install soldier piles along the southern and eastern site boundaries to a maximum depth of about 30 feet below grade surface (bgs).
- Lakewood used a Geoprobe 6620DT drill rig to advance thirteen soil borings (SB-101, SB-102, SB-103, SB-104, SB-105, SB-111, SB-112, SB-113, SB-114, SB-115, SB-118, SB-119 and SB-120) to a depth of 20 feet bgs in the northern, eastern, and southern parts of the site for waste characterization sampling. Fill/soil was screened for odors, staining, and organic vapors using a photoionization (PID); evidence of impacts were not observed and the fill/soil was backfilled into the borehole locations to be removed at a later date.
- Lakewood excavated two about 1-foot-long, 1-foot-wide, 2-foot-deep test pits (TP-01 and TP-02) to a depth of 2 feet bgs for waste characterization sampling. Excavated fill was screened for odors, staining, and organic vapors using a PID; evidence of impacts were not observed and the excavated fill was backfilled into its original location to be removed at a later date.

Material Tracking

- No material was exported from the site.
- No material was imported to the site.

Cc:	L. Haley, K. Semon, B. Gochenaur (Langan)	By:	Lauren Roper **LANGAN**

SITE OBSERVATION REPORT

Sampling

The following samples were relinquished to Alpha Analytical Laboratories (Alpha), a New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP No. 11148) certified laboratory in Westborough, Massachusetts:

- Five composite samples (WC04_COMP_0-20, WC06_COMP_0-5, WC06_COMP_5-10, WC06_COMP_10-20 and WC07_COMP_0-20) comprised from thirteen soil borings (SB-101 through SB-105, SB-111 through SB-115, and SB-118 through SB-120) and two test pits (TP-01 and TP-02) were collected and analyzed for Target Compound List (TCL) semivolatile organic compounds (SVOC), pesticides, herbicides, polychlorinated biphenyls (PCB), Target Analyte List (TAL) metals including total chromium and cyanide.
- Nine grab samples, WC04_GRAB_1-2, WC06_GRAB_2-3, WC06_GRAB_4-5, WC06_GRAB_5-6, WC06_GRAB_7-8, WC06_GRAB_12-13, WC06_GRAB_15-16, WC07_GRAB_0-1, and WC07_GRAB_3-4 were collected and analyzed for TCL volatile organic compounds (VOC) and/or extractable petroleum hydrocarbons (EPH).
- Two duplicate samples (SODUP01_110822_GRAB and SODUP01_110822_COMP) were collected for quality assurance/quality control (QA/QC) purposes.

CAMP Activities:

Langan performed on-site air monitoring during ground-intrusive activities for particulate matter smaller than 10 microns in diameter (PM10) or volatile organic compounds (VOCs). Fifteen-minute average concentrations of VOCs did not exceed action levels established by the community air monitoring plan (CAMP).

- Concentrations of PM10 and VOCs were not recorded at the upwind monitoring station from 12:44 to 12:57 and at the downwind monitoring station from 12:58 to 13:16 due to a server error. A field technician was contacted and the issue was resolved. Fugitive dust and odors were not observed leaving the site.
- Fifteen-minute average concentrations of PM10 exceeded action levels at the downwind monitoring station from 14:01 to 14:15 and 14:29 to 14:44 due to off-site concrete cutting activities adjacent to the station. Rise applied a constant stream of water to the work area and concentrations returned below action levels. Exceedances were not the result of ground-intrusive.

Particulate Monitoring (mg/m^3)			**Organic Vapor Monitoring (ppm)**		
Daily background	0.003		Daily Background	0.2	
Averaging Period	Upwind	Downwind	Averaging Period	Upwind	Downwind
Daily Time Weighted Average	0.003	0.036	Daily Time Weighted Average	0.2	0.0
Maximum 15-min Average	0.060	0.376	Maximum 15-min Average	0.8	0.1
Minimum 1-min Instant Reading	0.002	0.000	Minimum 1-min Instant Reading	0.0	0.0
Maximum 1-min Instant Reading	0.538	2.340	Maximum 1-min Instant Reading	0.8	1.4

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

NA = Not Available

Cc:	L. Haley, K. Semon, B. Gochenaur (Langan)	By:	Lauren Roper
			LANGAN

SITE OBSERVATION REPORT

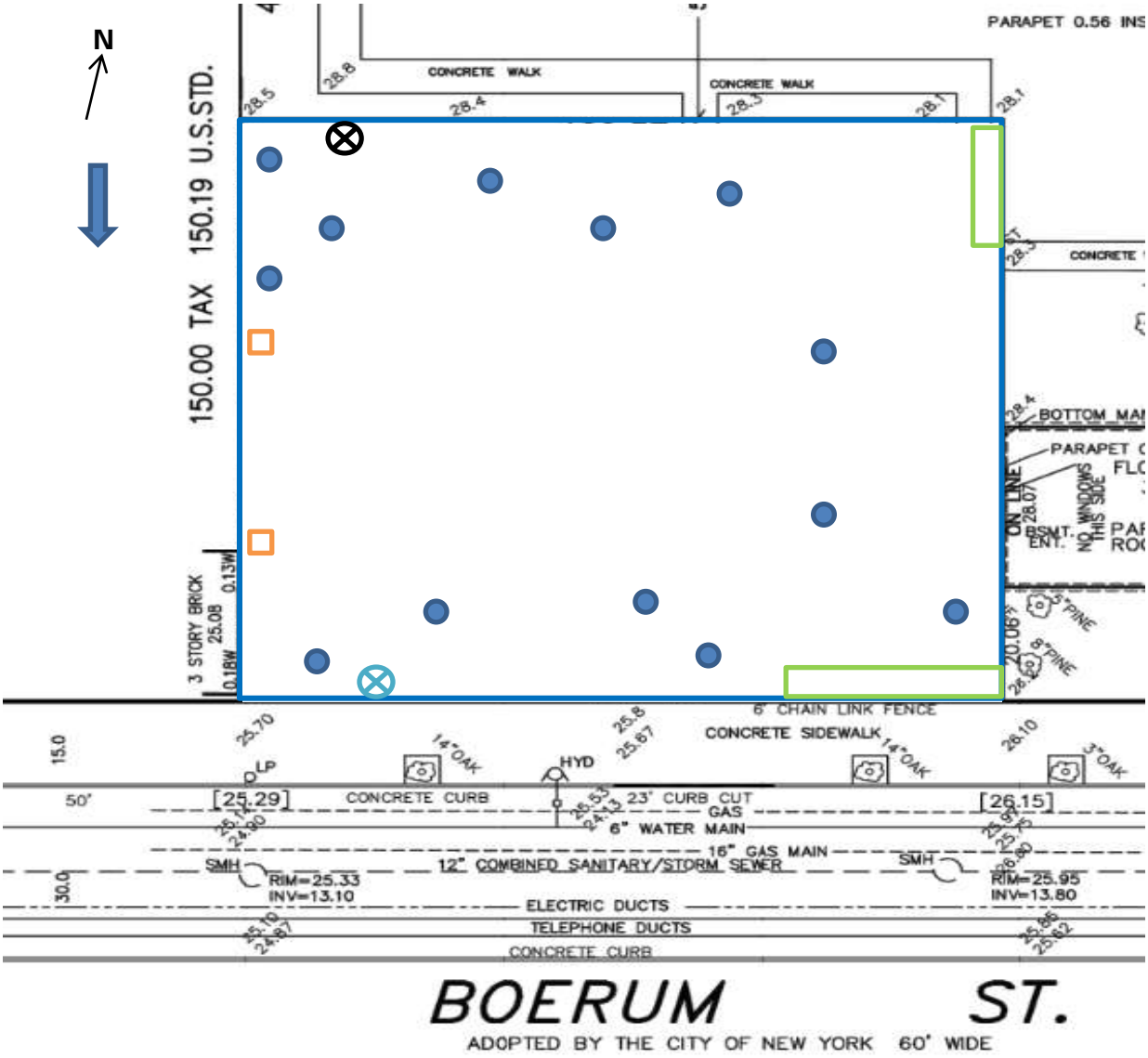
Anticipated Activities

- Anel will continue to install soldier piles around the site boundary.

Cc:	L. Haley, K. Semon, B. Gochenaur (Langan)	By:	Lauren Roper
			LANGAN

SITE OBSERVATION REPORT

Figure 1: Site Map



Legend:

- Upwind CAMP Station
- Downwind CAMP Station
- Excavation Extent
- Stockpile Location
- Approximate Location of Completed Soil Boring
- C&D Stockpile Location
- Graded Extent
- Wind Direction
- Support of Excavation Drilling Extents

Cc:	L. Haley, K. Semon, B. Gochenaur (Langan)	By:	Lauren Roper
			LANGAN

SITE OBSERVATION REPORT

SITE PHOTOGRAPHS

Photo 1: View of Lakewood advancing a soil boring in the southwestern part of the site (facing northwest).

Photo 2: View of Rise applying water to the concrete sawing activities to minimize dust (facing east).

Cc:	L. Haley, K. Semon, B. Gochenaur (Langan)	By:	Lauren Roper
			LANGAN