

November 19, 2024

Madeleine Babick
Division of Environmental Remediation
New York State Department of Environmental Conservation
47-40 21st Street
Long Island City, New York 11101

Re: Pre-Design Investigation Work Plan
BCP Site Number C224357
366 Rockaway Avenue, Brooklyn NY 11212

Dear Ms. Babick:

On behalf of Brownsville Arts Owner LLC (Volunteer), Roux Environmental Engineering and Geology, D.P.C. (Roux) is submitting this Pre-Design Investigation Work Plan (PDI WP) for the property located at 366 Rockaway Avenue Brooklyn, New York (Site). The Site is enrolled in the Brownfield Cleanup Program (BCP) under site number C224357. The Volunteer entered into a Brownfield Cleanup Agreement (BCA) with the New York State Department of Environmental Conservation (NYSDEC) on January 23, 2023 (index no. 224357-12-22). The PDI was included as the first step in the Remedial Action Implementation outlined in the NYSDEC-approved Remedial Action Work Plan (RAWP) dated October 2024.

The approximately 1.31-acre Site is identified as Tax Block 3499 Lot 15. Historical uses of the Site include a furniture upholsterer, a cabinet manufacturer, a wholesale wallpaper storefront, and stone cutting and manufacturing operations. The Site has been vacant since the 1980s and is currently overgrown with vegetation and enclosed by a chain link security fence. The proposed redevelopment of the Site entails the construction of a nine-story mixed-use residential building containing approximately 290 affordable housing units, a cellar, community facility space including an arts and media center, performance arts school, music school, multipurpose theater/rehearsal/instruction space, and administrative office space for non-profit organizations. The surrounding area is zoned as Residential and Commercial, and the planned project has been approved under the current zoning.

Presented below are the objectives and the technical details and procedures for all the proposed sampling:

PDI Sampling Objectives

A pre-excavation confirmation sampling program will be conducted as part of this PDI to further evaluate and determine the final remedial excavation depths to be completed during Site redevelopment. As included in the RAWP, areas of the Site have been divided into proposed Track 1 remedial depths based on the analytical data collected during prior investigations. The Site is divided into Excavation Areas A, B, and C and Hot Spots 1, 2, 3, and 4 (See **Figure 1**).

As outlined in the RAWP, a total of 64 confirmation bottom endpoint samples will be collected following completion of the remedial excavation. The collection of the soil samples as part of this PDI will confirm the remedial depths required to achieve a Track 1 remediation. The proposed PDI sampling program includes the collection of soil samples at 16 of the 64 locations (25% of the established bottom confirmation samples determined in Figure 10 of the RAWP) to determine if the Unrestricted Use Soil Cleanup Objectives (UUSOCs) are met. Individual points have been selected to provide a comprehensive spatial distribution throughout Excavation Areas A, B, and C, as well as three identified Hot Spot areas, Hot Spot 2, Hot Spot 3, and Hot Spot 4, as shown in **Figure 1**. A sample will not be

collected a Hot Spot 1 as part of this PDI since the analytical results of soil sample at RXSB-19 collected at 8 – 10 feet below land surface (ft bls) meets UUSCOs. Should the pre-excavation confirmation sample attain UUSCOs, the locations completed as part of this PDI will not be recollected as part of the post-excavation confirmation sampling.

The proposed samples will be collected from 16 soil borings, with a total of three samples being collected from each boring at various depths. Each sample will initially be analyzed for the parameter group most likely to exceed the UUSCO, based on the analytical results of prior onsite investigations. Upon initial collection only the shallowest of the three sample intervals will be analyzed, with the remaining two deeper intervals being sent to the laboratory with analysis on hold. Should the shallower soil samples exceed the UUSCO, the subsequent deeper sample on hold will be analyzed for the parameter group in exceedance of the UUSCO. Should the shallower soil samples from each boring not reveal any exceedances, the remaining deeper samples on hold will not be analyzed, and that soil sample will be analyzed for the full suite of parameters, in accordance with the RAWP.

The current anticipated excavation depths, number of samples, and sample depths of proposed soil borings are summarized in the table below:

Excavation Area	Current Anticipated Excavation Depth (ft bls)	Contaminants To Be Removed with Proposed Excavation Depth	Sample IDs for Analysis	Sample IDs for Analysis on Hold
Area A	4	SVOCs and metals	BCS-1 (4-6)	BCS-1 (6-8), BCS-1 (8-10)
			BCS-2 (4-6)	BCS-2 (6-8), BCS-2 (8-10)
			BCS-3 (4-6)	BCS-3 (6-8), BCS-3 (8-10)
Area B	6	SVOCs and metals	BCS-13 (6-8)	BCS-13 (8-10), BCS-13 (10-12)
			BCS-14 (6-8)	BCS-14 (8-10), BCS-14 (10-12)
			BCS-15 (6-8)	BCS-15 (8-10), BCS-15 (10-12)
			BCS-16 (6-8)	BCS-16 (8-10), BCS-16 (10-12)
			BCS-17 (6-8)	BCS-17 (8-10), BCS-17 (10-12)
			BCS-18 (6-8)	BCS-18 (8-10), BCS-18 (10-12)
			BCS-19 (6-8)	BCS-19 (8-10), BCS-19 (10-12)
			BCS-20 (6-8)	BCS-20 (8-10), BCS-20 (10-12)
Area C	8	SVOCs and metals	BCS-55 (8-10)	BCS-56 (10-12), BCS-56 (12-14)
			BCS-56 (8-10)	BCS-57 (10-12), BCS-57 (12-14)
Hot Spot 1	8	Lead and mercury	N/A – RXSB-19 (8-10) collected during RI meets UUSCOs.	N/A
Hot Spot 2	10	Total chromium and zinc	BCS-HS-2S (10-12)	BCS-HS-2S (12-14), BCS-HS-2S (14-16)
Hot Spot 3	12	Lead	BCS-HS-3 (12-14)	BCS-HS-3 (14-16), BCS-HS-3 (16-18)
Hot Spot 4	17	Mercury	BCS-HS-4 (17-19)	BCS-HS-4 (19-21), BCS-HS-4 (21-23)

Notes:

Ft bls – Feet below land surface
SVOC – Semi volatile organic compound
BCS – Bottom Confirmation Sample

Soil Boring Installation

The proposed borings will be advanced using a Geoprobe drill rig. Prior to any intrusive work, a One-Call utility mark out will be completed to identify any underground utilities. All soil borings will be pre-cleared to a depth of 5 ft bls using Vactron™ Technology and hand tools (post-hole digger, shovel, hand-auger, etc.) to confirm the absence of buried utilities. Macrocores will be collected continuously from surface to the final depths of each soil boring as summarized above.

Prior to sample collection, each sample core will be screened with a photoionization detector (PID) and will be inspected for presence of staining and odor. Soil from each boring will be collected for geologic logging according to the United Soil Classification System (USCS) and visual inspection and placed immediately thereafter into Ziploc® bags for screening. After approximately 15-minute equilibration period, the headspace within the Ziploc® bag will be screened for organic vapors using a PID. Samples will be collected at 2-foot intervals for lab analysis.

Soil Sampling Analyses

The initial soil samples selected for analysis will be submitted to a New York State Department of Health (NYSDOH) Environmental Laboratory Accreditation Program (ELAP)-certified laboratory for analysis of the following parameter groups:

- Part 375 semivolatile organic compounds (SVOCs);
- Part 375 metals + mercury; and
- Hexavalent/trivalent chromium.

Should the initial soil sample meet the UUSCOs for the parameters listed above, the sample will then be analyzed for the full suite of parameters, in accordance with the RAWP:

- Part 375 volatile organic compounds (VOCs);
- Part 375 pesticides;
- Polychlorinated biphenyls;
- Total cyanide; and
- Emerging Contaminants.

Methodology, Reporting, and Quality Assurance

The methodology used to install the borings will comply with all relevant procedures specified in the Field Sampling Plan (FSP), Quality Assurance Project Plan (QAPP), Health and Safety Plan (HASP), and Community Air Monitoring Plan (CAMP), including a special requirements CAMP if needed, included in the RAWP.

A Data Usability Summary Report (DUSR) will be prepared to evaluate the pre-excavation confirmation samples by a party independent from the laboratory performing the analysis in accordance with Appendix 2B of DER-10. The QAPP, included as Appendix H to the RAWP, describes the DUSR to be prepared for the project. The DUSR for all samples collected as part of the PDI and the Remedial Action will be included in the Final Engineer Report (FER).

Schedule

The PDI field work is anticipated to begin in December 2024, following NYSDEC approval, and is expected to take approximately one week to complete. The results of the PDI sampling will be tabulated and summarized in a letter report to NYSDEC for review and approval prior to the start of the remedial excavation.

Certification

I, Charles J. McGuckin, certify that I am currently a Qualified Environmental Professional as defined in 6 NYCRR Part 375 and that this Pre-Design Investigation Work Plan was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10).

Sincerely,

ROUX ENVIRONMENTAL ENGINEERING AND GEOLOGY, D.P.C.



Lauren Dolginko
Senior Geologist

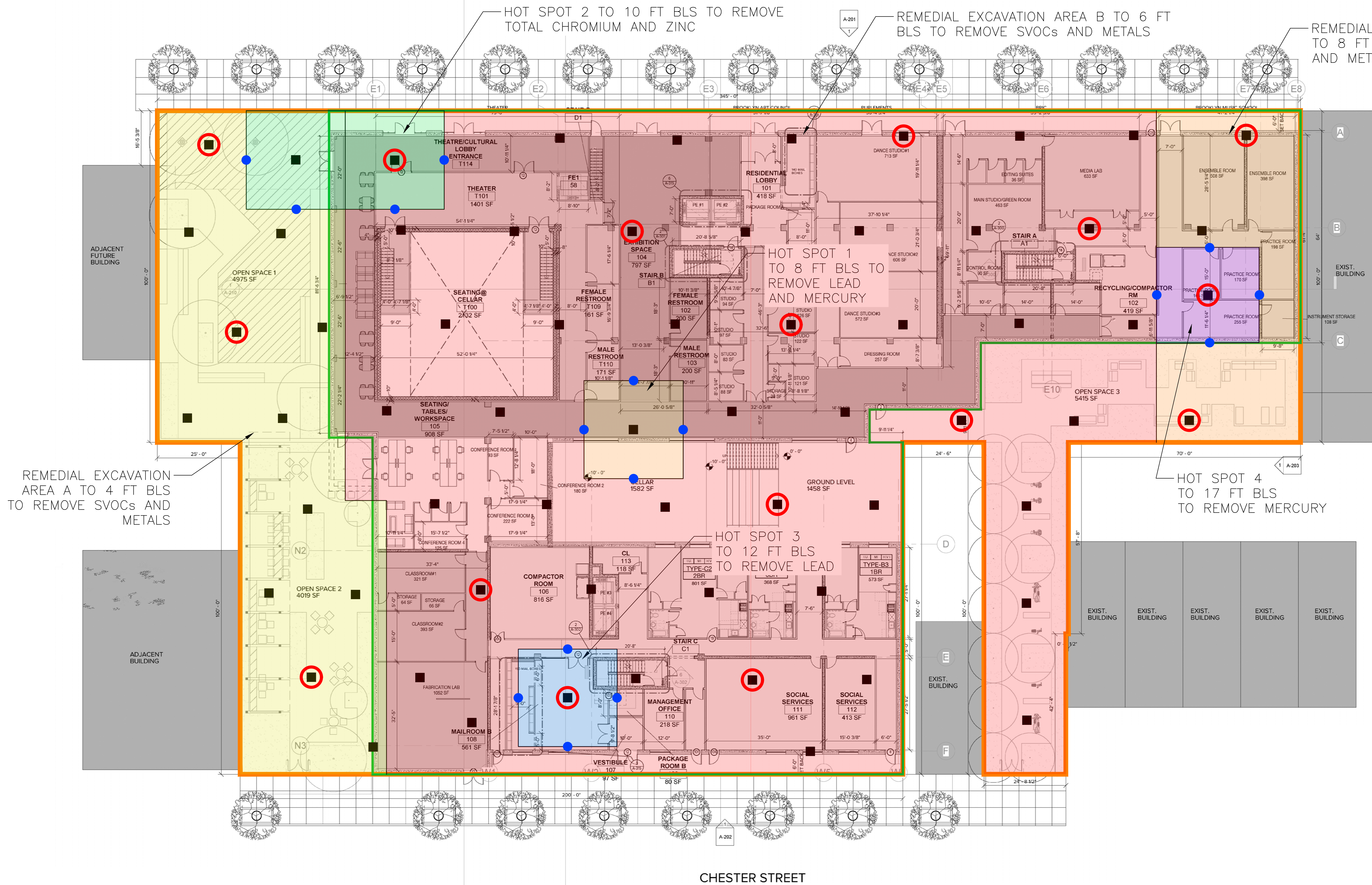


Frank Cherena, P.G.
Vice President/Principal Geologist



Charles McGuckin, P.E.
Vice President/Principal Engineer

ROCKAWAY AVENUE



LEGEND

- BCP SITE BOUNDARY
- FUTURE BUILDING FIRST FLOOR OUTLINE
- PROPOSED LOCATION OF TRACK 1 BOTTOM CONFIRMATION SAMPLE
- CONFIRMATION SAMPLE LOCATION PROPOSED TO BE COLLECTED PRE-EXCAVATION
- PROPOSED LOCATION OF TRACK 1 SIDEWALL CONFIRMATION SAMPLE
- CONFIRMATION SAMPLE LOCATION PROPOSED TO BE COLLECTED PRE-EXCAVATION
- PROPOSED TRACK 1 REMEDIAL DEPTH TO 4 FT BLS
- PROPOSED TRACK 1 REMEDIAL DEPTH TO 6 FT BLS
- PROPOSED TRACK 1 REMEDIAL DEPTH TO 8 FT BLS
- PROPOSED TRACK 1 REMEDIAL DEPTH TO 10 FT BLS
- PROPOSED TRACK 1 REMEDIAL DEPTH TO 12 FT BLS
- PROPOSED TRACK 1 REMEDIAL DEPTH TO 17 FT BLS

NOTE

- PROPOSED BUILDING FOOTPRINT OUTLINES BASED ON DRAWINGS A-100 AND A-101.00, DATED MARCH 9, 2023 PREPARED BY AUFANG ARCHITECTS.
- ACTUAL REMEDIAL DEPTH IS SUBJECT TO CHANGE BASED ON FIELD CONDITIONS, RESULTS OF THE PRE-DESIGN INVESTIGATION AND POST EXCAVATION ENDPOINT SAMPLING.

FT BLS - FEET BELOW LAND SURFACE



Title: **PRE-EXCAVATION CONFIRMATION SAMPLE LOCATIONS**

366 ROCKAWAY AVENUE
BROOKLYN, NEW YORK

Prepared for: **BROWNSVILLE ARTS OWNER LLC**

Compiled by: B.L.	Date: 9/10/2024	PLATE
Prepared by: B.H.C.	Scale: AS SHOWN	1
Project Mgr: L.D.	Project: 3868.0001Y000	
File: 3868.0001Y121.01.DWG		

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