4680 Fieldston Road

BLOCK 5819, LOTS 2167, 2168, 2170, AND 2175

BRONX, NEW YORK

Phase 1B Archaeological Investigation

Prepared for:
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Bronx, NY

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Chapter 1: Introduction and Project Background

A. INTRODUCTION

AKRF, Inc. was retained by Ms. Naomi Cooper to conduct a Phase 1B Archaeological Investigation of her private residence located at 4680 Fieldston Road in the Fieldston section of the Bronx (see **Figure 1**). The project site is bounded by Fieldston Road to the west, Indian Road to the north, a private park and the mapped roadway of Livingston Avenue to the east, and a separate residential property to the south (see **Figure 2**). The project site comprises Block 5819, Lots 2167, 2168, 2170, and 2175 and is developed with a single 2.5-story residence. The project site is located within the Fieldston Historic District, a New York City Historic District. This archaeological investigation was not completed as part of any planned development of the property.

B. PROJECT BACKGROUND AND PREVIOUS ENVIRONMENTAL REVIEW

In association with a New York City Environmental Quality Review (CEQR) conducted for a previously proposed development project, AKRF prepared a Phase 1A Archaeological Documentary Study ("Phase 1A Study") of the project site in September 2011. The Phase 1A Study concluded that areas within the project site with slopes less than 15 percent and to the south of the existing dwelling at 4680 Fieldston Road are sensitive for precontact archaeological resources (see **Figure 2**). The steeply sloping areas surrounding rock outcrops were determined to have low to moderate sensitivity for precontact resources associated with quarrying activities on or close to the ground surface. The location of the existing dwelling and the adjacent driveway were determined to have no sensitivity for precontact archaeological resources. The Phase 1A Study concluded that the project site is determined to have low sensitivity for archaeological resources dating to the historic period.

While a Phase 1B Archaeological Investigation was recommended in the areas of moderate to high sensitivity, the project was canceled and the testing was not completed. When the property was purchased by the current owners, the title included a declaration that the owners:

> *Have agreed to follow and adhere to all requirements for archaeological identification, investigation and mitigation set forth in the CEQR Technical Manual and LPC's Guidelines for Archaeological Work in NYC, including without limitation, the completion of Phase 1B archaeological field testing…in accordance with an LPC approved "Field Testing Plan" and a surface survey, as well as any excavation, mitigation and curation of archaeological resources required by the LPC.*

AKRF prepared an Archaeological Testing Plan for the review the New York City Landmarks Preservation Commission (LPC), and Amanda Sutphin, LPC's Director of Archaeology, concurred with the plan in a letter dated June 8, 2022.

FIELDSTON HISTORIC DISTRICT

The project site is located within the boundaries of the Fieldston Historic District, which was designated by LPC in 2006. The historic district is an early 20th century suburban development created on land purchased

by descendants of Major Joseph Delafield in 1829. The development of the property did not begin until 1909 when subway service had reached 242nd Street and Broadway. Plans for the property's development were prepared by civil engineer Albert E. Wheeler and were based on recommendations made by Frederick Law Olmsted and James R. Croes in 1876. The plans preserved much of the area's wooded character and incorporated roadways following the area's natural topography. Construction of the first houses began in 1911. Most houses were designed in picturesque historic revival styles—including the Medieval, English Tudor, Mediterranean, Dutch, and Georgian Colonial styles—that were encouraged by a handbook containing a list of approved architects. Houses were sited on their lots to take advantage of the area's varied and picturesque topography. No businesses, two-family homes, or apartment buildings were allowed in the neighborhood. The Fieldston Property Owners Association (FPOA) established design guidelines for the Fieldston neighborhood. These guidelines were relaxed in the 1950s which has allowed for the construction of more eclectic house styles (LPC 2006).

C. SITE CONDITIONS AT THE TIME OF THE PHASE 1B INVESTIGATION

The project site comprises four tax parcels: Block 5819, Lots 2167, 2168, 2170, and 2175. The conditions on the project site have not changed since the preparation of the Phase 1A Study in 2011. The project site is currently a 1.26-acre residential property containing a 2.5-story dwelling on Lot 2170. The house was designed by the architecture firm Mann & MacNeille in the Tudor Revival style and was built between 1917 and 1918. A circular gravel and asphalt driveway is located to south of the dwelling and leads to Fieldston Road. A fieldstone retaining wall runs along the property lines on Fieldston and Indian Roads. Delafield Park, a private park with an artificial pond that is owned by the Fieldston Property Owners Association (FPOA), is located immediately east of the project site, beyond a wooden fence. Portions of the site feature slopes greater than 15 percent or exposed rock outcrops, many of which are surrounded by trees and ground cover.

ENVIRONMENTAL SETTING

The project site is within a geographic bedrock region known as the Manhattan Prong of the New England (Upland) Physiographic Province. The bedrock in the vicinity of the project site—which is known as the Riverdale Ridge—includes Fordham Gneiss. The Fordham Gneiss is the oldest rock in the Manhattan Prong, formed approximately 1.2 billion to 900 million years ago during the Grenville Orogeny (Isachsen et al. 2000). Within the southern Bronx area, the top of the Fordham Gneiss bedrock is near the ground surface, and is exposed as a rock outcrop at several locations within the project site. Surficial geology in the area includes glacial till with areas of surficial or shallow bedrock.

The overall topography of the project site is moderately sloped, with an average slope of about 11 percent. The site's highest elevation—224 feet above sea level—is located near the south-central edge of the project site and the lowest elevation—206 feet above sea level—is located near the northwest corner of the site, adjacent to Fieldston Road. The Phase 1A Study concluded that the project site has not been subjected to large-scale landscape modification since the 19th century with the exception of the construction of the existing house, landscaping and associated facilities and utilities.

DOCUMENTED PRECONTACT OCCUPATION

The precontact sensitivity of project sites in New York City is generally evaluated by a site's proximity to level slopes, water courses, well-drained soils, and previously identified precontact archaeological sites. As described in the Phase 1A Archaeological Documentary Study, numerous Native American archaeological sites that have been identified within 1 mile of the project site, including one that may have been situated within or in the immediate vicinity of the project site. Furthermore, LPC's sensitivity model for the Borough of the Bronx, prepared by Eugene Boesch, Ph.D. in 1996, identify the Hudson River shoreline of the Bronx

as an area that is highly sensitive for precontact campsites and shell middens, many of which have been identified in the area. The Phase 1A Study concluded that little disturbance appears to have occurred within the project site with the exception of the construction of the existing dwelling at 4680 Fieldston Road and its associated driveways, etc. Landscaping has likely impacted some of the natural soil levels which may be thin because of the shallow bedrock in this area. Those portions of the project site with slopes less than 15 percent and to the south of the existing dwelling were determined to have a high sensitivity for precontact archaeological resources. The steeply sloping areas surrounding rock outcrops were determined to have low to moderate sensitivity for precontact resources associated with quarrying activities on or close to the ground surface. The location of the existing dwelling and the adjacent driveway were determined to have no sensitivity for precontact archaeological resources. The areas of archaeological sensitivity are depicted on **Figure 2**.

HISTORIC PERIOD DEVELOPMENT

The project site was undeveloped until the existing structure at 4680 Fieldston Road was constructed in 1918. The existing dwelling was built after the installation of water and sewer lines. While the project site was included within the historic Delafield estate and may have been crossed by a dirt road associated with that estate, no documented activity occurred within the project site during the majority of the historic period. Therefore, the project site is determined to have low sensitivity for archaeological resources dating to the historic period.

Chapter 2: Research Design and Field Methodology

A. INTRODUCTION

The Phase 1B Archaeological Investigation of the project site was completed in June 2022. The investigation was completed by A. Michael Pappalardo, RPA, and Theresa Imbriolo, RPA, who meet or exceed the requirements for the professional qualifications standards for archaeologists as defined by the Secretary of the Interior (36 CFR 61)[1] and comply with the codes and standards outlined by the RPA.[2]

B. POTENTIAL ARCHAEOLOGICAL RESOURCES IDENTIFIED IN THE PHASE 1B WORK PLAN

As stated in the 2018 LPC guidelines, although documentary research determines archaeological potential, testing is required to confirm the presence of those resources and to determine their significance. LPC's guidelines indicate that "archaeological resources are significant if they provide new insight about the past and answer important research questions" (LPC 2018: 19). As described in the Phase 1B Work Plan, the objective of the Phase 1B Archaeological Investigation of the project site was therefore to document the subsurface conditions of the project site to determine if soil levels are present that could potentially contain intact archaeological resources from the historic period occupation of the site. As described below, the Phase 1B Work Plan outlined possible archaeological resource types that could be present on the project site.

Little disturbance has been documented within the project site and all documented disturbance appears to be associated with the construction of the existing dwelling at 4680 Fieldston Road and its associated driveways, etc. Landscaping has also impacted the natural soil levels which are generally poorly developed because of the shallow bedrock in this area.

PRECONTACT SENSITIVITY ASSESSMENT

The precontact sensitivity of a project site is generally evaluated by the presence of high, level ground (not exceeding 12 to 15 percent slopes), fresh water courses, well-drained soils, and close proximity to previously identified precontact archaeological sites (NYAC 1994). The project site is situated on the Riverdale Ridge, the highest area in the Bronx. While portions of the site are very steep with slopes of 15 to 25 percent or more, other areas are level. The topography of the area does not appear to have changed significantly since the late-19th century, before the site was developed.

There may have once been a low-order stream immediately to the east of the project site and other sources of fresh water in the general area. The pond currently located adjacent to the east side of the project site is clearly modified and has been lined with stones. Numerous precontact archaeological sites have been identified within one mile of the project site, including one that was potentially within or immediately adjacent to the site. The construction of the dwelling at 4680 Fieldston Road and its driveway would have

[1] https://www.nps.gov/history/local-law/arch_stnds_9.htm

[2] https://rpanet.org/page/CodesandStandards

resulted in the disturbance of any precontact archaeological resources in those areas. In addition, significant portions of the project site feature steep slopes (15 to 25 percent or more) and exposed rock outcrops; it is not likely that there are buried archaeological resources in those locations.

Therefore, the Phase 1A concluded that undisturbed portions of the project site with slopes less than 15 percent are sensitive for precontact archaeological resources. The steeply sloping areas surrounding rock outcrops are determined to have low to moderate sensitivity for precontact resources associated with quarrying activities; these resources would be expected to be found on or close to the ground surface. The location of the existing dwelling and the adjacent driveway are determined to have no sensitivity for precontact archaeological resources.

HISTORIC SENSITIVITY ASSESSMENT

The project site was undeveloped until the existing structure at 4680 Fieldston Road was constructed in 1918. The existing dwelling was built after the installation of water and sewer lines. While the project site was included within the historic Delafield estate and may have been crossed by a dirt road associated with that estate, no documented activity occurred within the project site during the majority of the historic period. Therefore, the project site is determined to have low sensitivity for archaeological resources dating to the historic period.

C. FIELD METHODS

This Phase 1B Archaeological Investigation was designed to determine the presence or absence of archaeological resources. The investigation was conducted in accordance with LPC's "Guidelines for Archaeology work in New York City," issued in 2018[1] and is consistent with that proposed in the approved Phase 1B Work Plan. Fieldwork consisted of visual examination of the entire project site for evidence of past disturbance and sensitive landforms and the hand excavation of test pits across all the sensitive portions of the project site. No testing was completed on areas with a slope of greater than 15 percent, visibly disturbed areas, or disturbed, developed, or paved areas.

In the identified areas of potential sensitivity, shovel test pits (STPs) were excavated either in a 30-foot grid or along transects at a variable length interval of 30 to 40 feet, depending on slopes, bedrock outcrops, and ground cover. Each circular STP had a diameter of 18 to 20 inches and was excavated in natural soil layers to the depth of sterile subsoils, if possible. A small number of test pits were discontinued before encountering subsoil due to the presence of shallow bedrock or substantial root obstructions. All excavated soils were screened through ¼ inch steel hardware cloth. Observed artifacts were bagged for later examination. However, since all observed cultural material consisted of modern packaging material such as plastic or modern beverage bottle glass or architectural debris such as brick, cement, asphalt and tar paper fragments, no laboratory analysis was necessary. Upon completion, each excavated test pit was backfilled with the original soils.

STPs were named in the sequence they were excavated beginning in the backyard. Areas to the south of the driveway were labelled with an "S". Areas to the west and north of the house were labelled with a "N". The two STPs excavated along the path to Livingston Road were labelled with a "P" (see Appendix 1 and **Figure 2)**.

All fieldwork was documented through notes, photographs, and drawings, and all relevant professional standards were applied. The archaeological field team recorded soil profiles including colors—recorded

[1] http://www.nyc.gov/html/lpc/downloads/pdf/pubs/ayguide.pdf

using Munsell® soil color charts—and texture/inclusions in a field notebook. Testing locations were established using fiberglass tapes based on prominent mapped features such streets and standing structures

D. LABORATORY METHODS

No precontact or historic artifacts were recovered during the performance of this investigation. The only artifacts observed and sampled consisted of modern refuse such as architectural debris and glass and plastic packaging material of no research value. Therefore, laboratory analysis was not required.

Chapter 3: Results of Survey

The Phase 1B Investigation of the 4680 Fieldston Road project site consisted of a walkover survey of the site's ground surfaces and rock outcrops and the excavation of 25 test pits. **Appendix A** provides a description of each test pit. No precontact or historic artifacts or features were recovered from any of the test pits.

A. RESULTS OF WALKOVER SURVEY

Before establishing testing locations, the field team completed a walkover survey of the entire property. The 1.26-acre project site contains a single 2.5-story dwelling, a long, paved driveway, extending from the rear of the house, along the southern side of the house, to Fieldston Road to the west, a level grassy backyard area, and highly vegetated and moderately to steeply sloping areas to the south, west, and north of the dwelling (see **Figure 2**). The only large level area is the roughly 35 feet wide (east-west) by 120 feet long (north-south) grass-covered backyard (see **Photo 1**) that curves eastward in the site's southeast corner into a narrow pathway to Livingston Ave (see **Figure 2** and **Photo 7**). This level area is contiguous with a much larger level area surrounding an artificial pond to the east, which is a public park with paved walkways and benches. The area to the south of the house and driveway slopes steeply downward to the east (see **Photo 1**) and slopes more moderately downward to the west, towards Fieldston Road (see **Photo 2**) and to the north, towards the driveway. This area includes a substantial, northeast facing bedrock outcropping rising approximately 12 feet above the elevation of the grassy backyard; the outcrop face and top are completely covered with thick vegetation. The area immediately to the west of the house is level but appears to have been heavily modified during development of the property. Further to the west, this area slopes steeply downward towards Fieldston Road (see **Photo 6**). The area to the north of the house is heavily vegetated with trees, bushes, ground cover, and rock outcroppings and slopes steeply downward to Fieldston Road to the west and Indian Road to the north (see **Photos 3** through **6**).

Bedrock outcrops covered with vegetation are present to the south and north of the house (see **Photo 4**) and consist of weathered Fordham Gneiss. The outcrops did not appear to include any veins of quartz. The outcrops to the north appear to have been modified to form an area of plantings and rock garden.

Although, as the only substantial level area, the backyard was determined to be the area of greatest sensitivity, due to its flat topography and vicinity to the artificial pond, which may have once been a natural source of water, additional, smaller level areas were also identified to the south, west, and north of the house. As discussed below, STPs were excavated in each of these areas.

B. RESULTS OF SUBSURFACE TESTING

The field team excavated a total of 25 STPs on a hot and sunny day during the month of June 2022. Modern refuse was observed but not collected from most STPs and no precontact or historic artifacts or features were observed in any of the pits. The team encountered shallow bedrock or substantial root obstructions in several pits and, in all but four cases, relocated those pits to avoid the obstruction. In general, the stratigraphy encountered during subsurface testing strongly suggested that the project site's original natural upper topsoils are no longer present. The upper most dark brown loamy soils across the grassy backyard and adjacent flower beds suggested the accumulated deposition of artificial topsoil fill, which

unconformingly covered a lighter yellow brown subsoil, which appears to be natural as it lies on top of shallow bedrock. In addition, the soils encountered in the heavily vegetated areas in the vicinity of bedrock outcroppings to the south and north of the house were different from each other and the level grassy yard. Thick upper layers of very dark soils encountered in these areas suggested either the accumulation and decomposition of leaf litter and/or the accumulation of soils from higher elevations through erosion. See **Figure 7** for examples of typical soil profiles.

Almost half of the testing (12 STPs; see **Figure 2**) was conducted across the level grassy backyard to the east of the house and in the southeast corner of the property (STPs 1 through 10, and STPs P1 and P2; **Figure 2**). The remaining 13 STPs were excavated across the portions of the project site to the south, west, and north of the house.

The test pits excavated in the grassy backyard area were established along a 30-foot-interval grid. STPs were established judgmentally in the areas to the south, west, and north of the house based on the presence of slopes of less than 15 percent, distance from mature trees, and the presence of shallow or exposed bedrock. Three STPs (STPs S2, S3, and S4) were excavated judgmentally across the top of the substantial bedrock outcrop south of the house, a location that would have afforded good views to the northeast and perhaps a wetland area. Three STPs (STPs 5, 6, and 9) were excavated at the base of this outcrop.

The stratigraphy in the grassy backyard area generally consisted of 10 inches of an unnatural, very dark brown (10YR2/2) topsoil underlain unconformingly by a gray to brown (10YR 5/1 to 10YR 5/3) subsoil to a depth of approximately 20 inches below the ground surface. The interface between the topsoil and subsoil was abrupt and level, suggesting the removal of the original natural topsoil and the deposition of a rich loamy fill, perhaps to facilitate the growth of a grassy lawn. One STP in this area encountered a thin layer of sandy fill (10YR 8/1) between the topsoil and subsoil, further evidence of soil redeposition or fill. Soils were well-drained loam to silty loam. The majority of the test pits in this area were on the lawn, however, STPs 5, 6, and 9 were in an area of thick ivy ground cover at the base of a large rock outcrop (see **Figure 2**).

The stratigraphy encountered in the eight test pits excavated in the area south of the house generally consisted of less than 10 inches of black (10YR 2/1) topsoil with leaflitter underlain by dark brown (7.5YR 3/3) subsoil to a depth of 20 to 25 inches. The upper soils in this area are dark and thicker than would be expected, suggesting the collection of soils eroded from higher elevations or the accumulation of decomposing leaf litter over time. The consistency of the soils in this area ranged from loam to silty loam. The STPs excavated to the west and north of house generally encountered 10 inches of very dark brown to black (10YR 2/2 to 10YR 2/1) topsoil underlain by dark brown to dark yellowish brown (10YR 3/3 to 10YR 4/6) subsoil to a depth of 25 inches below the ground surface. Bedrock outcrops are present across this area. The two STPs were excavated within the eastmost pathway near the pond proving access to Livingston Ave. A paved driveway is present just to the south.

The soil profile in the two STPs excavated along the narrow access way to Livingston Ave in the southeast corner of the project site consisted of 10 inches of black (10YR 2/1) topsoil underlain by a very dark gray to dark yellowish brown (10YR 3/1 to 10YR 3/4) subsoil to a depth of 25 inches below the ground surface. The topsoil appears to have been redeposited and lies uncomformingly on top of the subsoil.

Chapter 4: Conclusions and Recommendations

A. CONCLUSIONS

AKRF completed a Phase 1B Archaeological Investigation of the 4680 Fieldston Road project site in order to determine the presence or absence of archaeological resources. The survey consisted of a walkover survey and the excavation of 25 shovel test pits across all areas of archaeological potential. No precontact or historic artifacts were recovered from the investigation and no evidence of precontact or historic activity was observed.

B. RECOMMENDATIONS

Based on the absence of precontact or historic artifacts or archaeological features no additional fieldwork is recommended.

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Figures

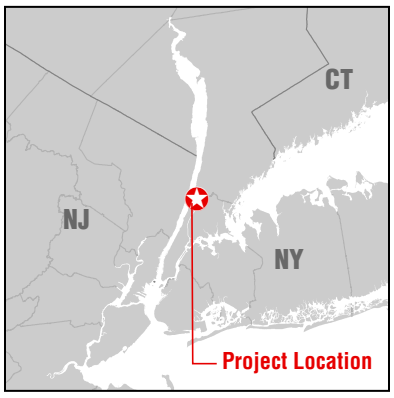
Data source: USGS The National Map, https://basemap.nationalmap.gov/arcgis/rest/services/USGSTopo/MapServer

6.27.22

0 2,000 FEET

Project Site

Approximate coordinates of Project Site:
73°54'13"W 40°53'43"N

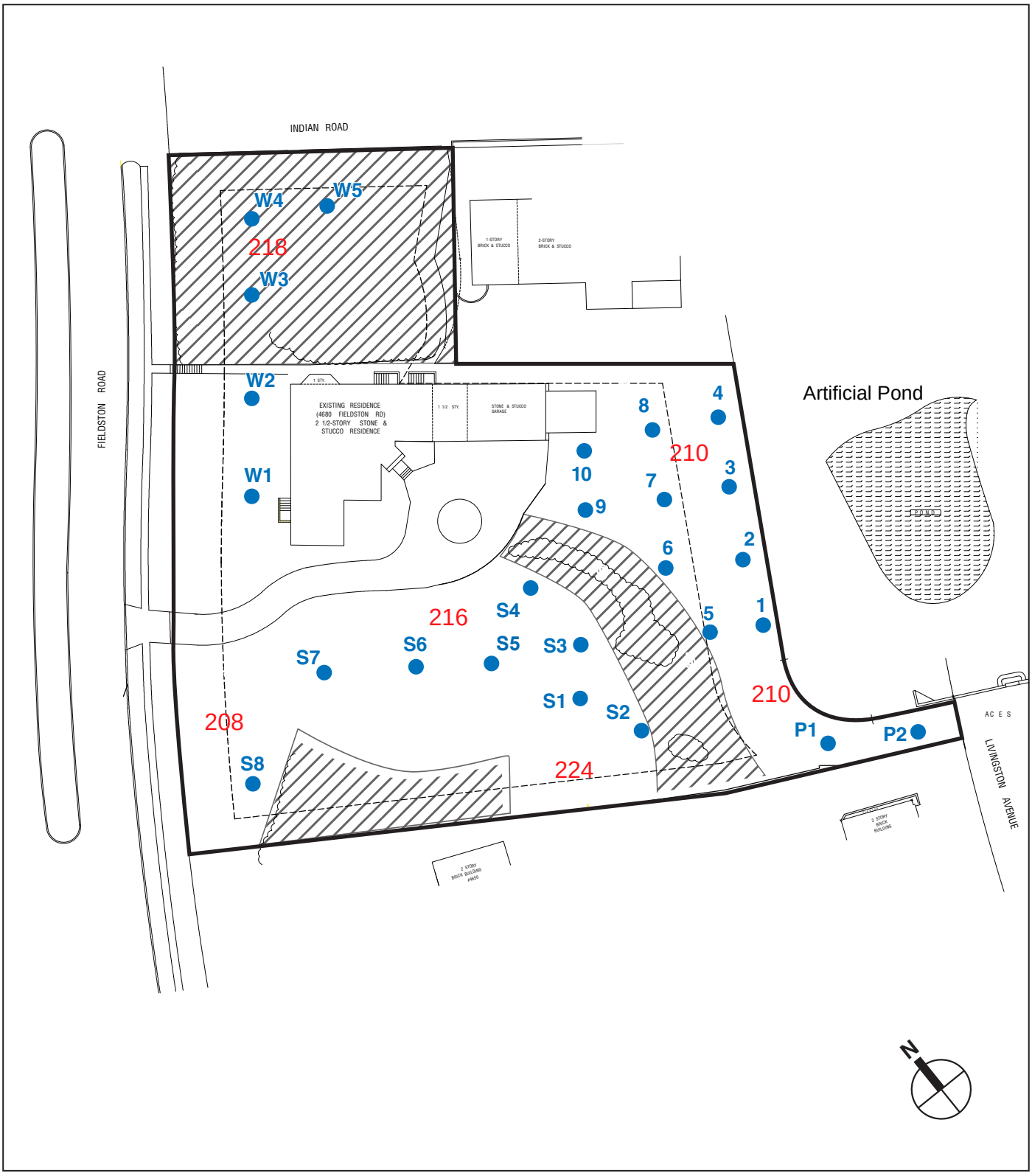


USGS Topographic Map – Yonkers Quadrangle

4680 FIELDSTON ROAD

Figure 1

6.27.22



Project Site Boundary

Areas with Steep Slopes and/or Rock Outcrops

S7 STP Location and Reference Number

216 Ground surface elevation (NAVD88)

75 feet

Locations of Archaeological Testing

4680 FIELDSTON ROAD

Figure 2

View of the project area facing north from top of stone outcrop near the southern project border. The fence is the eastern boundary of the project site **1**

View from the south of project site facing north showing the house and driveway **2**

Site Photographs
Figure 3

View from northwest corner of the project site facing east with Indian Road at left. Note the change in topography **3**

View of the western border of the project site overlooking Fieldston Road showing exposed bedrock **4**

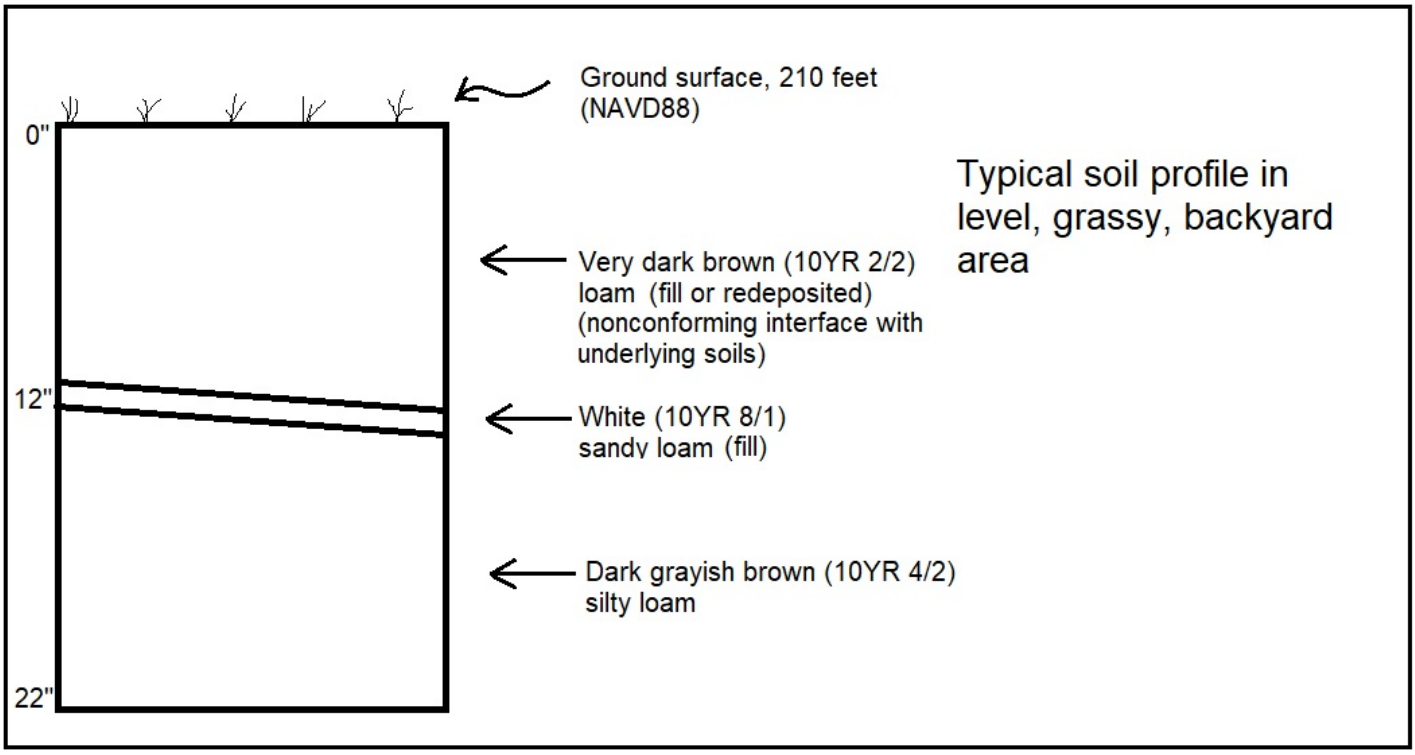
Looking at the northwest corner of the project site from the corner of Fieldston Road (bottom) and Indian Road (left) showing the sudden change in elevation between the street and the project site **5**

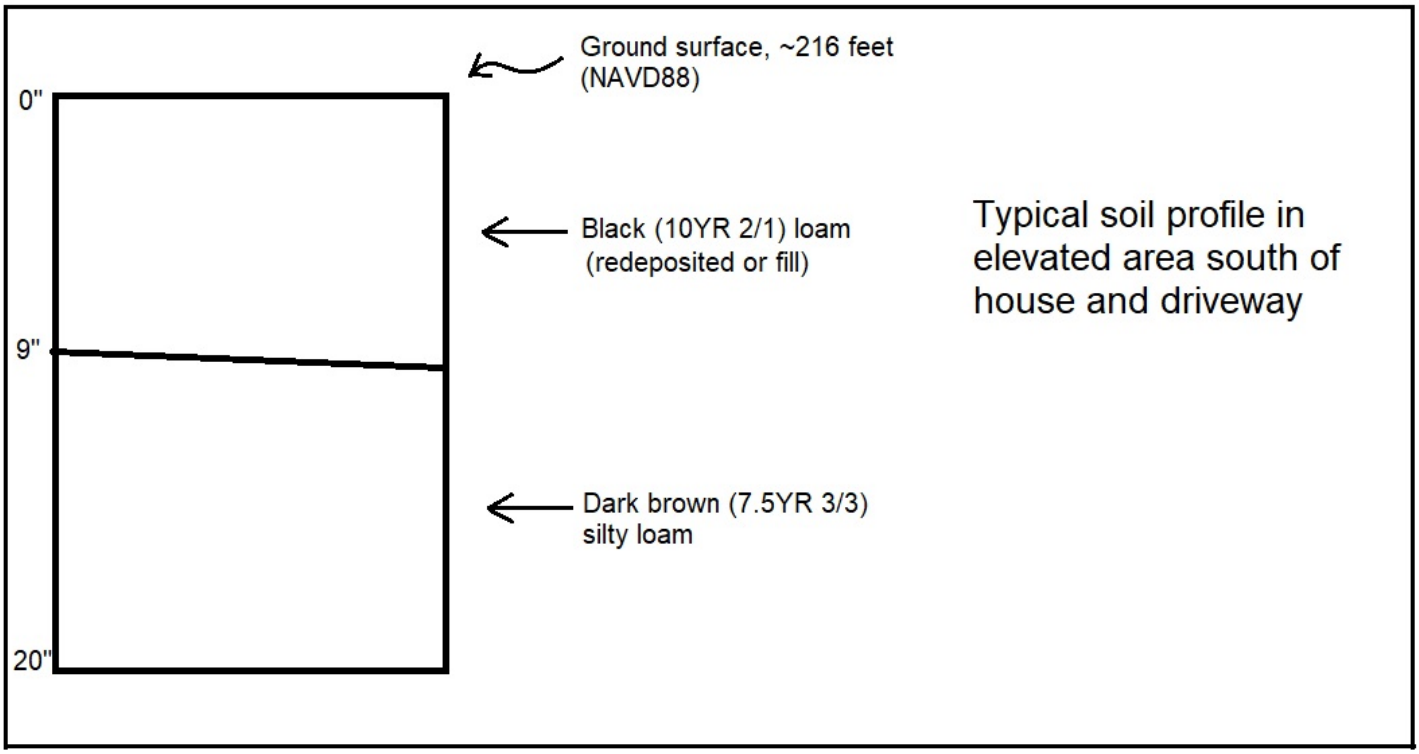
Looking east at the western side of the project site from Fieldston Avenue **6**

Site Photographs
Figure 5

View west from southeast corner of project site. The pond is to the right and Livingston Avenue is behind the photographer **7**

Site Photographs
Figure 6





Typical Soil Profiles
Figure 7

Appendix A: Excavation Record

STP	Level #	Approx Elev. (NAVD88)	Opening Depth (in)	Closing Depth (in)	Soil Color	Munsell Code	Soil Type	Notes	Artifacts	Reason for stopping
Backyard Area										
1	1	210	0	10	Very Dark Brown	10YR2/2	Loam Topsoil	Did not have munsell book for first two stps; soil appears to be fill; nonconforming interface with underlying soil		
1	2		10	20	Yellowish Brown	10YR 5/2	Silty Loam	Large rocks, don't appear to be bedrock		No cultural material (NCM); rock obstruction
2	1	210	0	9	Very Dark Brown	10YR2/2	Loam Topsoil	Soil appears to be unnatural; non-conforming interface with underlying soil		
2	2		9	18	Light Yellowish Brown	10YR 5/2	Silty Loam		Glass	
2	3		18	23	Yellowish Brown	10YR 5/2	Silt			NCM
3	1	210	0	15	Very Dark Brown	10YR2/2	Loam Topsoil	Soil appears to be unnatural; non-conforming interface with underlying soil		
3	2		15	17	Dark Gray Brown	10YR4/2	Silty Loam			
3	3		17	23	Grayish Brown	10YR5/2	Silt			NCM
4	1	210	0	10	Very Dark Brown	10YR2/2	Loam Topsoil	Soil appears to be unnatural; nonconforming interface with underlying soil		
4	2		10	19	Grayish Brown	10YR5/2	Silty Loam			NCM
5	1	210	0	10	Very Dark Gray Brown	10YR3/2	Loam	Soil appears to be unnatural; nonconforming interface with underlying soil	Modern Glass and Ceramic	
5	2		10	26	Dark Brown	10YR3/3	Silty Loam	At 17 inches there was a non-corming 1 inch-thick layer of coarse sand 10YR7/4		NCM
6	1	210	0	13	Very Dark Brown	10YR2/2	Loam	Soil appears to be unnatural; nonconforming interface with underlying soil	Glass	
6	2		13	19	Gray	10YR5/1	Silty Loam			NCM
7	1	210	0	11	Very Dark Brown	10YR2/2	Loam	Soil appears to be unnatural; nonconforming interface with underlying soil		
7	2		11	15	Dark Gray	10YR4/1	Silty Loam	Stopped by rock, does not appear to be bedrock		Rock Impasse

STP	Level #	Approx Elev. (NAVD88)	Opening Depth (in)	Closing Depth (in)	Soil Color	Munsell Code	Soil Type	Notes	Artifacts	Reason for stopping
8	1	210	0	11	Very Dark Brown	10YR2/2	Loam	Soil appears to be unnatural; nonconforming interface with underlying soil	Glass	
8	2		11	22	Dark Grayish Brown	10YR4/2	Silty Loam	Light (10YR8/1) layer, 1/2 inch thick, at 12 inches bgs		NCM
9	1	210	0	8	Very Dark Brown	10YR2/2	Loam	Soil appears to be unnatural; nonconforming interface with underlying soil	Glass frags throughout	
9	2		8	16	Brown	10YR5/3	Silty Loam			NCM
10	1	210	0	13	Brown	10YR4/3	Loam	Stopped by rock, does not appear to be bedrock		Rock Impasse
South of House and Driveway										
S1	1	~224	0	16	Dark Brown	7.5YR3/3	Silty Loam	Hit what appears to be bedrock	Bone, Ceramic, Glass	Rock Impasse
S2	1	~224	0	6	Black	10YR2/1	Loam	Soil appears to be unnatural or perhaps decomposing leaf litter		
S2	2		6	14	Dark Brown	7.5YR3/3	Silty Loam	Roots & what appears to be bedrock		Rock Impasse
S3	1	~224	0	6	Black	10YR2/1	Loam	Exposed bedrock in immediate area		
S3	2		6	13	Dark Yellowish Brown	10YR3/4	Silty Loam			NCM
S4	1	~216	0	7	Black	10YR2/1	Loam	Hit Bedrock; bedrock in this area		Rock impasse
S5	1	~216	0	9	Black	10YR2/1	Loam	Soil appears to be unnatural		
S5	2		9	20	Dark Brown	7.5YR3/3	Silty Loam			NCM
S6	1	~216	0	19	Dark Brown	7.5YR3/3	Silty Loam	Topsoil is redeposited; hit what appears to be bedrock	Glass	Rock impasse
S7	1	~216	0	6	Black	10YR2/1	Loam			
S7	2		6	19	Dark Yellowish Brown	10YR4/4	Silty Loam			NCM
S8	1	~208	0	6	Very Dark Brown	10YR2/2	Loam			
S8	2		6	20	Dark Brown	10YR3/3	Silty Loam			NCM
West and North of House										
W1	1	~216	0	13	Very Dark Brown	10YR2/2	Loam	Exposed bedrock across immediate area; soil disturbed or redeposited		
W1	2		13	24	Dark Brown	10YR3/3	Silty Loam			NCM
W2	1	~216	0	6	Very Dark Brown	10YR2/2	Loam	Exposed bedrock across immediate area; soil disturbed or redeposited		
W2	2		6	21	Dark Brown	10YR3/3	Silty Loam			NCM

STP	Level #	Approx Elev. (NAVD88)	Opening Depth (in)	Closing Depth (in)	Soil Color	Munsell Code	Soil Type	Notes	Artifacts	Reason for stopping
W3	1	~216	0	7	Black	10YR2/1	Loam	Exposed bedrock area; soil disturbed or redeposited		
W3	2		7	22	Dark Yellowish Brown	10YR4/6	Silty Loam			NCM
W4	1	~216	0	7	Black	10YR2/1	Loam	Exposed bedrock across immediate area; soil disturbed or redeposited		
W4	2		7	20	Dark Yellowish Brown	10YR4/6	Silty Loam			NCM
W5	1	~216	0	7	Black	10YR2/1	Loam	Exposed bedrock across immediate area; soil disturbed or redeposited	Glass	
W5	2		7	25	Brown	10YR4/3	Silty Loam			NCM
Livingston Avenue Access										
P1	1	210	0	10	Black	10YR2/1	Loam	soil disturbed or redeposited	Glass	
P1	2		10	26	Very Dark Gray	10YR3/1	Silty Loam			NCM
P2	1	210	0	10	Black	10YR2/1	Loam	soil disturbed or redeposited	Glass	
P2	2		10	24	Dark Yellowish Brown	10YR3/4	Silty Loam			NCM