

# **PHASE IB ARCHAEOLOGICAL REPORT**

**Ennis Frances Houses  
Expansion and Improvements  
2070 Adam Clayton Powell, Jr. Boulevard  
Block 1929 / Lot 57  
Manhattan, New York  
CEQR 10DCP028M**

**Prepared For:**

**Equity Environmental Engineering  
500 International Drive  
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**Prepared By:**

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**August 2019**



## EXECUTIVE SUMMARY

A portion of the Ennis Francis Houses (EFH) at 2070 Adam Clayton Powell, Jr. Boulevard and West 124<sup>th</sup> Street on Block 1929 in Manhattan are slated for improvements. However the proposed construction of a new EFH residential facility cannot proceed without addressing a specific concern of New York City's Landmarks Preservation Commission (LPC). Research compiled in a 2010 Phase IA Archaeological report by archaeologist Dr. Joan Geismar identified a portion of the current EFH project site as sensitive for the possibility of human remains from a "German burial ground" associated with a mid-nineteenth century church on the abutting current Tax Lot 17. The 2010 study identified an L-shaped area near the rear of Lot 57 with no history of standing structures.

The EFH proposed improvements cannot avoid the identified sensitive area, the open rear yards in current tax Lot 57, which is considered the Area of Potential Effect (APE). As a result, Historical Perspectives, Inc. (HPI) prepared a Testing Protocol according to applicable archaeological standards (LPC 2018) in order to address the LPC concerns for potential human remains.

At the request of LPC, the Testing Protocol included outreach to the descendant community of the "German burial ground." Through parish mergers over several generations, The Church of St. John the Baptist (located on West 42<sup>nd</sup> Street) and Holy Cross (located on West 30<sup>th</sup> Street) are the acknowledged descendent community of the West 124<sup>th</sup> Street property. The protocol included notification procedures for when and how this descendant parish community would be notified if any human remains were to be recovered during HPI's testing on Block 1929.

The Testing Protocol was reviewed and approved by LPC (Sutphin 5/28/19). The field investigation was conducted June 17-19, 2019 under the direction of Dr. Sara Mascia, Vice President of HPI.

Testing was conducted by a combined effort of heavy machinery and hand-excavations. The testing entailed excavation of a ca. 13 x 100-foot (4 x 30 m) west-west trench along the rear of Lot 57 (crossing the rear of the four historic lots identified by Geismar as sensitive). Excavation found that the entire southern half of the trench contained fill extending to depths over 6 feet below the surface, evidently impacts by construction activities in the adjacent property. The northern half of the trench (which extended 4-5 feet south from the north wall) did contain some pockets of subsoil between historical disturbances (both late 19<sup>th</sup> century construction and 20<sup>th</sup> century demolition activities, as well as the introduction of the water drainage feature across the back yards). Each of these locations was shovel-shaved and hand excavated to determine if any evidence of burial shafts was present. No evidence of burial shafts or disturbed burials was observed in any location throughout the trench's width or length.

No further archaeological consideration is recommended for the project site.

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## **I. Introduction**

A portion of the Ennis Francis Houses (EFH) at 2070 Adam Clayton Powell, Jr. Boulevard and West 124<sup>th</sup> Street on Block 1929 in Manhattan are slated for improvements. (Figure 1) However, the proposed construction of a new EFH residential facility cannot proceed without addressing a specific concern of New York City's Landmarks Preservation Commission (LPC). Research compiled in a 2010 Phase IA Archaeological report by archaeologist Dr. Joan Geismar identified a portion of the current EFH project site as sensitive for the possibility of human remains from a "German burial ground" associated with a mid-nineteenth century church on the abutting current Tax Lot 17.

The 2010 study identified an L-shaped area near the rear of Lot 57 with no history of standing structures. (Figure 2) The 1985 construction of the Ennis Frances complex had retained and maintained these small, open rear yards areas that could be accessed for archaeological testing.

The EFH proposed improvements cannot avoid the identified sensitive area, the open rear yards in current tax Lot 57, which is considered the Area of Potential Effect (APE). As a result, Historical Perspectives, Inc. (HPI) prepared a Testing Protocol according to applicable archaeological standards (LPC 2018) in order to address the LPC concerns for potential human remains.

At the request of LPC, the Testing Protocol included outreach to the descendant community of the "German burial ground." Through parish mergers over several generations, The Church of St. John the Baptist (located on West 42<sup>nd</sup> Street) and Holy Cross (located on West 30th Street) are the acknowledged descendent community of the West 124<sup>th</sup> Street property. The protocol included notification procedures for when and how this descendant parish community would be notified if any human remains were to be recovered during HPI's testing on Block 1929.

The Testing Protocol was reviewed and approved by LPC (Sutphin 5/28/19).

## **II. Goals of the Archaeological Testing**

The primary goal of the EFH archaeological testing was to verify the presence/absence of human remains from a possible undisturbed "German burial ground" which might have been within the APE of the proposed new EFH structures.

- Site Inspection

Pre-construction archaeological examination, aided by a careful combined approach of mechanical soil stripping and hand-shovel testing, is often embraced as the most practical approach to an archaeological investigation of a site when (1) large amounts of pavement, soil and other overburden may need to be removed before reaching the archaeological resource zone, (2) the presence of resources is unclear, and (3) there is a potential for the recovery of human remains.

As the post-1985 integrity of the individual rear yard areas was unknown, once site access for fieldwork was provided to HPI, the archaeological team was able to identify additional impacts

and disturbances to the sensitive area as flagged by Dr. Geismar in 2010. An extensive site visit was completed on June 12, 2019 to examine the sensitivity area that had been identified by Geismar (Photographs 1-4). The area identified as sensitive runs east-west along the rear edge of the former lots fronting on 124<sup>th</sup> Street and, at the western end the sensitivity area extends northward to the back of the existing building (see Figure 2). The site visit found that the northern leg of the sensitivity area had been extensively disturbed in the twentieth century. A water-management system, comprised of a series of deep drains and linked piping, runs parallel to the edge of the east-west sensitivity area as well as through a large portion of the northern leg (Photograph 1). In addition, an external staircase leading down into the basement of the existing EFH structure was also present within the northernmost leg of the sensitivity area (Photograph 4). The presence of these two large-scale disturbances eliminated this portion of the sensitivity area from having the potential to retain archaeological integrity (see Figure 3). Testing proceeded with this refinement.

- Historical Sensitivity and Outreach

A second, equally critical goal was to identify, prior to excavations, the descendant community of the possible “German burial ground” in order to obtain appropriate approval of the removal of any recovered remains. Since 10 years had passed since Geismar’s original research on Lots 45-48, new on-line data sources were sought, a review of historic maps was conducted, interviewees were re-contacted for updates, additional archives sources were sought, and notices were posted on Ancestry.com. A full report on this Descendant Community Research is on file with LPC.

In summary, the 2010 1A Documentary Study by Geismar stated

the 1851 Dripps map, that shows a Catholic Cemetery on much, if not all, of the project block and identified the need for this 1A archaeological study, was mainly, but not entirely, inaccurate. In the latter half of the 19th century, a 100 by 100-foot cemetery—on former Lots 45, 46, 47, and 48 on West 124th Street owned by St. John’s German Roman Catholic Church--was located where the 3-story Francis Ennis Houses were built in 1985. ....[the properties] were owned by the church from 1848 until the 1870s when all the church lots, including the four cemetery lots, were intermittently sold for development (Geismar 2010:6).

Through parish mergers over several generations, The Church of St. John the Baptist (located on West 42<sup>nd</sup> Street in Manhattan and Holy Cross (Church), located at West 30th Street in Manhattan, are the acknowledged descendent community of the West 124<sup>th</sup> Street property. The Pastor of the Church, The Very Rev. Francis J. Gasparik, was contacted regarding the proposed archaeological excavation for the determination of presence/absence of a “German burial ground”.

Father Gasparik, in 2010 and, again, in 2018, researched his own Church records and could not locate any documents to suggest the use of the EFH for burials. He firmly believes that the early map notations reflect the property owner’s intent to associate [historic] Lots 45-48 with the church through a burial-ground label, perhaps in order to avoid taxation.

Maps provided the only documentary data indicating that Lots 45-48 might have once been the site of a cemetery. No additional documentary evidence was found for this report that would indicate that any formal burials actually took place within the project APE. Because negative evidence does not provide ground truth, archaeological field testing was recommended to ensure that no potential burials would be disturbed by the proposed development of the project site. Father Gasparik approved in writing (4/6/19) that if human burials were identified during the archaeological testing, the burials could be removed from the site. Notification procedures for the descendant parish community were established and a copy forwarded to LPC.

### **III. Archaeological Field Methodology**

This first level of fieldwork, often referred to as Phase IB, was conducted in accordance with the applicable archaeological guidelines (LPC 2018). The subsurface testing for archaeological resources is limited to the portion of the project area that has been identified as sensitive and will be impacted by the proposed development (the APE). It is not, however, a full-scale Data Recovery excavation.

The overall proposed testing area at EFH was limited to portions of four small historic lots, Lots 45 - 48. A large, west-west trench (100 x 15 feet) was planned for the rear of the former project lots within the APE (Figure 3). The testing plan called for each of these lots to be subjected to trenching by heavy machinery in order to identify potential burial shafts that might be present in the former rear lots. The HPI field testing program was designed to rely primarily on machine-excavation. Excavation within the test trench was designed to be conducted by scraping thin levels of soil to remove the overburden and after the surface layers were carefully removed, the team might be able to discern the presence of discrete burial shafts (usually by soil color) within the APE. The excavation trench would be canted as necessary to comply with OSHA regulations.

During the course of the field investigation, professional standards for excavation, screening, recording stratigraphy, labeling, mapping, photographing, and cataloging will be applied.

### **IV. Results of Field Testing**

The LPC archaeology staff was notified when testing would begin (Saunders 6/14/19) and the field investigation was conducted June 17-19, 2019 under the direction of Dr. Sara Mascia, Vice President of HPI. Sara Mascia meets the standards of the New York Archaeological Council and the National Park Service 36 CFR 61 and is certified by the Register of Professional Archaeologists (RPA).

Testing was conducted by a combined effort of heavy machinery and hand-excavations. As mentioned above, the field investigation entailed the excavation of a ca. 13 x 100-foot (4 x 30 m) west-west trench along the rear of Lot 57 (crossing the rear of the four historic lots identified by Geismar as sensitive). The team left approximately 2-3 feet intact along the southern border of the property to prevent any soil collapse from the neighboring property. Excavation of the surface overburden and fill layers began in the east end of the trench. Working with the machine operator, the HPI archaeologists began the investigation by carefully removing the overburden and surface strata in shallow increments. After the overburden was removed the archaeologists utilized the backhoe to carefully remove fill layers which contained 20th-century construction/

demolition debris in order to expose any undisturbed strata or burial shafts. The trench was examined in ca. 3.5-meter (ca.12-foot) sections to ensure proper control of the removed soils and the safety of the field personnel.

Excavation found that the ca.13ft x 100 ft trench, overall, contained two separate soil profiles for the northern and southern sections. The southern portion of the trench measured approximately 8 to 9 feet wide north to south, leaving a width of between 4-5 feet x 100 feet in the northern section.

Testing recorded the entire southern half of the trench as fill, extending to depths over 6 feet below the surface. A review of historical and current maps of the project block indicates that the elevation of the project block has remained steady from the 19th century through the present (Figures 1, 2, and 4). Traditional burials are typically found at 6 feet (1.82 m) below the surface. The presence of fill to the depth of 6 feet (1.82 m) at the east end of the trench indicated that considerable unrecorded disturbance occurred in this location, obscuring any evidence of possible grave shafts. After phone consultation with LPC, it was determined that an additional one to one and a half feet of fill would be excavated to determine if subsoil or any burials were present (Sutphin, personal communication to Mascia 6.17.19). In the southern half of the trench, excavation halted at depths between 7.5-8 feet (2.15-2.4 m) below the surface (Figure 3, Photograph 5).

The depth of fill observed by the archaeological team confirmed the results of two soil borings in the rear yard that were completed in April 2019 (Mueser Rutledge Consulting Engineers 2019). An examination of the boring logs indicated that fill was present at the extreme rear (south side) of Lot 57 to 15 feet below the surface. (See Appendix: B3 and B5 Soil Boring Logs.) Because historical features often mimic fill, soil borings are not 100% reliable to predict the presence of disturbed strata. However, in this case, the soils observed during testing were clearly recent fill. In fact, near the southwest corner of the archaeological test trench, a large plastic bucket with a date of March 05, 2012 was recovered at a depth of 6.25 feet (1.9 m). (See Photograph 10.) The presence of this bucket indicates a significant deep disturbance to this portion of the site in the relatively recent past.

The northern half of the trench (which extended 4-5 feet south from the north wall) did contain some pockets of subsoil between historical disturbances. Each of these locations was shovel-shaved and hand excavated to determine if any evidence of burial shafts was present. The soil profiles in the northern section of the trench were also different between the eastern and western sides. On the east side of the trench, subsoil was finally reached at depths between 4.75 feet (1.45m) and 5.25 feet (1.6 m). While in the western one-third of the trench, a stratum of subsoil mixed with ashy fill was observed extending from 4.5 to 6.2 feet, indicating that subsoil in this location had been disturbed to greater depths in the past. Undisturbed subsoil was only present in a few deep pockets from 5.5 to 6.25 feet (1.68 to 1.9 m).

Soil profile columns were completed every 25 feet along the north wall (Tables 1-4 below).

Table 1. Stratigraphy of North Wall of Trench 1 (at 5 Feet from NE corner)

Level	Depths	Description
1	0—32 cm	Brown (10YR 5/3) coarse sand
2	32-48 cm	Yellow (10YR 7/6) sand
3	25-108 cm	Very Dark Grayish Brown (10YR 3/2) sandy fill with modern bricks
4	108-122	Black (10YR 2/1) sand and Ash
5	122-230 cm	Strong Brown (7.5 YR 5/8) sandy fill with architectural demolition debris and building remnants

Table 2. Stratigraphy of North Wall of Trench 1 (at 30 Feet from NE corner)

Level	Depths	Description
1	0—30 cm	Brown (10YR 5/3) coarse sand
2	30-45 cm	Yellow (10YR 7/6) sand
3	45-101 cm	Dark yellowish Brown (10YR 4/4) sandy loam and modern artifacts
4	101-145	Black (10YR 2/1) sandy fill with architectural debris
5	145-194 cm	Strong Brown (7.5 YR 5/8) sand
6	194-235 cm	Pale Brown (10YR 6/3) sand subsoil

Table 3. Stratigraphy of North Wall of Trench 1 (at 65 Feet from NE corner)

Level	Depths	Description
1	0—26 cm	Brown (10YR 5/3) coarse sand
2	26-40 cm	Yellow (10YR 7/6) sand
3	40-130 cm	Dark yellowish Brown (10YR 4/4) sandy loam and modern artifacts
4	130-195 cm	Strong Brown (7.5 YR 5/8) sand
5	195-250 cm	Pale Brown (10YR 6/3) sand subsoil

Table 4. Stratigraphy of North Wall of Trench 1 (at 90 Feet from NE corner)

Level	Depths	Description
1	0—70 cm	Concrete
2	70-100 cm	Dark yellowish Brown (10YR 4/4) sandy loam and modern artifacts
3	10-190 cm	Strong Brown (7.5 YR 5/8) sand mixed with some ash/artifact pockets
4	190-240cm	Pale Brown (10YR 6/3) sand subsoil

Several remnants of historical features were identified in the northern section of the trench. Beneath the initial modern fill layer, excavation exposed a section of a former 19th century brick foundation at the northeast corner of the trench (Figure 3; Photograph 6). In this location, fill was finally encountered at a depth of 6.25 feet (1.9 m) below the surface. At 18 feet from the northeast corner the remnant of a brick cistern was observed (Photograph 7). After cleaning the side of the cistern for photographs, it was discovered that it was a small remnant left *in situ* with the rest of the cistern no longer present (Photograph 8). A small assemblage of 20<sup>th</sup> century artifacts was collected from the area where the cistern had once been. The concentration was likely deposited when the majority of the cistern was destroyed, likely by the introduction of the current water drainage pipe across the site. The laboratory analysis of the artifacts retrieved around the cistern remnant found they all dated from the mid-20<sup>th</sup> century or later. They included a glass salt shaker, a plastic spoon, two porcelain fuse fragments, a modern GE lightbulb fragment, the top of a colorless jar with screw threads, and a fragment of a Noxema jar.

At 44-47 feet (13.4 – 14.32m) from the northeast corner a deposit of brick and ash was noted at depths between 2.5-3.11 feet (75-95cm). The deposit appeared to be from the demolition of the former buildings and has no archaeological integrity. Near the western end of the trench, a section of thick concrete pathway was exposed (Photograph 9).

No evidence of burial shafts or disturbed burials was observed in any location throughout the total ca. 13 x 100-foot (4 x 30 m) east-west trench along the rear of Lot 57.

## **V. Conclusions and Recommendations**

In conclusion, one large test trench was investigated during the course of fieldwork in the former backyards of historic Lots 45-48. The HPI team found that the majority of the sensitivity area contained disturbed fill strata, with the southern half of the area impacted by construction activities in the adjacent property and the northern half of the area impacted by both late 19<sup>th</sup> century construction and 20<sup>th</sup> century demolition activities, as well as the introduction of the water drainage feature across the back yard. No evidence of burials or burial trenches was observed during the excavation affirming the Church's assertion that Lot 57 was not utilized for burial purposes. No further archaeological consideration is recommended for the project site.

## VI. References

Bromley, G. W.

1934 *Manhattan Land Book, Desk & Library Edition, City of New York*. Plate 140. G. W. Bromley, New York.

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Robinson, E. and R. H. Pidgeon

1890 *Atlas of the City of New York. Volume 2. Embracing the 12th Ward*. E. Robinson, New York.

Sutphin, Amanda

2019 Telephone communication, Amanda Sutphin, Landmarks Preservation Commission, with Cece Saunders, Historical Perspectives, Inc. June 14, 2019.

Telephone communication, Amanda Sutphin, Landmarks Preservation Commission, with Sara Mascia, Historical Perspectives, Inc. June 17, 2019.

United States Geological Survey (U.S.G.S.)

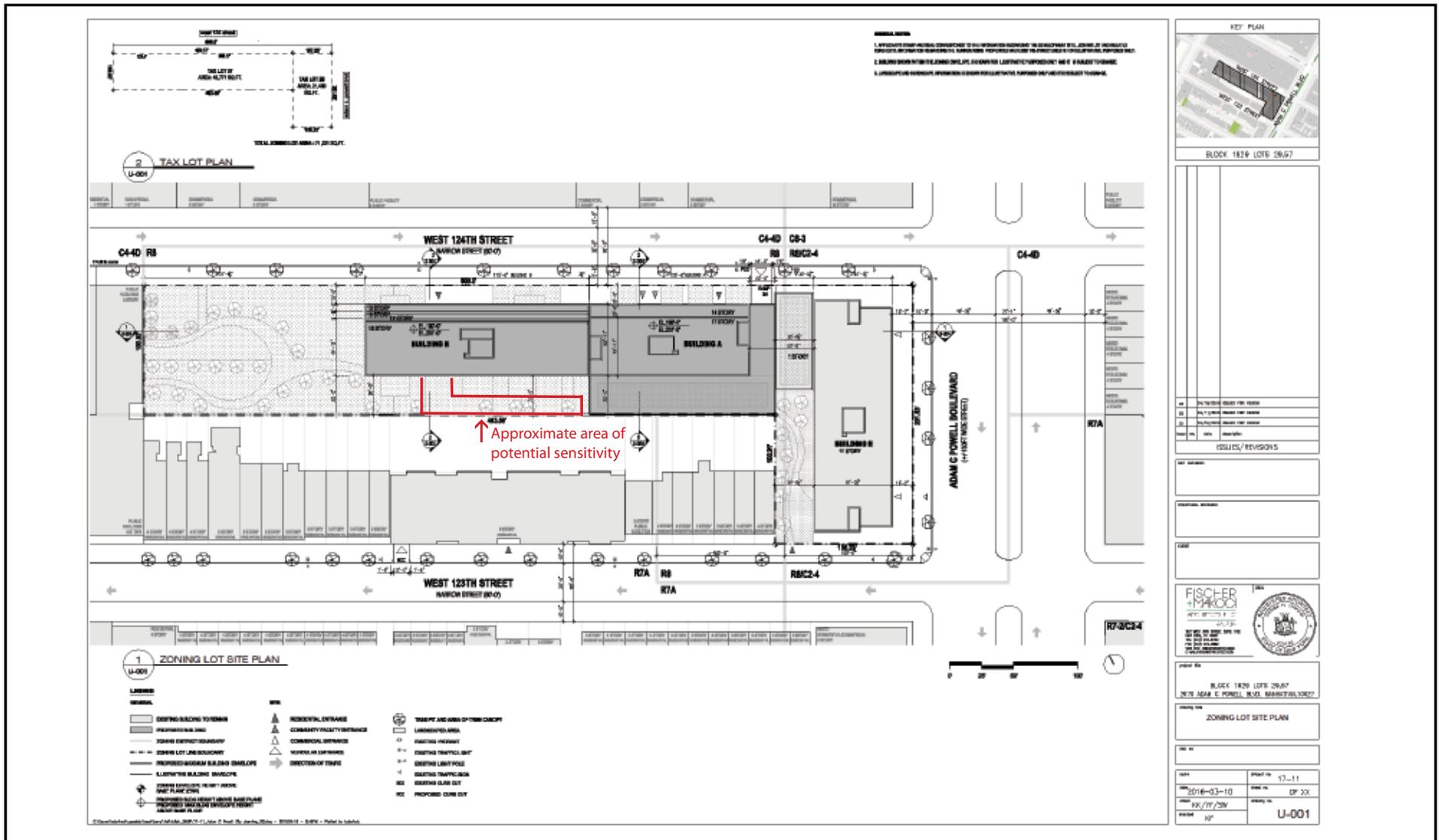
2016 *Central Park, N.Y. 7.5 Minute Topographic Quadrangle*.



Ennis Francis Houses Expansion and Improvements  
 2070 Adam Clayton Powell, Jr., Boulevard  
 [Block 1929, Lot 57]  
 New York, New York



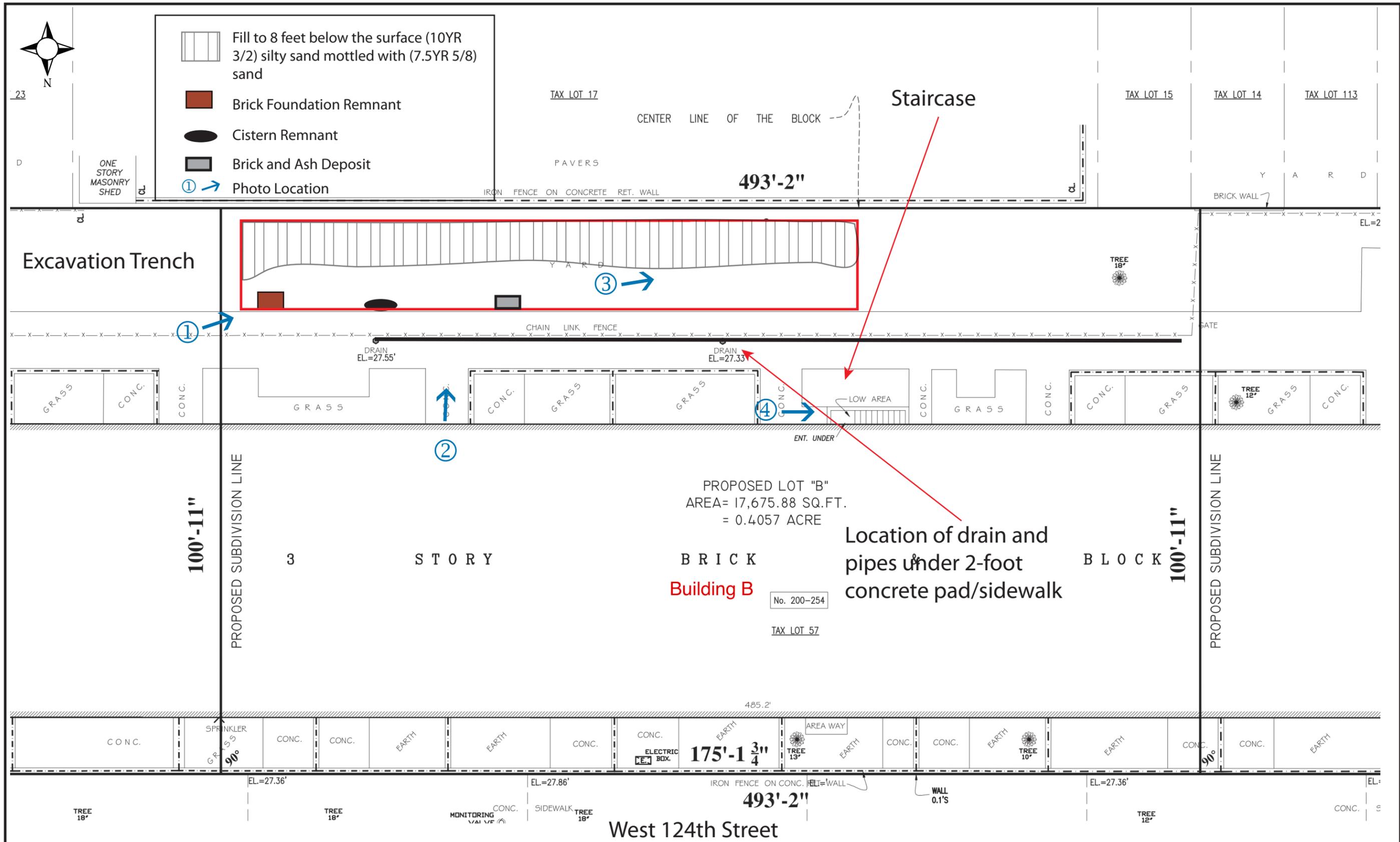
Figure 1. Project Site on Central Park, NY-NJ 7.5 Minute Quadrangle (USGS 2016).



Ennis Francis Houses Expansion and Improvements  
 2070 Adam Clayton Powell, Jr., Boulevard  
 [Block 1929, Lot 57]  
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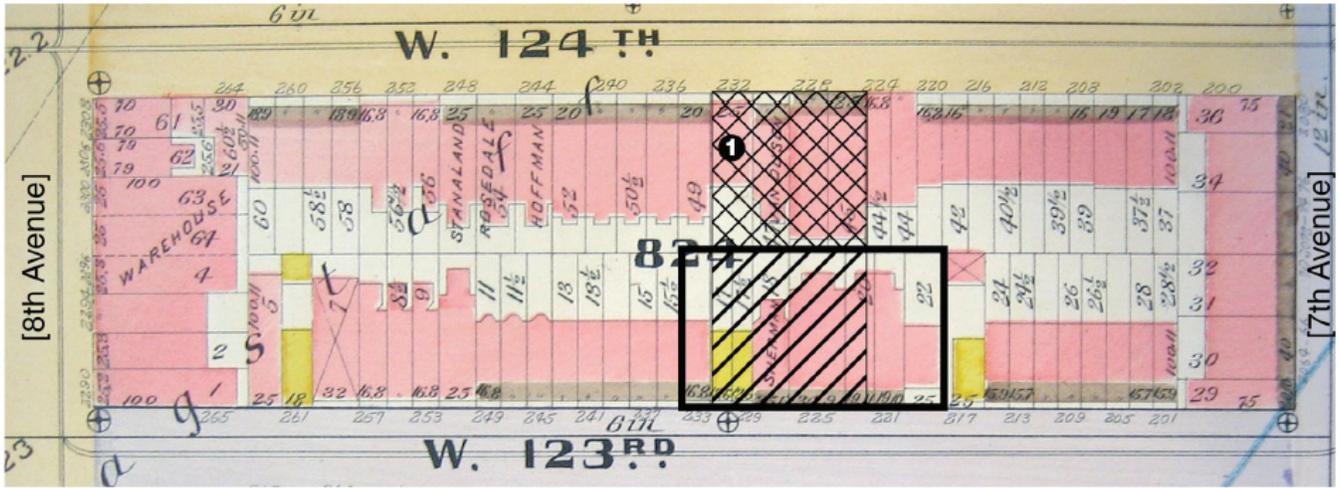
Figure 2. Identified Area of Archaeological Sensitivity.



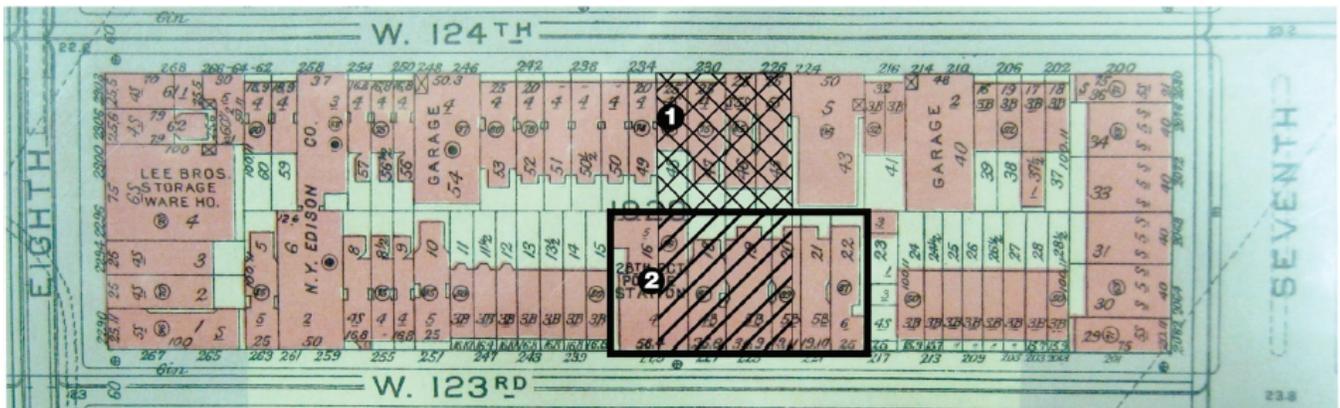
Ennis Francis Houses Expansion and Improvements

Figure 3. Location of Archaeological Test Trench and Disturbance Behind Existing Building and photo key.

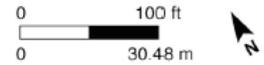




**10a** Development site 1890 (Robinson & Pidgeon 1890, detail)



**10b** Development site 1934 (Bromley 1934, detail)



Ennis Francis Houses Expansion and Improvements  
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 [Block 1929, Lot 57]  
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Figure 4. Graphic reproduced from Geismar, Joan H., 2010. *Ennis Francis Houses 1A Documentary Report*.



Photograph 1. Project Site Area of Potential Effect, South of the Existing Structures, Facing East.



Photograph 2. Brush and Refuse in the Location of the Test Trench, Facing South.



Photograph 3. Brush and Refuse in the Location of the Test Trench, Facing Southwest.



Photograph 4. Staircase in the Rear of Existing Structure Fronting on West 124<sup>th</sup> Street.



Photograph 5. South Wall Profile of the Test Trench, Showing Disturbed Fill to the Depth of 7.6 Feet (230 cmbs).



Photograph 6. North Wall Profile at the East End of the Test Trench. Showing the Disturbance and Remnants of the Former 19<sup>th</sup> century Building.



Photograph 7. Remnant of a 19<sup>th</sup> Century Cistern.



Photograph 8. Profile of North Wall After Removal of the Cistern Remnant.



Photograph 9. Section of the Concrete Pathway and Drain Cover Exposed at the West End of the North Wall.



Photograph 10. Plastic Bucket Recovered from Southwest End of the Trench at a depth of 6.25 feet (1.9 m). Note date of 2012 on the bucket.

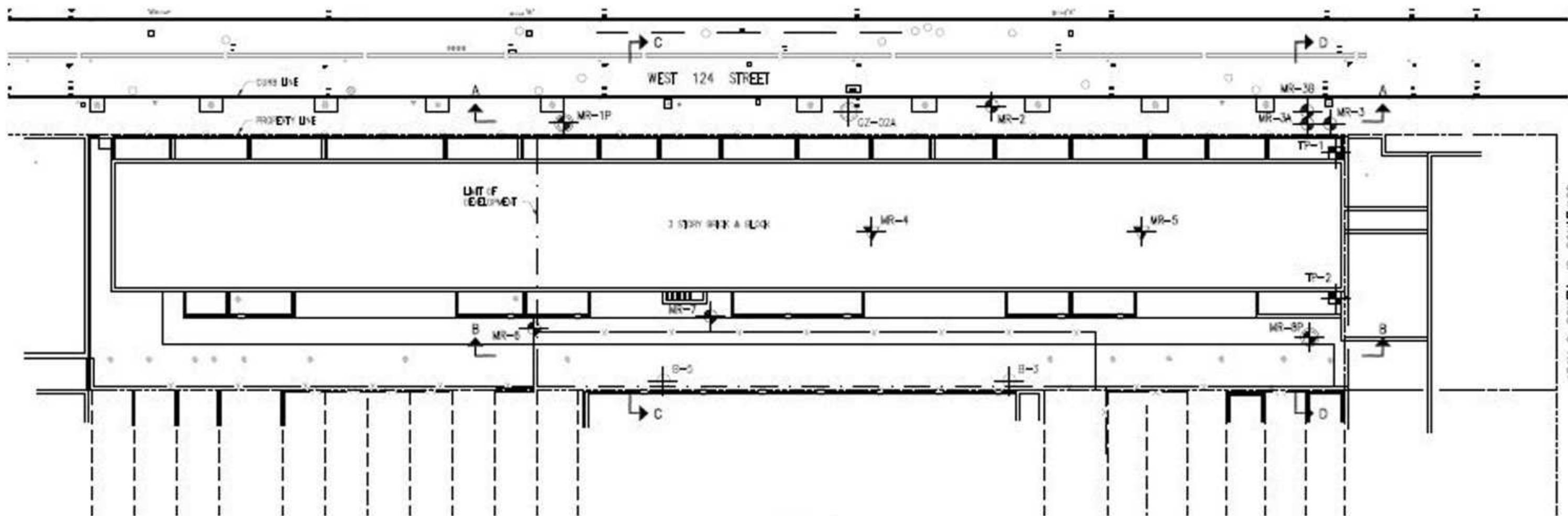


**GEOTECHNICAL REPORT  
212 W. 124<sup>TH</sup> STREET  
NEW YORK, NEW YORK**

**NY Developers & Management LLC  
266 47<sup>th</sup> Street, 5<sup>th</sup> Floor  
Brooklyn, NY 11220**

**Mueser Rutledge Consulting Engineers  
225 W. 34<sup>th</sup> Street, 14 Penn Plaza  
New York, NY 10122-0002**

**April 3, 2019**



**PLAN**



**LEGEND:**

- 
 MR-1P  
 - MICE BORING DRILLED IN 2018 WITH HEADOVER INSTALLED
- 
 MR-2  
 - MICE BORING DRILLED IN 2018
- 
 MR-4  
 - MICE BORING DRILLED IN 2018
- 
 GZ-22A  
 - GZA BORING WITH HEADOVER
- 
 B-3  
 - GZA BORING
- 
 TP-2  
 - MICE TEST PIT COMPLETED IN 2018

**NOTES:**

1. THIS PLAN HAS OBTAINED FROM AN ARCHITECTURAL SURVEY PERFORMED BY BORG LAND SURVEYING, P.C. ON MAY 24, 2018.
2. DIMENSIONS SHOWN REFER TO SMOOBS DATA.
3. BORINGS AND TEST PITS IN 2018 WERE MADE BY DRAG CONTRACTORS DRILLING CO., INC. BETWEEN NOVEMBER 7 AND DECEMBER 18, 2018 UNDER THE CONTINUOUS SUPERVISION OF MICE.
4. BORINGS DRILLED IN 2019 WERE MADE BY UNITED ACCESS DRILLING SERVICES, LLC BETWEEN MARCH 15 AND MARCH 20, 2019 UNDER CONTINUOUS SUPERVISION OF MICE.
5. AS-BUILT BORING AND TEST PIT LOCATIONS WERE MARKED IN THE FIELD OFF OF EXISTING STRUCTURE.

REV	DATE	BY	LOCATION
			212 WEST 124TH STREET
			NEW YORK NEW YORK
			NY DEVELOPERS & MANAGEMENT LLC
			NEW YORK NEW YORK
			<b>MURDER RUTLEDGE CONSULTING ENGINEERS</b>
			14 PENN PLAZA - 225 W. 34TH STREET, NY, NY 10122
DATE	DATE	DATE	DATE
DRW: J.R.C.	CHK: J.R.C.	DATE: 03-23-2019	NO. 13308
DATE: 03-23-2019	DATE: 03-23-2019	DATE: 03-23-2019	DATE: 03-23-2019
AS BUILT BORING AND TEST PIT LOCATION PLAN			B-1

L:\Projects\13308\13308-1.dwg  
 Plot Date: 03/23/2019 10:30:30 AM  
 Plot By: Paul Perini  
 Plot Scale: 1/8"=1'-0"



## BORING LOG



**GZA**  
GeoEnvironmental of New York  
Engineers and Scientists

Abyssinian Development Corporation  
Ennis Francis House Project  
Harlem, New York

BORING NO.: B-5  
SHEET: 1 of 2  
PROJECT NO: 41.0161662.00  
CHECKED BY: PBP

GZA Inspector: C. Duymaz  
Drilling Co.: CMI Subsurface Investigations  
Foreman: Greg Leavitt  
Type of Drill Rig: Mobile B-61 Truck Rig

Drilling Method: MRC  
Auger/Casing: Casing  
O.D./I.D Dia (in.): 4

Boring Location (Latitude Longitude): See Location Plan  
Ground Surface Elev. (ft.): 0 Datum: Sidewalk  
Final Boring Depth (ft.): 52  
Date Start/Finish: 8/20/2007 - 8/23/2007

Hammer Type: Donut  
Hammer Weight (lb.): 140  
Hammer Fall (in.): 30

Sampler Type: SS  
Sampler I.D. (in.): 2.0  
Sampler Length (in.): 24

Groundwater Depth (ft.)

Date	Time	Water Depth	Stab. Time
No	Observation	Made	

Sampler used throughout unless otherwise noted on the log.

Depth (ft.)	Sample				Sample Description Modified Bismister	S S S	Remark	PP/Tv (tsf)	Elev. (ft.)	Stratum Description (NYCBC)	Depth (ft.)
	No.	Depth (ft.)	Pen./ Rec.	Blows per 6"							
5	S-1	1-3	24/16	10 9 9 8	S-1 : Medium dense, brown, fine to medium SAND, little Silt, trace Clay.	1			-0.5	ASPHALT 1.5'	0.5
	S-2	3-5	24/8	3 5 7 14	S-2 : Medium dense, brown, fine to coarse SAND, some Gravel, trace Silt, frequent Brick fragments.						
	S-3	5-7	24/6	3 4 4 13	S-3 : Loose, brown, fine to coarse SAND, trace Gravel, trace Silt.						
	S-4	7-9	24/18	32 36 46 55	S-4 : Very dense, brown, fine to coarse SAND, some coarse Gravel, frequent Concrete fragments, trace Silt.						
10	S-5	10-10.8	12/5	65 100/4"	S-5 : Very dense, brown, fine to coarse GRAVEL, little fine to coarse SAND.	2			-15	FILL (11-65)	15
15	S-6	15-17	24/5	13 15 13 14	S-6 : Medium dense, brown, medium to coarse SAND, some Gravel, trace Silt.						
20	S-7	20-22	24/0	15 13 10 10	S-7 : No Recovery.						

SAND AND GRAVEL