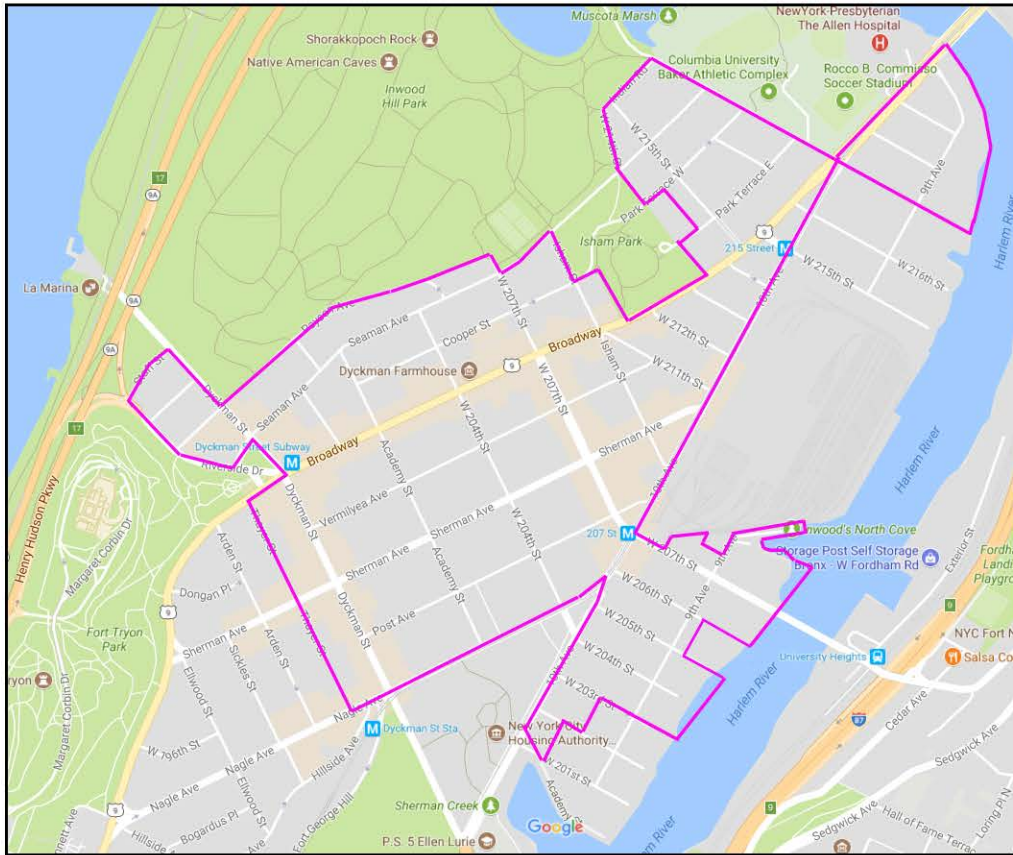


INWOOD REZONING

CEQR NO. 17DME007M

PHASE I AARCHAEOLOGICAL ASSESSMENT



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1. EXECUTIVE SUMMARY

This report is an archaeological assessment of thirty-nine lots within the Inwood rezoning area that the New York City Landmarks Preservation Commission (LPC) flagged for potential archaeological sensitivity and that may be negatively impacted by the proposed rezoning (Cover, Figs. 2A and 2B).

The project site lots are located on thirteen **Projected Development Sites (PROJDS)** and nine **Potential Development Sites (POTDS)** distributed over the proposed rezoning area's four sub-districts, as follows:

- Fourteen lots are distributed over Blocks 2214, 2215, and 2197 between West 218th Street, Broadway and the Harlem River, within the "Tip of Manhattan" sub-district, on **PROJDS 1, 2, 4, and 33** and **POTDS B**;
- Seven lots are distributed over Blocks 2232, 2230, 2229 and 2228, on the west side of Tenth Avenue between West 215th Street and Sherman Avenue, within the "Upland Wedge" sub-district, on **PROJDS 5** and **POTDS E, G, and J**;
- Fourteen lots are distributed over Blocks 2184, 2185, 2187, 2188, 2199, 2200, 2202 and 2203, between West 202nd and West 208th Streets and Ninth Avenue and the Harlem River, within the Sherman Creek sub-district, on **PROJDS 6, 7, 8, 11, 12, and 13**, and **POTDS I, Q, and T**, and
- Four lots are distributed over Blocks 2223, 2235 and 2238 on Broadway between Academy Street and West 207th Street, and on West 207th Street between Sherman and Post Avenues, within the "Commercial "U" sub-district on **PROJDS 28 and 29**, and **POTDS AI and AM**.

None of these lots was developed, at the earliest, before the 1910s, and most not before the 1920s or even later. Moreover, the "development" of half of the lots consisted of parking lots, with or without workshops, sheds or garages associated with automotive-related businesses.

Of the thirty-nine lots assessed in this report, the only ones with potentially significant historic archaeological remains are on **PROJDS 5** and **POTDS E**, where there was an African slave cemetery said to date to the Colonial Period and associated with the earliest of Inwood's settlers. These remarkable burials yielded extraordinary skeletal remains evidencing rare burial practices. Additionally, there was a frame building, possibly a dwelling, on **POTDS B**, which was built ca. 1916 and demolished after 1951. It is considered archaeologically sensitive since it must have been equipped with a cistern and privy in its yard. Such backyard installations are typically filled with refuse during and after their period of use, which, in this instance, would provide a rare window into life in a remote part of Manhattan during its transition from rural to industrial uses.

While historic periods are not well represented on the lots assessed here, their potential archaeological sensitivity for prehistoric remains is high. During the late 19th and early 20th centuries, before the neighborhood was paved over and the streets graded and opened, Inwood was a Mecca for archaeologists interested in Manhattan's Indian and prehistoric past. This part of the island has yielded more prehistoric finds than any other, including shell middens, encampments, rock shelters, dog and human burials, and finds of stray artifacts. The proposed

rezoning area was mostly wetland and, as such, a prime location for hunting marsh fowl, fishing, and collecting clams in the salt flats. In archaeological assessments, determinations of prehistoric sensitivity are made based on whether the natural resources and topography were likely to attract prehistoric peoples, as well as on previous discoveries of prehistoric sites or artifacts within a one-mile radius of the sites being assessed. In the case of Inwood, both of these pre-conditions are amply satisfied. For this reason, this report concludes that thirty-six of the thirty-nine project site lots flagged by the LPC are potentially sensitive for prehistoric remains and recommends that, should these sites be developed, archaeological testing be conducted prior to construction and following whatever procedures may be necessary to mitigate the effects of any hazardous materials that may be present on the lots (Table I).

Table I - Summary Result of this Report's Assessment for Archaeological Sensitivity						
Site	Block / Lot	Address	Archaeological sensitivity		Area of Potential Sensitivity	
			Yes	No	Entire lot	Part
12	2184 / 20	3775 Ninth Ave.	X		X	
	2185 / 1	Ninth Ave.	X		X	
I	2187 / 7	3859 Ninth Ave.	X		X	
6	2188 / 10	W. 207 St.	X		X	
13	2199 / 11	499 W. 202 St.	X			X
T	2200 / 5	3801 Tenth Ave.	X			X
8	2200 / 15	416 W. 204 St.	X		X	
	2200 / 21	3814 Ninth Ave.	X		X	
	2200 / 29	417 W. 203 St.	X		X	
11	2202 / 1	3835 Tenth Ave.	X		X	
Q	2202 / 17	414 W. 206 St.	X		X	
	2202 / 21	3842 Ninth Ave.	X		X	
7	2203 / 9	430 W. 207 St.		X		
	2203 / 21	408 W. 207 St.	X		X	
1	2214 / 24	400 W 219 St.	X		X	
4 33	2197 / 47	4095 Ninth Ave.	X			X
2	2197 / 67	4135 Ninth Ave.	X		X	
	2197 / 71	Ninth Ave.	X		X	
	2197 / 74	"	X		X	
	2197 / 174	"	X		X	
	2215 / 842	5140 B'way	X			X
	2215 / 852	4168 Ninth Ave.	X		X	
	2215 / 857	Ninth Ave.	X		X	
	2215 / 863	4116 W. 220 St.	X		X	
	2215 / 866	409 W 220 St.	X		X	
	2215 / 877	B'way	X		X	
	2215 / 885	Ninth Ave.	X		X	
B	2215 / 801	5122 B'way	X		X	
AM	2223 / 30	521 W. 207 St.	X			X
J	2228 / 32	500 W. 211 St.	X		X	
E	2229 / 25	3966 Tenth Ave.	X		X	
	2229 / 32	3950 Tenth Ave.	X		X	
5	2230 / 21	3976 Tenth Ave.	X		X	
G	2232 / 1	5044 B'way	X		X	
	2232 / 5	5050 B'way	X		X	
	2232 / 13	Tenth Ave.	X		X	
29	2235 / 9	4910 B'way	X			X
AI	2235 / 5	4892 B'way		X		
28	2238 / 28	4849 B'way		X		

2. DESCRIPTION OF THE PROPOSED REZONING AREA AND THE LOTS ASSESSED IN THIS STUDY

A. Aims of the Proposed Rezoning, its Boundaries, and Description of its Sub-Districts

The proposed Inwood rezoning area (“project area”) is generally bounded by the Harlem River on the East; the Sherman Creek Inlet, Riverside Drive, Thayer and Dyckman streets to the south; Indian Road, Payson Avenue, and Broadway on the west (with a small area continuing to Staff and Dyckman Streets); and Broadway Bridge to the north (Cover, Figs. 1, 2A and 2B). The aims of the proposed rezoning are to facilitate a development plan that meets the long-term community vision for Inwood by extending the mixed-use character of Inwood east, to the Harlem River, and preserving the strong existing residential fabric found in portions of the neighborhood west of Tenth Avenue. The Proposed Actions also aim to require affordable housing, promote a public waterfront and active streetscape, and encourage new commercial and community facility uses across large swaths of the neighborhood. The NYCEDC has already developed a master plan to rehabilitate and revitalize the Harlem River waterfront in the southern portion of the proposed Inwood rezoning area, east of Tenth Avenue. That plan, known as the “Sherman Creek Waterfront Esplanade Master Plan”, would make publicly accessible the neighborhood’s waterfront, enhancing it through the creation of new parks, recreation areas, pedestrian walkways and bike paths (WXY architecture 2011, 5-6).

The portion of the proposed rezoning area along and to the east of Tenth Avenue is comprised mostly of underdeveloped waterfront land along the Harlem River waterfront in Inwood. This eastern portion of the proposed rezoning area is characterized primarily by large sites occupied by surface parking, vehicle storage, low-rise one- and two-story free-standing commercial buildings accommodating wholesale distributors, some commercial use, transportation and automotive-related uses, and other low-intensity uses, as well as vacant land and ancillary uses for Con Edison operations in the area. In contrast, the portion of the proposed rezoning area to the west of Tenth Avenue is comprised of densely developed residential areas consisting of primarily six- to eight-story multi-unit residential buildings intermixed with a limited amount of detached and semi-detached homes and some larger 14-story developments, as well as active commercial corridors concentrated along Broadway, Dyckman Street, and West 207th Street.

PROJDS and **POTDS** fall within four of the five sub-districts comprising the proposed rezoning area. These four sub-districts are:

1. The Tip of Manhattan sub-district

This sub-district is located at the northeastern tip of the island and bounded by the Harlem River to the east, Spuyten Duyvil Creek to the north, West 218th Street on the South and Broadway on the west. It is least developed of the four sub-districts assessed in this report, consisting almost entirely of parking lots and single-story automotive-related uses. The elevation rises from its southern end towards the northeast and, from the bend in Ninth Avenue, also to the northwest. Most of the shoreline visible from the edge of the parking lots bordering the river was very steep, with large, sharp-edged boulders that had evidently sheared off the cliff side and fallen down to the river’s edge. The lots bordering the river and the fences surrounding the properties run almost up to the water’s edge, leaving only a very narrow strip of scrub and saplings.

2. The Upland Wedge sub-district

This narrow sub-district comprises lots along Tenth Avenue between West 207th and West 218th streets, as well as Broadway between West 213th and West 218th streets. This area lies south of the Tip of Manhattan sub-district and north of the Sherman Creek and Commercial “U” sub-districts. This sub-district is dominated by the elevated subway rail tracks, which run down the center of Tenth Avenue. The MTA’s rail yards occupy the east side of Tenth Avenue, opposite the automotive and other small businesses within the Upland Wedge sub-district.

3. The Sherman Creek sub-district

This sub-district is located between Tenth Avenue and the river, and immediately north of the Sherman Creek inlet, between West 201st and West 208th Streets. Several studies have been made of this sub-district in connection with the planned Sherman Creek Waterfront Esplanade mentioned above. The most pertinent, for the present report, is the Phase II Environmental Site Investigation of the section between Ninth Avenue and the Harlem River prepared by GRB Environmental Services, Inc., which includes data on soil borings (GRB 2010).

The Sherman Creek sub-district is primarily zoned for manufacturing, and land uses range from surface parking lots, to single-story warehouse/wholesale and auto-related uses, as well as some community facility uses, including two private schools, and a growing number of restaurants and night clubs. A small portion of the sub-district (between West 203rd and West 207th streets) is zoned R7-2 (a medium density residential zoning district), and is developed with existing residential buildings. The area is connected to the University Heights section of the Bronx by the University Heights Bridge, which runs from the foot of West 207th Street. Along the Harlem River waterfront, there are five pocket parks, located at the ends of West 202nd, West 203rd, West 204th, West 205th, and West 206th streets, which provide limited public access to the Harlem River. In addition, the North Cove, located at the end of West 208th Street, is a natural feature that local waterfront advocates have cleaned up and maintained as an informal space for wildlife and community use. The shoreline in this sub-district has been described as a very largely degraded “hodgepodge of rip-rap, concrete bulkhead, granite bulkhead, timber piles, and sheet piles” (WXY 2011, 14).

4. The Commercial "U" sub-district

This sub-district comprises blocks with frontages along Dyckman Street between approximately Nagle Avenue and Broadway; along Broadway between Thayer and West 207th Streets, and on West 207th Street between Broadway and Tenth Avenue. Subway stations at Dyckman Street and Broadway, West 207th Street and Broadway, West 207th Street and Tenth Avenue, and Dyckman Street and Nagle Avenue serve the area. The area is generally characterized by one- to two-story commercial and community facility uses, with some multi-story housing with ground floor retail and other commercial uses. The retail is characterized primarily by small storefronts, some second story retail and other various commercial uses, and a large number of restaurants, bars, and lounges.

B. Location, Descriptions / Current uses of Potentially Archaeologically Sensitive Lots

Large sections of the proposed rezoning area, both along the waterfront and inland, have never been developed beyond paving for parking lots, and any potential Prehistoric archaeological remains will therefore not have been disturbed by subsequent construction. In the early 20th century, Prehistoric remains were found in many places in Inwood, including in the proposed rezoning area. Consequently, the LPC determined that thirty-nine irregularly sized lots among the development sites were sensitive for archaeological remains, and called for a detailed archaeological assessment of these, which the present report provides.

The following description of the sub-districts and the lots that have been flagged for archaeological sensitivity is organized by sub-district, moving north to south. Under each of these four divisions, the specific blocks and lots are grouped according to the projected or potential development sites on which they are located.

1. The Tip of Manhattan sub-district

Fourteen of the lots flagged for archaeological sensitivity are in this sub-district.

All eleven lots within **PROJDS 2**, on Blocks 2197 and 2215, are considered archaeologically sensitive (Figs. 11, 12, 13, 14 and 35). Block 2197, Lots 67, 71, 74, and 174, and Block 2215, Lots 877 and 885, at the northeastern tip of Manhattan, along the Harlem River, are currently used for truck parking by Spectrum (formerly known as Time Warner). Lying immediately to the south, Lot 47, Block 2197 of **PROJDS 4 and 33** is also a Spectrum parking lot. The remaining lots of **PROJDS 2**, west of Ninth Avenue, are occupied by New York Presbyterian-The Allen Hospital's staff parking lot. The hospital itself is situated on the west side of Broadway (not within the proposed rezoning area), on a steep-sided hill that rises considerably above the Tip of Manhattan sub-district.

PROJDS 1, comprising a single lot, Lot 24 on Block 2214, is at the northwest corner of Ninth Avenue and West 218th Street (Fig. 9). This archaeologically sensitive site is covered by the building and parking lot of the A-1 All German Car Corp (an automotive service and repair shop).

The small workshop and large parking lot of Broadway Wash and Lube stand on **POTDS B**, on the east side of Broadway, between West 219th and West 220th Streets, overshadowed by the elevated Broadway local subway trestle (Fig. 15); as is Lot 842, Block 2215 on **PROJDS 2**. The only archaeologically sensitive lot of the three lots comprising **POTDS B** is Lot 801 on Block 2215, which is the lube shop's parking area

2. The Upland Wedge sub-district

Seven of the lots flagged for archaeological sensitivity are in the Upland Wedge sub-district.

Moving from north to south, the first archaeologically sensitive lots are three of the five lots contained in **POTDS G** on Block 2232, between West 214th and West 215th Streets (Fig. 16). Two of these, are the vacant Lots 5 and 13, partly used for parking, which run through Block 2232 between Broadway and Tenth Avenue. The third, Lot 1, on the corner of West 214th Street, is occupied by the Riverdale Funeral Home's accessory parking lot.

All of **PROJDS 5**, and all of **POTDS E and J** are considered sensitive for archaeological remains (Figs. 17, 18A, 18B, and 19).

PROJDS 5, comprising Lot 21 on Block 2230, on the west side of Tenth Avenue between West 213th and West 212th Streets, is wholly occupied by Edison's Park Fast public parking lot.

POTDS E, on Block 2229 along the west side of Tenth Avenue between West 212th and West 211th Streets, is occupied by an auto parts lot on Lot 25 containing several sheds, while a row of one- and two-story buildings housing various commercial businesses stand on Lot 32.

POTDS J, on Block 2228 Lot 32 at the corner of West 211th Street, Sherman Avenue and Broadway, is used as a parking lot by Quest Livery Leasing.

2. The Sherman Creek sub-district

Fourteen lots flagged for archaeological sensitivity are scattered across the Sherman Creek sub-district.

Lot 10, on Block 2188, is part of **PROJDS 6** (Fig. 20). It is located adjacent to and north of the University Heights Bridge. The lot, used for public parking and truck storage, is partially visible from the bridge, though mature trees obscure its eastern end. GRB (2101, 1) describes this as the MTA Storage area. The North Cove, a small inlet on the north side of the lot, is not accessible, as its opposite side is occupied by the Metropolitan Transportation Authority's 207th Street Rail Yard.

Across West 207th Street is Lot 7, Block 2187, on **POTDS I** (Fig. 21). As viewed from the University Heights Bridge, the yard of the one-story Beer Wholesale Soda store, Flair Beverage Corp., on Lot 5, facing Ninth Avenue, is used for vehicle parking, crates, and storage containers. According to GRB's research, there was a gasoline service station on this lot in 1940-1941 that was equipped with two 550-gallon gasoline tanks (presumably the auto repair shop shown on the 1951 Sanborn map, vol. 12, pl. 60). They did not find any additional information about the fate of these tanks, however, nor were they able to get permission from Flair Beverage to inspect the site (GRB 2010, 12).

On the west side of Ninth Avenue between West 207th and West 208th Streets, all of **PROJDS 7**, comprising Lots 21 and 9 on Block 2203, are occupied by an Associated Supermarket store and its large accessory parking lot (Fig. 22). At the southwest corner of Ninth Avenue and West 206th Street, Lots 17 and 21 on Block 2202 make up **POTDS Q** (Figs. 23 and 24). These vacant lots are used as parking areas, Lot 17, for the adjacent Amigo Produce fruit and vegetable wholesale store, while Lot 27 is occupied by a public parking lot licensed to the Marjo Parking Inc.

Lot 1, the southern half of **PROJDS 11** at the northeast corner of Tenth Avenue and West 205th Street, on Block 2202, is occupied by a public parking lot next to a hodgepodge of car-repair shacks and a food truck (Fig. 25).

On Block 2200, are located the single lot, Lot 5 of **POTDS T** at the southeast corner of Tenth Avenue and West 204th Street (Fig. 28), and three lots, Lots 15, 21, and 29 of **PROJDS 8** along the west side of Ninth Avenue between West 204th and West 203rd Streets (Fig. 26).

It was difficult to determine how much of **POTDS T** was occupied by the yard of a one-story “Auto Glass” shop and two other, apparently vacant one-story buildings fronting on Tenth Avenue. Used for recreational, domestic and storage purposes -- judging by its contents -- the walled yard can only be glimpsed from West 204th Street through a narrow, gated passageway.

PROJDS 8 is surrounded by opaque fencing, but the south side, on Lots 29 and 21, was visible from a gated entrance on West 203rd Street. These lots are being used for truck parking or storage. Lot 15, a Con Edison property, is vacant, with weeds poking through the concrete.

PROJDS 12 comprises Block 2185, Lot 1 and Block 2184, Lot 20. Block 2185, Lot 1 is being used for trucks and open storage, and Block 2184, Lot 20 is a parking lot (Figs. 27 and 30).

PROJDS 13, on Block 2199, Lot 11, is occupied by a parking lot (Fig. 29).

3. The Commercial "U" sub-district

Four of the lots flagged for archaeological sensitivity are located in the Commercial "U" sub-district.

POTDS AM is located on Block 2223, Lot 30, between Sherman and Post Avenues on the east side of 207th Street (Fig. 31). Approximately the front two-thirds of this 100 by 100-foot lot is occupied by a two-story building housing five different retail stores at street level. Sanborn maps indicate that the rear is almost entirely vacant, but this would need to be verified by a visual inspection.

POTDS AI and **PROJDS 29** are located on Block 2235, lots 5 and 9, respectively (Figs. 33 and 34), on the south side of Broadway between 206th and 207th Streets. A

One-story building housing a Rite Aid store extends across the entire front half of lot 5, leaving the rear vacant. It was not possible however, to examine the rear of lot. This would need to be surveyed prior to making a definitive determination as to its potential archaeological sensitivity. Approximately two-thirds of lot 9 is occupied by a one-story restaurant "Inwood Bar and Grill". There is an extension at the back of the building and a kind of patio as well as other construction that appears to cover the entire lot area, as also indicated on the most recent Sanborn maps.

PROJDS 28 is located on Block 2238, lot 35, on the north side of Broadway between Academy and 204th Streets (Fig. 32). It is currently vacant.

C. Potential Hazardous Material Contamination of Lots Described in Section 3B

Hazardous materials assessment of the sites within the proposed rezoning area were conducted as part of the Inwood Rezoning Proposal Draft Environmental Impact Statement (in preparation). As regards the sites assessed for archaeological sensitivity in this report, the hazmat assessment concluded, based on documentary evidence and, in most cases also visual inspections, that there were environmental concerns on every site.

In the Sherman Creek Sub-district, GRB (2010) and Metcalf & Eddy, Inc. (M & E 2004, 2005) conducted a Phase II environmental site investigation, including soil and groundwater sampling, that revealed varying levels of contaminants adjacent to the sites evaluated for archaeological sensitivity in this report (GRB 2010, 56, Figure 5-1: Exceedance Location Map). There are five locations adjacent to, or in the vicinity of, the sites evaluated in this report whose levels of contaminants exceed the New York State Department of Environmental Conservation's (NYSDEC) regulatory standards and would require mitigation before any archaeological investigations could be conducted in these locations.

M & E's boring B204-1, at the end of West 204th Street, near **PROJDS 12** (Lot 1 on Block 2185), contained volatile organic compounds (VOCs) that would pose a danger to human health if the site is "disturbed to the degree where onsite soils present an inhalation or ingestion hazard" (GRB 2010, 30). "The fill materials would require special handling, with health and safety precautions, if the re-use of the Site includes excavation..." (Ibid.) Additionally, ground and water samples taken in this location contained elevated levels of semi-volatile compounds (SVOCs), lead, mercury, chromium, and cadmium (GRB 2010, B-5).

Elevated levels of the SVOCs Benz(a)anthracene, Benz(a)pyrene, and Chrysene (wastes generated during the production, recovery, or refining of coke by-products produced from coal), and groundwater contamination from chromium and lead were found in samples taken at the terminus of West 207th Street, adjacent to **PROJDS 6** (Lot 10 on Block 2188) and **POTDS I** (Lot 7 on Block 2187) (M&E 2005, B-206-01; GRB 2010, B-2).

Additionally, soil and groundwater samples contaminated with lead, mercury and chromium, were found in samples taken near the northeast corner of West 208th Street and Ninth Avenue, approximately half a block west of **PROJDS 6** (Block 2188, Lot 10).

For these contaminated areas, GRB recommended that 10 ft. X 10 ft. X 6 ft. of soil be excavated from each location and disposed as industrial contaminated fill (GRB 2010, 36).

The potential contamination of the blocks and lots on the above-noted projected and potential development sites flagged for archaeological sensitivity would have to be mitigated in the event that archaeological testing is recommended for any of these locations.

3. ENVIRONMENTAL SETTING

A. Geomorphology

Inwood's bedrock is composed of gneiss and schist formed in the Precambrian age, approximately one billion years ago. This section of the Manhattan Prong is part of the Appalachian Piedmont. The gneiss and schist form sharp outcroppings in the western half of Inwood, interlayered with marble, while the eastern side, including the area of the proposed rezoning, is a flat lowland plain underlain by marble (Merguerian, Merguerian and Cherukupalli 2011). The marble stratum has been deformed into a series of folds that extend northeastwards through New York and Massachusetts to Vermont. Known as "Inwood" marble in northern Manhattan, this metamorphic dolomitic limestone, composed of calcium and magnesium carbonates, is harder than marble composed of calcium carbonate alone and therefore more resilient to weathering. The marble and schist layers are overlain by glacial drift that was deposited during the last glacial period, circa 12,000 to 15,000 years ago at the end of the Pleistocene Epoch. The unsorted till of the glacial material is composed of pebble to boulder-sized rocks intermixed with clay, or sorted stratified sand and gravel from the glacial outwash (GRB 2010, 9).

B. Stratigraphy

During the excavation for the Harlem ship canal, in 1891, a mastodon tusk was found in a layer of peat at a depth of approximately 16 feet below mean low water, near present-day Broadway, in the salt marshes bordering the former canal. Richard Parr Whitfield, then curator of the Department of Geology at the American Museum of Natural History, examined the site and reported on its stratigraphy.² He observed a layer of sandy clay, approximately 18 inches thick, over the marble bedrock, with a layer of "incipient peat", up to 12 feet thick over the clay. This last contained "grass seeds, sedges, nuts, and beetle wings" (Hornstein 1898, 100). The silty root layer of the salt meadow at the top, growing over the peat, was approximately 4 to 6 feet thick. The clay would have been deposited on the bottom of the lake that formed from the melt waters of the last retreating glacier, dammed up by its moraine. The rock and clay barrier was eventually breached at the Verrazano Narrows, and the huge lake began to drain. The peat layer was formed from the vegetation that filled the lake around 13,000 years ago. Meanwhile, the melting glaciers gradually raised the sea level, which reached its present height about 6,000 years ago.

The stratigraphy of the section of the Sherman Creek sub-district, east of Tenth Avenue may be reconstructed from GRB's soil borings. According to their investigations, bedrock here lies approximately 20 to 30 feet below grade, while the elevation above mean sea level is approximately 8 feet (GRB 2010, 9). GRB made three borings on or adjacent to the sites assessed in this report (GRB 2010, 1, 20):

² R.P. Whitfield, cited in Harnage and Bishop 1921, 39-40, and Horenstein 1989, 89-90. Whitfield's original report was not located.

1. Boring B-2, dug near **PROJDS 6**, at the end of West 207th Street, in the MTA storage area under the University Heights Bridge, “contained 6 feet of fill with gravel. From 6 feet to 15 feet there was no recovery”.

2-3. Borings B-5 and B-6, near **PROJDS 12**, at the ends, respectively, of West 204th and West 203rd Streets, the latter within the NYPD Vehicle Pound. Contained (B-5): “1 foot of chat and 9 feet of fill, plastic, sand, gravel, styrofoam and silt” and, (B-6): 1 foot of asphalt, 8 feet of fill with a mixture of sand, silt, wood, gravel, tar, asphalt, cinders, pebbles and boulders underlain with natural material with fine sand, silt and some brown clay.

LMS made a boring on Block 2183, Lot 1, near the corner of Academy and West 201st Streets. This is not adjacent to the sites assessed in this report, but is of interest because it reached a depth of 13 feet below grade. The boring log reports “micaceous sand, tight sandy silt, grey meadowmat & clay” at about 10 feet below grade and, most significantly, “tight grey silty clay and *some peat* (author’s italics), between 11 and 13 feet”. This boring does not record the depth to water, or note wetness in the excavated materials.

From the above, we can estimate that there are approximately 8 feet or more of fill over the area north of Sherman Creek, meaning that pre-industrial layers, at least near the shore, lie below sea level. Further west, however, the prehistoric peat layer may lie between 11 and 13 feet below grade and possibly not below the water.

C. Pre-Industrial / Pre-Modern Topography

Originally, the Harlem River flowed further west and the irregular shoreline, running just east of present-day Ninth Avenue, was punctuated by bays and coves, streams and creeks. Above West 221st Street, at the northern edge of Projected Development Site 2, were salt meadows bordering a small bay (Fig. 3). A creek ran into this bay, and a long, narrow island lay off the bay’s southern shore. Further north, the Spuyten Duyvil Creek looped around the northern tip of Manhattan, severed from the rest of the island by the canal, to join up with the Harlem River through a narrow channel (*ER* 1895, 399, 401, Fig. 3, sections A-B, C-D, and E-F). Both these waterways are tidal inlets, the former flowing in the Hudson River, the latter into the East River. Among the sites in the proposed rezoning area assessed in this report, the eastern end of **PROJDS 4 and 33**, in the Tip of Manhattan sub-district; and in the Sherman Creek sub-district, the eastern end of **PROJDS 8 and 12**, and **POTDS I** are probably composed of landfill. **PROJDS 12** was largely submerged under the leg of a T-shaped inlet whose mouth lay between West 203rd and West 204th Streets (Fig. 6; Robinson 1885, 32). A stream once ran by the south side of **POTDS J**. (Ibid.)

The 1783 British Headquarters map depicts Sherman Creek, known as Half Kull (or Kill – Great Kill being the Harlem River), as a large, deep bay extending inland in two narrower inlets draining the long salt meadows that bisected the island. GRB (2010, 8) describes it as a former tidal creek that is currently a “mud flat exposed at low tide”. “Barrier Gate Creek”, as it is labeled on the 1860 Commissioners Map, was the longest of the streams that fed into Sherman Creek, also known as Half Kull or Kill, the Great Kull / Kill being the Harlem River. The creek

rose approximately at Fort Washington Avenue and West 180th Street, flowed north immediately west of Broadway, then turned east to run along the line of Nagle Avenue (Rubinson and Winter 1988, 4). Projected Development Site 13 bordered on the north side of the creek's salt marshes, which was narrowed and its banks straightened during the 1890s (Sanborn 1893, 249; Bromley 1897, 45).

During the 19th and early 20th centuries, the extensive farms and estates in Inwood enjoyed the fresh water supplied by the district's springs and wells. James Ruel Smith surveyed these locations in 1897-1898, and his descriptions and photographs were posthumously published, in *Springs and Wells of Manhattan and the Bronx* (1938). Several water sources were located near or adjacent to the proposed rezoning area's Tip of Manhattan sub-district:

- There was a spring on the Valentine-Seaman-Drake estate, west of Broadway and south of West 218th Street. The southern boundary of this large holding was situated between later West 215th and West 217th Streets and the Harlem Ship Canal. The spring was located about 40 feet from the canal (Smith 1938, 145).
- The old Dyckman house had its well near West 218th Street, west of Broadway in what is today Columbia University's Baker Athletic Complex and sports fields (Smith 1938, 150).³
- There was a spring 75 feet west of John Nagel's house, and about "300 feet east of the line of Ninth Avenue". The house stood by the Harlem River on the line of later West 213th Street (Smith 1938, 142).
- There was a well west of the "old graveyard", no doubt the one where the first settlers of Inwood were buried, which was situated between West 212th and West 213th Streets (Smith 1938, 142). This would place it just north of **PROJDS 5**.
- Cold Spring, the largest spring in New York City, according to Smith, was east of Inwood Hill Park, about 100 feet from the Harlem Ship Canal. Smith also mentions that there were two other springs near this one, without further details (Smith 1938, 153, 155). Cold Spring was known to the Dutch settlers as the "Spouting spring" (Bolton 1914, 3)

Although the exact sites where the water welled up may have changed over the centuries, the many sources of fresh water will have been one of the features attracting Native Americans to this area.

Immediately west of the Tip of Manhattan sub-district, west of Broadway, there is a high, steep-sided hill where the New York Presbyterian's Allen Hospital now stands. During the revolutionary war, the hospital's smaller eminence abutted, at the former northern tip of Manhattan Island, a more formidable hill crowned by the British army's Prince Charles Redoubt (Fig. 4). The two hills were connected by only a narrow neck of land between two salt marshes (Fig. 3). Two brooks ran west and east across the salt marshes between the hills, the eastern one emptying into the Harlem River (Figs. 4 and 5). In ca. 1817 these two brooks were joined to create the canal depicted on the 1888 USGS map, there labeled "Old Canal" (Fig. 3; Bolton 1934, 208). The same map depicts a narrow finger of the salt marsh extending southeastwards into **PROJDS 2**. This marshy patch, slightly differently configured, also appears on the 1851 and 1853 Dripps maps (Fig. 4), but on the 1866 Dripps map, it is depicted as a pond of considerable

³ Smith's photographs of the Valentine-Seaman-Drake spring and the one at the old Dyckman house are available online: New York Historical Society, James Reuel Smith springs and wells photograph collection, New York Heritage Digital Collections, nyhs PR062_b-13_H-054.jpg and nyhs_PR062_b-05_f-12_00_H-73.jpg respectively.

size. On the 1860 King's Bridge Section, 1874 Viele, and 1879 Bromley maps (Fig. 5), the pond is linked to the canal by a narrow creek. It is no longer shown on the 1885 Robinson map. When the Harlem Ship Canal opened in 1895, connecting the Hudson and Harlem Rivers by a broad channel, it absorbed the salt marshes, the Old Canal and the former inlet, and severed the northeastern tip of Manhattan from the rest, turning it into an island. In 1916 this island, known as Marble Hill, was connected to the mainland with landfill.

The Harlem ship canal, opened June 17, 1895, had a maximum depth of 18 feet, but only "10 ft. as yet in the dredged portions" at that date (*ER* 1895, 399).

Broadway, in the Commercial "U" sub-district where **PROJDS 28** and **29** and **POTDS AI** are located, ran through a valley, with a low hill rising to the north (Dripps 1851). **POTDS AM**, on West 207th Street, was similarly sited on the western foot of a steep-sided hill.

D. Ecology

The former marshes and the quiet waters of the bays and streams that formerly characterized the proposed rezoning area offered ideal conditions for fishing and shell-gathering. At the opening ceremonies of the Harlem Ship Canal in 1889, Mayor Strong expressed regret at the loss of his favorite fishing retreat, while the *New York Herald*, decried the destruction of "the happy hunting ground" of that "placid, lagoon-like estuary" where, at low tide, one could gather bobtail clams in abundance and fish for eels (*New York Herald* 1895, 1893, respectively). Marsh birds and game would have been plentiful here as well, attracted by the rich food sources in these wetlands as well as those found around Sherman Creek.

According to Calver's contemporary description of the area in the early 20th century:

It is not too much to say that with its stretches of probably Maizeland, its oyster beds, and fishing grounds; its watercourses –fowl and small game; its still waters for canoeing, along with the natural rock shelters, North Manhattan was unmatched in the features possessed for the accommodation of primitive life (Calver 1932).

4. PALEO-INDIAN TO CONTACT PERIODS

The beginning of the Paleo-Indian Period (ca. 12,000 to 10,000 B.P.) corresponds to the end of the Wisconsin glaciation and the decline of the Mastodon population in North America. The animals became extinct around 10,000 to 11,000 years ago, at the end of the Pleistocene Epoch, possibly as a result of over-hunting by the Clovis people, named after the large fluted spear head that is diagnostic for this period. To date, the only remains of Paleo-Indian presence in New York City have been found on Staten Island, with the exception of one Clovis spear point discovered in the Bayswater section of Queens (Ritchie 1980, 4f, xvii f; Boesch 1997, 10). Some researchers now question the idea that Paleo-Indians' main food source came from hunting Pleistocene mega fauna like mastodons, mammoths, and ground sloths, as well as caribou and musk ox, and suggest instead that they subsisted mainly from gathering plants and killing smaller game (Mann 2013). According to this theory, the archaeological remains of larger animals that the Paleo-Indians brought down with their characteristic "Clovis" spear points would have been dispatched when the animals were already dying. On the other hand, although very few Clovis era spear-throwers or *atlatls* have actually been found, recent analysis of spear point fractures indicate that the Clovis people apparently did use these small, hook-like objects, which allowed them to propel their spears with greater force and from safer distances, thereby allowing them to hunt the largest animals (Hutchings 2015).

As noted in the previous section, a mastodon tusk was found in 1891 north of **PROJDS 2**, in the area now occupied by the Harlem River. "The exact location ... [was] in the canal, about 15 feet from its northern side, and about 10 feet west of the center of Broadway". (R.P. Whitfield, quoted in Hartnage and Bishop 1922, 40). The tusk, 3 feet long with a diameter of 7.5 inches, was from the upper or socket end, and was well preserved (Ibid.) A few years earlier, in 1885, a mastodon tusk measuring approximately 15 inches long by 4 inches in diameter at its widest, had been discovered in a drainage ditch that was being cut through the peat layer on Dyckman Street near Broadway (Ibid.; Horenstein 1989, 98). This location was originally at the edge of the salt marshes. The most recent find, consisting of "the lower jaw, teeth, and limb bone fragments of a young mastodon" was made in 1925 during the excavation for a new apartment building at the northeast corner of Dyckman Street and Seaman Avenue (Horenstein 1989, 97). These remains were also embedded in the peat layer, about 21 feet below grade.

The Paleo-Indians were nomadic, and their encampments, food processing, and tool-making stations were temporary. In the northeastern United States, the ephemeral archaeological remains of this period have been primarily found in well-drained areas near streams or wetlands.

The Native Americans of the Early Archaic period, ca. 8,000 to 6,000/5,000 B.C.E.) similarly exploited "riverine, coastal marine, and lacustrine species" (Boesch 1997, 12) in environments like the swamps and mudflats that emerged after the enormous lake once covering the proposed rezoning area subsided (see Section 2B). Sites of the Archaic Period have been found on islands, at the head of coastal estuaries or by the seashore, as well as by streams in the interior. In the northeastern United States generally, mixed forests of hickory, oak, beach, elm and chestnut, augmented by the earlier conifers, provided a habitat for edible plants, white-tailed deer, wild turkey and moose, while the wetlands supported migratory wild fowl and beaver. Though still

nomadic, the Archaic Indians invented a wider range of plant processing tools such as grinding stones, mortars and pestles and, at the end of the period, during the Transitional or Terminal Archaic phase, ca. 1,500 to 1,000 B.C.E., began carving stone vessels. At the end of the period, semi-permanent villages appear.

The Woodland Period, ca. 1000 B.C.E. to 1600 C.E., ends roughly with the arrival of the first Europeans. Bows and arrows were now used in hunting in place of the earlier spears and throwing sticks, and fired pottery replaced the carved stone vessels of the Archaic Period. Smoking pipes also appeared in this period. Huge piles of discarded shells called “middens” evidence a rise in shell gathering and lengthy period spent in harvesting localities, which may also signal increasing sedentarization. The Late Woodland Period, ca. 900-1,600 C.E., saw the introduction of agriculture and with it, the creation of large, permanent or semi-permanent, palisaded settlements. However, Woodland Period groups also still traveled seasonally to their hunting or fishing camps.

The Woodland period is well represented in Inwood in rock shelters, human and dog pit burials, small camp sites and chance finds (Rubinson and Winter 1988, 11, and references). Those directly relevant to the proposed rezoning area will be described in detail below. Beyond the immediate project site area but still within a one-mile radius of it lie the best known of the Woodland Period sites in Inwood: the rock shelters in Inwood Hill Park, one of which is still extant (Finch 1909, 69; Skinner 1915, 46). Nearby is a plaque commemorating Dutch Governor General Peter Minuit’s “purchase” of Manhattan Island in 1626. At the time of the European conquest, the Algonkian-speaking Wickquaesgeck Indians, one of the Delaware groups, were camped in Upper Manhattan (Finch 1909, 73; Parker 1922, 11; Bolton 1934, 78). But by the end of the 17th century, the Europeans had purchased or appropriated all of their lands in northern Manhattan, including the blocks and lots within the proposed rezoning area. The last land purchase from the Native Americans, in Inwood, occurred in 1688, and the last title transfer was completed in 1715 (Bolton 1909, 108; Rubinson and Winter 1988, 14).

In the early 20th century the area on the eastern side of Inwood Hill, at the northern tip of Manhattan, was known as Cold Spring Hollow, after its spring. The most massive shell heaps in Inwood were also found here, but these have now disappeared (Bolton 1909, 81). The Native Americans called the locality “Sho-ra-kap-kok”, meaning the “Sitting-down place” (Bolton 1914, 3; 1934, 2, 54). According to Skinner, the name encompassed the general area where the Hudson River and Spuyten Duyvil Creek met, as well as the Cold Spring site (Ibid.; Bolton 1934, 54). The Indian’s main, stockaded stronghold was said to be located nearby, at Nipinichsen, on Inwood Hill, although its exact location has not been determined (Skinner 1915, 48). Nipinichsen overlooked Papirinimen, which Skinner identified as the Spuyten Duyvil Creek, although elsewhere it is described as the island – later called Marble Hill – formerly separated from the rest of Manhattan only by creeks and marsh, and from the mainland by the Spuyten Duyvil Creek (see Section 3C, above). According to Bolton, Pa-pir-i-nemin, “the place where the stream is shut”, or “making a false-start-place” referred to the ebbing and flowing of the tides (Bolton 1909, 77; 1934, 48).

The largest and most elaborately decorated Woodland Period ceramic jar ever unearthed in Manhattan was discovered adjacent to the proposed rezoning area, on West 214th Street, about

100 feet east of Tenth Avenue. At the time, Tenth Avenue was being graded and the pot was preserved “just safely below the plow line, in the soft earth of the field”. (Calver 1932) This, and other sites were within Bolton’s Muscoota site, which extended northwards from Sherman Creek and includes the proposed rezoning area (Bolton 1934, 134).

The following discussion of the settlements, burials, food processing stations and chance finds documented by the early 20th century archaeologists and listed in the site file records of the New York State Museum (NYSM) and the Office of Parks, Recreation and Historic Preservation (OPRHP) demonstrates that the proposed rezoning area’s archaeological sensitivity for prehistoric remains is high. Tables 2 and 3 list the results of a site file search of the NYSM and OPRHP records, of sites within, and within a one-mile radius of, the proposed rezoning area. It was not always clear, however, which site file record corresponded to one or the other of the sites discussed in the archaeological literature, and the locations in the NYSM and OPRHP files are often vague – intentionally so, to prevent looting. The sites, however, have long since been obliterated by development or, if anything remains, it is safely buried under concrete.

The latest prehistoric sites from the late Woodland or Contact Periods will have been disturbed or destroyed during the installation of the MTA’s train yard facilities or in the excavations for the Harlem Ship Canal but remains of earlier periods may be preserved at greater depths below the surface. On his Topographical Map, Bolton noted several sites and chance finds east of Ninth Avenue between the line of West 209th Street and West 215th Street, and several other sites were described in the archaeological literature. These include shell heaps, stone sinkers and hammerstones, an “Indian encampment and dog burial”, and a many individual finds including a banner stone, a stone tomahawk, a chert arrow head, and the intact ceramic vessel mentioned above (Fitch 1909, 70; Bolton 1909, 88-89; Skinner 1915, 45, 48; NYSM 4055). The site “along the river from 209th street to 211th street” had already been “plow torn” in the early 20th century (Parker 1922, 14). Shell heaps were reportedly found on the Harlem River at Cold Spring and other locations at the foot of West 219th Street, West 213th, West 210th and West 202nd Streets (NYSM 4052; Finch 1909, 66; Bolton 1909, 79, 87). One was located immediately adjacent to

PROJDS 2, at West 220th Street west of Broadway (Fitch 1909, 70; Skinner 1915, 46; Parker 1922, 14; NYSM 4052, OPRHP 061.01.000113). The site of “Indian flint chips”, noted on one of Bolton’s maps between the former pond and the riverbank, was in the approximate location of the disposition site at the eastern edge of **PROJDS 4** and **PROJDS 33**.

Bolton recorded “Indian Ceremonial Pits”, one containing a dog burial, on what is now the southern side of **POTDS E**, at the corner of West 211th Street and Tenth Avenue (Fig. 7; OPRHP 061.01.000114). This site was next to, and partly under, the “Negro Burying Ground” (see below; Bolton 1909, 84). It consisted of “several shell pockets” containing oyster shells, approximately four to five feet below grade, covered by a natural sand dune (Finch 1909, 71). The roughly circular pits measured about three feet in diameter by three feet deep (Ibid.) The dog burial, covered by a mass of oyster shells some 18 inches thick, also contained fragments of a pottery vessel (Bolton 1909, 87). Other pits contained a turtle shell, and snake skeletons (Finch 1909, 71; Bolton 1909, 87). Bolton also mentions fish bones, possibly from a breast ornament or necklace (Bolton 1909, 87; 1934, 134). Two photographs in the collection of the New York Historical Society record the excavation of the “ceremonial pits” in the early 20th century, and the flat, featureless tract of land, possibly recently graded, where they were located.⁴

Chenoweth reportedly found Indian burials on Emerson Avenue (207th Street), near Seaman Avenue and on a "knoll" near Payson Avenue, both sites within a few blocks of **PROJDS 28, PROJDS 29, PROTDS AI** and **POTDS AM** (American Scenic 1905, 43).

Calver, Bolton and Skinner conducted excavations in order to recover Inwood's Indian past, and our knowledge of the area's pre-European settlement is almost entirely based on their publications. Their work, however, and that of amateur archaeologists like Chenoweth, unfortunately also attracted the attention of what we would today call looters. As early as 1890, when archaeological investigations in Inwood had just begun, an article in the *Albany Morning Express* observed that the area was being ravaged by "relic hunters":

Mr. Chenoweth's archaeological enterprises and the publicity given to them by the *Sun* have had a disturbing effect on the little hamlet at the Kingsbridge road and Inwood Street. The whole neighborhood is overrun by relic hunters, amateur archaeologists and curious persons generally. They go there daily with trowels and baskets, and rummage about in Tedd Donovan's real estate and on the banks of the Harlem. Almost every evening a dozen or more tired-looking men with little bundles of stones, bones and pottery... On Sundays the number of the relic hunters is doubled and trebled (Prehistoric Tragedy 1890).

No doubt these activities seriously compromised the integrity of the area's archaeological remains, particularly those still traceable on the surface, most likely dating to the Woodland and Contact Periods. Fortunately, as indicated by the mastodon bone burials described above and in Section 3B, potential remains of Paleo-Indian or Archaic settlements, if present, could be located at depths that were beyond the reach of those looters' spades.

⁴ New York Historical Society, Box PR-002-261 "Sites and scenes Washington Heights Vicinity Collected by Reginald Pelham Bolton", Folder 4, #5686 and #5688.

Table II - Previously Identified Prehistoric Sites within or within a one-mile radius of the PRA¹ - Summary Data				
Site Files of the New York State Museum (NYSM)				
File #	Location	Reporter	Bibliography	Description
709	Kappock, Bronx	None		None
711	Payson Ave. & Broadway	None		None
2838	Bronx	Parker	Parker 1922	Prehistoric - Village
2839	Bronx	Parker	Parker 1922	Prehistoric - Village
4051	Inwood - Hudson River shore	Parker		Prehistoric - Village / shell midden
4052	PRA¹	Parker		Prehistoric - Shell midden destroyed by Harlem ship canal
4053	Hill near Harlem River	Claver	Parker	Prehistoric - Village / shell midden, canine burials
4054	Seaman Ave / Isham Ave.	Bolton? Skinner?	Parker	Prehistoric - Village
4055	214th Street & 10th Avenue	Bolton? Skinner?	Parker	Prehistoric - Chance find, large ceramic vessel
4056	Inwood / Spuyten Duyvil Creek	Parker	Bolton? Skinner?	Prehistoric - Trail
4066	Washington Heights - East side	Parker	Bolton? Skinner?	Prehistoric - Village / fields
4067	Washington Heights - West side	Parker	Bolton? Skinner?	Prehistoric - Shell middens
4068	Inwood - foot of Fort George Hill	Parker	Bolton? Skinner?	Prehistoric - Village
4069	PRA¹	Parker	Bolton? Skinner?	Prehistoric - ?
5320	Bronx / Spuyten Duyvil	Parker	Parker 1922	Prehistoric - Traces of occupation
5321	Bronx / Kingsbridge	Parker	Parker 1922	Prehistoric - Traces of occupation
5322	Bronx / University Heights	Parker	Parker 1922	Prehistoric - Traces of occupation - 3 sites
7250	Washington Heights - West side	Parker	Parker 1922	Prehistoric - Villages / fishing station, shell midden, destroyed by bridge
8368	Inwood Park	Parker	Parker 1922	Prehistoric - Rock shelters
8369	PRA¹	Parker	Parker 1922	Prehistoric - Shell middens
8370	Inwood - foot of Fort George Hill	Parker	Parker 1922	Prehistoric - Camp site
8371	PRA¹	Parker	Parker 1922	Prehistoric - Camp site
8375	Bronx / Spuyten Duyvil	Parker	Parker 1922	Prehistoric - Nipnichsen Village
¹ Proposed Rezoning Area				

Table III - Previously Identified Prehistoric and selected Historic Sites within or within a one-mile radius of the PRA¹ - Summary Data				
Site Files of the Office of Parks, Recreation and Historic Preservation (OPRHP)				
File # / Site	Location	Reporter	Bibliography	Description
061.01.000113	PRA¹ 220th St. & Kingsbridge Rd.	Neafie, Chenoweth 1886	Finch 1909; Skinner 1915, 186; Parker 1922, 629; Bolton 1924	Shell midden, destroyed by the canal
061.01.000114	209th-211th St. E. of 10th Ave.	Calver, Bolton & Hall	Finch 1909, 66-73; Parker 1922, 629; Skinner 1915, 187	Shell midden, dog burials
061.01.000115	212th Street & 10th Avenue	Photographs at NY Hist. Society	Finch 1909; Bolton 1924; /Evening Telegram 3-14-1903	Historic: Negro graveyard, Colonial period
061.01.000116	194th Street & Broadway	Bolton	Bolton 1909	Brook crossing camp site
061.01.000118	183rd Street & Bennett Ave.		Clinton Map	No visible evidence
061.01.000119	196-219th Sts. W. of Broadway	Calver & Bolton 1908	Bolton 1909, III:77; 1922, 224-225	Muscoota Village / Cemetery, shell midden,
061.01.000121	Inwood Park		Finch 1909; Bolton 1924; Skinner	Rock shelters
061.01.000123	Fort Tryon Park	Michael Cohn		Dongan Place shell heap
061.01.000532	Near 207th Street & Broadway	Chenoweth 1895 / Skinner 1918-19	Bolton 1909, 77; 1920, 307; Skinner 1915; 1920.	"Shorakapkok" / Cold Spring, cave & kitchen midden
061.01.000533	213th Street	Bolton & Carver 1909	Parker 1922, 630	Village - miscellaneous artifacts
061.01.000534	Isham Street & Seaman Ave.	Calver	Skinner 1915, 186; Parker 1922, 630	Village - Shell midden
005.01.00069	Bronx, Riverdale Park	V. Decarlo & N.A. Rothschild	Rothschild, N.A. & J.P. Fenton "Riverdale Park Survey", on file, NYC Dept of Cultural Affairs & Wave Hill	Shell midden
1 Proposed Rezoning Area				

5. HISTORICAL PERIODS

A. Overview: 17th to 20th centuries

Until the early 20th century, the proposed rezoning area and its environs comprised meadows, orchards, and salt marshes. Indeed, the largest fruit orchard left on Manhattan, formerly part of Jan Nagle's land, still existed at the end of the 20th century where the MTA train yards are now (Smith 1938, 142). In the 1950s, a few pear trees still remained.

In 1677, Governor Nicolls bestowed on the residents of New Haerlem, in Upper Manhattan, a tract of land extending from 74th Street and the East River, to 130th Street at the Hudson River, including the area of the proposed rezoning. This huge charter was then divided into five sections that were allotted to Vermilye, Boch, Nagel, and Dyckman, but the last two bought out the others (Bolton 1909, 107). Their tract became the Nagel farm, whose old homestead stood at the end of a country lane, later West 213th Street, near the River. During the 18th century, most of the land north of Sherman Creek and east of Broadway was owned either jointly or individually by Jan Dyckman or Jan Nagle and their descendants. Others leased the land from them. For instance, in the 19th century, Henry Post tenanted a tract on Dyckman's land within the Tip of Manhattan sub-district of the proposed rezoning area (See Section 6B1, below). The only structures anywhere east of Broadway at this time were the Nagel Homestead, and a building near the corner of later West 219th Street and Broadway, within the proposed rezoning area, but not on one of the lots assessed in this report. Otherwise, the entire area between Sherman Creek and Spuyten Duyvil was devoid of buildings through the late 19th century.

During the Revolutionary War, Washington Heights and Inwood were strongly fortified to block the British army from advancing up the Hudson. The Americans were however unable to stop the British General Sir William Howe, who defeated them at the Battle of Fort Washington on November 16, 1776, capturing Fort George, Fort Washington, and the other American positions in Inwood, which included batteries, redoubts and camps. The Hessian troops built an encampment on the Dyckman property at Broadway and West 204th Street, where the reconstructed farmhouse and a facsimile of the Hessian hut now stand. Although none of the American and later British installations existed in the area of the proposed rezoning, chance finds of the Revolutionary War were discovered nearby, on Nagel's farm. (The Nagel homestead is depicted east of the cemetery on Fig. 6).

In 1817, Curtis and John Bolton purchased from Jan Nagel a tract of land that included the marshy area formerly bordering the north side of the proposed rezoning area. This included the two brooks that flowed west and east into the Spuyten Duyvil Creek and Harlem River (Section 3C, above). The Boltons joined and widened these two waterways, creating a canal. This was known, at different times, as the Bolton, Nichols' or, most frequently, Dyckman Canal, since it passed through Dyckman's meadows (Murphy 1860, 8; Bolton 1934, 208). By 1817, a marble saw mill powered by the tides was built in the middle of the new canal, presumably soon after the new waterway opened (Bolton 1934, 208). There is a photograph, probably of this structure, labeled the "Bolton Grist Mill" at the New York Historical Society. It notes that the building was

erected in 1817, and shows that the creek at this point flowed through a deep cleft whose steep rock wall towered over the rustic building.⁵⁶

Bolton describes his ancestors as “pioneers in the marble industry”, noting that they began quarrying on the west side of the High Road (Broadway) just south of the bridge that formerly crossed the marshes (opposite the Tip of Manhattan sub-district; Bolton 1934, 208). Conklin, however, cites a marble headstone in Trinity Cemetery dated 1723 as evidence that Inwood marble was already being quarried in the first quarter of the 18th century and possibly even earlier (Conklin 1997, 460; at least three other 18th century marble tombstones in the same cemetery may have been cut from local stone). Quarries are specifically listed in the above-mentioned 1667 land grant that included and enumerated all the land, water and hunting resources contained therein. By the early 19th century, marble quarrying was certainly well established in Inwood, as John Randal observed while surveying the district for the 1811 “Commissioner’s Map”. Conklin casts doubt on Randal’s recollection of a quarry located west of Broadway between 213th to 217th Streets, but this is not far from the section that Bolton claims was quarried by his ancestors and was still visible in 1934. Moreover, the “Old Marble Quarries” are depicted in exactly this location on the 1851 Dripps map (Conklin 1997, 460-461; Bolton 1934, 208). The quarries would have been situated, then, immediately northeast of **PROJDS 5 and POTDS E**. The Dripps map also records another, smaller quarry near the canal, on the west side of Kings Bridge Road (Broadway), opposite the Tip of Manhattan sub-district.

Although it facilitated transport between the Hudson and Harlem Rivers, the opening of the Harlem Ship Canal in 1895, discussed in Sections 3B, C, and D, above, had no impact for several decades on the development of the Tip of Manhattan sub-district. Similarly, the partial filling and straightening of the banks of Sherman Creek, in the same period, had no immediate effect on the development of the Sherman Creek sub-district. Nor did the filling of the inlet immediately north of Sherman Creek, in the proposed rezoning area. On the 1885 Robinson map, a T-shaped inlet of the Harlem River is connected to a wide bay, spreading across an area along later Ninth Avenue between West 206th and West 202nd Streets. This covered **PROJDS 12** and the eastern edge of **PROJDS 8’s**, Lot 21 extending along the east side of Ninth Avenue between West 204th and West 203rd Streets. By 1893, the southern arm of the top of the “T” had been filled, the northern half much reduced in extent, and the shore at the foot of the T-shaped inlet, partly straightened, filling in the western end of **PROJDS 12**, but leaving the eastern half still submerged. By 1902, the inlet had disappeared.

In 1906, the opening of the IRT’s elevated train stations at West 207th and West 215th Streets offered a significant new incentive for developers, yet the area east of Broadway remained slow to respond. The 1916 Bromley map records only a handful of new brick buildings in the Sherman Creek sub-district, mostly next to the West 207th Street station. The few additional structures erected in the following decade were almost all garages. In 1925, most of the area’s blocks and lots were still vacant. The Tip of Manhattan sub-district was even slower to develop. Only between 1925 and 1935 do we find a change here, from vacant land to commercial uses, consisting mostly of coal yards, with one oil manufacturer, an auto wrecking yard, and car barns

⁵ New York Historical Society, Box PR-002-261 “Sites and scenes Washington Heights Vicinity Collected by Reginald Pelham Bolton”, Folder 7, no. 143.

on Broadway. On the other hand, by 1925, the Upland Wedge district and adjoining blocks west of Tenth Avenue were developing into a residential area, with a school on Block 2229, adjacent to **POTDS E** and apartment buildings on neighboring blocks, north and south.

The northern end of the shoreline within the Sherman Creek sub-district was also deeply indented by a bay that cut diagonally across **POTDS I**.

B. The “Negro Burying Ground” and the Nagel Cemetery

The “Indian Ceremonial pits”, discussed in Section 4, above, were located on West 211th Street and Ninth Avenue immediately south, and partly under a “Negro Burying Ground”, on **POTDS E**. This was discovered on March 14, 1903 during grading for Tenth Avenue (Fig. 8A; *NY Evening Telegram* 1903; *NY Times* 1903; Finch 1909, 71; Bolton n.d.).

The sensational dispatch in the *NY Evening Telegram* on March 14, 1903, disclosed, "Huge skeletons", one as much as seven feet four inches tall, in graves marked by human skulls, "with rusted iron chains and balls hanging from the larger bones..." The skeletal measurements were quoted from Mr. Hall, "connected with the American Museum of Natural History" who arrived the same day at the site. Ten skeletons were exhumed and thirty-five further grave stones were observed. In 1920, Calver saw about thirty of these "rude stones" however, only "projecting a few inches above the sod" (Calver 1920, 153). In one photograph, preserved at the New York Historical Society, a single stone may be seen, resting against the side of the knoll (Fig. 8C).⁷

On March 15th, the *New York Times* (1903) reported that approximately twelve human skeletons were discovered in the little knoll, some represented solely by long bones, and that some had been buried upright, their heads a mere three feet below surface. The article also noted the uncut stones of as yet undisturbed graves but, rather than balls-and-chains, an “old cannon ball ...found in or near one of the graves”. According to the *New York Daily Tribune* (1903), one of the stones was not blank but had a "rudely chiseled" inscription reading "March 31, 1777". This report could not be verified.

The news stories were full of inaccuracies. The day after the discovery, W.L. Calver and J.K. Finch, the latter an anthropologist from the American Museum of Natural History (AMNH), examined the site and found no upright interments, while the cannon ball had actually been discovered one hundred yards away and was not associated with the burials (Wall and Cantwell 2004, 99). Nor were the graves marked by skulls. Calver and Finch recorded: "36 graves arranged in rows, each marked by an uncut stone at its head, which was oriented to the west"; the remains of shrouds and coffins evidenced by brass pins, iron nails and fragments of decayed wood, and a child burial, wearing a bead necklace (Bolton 1924, 204; Wall and Cantwell 2004, 99).

⁷ New York Historical Society Box PR-002-261 “Sites and scenes Washington Heights Vicinity Collected by Reginald Pelham Bolton”, Folder 6, “Remains in the slave burying ground 212th Street 10th Avenue”, #37445; Site of Negro Burying Ground, and Indian dog pits, #43841; Dyckman Farmhouse Museum, Bolton scrapbook, reproduced in Thompson 2015.

The identification of the slave cemetery as such was preserved in neighborhood lore and by the existence of a "British picture" depicting "huts of the blacks" west of the cemetery (*NY Times* 1903). If this refers to J.W. DeKrafft's copy of a plan drawn in 1781, then the "Huts of the Blacks" indicated there were situated on the opposite side of the East River, not next to the cemetery.⁸ However, Ales Hrdlicka, a physical anthropologist from the AMNH, examined four skulls at the site of the "Slaves Burying Ground" and affirmed that they were indeed African (Wall and Cantwell 2004). Photographs of the human remains show one of the skeletons *in situ* in a supine extended position, and disarticulated bones and skulls piled up by the locals or gathered by the archaeologists (Figs. 8B and 8D).⁹ Sadly, most of the bones have disappeared, carried away by neighborhood residents as collectibles (*NY Times* 1903).

Local residents asserted that the slaves belonged to the Dyckman, Vermilye and Hadley families, whose own cemetery, separate from that of their slaves, was located immediately adjacent to it. The latter site, not part of this assessment, stood northeast of the slave cemetery on the east side of present-day Ninth Avenue, in the area now occupied by the MTA train yards (Finch 1909, 71; Skinner 1915, 55). Its name, "Neagle Burying Ground", was a corruption of Nagel, on whose land it was located. This cemetery is already shown on the 1851 Bolton map, but the name is difficult to read, possibly "Norgal", clearly a corruption of Neagle. The "Nagle Cemetery" still appears on the 1916 Bromley map. Smith (1938, 142) does not mention the slave cemetery, but notes that the oldest legible tombstone of the forty odd that he saw in 1898 in the "old graveyard" (the Nagel cemetery) was dated 1825. The graves, he specified, belonged to Inwood's early European settlers: members of the Vermilye, Harris, Lockwood and Smith families (Smith 1938, 142).

Because of the rising cost of slaves during the second half of the 18th century, ownership became increasingly associated with the wealthiest families, mostly merchants living and working in Lower Manhattan (Davis 172-173). The physical remains of individuals recovered from the African Burial Ground site on Duane Street in Manhattan made possible the detailed study of the urban slave population during the Colonial Period. There is no comparable source of information for the lives of those slaves who resided in rural, upper Manhattan in that period. Yet landowners in areas such as Inwood also held slaves on their farms, to perform the more arduous tasks (Shane 1991, 21). According to the 1810 Federal Census, Jacobus Dyckman had two slaves in his household, which numbered a total of fifteen individuals. Of these, the ages and sex of eleven -- presumably family members -- were recorded, while neither of these data are provided for the two other "free persons" in the household -- who may have been either free blacks or whites -- or for the two slaves (White 1991, xxvi).

As for the location of the Native American and historic cemetery relative to **POTDS E** and **PROJDS 5**, the side of the fourteen-foot high knoll that the workmen cut through (Fig. 8A and 8C) was located "about six hundred feet north of Isham-st., in the northward extension of Tenth-

⁸ The plan was published in Valentine's Manual in 1854, according to an imprint below the lithograph, a copy of which is preserved at the DFMC where it was examined by this writer (Image File #31).

⁹ See footnote 6, above.

ave." (*NY Tribune* 1903). The rest of the cemetery, and the Indian Ceremonial Pits, are shown on Bolton's 1905 map of the Village of Inwood on the east side of Block 2229, in the area of **PROJDS E** (Fig. 7). There he also noted that the "last two" burials on the eastern edge of the Negro Burying Ground, which extended over 212th Street, were "in coffins". These burials are indicated along the north line of the planned street, but the graveyard was not fenced, and we cannot definitely rule out the possibility that further unmarked graves, or graves whose headstones had disappeared by Bolton's day, might have existed north of West 212th Street, on **PROJDS 5**. Another map attributed to Bolton, which must postdate 1904 since the elevated railroad is shown, does not indicate the Negro Burying Ground, only the "Old Colonial Graveyard".¹⁰ Although the American Scenic and Historic Preservation Society was anxious to safeguard the site, there being no definite plans for preservation, its fate was "obliteration" (*NY Tribune* 1903)

¹⁰ This map was made for David Stewart Real Estate and Loans. A notation at the bottom of the map records a deed of I. Dyckman, dated 1808, which "recites that it [the burial ground] was used from time immemorial". The LPC's Archaeological Survey Record, notes an earlier deed, made in 1806 for William Nagel, on whose farm the cemetery was located. According to that document, the burial ground "has been made use for that purpose for ages past for sole use as a burial ground for the benefit of my family connections, relations, and friends." This record was made available by courtesy of Daniel Pagano, LPC.

6. LOT HISTORIES

A. Notes on the maps

Directions have been simplified to north, south, east, or west, instead of northeast, northwest, etc., except in some instances of multi-sided lots. Text in quotes was copied exactly as it appears on the maps.

The 1879 Bromley map does not directly indicate the area of salt marsh bordering the old canal and the bay at its mouth, but does show, with a dotted line, what is presumably the edge of the dry land. In the following summary, the area outside the dotted line, which is probably salt marsh, is however simply noted as “vacant”. The same applies for Lots 852, 857 and 866, on the block bounded by West 220th and West 221st Streets and Broadway, which were near a small outlet of the creek that formed a pond in the middle of this block. Portions of these lots might also have been marshy.

B. Summary Data and Assessment of Archaeological Sensitivity

1. Tip of Manhattan sub-district

BLOCK 2214 - PROJDS 1

Lot 24

Address: 400 West 219th Street.
Dimensions: 100 X 200 ft.
Current Use: Parking lot; small one-story automotive-related building in the center of the lot.

Historic maps:

1844-45 USGS:	Dry land, undeveloped.
1782 British HQ:	Dry land, undeveloped.
1851 Dripps:	Probably dry land, undeveloped – this part of the map is missing.
1879 Bromley:	Vacant, undeveloped.
1885 Robinson:	Ditto, land of Henry Post.
1893 Sanborn:	Vacant.
1897 Bromley:	Ditto, land of Henry Post.
1900 Sanborn:	Small one story building on the east side of the lot.
1902 Bromley:	Land of Henry Post, frame built stable along the east lot line, north side.
1913 Sanborn:	Vacant.
1916 Bromley:	Ditto.
1925 Bromley:	Ditto.
1935 Sanborn:	Small one-story story brick store in the northwest corner of the lot.

1951 Sanborn:	Two wings of the “Special Formula Chemical Co. overlap slightly more than the northwest third of the lot, the rest is vacant.
1969 Sanborn:	Same footprint, but the wings now occupied by Auto Rep. and Auto Body Rep shops; the main building marked “Candy Mfg”.
1977 Sanborn:	Ditto.
1988 Sanborn:	Ditto.

Discussion: Between 1935 and 1951 the Special Formula Chemical Co. was built on the adjacent lot, but only the northwestern third of this lot had buildings on it, consisting of two one-story wings of the Chemical Co., without basements. These were demolished after 1988.

Conclusion: This site is considered archaeologically sensitive for prehistoric remains.

BLOCK 2197 - PROJDS 2

Lot 67

Address:	4135 Ninth Avenue.
Dimensions:	108.6 ft. S/184.62 ft. N X 60.94 ft. W, 9.37 X 3.5 ft. extension SE corner.
Current Use:	Parking/vehicle storage.
Old Lot number:	71
<u>Historic maps:</u>	
1783 British HQ:	Salt marsh.
1844-45 USGS:	Ditto.
1851 Dripps:	Ditto.
1879 Bromley:	Vacant.
1885 Robinson:	Ditto, land of Henry Post.
1893 Sanborn:	Vacant.
1897 Bromley:	Ditto, land of Henry Post.
1900 Sanborn:	Vacant.
1902 Bromley:	Land of Henry Post, ditto.
1913 Sanborn:	Small building at shoreline, otherwise vacant. Elevation above msl 8 ft.
1916 Bromley:	Vacant.
1925 Bromley:	Ditto.
1935 Sanborn:	Part of the “Kenlon Coal Yard” “Coal Pocket” and a small building cover part of the lot.
1951 Sanborn:	Oil tanks of Socony Vacuum Oil Co Inc on the SW arm of this lot, “Kenlon Oil Co.” on the rest, mostly vacant, small one-story office building and part of a larger, one-story building on part of the lot’s north side.
1968 Sanborn:	Ditto, but now “Public Service Oil Co., Inc., Oil Tanks on SW arm of lot with notation “Oil Tanks 80000 Gals Each”
1969 Sanborn:	Ditto, but now “River Oil Co.”
1977 Sanborn:	Ditto.

1988 Sanborn: Ditto, but now “Public Service Oil Co., Inc.

Discussion: Between 1925 and 1935 this lot became part of a coal yard. Aside from the oil tank on the southwest arm of this backwards L-shaped lot, which may still be buried there, the remainder has had only small, one story buildings on it.

Conclusion: This site is considered archaeologically sensitive for prehistoric remains.

Lot 71

Address: Ninth Avenue.

Dimensions: 79.4 W X 184.62 S X 204.69 E X 100.37 N; 17.48 ft. jog at NW corner.

Current Use: Parking/vehicle storage.

Historic maps:

1782 British HQ: Salt marsh.

1844-45 USGS: Ditto.

1851 Dripps: Ditto.

1879 Bromley: Vacant.

1885 Robinson: Ditto, land of Henry Post.

1893 Sanborn: Vacant.

1897 Bromley: Ditto, land of Henry Post.

1900 Sanborn: Vacant.

1902 Bromley: Land of Henry Post, ditto.

1913 Sanborn: Ash hoist, otherwise vacant.

1916 Bromley: Vacant.

1925 Bromley: Ditto.

1935 Sanborn: Ditto. Probably part of one of the adjacent coal yards.

1951 Sanborn: “Bradley-Mahony Coal Corp”, mostly vacant, small one-story office building on Ninth Avenue, Coal pockets and kilns in the middle of the lot.

1969 Sanborn: Vacant.

1977 Sanborn: Park’g, small one-story office on east side of Ninth Avenue.

1988 Sanborn: Park’g.

Discussion: This lot because part of a coal yard in the early 20th century, but aside from one small one-story office building, it has never been developed.

Conclusion: This site is considered archaeologically sensitive for prehistoric remains.

Lot 74

Address: Ninth Avenue.

Dimensions: 10 X 100.35 ft.

Current Use: Parking.

Historic maps:

1782 British HQ:	Salt marsh.
1844-45 USGS:	Ditto.
1851 Dripps:	Ditto.
1879 Bromley:	Vacant or submerged.
1885 Robinson:	Ditto, land of Henry Post.
1893 Sanborn:	Vacant.
1897 Bromley:	Ditto, land of Henry Post.
1900 Sanborn:	Vacant.
1902 Bromley:	Land of Henry Post, ditto.
1913 Sanborn:	Vacant.
1916 Bromley:	Vacant.
1925 Bromley:	Ditto.
1935 Sanborn:	Ditto. Probably part of the "Roden Coal Yard".
1951 Sanborn:	Part of the Bradley-Mahony Coal Corp. yard on lot 71, coal pocket probably overlaps this lot.
1968 Sanborn:	Vacant.
1969 Sanborn:	Ditto.
1977 Sanborn:	Ditto.
1988 Sanborn:	Ditto.

Discussion: Between 1925 and 1935, this lot became part of a coal yard, but it was never developed.

Conclusion: This site is considered archaeologically sensitive for prehistoric remains.

Lot 174

Address:	Ninth Avenue.
Dimensions:	25.8 ft. W X 138.83 ft. N X 121.72 ft. E X 100.37 ft. S.
Current Use:	Parking/vehicle storage.
Old Lot number:	74
<u>Historic maps:</u>	
1782 British HQ:	Salt marsh.
1844-45 USGS:	Ditto.
1851 Dripps:	Ditto.
1879 Bromley:	Vacant or submerged.
1885 Robinson:	Ditto, land of Henry Post.
1893 Sanborn:	Vacant.
1897 Bromley:	Ditto, land of Henry Post.
1900 Sanborn:	Vacant.
1902 Bromley:	Land of Henry Post, ditto.
1913 Sanborn:	Vacant.
1916 Bromley:	Ditto.
1925 Bromley:	Ditto.
1935 Sanborn:	"Roden Coal Yard", coal pocket, two small one-story building.

1951 Sanborn:	Ditto, but only one, one-story office building possibly overlapping the north end of the lot.
1968 Sanborn:	Vacant.
1969 Sanborn:	Ditto.
1977 Sanborn:	Ditto.
1988 Sanborn:	Ditto.

Discussion: Between 1925 and 1935, this lot became part of a coal yard, but aside from a small, one-story office building, it was never developed.

Conclusion: This site is considered archaeologically sensitive for prehistoric remains.

BLOCK 2197 -part of PROJDS 4 and 33

Lot 47

Address:	4095 Ninth Avenue.
Dimensions:	517.87 ft. W X 132 ft. S X 108.6 N X shoreline on east side.
Current Use:	Parking/vehicle storage.
<u>Historic maps:</u>	
1782 British HQ:	Salt marsh or beach.
1844-45 USGS:	Ditto.
1851 Dripps:	Ditto.
1879 Bromley:	Vacant.
1885 Robinson:	Ditto, land of Henry Post.
1893 Sanborn:	Vacant.
1897 Bromley:	Ditto, land of Henry Post.
1900 Sanborn:	Vacant.
1902 Bromley:	Land of Henry Post, ditto.
1913 Sanborn:	Small, one story brick store house with basement, otherwise vacant.
1916 Bromley:	Vacant.
1925 Bromley:	Ditto.
1935 Sanborn:	“Lotus Oil & Distribution Corp’n”, large building marked “Volatile Fluids Mound” covering the center of the lot, a small office building and second, smaller buildings on the west side of the lot.
1951 Sanborn:	Ditto, but now “Socony Vacuum Oil Co Inc”.
1969 Sanborn:	Ditto, but now “River Oil Co.”, notation: “869,000 Gal Fuel Oil Tk Buried Earth Covered”
1977 Sanborn:	Ditto.
1988 Sanborn:	Ditto, but now “Belcher Oil Co.”

Discussion: Between 1925 and 1935, a large building for volatile fluids, a small office and other small, unmarked one-story buildings were erected on the lot. Between 1951 and 1969, a large fuel oil tank was installed underground. The fuel oil tank, if still

present, would need to be removed and any remaining hazardous conditions on the site would require mitigation before archaeological investigation could proceed.

*Conclusion: Lot 47, encompassing **PROJDS 33** and **PROJDS 4**, is sensitive in part for prehistoric remains.*

BLOCK 2215 - PROJ D 2

Lot 842

Address: 5140 Broadway.
Dimensions: 247.18 ft. W X 37.51 ft. N X 225.67 ft. E X 100.25 ft. S.
Current Use: Parking.
Historic maps:
1782 British HQ: Salt marsh.
1844-45 USGS: Ditto.
1851 Dripps: Dry land, undeveloped.
1879 Bromley: Ditto.
1885 Robinson: Ditto, land of Henry Post.
1893 Sanborn: Vacant.
1897 Bromley: Ditto, land of Henry Post.
1900 Sanborn: Vacant.
1902 Bromley: Land of Henry Post's, ditto.
1913 Sanborn: Vacant.
1916 Bromley: Ditto.
1925 Bromley: Ditto.
1935 Sanborn: Ditto.
1951 Sanborn: Ditto.
1969 Sanborn: "Fill'g Sta" (Filling Station), one story building along the east lot line, "Park'g" in the northern half of the lot.
1977 Sanborn: Ditto, but not labeled filling station.
1988 Sanborn: Ditto.

Discussion: Between 1951 and 1969 a filling station was installed on the lot together with a parking garage. These were removed after 1988.

Conclusion: This site is considered archaeologically sensitive for prehistoric remains.

Lot 852

Address: 4168 Ninth Avenue.
Dimensions: 125.67 ft. W X 111.25 ft. N X 77.17 ft. E X 100 ft. S.
Current Use: Parking.
Historic maps:

1782 British HQ:	Salt marsh.
1844-45 USGS:	Ditto. Vacant.
1851 Dripps:	Dry land and salt marsh.
1879 Bromley:	Vacant.
1885 Robinson:	Vacant, land of Henry Post.
1893 Sanborn:	Vacant.
1897 Bromley:	Vacant, land of Henry Post.
1900 Sanborn:	Vacant.
1902 Bromley:	Land of Henry Post, ditto.
1913 Sanborn:	Vacant.
1916 Bromley:	Ditto.
1925 Bromley:	Ditto.
1935 Sanborn:	“Auto Wrecking Yard”, one story, L-shaped “Parts” shed along the north side and part of the east side of the lot, one story “Auto Parts” shed and one story office on Ninth Avenue.
1951 Sanborn:	Ditto, one-story buildings or sheds around most of the lot’s perimeter.
1969 Sanborn:	One story “Auto Rep” shop NE side of lot, Auto Wrecking Yard, part of one-story Auto Parts shed.
1977 Sanborn:	Ditto.
1988 Sanborn:	Auto Rep shop NE side of lot, Auto Wrecking Yard covers the rest.

Discussion: Between 1925 and 1935, this lot became part of an auto wrecking yard, but aside from an auto parts shed no buildings have been erected on this lot. The structures and the wrecking yard were removed after 1988.

Conclusion: This site is considered archaeologically sensitive for prehistoric remains.

Lot 857

Address:	Ninth Avenue.
Dimensions	51.89 ft. W X 103.68 ft. N X 83.09 S.
Current Use:	Parking.
<u>Historic maps:</u>	
1782 British HQ:	Salt marsh.
1844-45 USGS:	Ditto.
1851 Dripps:	Dry land and salt marsh.
1879 Bromley:	Ditto.
1885 Robinson:	Vacant, land of Henry Post.
1893 Sanborn:	Vacant.
1897 Bromley:	Vacant, land of Henry Post.
1900 Sanborn:	Vacant.
1902 Bromley:	Land of Henry Post, ditto.
1913 Sanborn:	Vacant.
1916 Bromley:	Ditto.
1925 Bromley:	Ditto.

1935 Sanborn:	Ditto.
1951 Sanborn:	One-story "Auto Parts" building
1969 Sanborn:	Ditto.
1977 Sanborn:	Ditto.
1988 Sanborn:	Vacant.

Discussion: Between 1935 and 1951, a one-story auto parts building was erected on the lot, but apart from this construction, the lot has not been developed. The auto parts building was removed between 1977 and 1988.

Conclusion: This site is considered archaeologically sensitive for prehistoric remains.

Lot 863

Address:	4116 West 220th Street.
Dimensions:	50 ft. N/S X 100 ft. E/W.
Current Use:	Parking.

Historic maps:

1782 British HQ:	Salt marsh.
1844-45 USGS:	Ditto.
1851 Dripps:	Vacant dry land and salt marsh.
1879 Bromley:	Vacant, land of Henry Post.
1885 Robinson:	Ditto.
1893 Sanborn:	Vacant.
1897 Bromley:	Ditto.
1900 Sanborn:	Ditto.
1902 Bromley:	Ditto.
1913 Sanborn:	One story shed "Storage of old machinery" overlaps the southern edge of the lot.
1916 Bromley:	Ditto.
1925 Bromley:	Ditto.
1935 Sanborn:	Vacant.
1951 Sanborn:	Very small square, one-story "SHED" in the southeast corner of the lot.
1969 Sanborn:	Ditto.
1977 Sanborn:	Ditto.
1988 Sanborn:	Vacant.

Discussion: Except for a one-story storage shed overlapping the edge of the lot, this lot has never been developed.

Conclusion: This site is considered archaeologically sensitive for prehistoric remains.

Lot 866

Address: 409 West 220th Street.
Dimensions: Three arms north, west and east: 77.17 ft. NW X 100 ft. N X 100 ft. W X 150 ft. S X 50 ft. SE X 100 ft. S X 57.36 ft. NE X 83.09 ft. N X 51.89 ft. NE X 29.3 ft. N
Current Use: Parking.
Historic maps:
1782 British HQ: Salt marsh.
1844-45 USGS: Ditto.
1851 Dripps: Dry land and salt marsh.
1879 Bromley: Ditto.
1885 Robinson: Vacant, land of Henry Post.
1893 Sanborn: Vacant.
1897 Bromley: Vacant, land of Henry Post.
1900 Sanborn: Vacant.
1902 Bromley: Land of Henry Post, ditto.
1913 Sanborn: Vacant.
1916 Bromley: Ditto.
1925 Bromley: Ditto.
1935 Sanborn: Ditto, possibly incorporating part of the yard and “Parts Shed” of lot 852.
1951 Sanborn: “Auto Junk” yard, one story “Auto Rep.” building, concrete floor, cinder block, on the west side of the block, continuation of the one-story “Auto Parts” shed on lot 857.
1969 Sanborn: Ditto.
1977 Sanborn: Ditto.
1988 Sanborn: “Auto Junk”, no buildings.

Discussion: Between 1935 and 1951, an auto repair building was erected on the west side of the lot. Aside from this structure, the lot has not been built upon.

Conclusion: This site is considered archaeologically sensitive for prehistoric remains.

Lot 877

Address: Broadway.
Dimensions: 100.55 ft. W X 300.14 ft. N X 100.45 ft. E X 210.05 ft. S.
Current Use: Parking.
Old Lot number: 874.
Historic maps:
1782 British HQ: Salt marsh.
1844-45 USGS: Ditto.
1851 Dripps: Ditto.
1879 Bromley: Vacant.
1885 Robinson: Ditto, land of Henry Post.

1893 Sanborn:	Ditto.
1897 Bromley:	Ditto, land of Henry Post.
1900 Sanborn:	Vacant.
1902 Bromley:	Land of Henry Post, long, rectangular frame building.
1913 Sanborn:	Vacant.
1916 Bromley:	Ditto.
1925 Bromley:	Ditto.
1935 Sanborn:	Sun-Ray Coal Co., small, one-story office, storage and auto shed buildings.
1951 Sanborn:	Mostly vacant, small, one-story office building on Ninth Avenue near the west end of the lot.
1969 Sanborn:	Ditto.
1977 Sanborn:	Ditto.
1988 Sanborn:	Ditto.

Discussion: Aside from a few small one-story offices, storage buildings and sheds erected after 1925, this lot has remained largely vacant. All these structures were removed after 1988.

Conclusion: This site is considered archaeologically sensitive for prehistoric remains.

Lot 885

Address:	Ninth Avenue.
Dimensions:	114.2 ft. W X 100.45 N X 37.0 ft. E X 138.83 ft. S.
Current Use:	Parking.
<u>Historic maps:</u>	
1782 British HQ:	Salt marsh.
1844-45 USGS:	Ditto.
1851 Dripps:	Ditto or submerged.
1879 Bromley:	Vacant or submerged.
1885 Robinson:	Ditto, land of Henry Post.
1893 Sanborn:	Ditto.
1897 Bromley:	Ditto, land of Henry Post.
1900 Sanborn:	Vacant.
1902 Bromley:	Henry Post's land, ditto.
1913 Sanborn:	Vacant
1916 Bromley:	Ditto.
1925 Bromley:	Ditto.
1935 Sanborn:	Small, one-story office building, possibly part of the one-story auto shed on lot 877.
1951 Sanborn:	"Roden Coal Yard", one-story office building on 9 th Avenue.
1969 Sanborn:	Vacant.
1977 Sanborn:	Ditto.
1988 Sanborn:	Ditto.

Discussion: Aside from the small, one-story office building of the coal yard, this lot has not been built upon. The coal yard and office were removed between 1951 and 1969.

Conclusion: This site is considered archaeologically sensitive for prehistoric remains.

BLOCK 2215 – POTDS B

Lot 801

Address: 5122 Broadway.
Dimensions: 119.46 ft. W X 96.09 ft. X 99.92 ft. E; north side irregular, approximately 54 ft.
Current Use: Parking.
Old block/lot: Block 2214, Lot 71; Block 2215, Lot 21 (Sanborn 1900).
Historic maps:
1782 British HQ: Salt marsh.
1844-45 USGS: Ditto.
1851 Dripps: Dry land, undeveloped.
1879 Bromley: Land of M. Dyckman, small building near the SW corner of the lot.
1885 Robinson: Land of Henry Post, ditto.
1893 Sanborn: Vacant.
1897 Bromley: Land of Henry Post, frame building in the center of the lot.
1900 Sanborn: Two small one story buildings near the southwest corner of the lot.
1902 Bromley: Henry Post's land, one one-story frame building near the southwest corner of the lot.
1913 Sanborn: Vacant.
1916 Bromley: Frame building with one 2-story, and one 1-story wing near the SW corner of the block.
1925 Bromley: Two small, one story buildings divided into three sections - car sheds.
1935 Sanborn: The 2- and 1-story dwelling, as on the 1916 Bromley still stands at an angle to the car sheds, which are parallel to the lot line – not shown on the 1925 Bromley.
1951 Sanborn: Same; the dwelling has an additional one-story wing on the north side.
1969 Sanborn: Vacant and Park'g.
1977 Sanborn: Ditto.
1988 Sanborn: "Truck Park'g"; two long 1-story buildings, one along the south side of the lot, beginning in the west corner, the other along the east lot line.

Discussion: The frame building depicted on this lot on the 1897 Bromley map, before the streets were opened, was actually on the adjacent block, south of West 219th Street, as shown on later maps. A dwelling was however erected on this site ca. 1914/1915. It stood at least as late as 1951. Since there was no city water or sewage in these decades, the dwelling would have been equipped with a cistern and privy. These installations will not have been

impacted by later construction, as the only buildings ever erected on the lot were one-story car barns.

Conclusion: This lot is considered sensitive for both historic and prehistoric remains.

2. Upland wedge sub-district

BLOCK 2232 – POTDS G

Lot 1

Address: 5044 Broadway
Dimensions: 81.5 ft. X 111.15 ft.
Current Use: Parking
Old block/lot: Lots 1, 2 and 3, 1902 Bromley; Lots 1 & 3, 1916 Bromley, 1925 Bromley; Lots 26, 27, 28, 1897 Bromley; Lots 23, 24, 25, 26, 27, 28, 1879 and 1885 Bromley.

Historic maps:

1782 British HQ: Vacant.
1844-45 USGS: Ditto.
1851 Dripps: Ditto.
1879 Bromley: Ditto.
1885 Robinson: Ditto.
1893 Sanborn: Ditto.
1897 Bromley: Ditto.
1900 Sanborn: Ditto.
1902 Bromley: Ditto.
1913 Sanborn: Ditto.
1916 Bromley: Ditto.
1925 Bromley: Lot 1 vacant; one story brick building, lot 3; each lot ca. 40 ft. wide.
1935 Sanborn: Ditto.
1951 Sanborn: Used Auto [illegible] on Lot 1 - vacant; "Carpet Cleaning" "conc fl" (concrete floor), on Lot 3.
1969 Sanborn: Parking on Lot 1 - vacant, Funeral Home on Lot 3.
1977 Sanborn: Ditto.
1988 Sanborn: Ditto.

Discussion: The southeastern half of this site has never been developed and while the northeastern half had a one-story building on it, there was no basement and therefore burials could still be preserved below the floor.

Conclusion: This site is considered archaeologically sensitive for prehistoric remains.

Lot 5

Address: 5050 Broadway
Dimensions: 27.17 ft. W X 108.08 ft. S X 25 ft. E X 97.57 ft. N
Current Use: Parking
Old block/lot: Lot 40, 1885 Bromley; Block 69G, Lot 40, 1897 Bromley; Lot 5 includes Lot 4, 1900 Sanborn.

Historic maps:

1782 British HQ: Vacant.
1844-45 USGS: Ditto.
1851 Dripps: Ditto.
1879 Bromley: Ditto.
1885 Robinson: Ditto.
1893 Sanborn: Ditto.
1897 Bromley: Ditto.
1900 Sanborn: Ditto.
1902 Bromley: Ditto.
1913 Sanborn: Ditto.
1916 Bromley: Ditto.
1925 Bromley: Ditto.
1935 Sanborn: Ditto.
1951 Sanborn: Ditto.
1968 Sanborn: Ditto.
1969 Sanborn: Ditto.
1977 Sanborn: Ditto.
1988 Sanborn: Parking.

Discussion: There is no record of any building on this lot.

Conclusion: This site is considered archaeologically sensitive for prehistoric remains.

Lot 13

Address: Tenth Avenue
Dimensions: 25 ft. X 100 ft.
Current Use: Vacant – parking.
Old block/lot: Lot 32, 1885 Robinson, 1897 Bromley.

Historic maps:

1782 British HQ: Vacant, possibly on the side of a slight rise.
1844-45 USGS: Vacant.
1851 Dripps: Ditto.
1879 Bromley: Ditto.
1885 Robinson: Ditto.
1893 Sanborn: Ditto.
1897 Bromley: Ditto.

1900 Sanborn:	Ditto.
1902 Bromley:	Ditto.
1913 Sanborn:	Ditto.
1916 Bromley:	Ditto.
1925 Bromley:	Ditto.
1935 Sanborn:	Ditto.
1951 Sanborn:	Ditto.
1968 Sanborn:	Ditto.
1977 Sanborn:	Ditto.
1988 Sanborn:	Ditto.

Discussion: There is no record of any building on this lot.

Conclusion: This site is considered archaeologically sensitive for prehistoric remains.

BLOCK 2230 – PROJDS 5

Lot 21

Address:	3976 Tenth Avenue
Dimensions:	100 ft. X 154.1 ft,
Current Use:	Edison's Park Fast public parking lot
Old block/lot:	Lots 29 to 35, 1879 Bromley, 1885 Robinson; Block 69D, Lots 29 to 32, 1897 Bromley; Block 2230, Lot 19, 1902 Bromley; Lots 23 and 21, 1916 Bromley, 1925 Bromley.

Historic maps:

1782 British HQ:	Shows a knoll west of the Nagel homestead
1844-45 USGS:	Vacant.
1851 Dripps:	Vacant, next to the old road to the Nagel homestead
1879 Bromley:	Vacant.
1885 Robinson:	Ditto.
1893 Sanborn:	Ditto.
1897 Bromley:	Ditto.
1900 Sanborn:	Ditto.
1902 Bromley:	Ditto.
1913 Sanborn:	Ditto.
1916 Bromley:	Ditto.
1925 Bromley:	Ditto.
1935 Sanborn:	Ditto.
1951 Sanborn:	Ditto.
1968 Sanborn:	Ditto.
1977 Sanborn:	Ditto.
1988 Sanborn:	Ditto.

Discussion: This lot has never been developed. Bolton's map shows the "Negro Slaves Graves" extending into West 212th Street up to the southern edge of this lot, but as the streets were not yet laid out, the exact location of these graves is difficult to determine. Additionally, there may be further, previously undiscovered graves north of these, on Lot 5.

Conclusion: This lot is sensitive for both prehistoric and historic remains.

BLOCK 2229 – POTDS E

Lot 25

Address: 3966 Tenth Avenue
Dimensions: 99.92 ft. X 100 ft.
Current Use: **Automotive service-related uses**
Old block/lot: Lots 33-36, 1879 Bromley, 1885 Robinson; Block 69D, Lots 33 to 36, 1897 Bromley; part of Lot 5, 1902 Bromley; part of Lot 12, 1916

Bromley.

Historic maps:

1782 British HQ: Possibly on the slope of a knoll.
1844-45 USGS: Vacant.
1851 Dripps:
1879 Bromley: Vacant.
1885 Robinson: Ditto.
1893 Sanborn: Ditto.
1897 Bromley: Ditto.
1900 Sanborn: Ditto.
1902 Bromley: Ditto.
1913 Sanborn: Ditto.
1916 Bromley: Ditto.
1925 Bromley: Ditto (Lot 25).
1935 Sanborn: Ditto.
1951 Sanborn: "Parking".
1968 Sanborn: Small one story store, otherwise "Parking".
1977 Sanborn: Ditto.
1988 Sanborn: Ditto.

Discussion: The insurance maps do not record the "Negro Burying Ground", but this is known to have been located on this lot from Bolton's maps and publications, as well as from newspaper articles. In addition, remains of an "Indian Ceremonial site" were found below some of the graves of the African burials.

Conclusion: This lot is sensitive for both prehistoric and historic remains

Lot 32

Address: 3950 Tenth Avenue
Dimensions: 99.92 ft. X 100 ft.
Current Use: Single-story commercial buildings occupied by restaurants and retail uses
Old block/lot: Lots 29 to 32, 1879 Bromley, 1885 Robinson; Block 69D, Lots 29 to 32, 1897 Bromley, 1902 Bromley; Lots 29 to 32, 1916 Bromley, 1925 Bromley.

Historic maps:

1782 British HQ: Possibly on the slope of a knoll.
1844-45 USGS: Vacant.
1851 Dripps: Vacant, just north of a brook.
1879 Bromley: Vacant.
1885 Robinson: Ditto.
1893 Sanborn: Ditto.
1897 Bromley: Ditto.
1900 Sanborn: Ditto.
1902 Bromley: Ditto.
1913 Sanborn: Ditto.
1916 Bromley: Ditto.
1925 Bromley: Ditto.
1935 Sanborn: Stores on three-quarters of the lot.
1951 Sanborn: Entire lot covered by a building
1968 Sanborn: Ditto.
1977 Sanborn: Ditto.
1988 Sanborn: Ditto.

Discussion: The insurance maps do not record the “Negro Burying Ground”, but this is known from Bolton’s maps and publications, as well as from newspaper articles to have been located on this lot. In addition, prehistoric remains were found below some of the graves of the African burials on the western side of that cemetery.

Conclusion: This lot is sensitive for prehistoric as well as historic remains.

BLOCK 2228 – POTDS J

Lot 32

Address: 500 West 211th Street.
Dimensions: 92.02 ft. N X 59.59 W X 59.5 ft. SW X 75.43 ft. S X 31.87 ft. E.
Current Use: Quest Livery Leasing parking lot.
Old block/lot: Lot 600, 1879 Bromley, 1885 Robinson; Block 15, Lot 600, 1897 Bromley.

Historic maps:

1782 British HQ:	Vacant.
1844-45 USGS:	Ditto.
1851 Dripps:	Ditto.
1879 Bromley:	Ditto.
1885 Robinson:	Ditto.
1893 Sanborn:	Ditto.
1897 Bromley:	Ditto.
1900 Sanborn:	Ditto.
1902 Bromley:	Ditto (Lot 32).
1913 Sanborn:	Ditto.
1916 Bromley:	Ditto.
1925 Bromley:	Ditto.
1935 Sanborn:	Ditto.
1951 Sanborn:	Ditto.
1968 Sanborn:	Ditto.
1977 Sanborn:	Ditto.
1988 Sanborn:	“Used Auto Sales”, two sheds on the western sides of the lot.

Discussion: There is no record of any building on this lot.

Conclusion: This site is considered archaeologically sensitive for prehistoric remains.

3. Sherman Creek Sub-district

BLOCK 2188 – PROJDS 6

Lot 10

Address:	West 207 th Street
Dimensions:	169.83 ft. W X 175.98 ft. S X 191.10 ft. E X 388.12 ft. NE X 20 ft. NW X 190 ft. S.
Old block/lot: lots	Block 20, Lots 734, 735, rest un-numbered, 1885 Robinson; Block 2188, 727 to 740, 1897 Bromley; Block 2188, Lot 5 (part), 9, 28, and 29, 1902 Bromley; Block 2188, Lots 9, 28 and 29, 1916 Bromley, 1925 Bromley.
<u>Historic maps:</u>	
1782 British HQ:	Salt marsh.
1851 Dripps:	Eastern end of the lot, at the foot of a low hill, is marshy, with the mouth of a creek at the NE corner, which is submerged, and a small pond on the south side of the lot, fed by a stream running SW to NE, approximately across the middle of the lot.
1879 Bromley:	Land of Dennis Post, NE quarter of the block submerged, otherwise vacant.
1885 Robinson:	Approximately half submerged, the rest vacant.

1893 Sanborn:	Ditto.
1897 Bromley:	Ditto.
1900 Sanborn:	Ditto.
1902 Bromley:	Ditto.
1913 Sanborn:	Ditto.
1916 Bromley:	Ditto.
1925 Bromley:	Ditto.
1935 Sanborn:	Five “House Boats” one story and 3 small, one-story structures, “Auto Wrecking Yard” on West 208 th Street near Ninth Avenue, otherwise vacant.
1951 Sanborn:	Ditto, plus a few extra stalls.
1968 Sanborn:	Vacant.
1977 Sanborn:	Ditto.
1988 Sanborn:	“Park’g” and “Dump”, vacant.

Discussion: There is no record of any building on this lot beyond a few small, one-story structures.

Conclusion: This site is considered archaeologically sensitive for prehistoric remains.

BLOCK 2203 – PROJDS 7

Lot 9

Address:	430 West 207 th Street.
Dimensions:	199.1 ft. X 300 ft.
Current Use:	Single-story commercial building accommodating an Associated Supermarket and accessory parking lot.
Old block/lot:	Block 17, Lots 625-636 and 645 to 656, 1885 Robinson; Block 2203, Lots 625 to 636 and 645 to 656, 1897 Bromley; Block 2203, Lots 9-20, 29, 32, and 35 to 38, 1902 Bromley, 1916 Bromley, 1925 Bromley.

Historic maps:

1782 British HQ:	Salt marsh.
1851 Dripps:	Vacant, on the edge and atop a slight rise.
1879 Bromley:	Partly land of Dennis Post, vacant.
1885 Robinson:	Vacant.
1893 Sanborn:	Ditto.
1897 Bromley:	Ditto.
1900 Sanborn:	Ditto.
1902 Bromley:	Ditto.
1913 Sanborn:	Ditto.
1916 Bromley:	Ditto.
1925 Bromley:	Ditto.
1935 Sanborn:	Swimming pool and “Miramar Baths” three stories with basement, built 1926.

1951 Sanborn:	Ditto.
1968 Sanborn:	Parking
1977 Sanborn:	Ditto.
1988 Sanborn:	One story structure with ramp on northeast side, parking on roof.

Discussion: It is likely that the swimming pool in the basement will have negatively impacted potential archaeological remains.

Conclusion: This lot is not considered archaeologically sensitive.

Lot 21

Address:	408 West 207 th Street.
Dimensions:	199.1 ft. X 100 ft.
Current Use:	Accessory parking lot.
Old block/lot:	Block 17, Lots 637-644, 1885 Robinson; Block 2203, Lots 637 to 644,
1897	Bromley.
<u>Historic maps:</u>	
1782 British HQ:	Salt marsh.
1851 Dripps:	Vacant, on a slight rise. 1879
Bromley:	Land of Dennis Post, vacant.
1885 Robinson:	Vacant.
1893 Sanborn:	Ditto.
1897 Bromley:	Ditto.
1900 Sanborn:	Ditto (Lot 21).
1902 Bromley:	Ditto.
1913 Sanborn:	Ditto.
1916 Bromley:	Ditto.
1925 Bromley:	Ditto.
1935 Sanborn:	Filling Station, two small one-story buildings, one is an office, the rest parking.
1951 Sanborn:	Ditto.
1968 Sanborn:	Parking.
1977 Sanborn:	Ditto.
1988 Sanborn:	Vacant.

Discussion: Aside from two small, one-story structures associated with a filling station, no buildings have been erected on this lot.

Conclusion: This site is considered archaeologically sensitive for prehistoric remains.

BLOCK 2187 – POTDS I

Lot 7

Address: 3859 Ninth Avenue.
Dimensions: about 387 ft. S X 189.84 ft. E X 451.98 ft. N X 39.92 ft. W + 24.92 ft. W.
Current Use: Truck parking area, and open storage for pallets, sheds.
Old block/lot: Block 18, Lots 661, 665 to 682 and 686, 1885 Robinson; Block 2187, Lots 661, 665 to 682 and 686, 1897 Bromley; Block 2187, Lot 5 (part), 29 and 3(?), 1900 Sanborn; Block 2187, Lot 1 (part), 5 (part), 9, 11, 25 and 26, 1902 Bromley; Block 2187, Lot 7 (part), 9, 11, 20, 27 and 29, 1916 Bromley, 1925 Bromley.

Historic maps:

1782 British HQ: Salt marsh.
1851 Dripps: Marshy, small pond on the north side of the lot, a stream crosses the east end of the lot, other streams crisscross at its western end or on adjacent

Lot 5

1879 Bromley: Land of Dennis Post, vacant.
1885 Robinson: Vacant, eastern end submerged.
1893 Sanborn: Ditto.
1897 Bromley: Ditto.
1900 Sanborn: Ditto.
1902 Bromley: Ditto.
1913 Sanborn: Two story brick store and dwelling on West 206th Street near the corner of Ninth Avenue, one-story frame wing behind it, marked “Truckman”, rest vacant.
1916 Bromley: Ditto, frame building on same sight as the 1913 building, covering most of old Lot 29, near the corner of Ninth Avenue and West 206th Street, the lot measures 50 ft. X 99.11 ft., adjacent to Lot 5.
1925 Bromley: Ditto, brick wing of a “Garage” on Ninth Avenue on Lot 29, marked “Dept. of St. Cleaning”, hazard building in yard overlaps Lot 27 to the east.
1935 Sanborn: Auto body works, one story, near the corner of Ninth Avenue and West 206th Street, rest vacant.
1951 Sanborn: Buildings on 1935 Sanborn no longer shown; long narrow building along West 206th Street for “20 Cars”, small, one-story storage building along the north lot line and a one story auto repair shop near the north lot line, on West 207th Street, the rest vacant.
1968 Sanborn: Auto repair shop still stands, other buildings from 1951 Sanborn not shown, Woodworking shop on West 206th Street with a smaller wing for an office on its east side occupies about one quarter of the lot, one 1-2 story storage building and one 1-2 lumber storage building are east of the auto repair shop, on West 207th Street.
1977 Sanborn: Ditto, but the woodworking shop now “Sola Metal” and the building has a second wing on its east side, north of the office.
1988 Sanborn: Ditto.

Discussion: There was a dwelling with store on West 206th Street near Ninth Avenue, the other structures recorded were sheds, workshops and garages.

Conclusion: This site is considered archaeologically sensitive for prehistoric remains.

BLOCK 2202 – PROJDS 11

Lot 1

Address: 3835 Tenth Avenue.
Dimensions: 99.92 ft. X 100 ft.
Current Use: Public parking lot & tire repair, and food truck.
Old block/lot: Block 1A, Lots 1 to 4, and 37 to 40, 1885 Robinson; Block 2202, Lots 1 to 4 and 37 to 40, 1897 Bromley; Block 2202, Lots 1 and 5, 1900 Sanborn, 1902 Bromley, 1916 Bromley.

Historic maps:

1782 British HQ: Salt marsh.
1851 Dripps: On top of a hill, vacant.
1879 Bromley: Vacant.
1885 Robinson: Ditto.
1893 Sanborn: Ditto.
1897 Bromley: Ditto.
1900 Sanborn: Ditto.
1902 Bromley: Ditto.
1913 Sanborn: Ditto.
1916 Bromley: Ditto.
1925 Bromley: Ditto.
1935 Sanborn: Ditto.
1951 Sanborn: Ditto.
1968 Sanborn: Ditto.
1977 Sanborn: Ditto.
1988 Sanborn: One story, L-shaped building, “Used Auto Sales”, and second, one-story building east of it, on the northern half of the lot, southern half vacant.

Discussion: Aside from two one-story auto shops, there has been no building on this lot, and half has remained vacant.

Conclusion: This site is considered archaeologically sensitive for prehistoric remains.

BLOCK 2202 – POTDS Q

Lot 17

Address: 414 West 206th Street
Dimensions: 99.92 ft. X 100 ft.
Current Use: Parking
Old block/lot: Block 1A, Lots 13 to 16, 1885 Robinson; Block 2202, Lots 13 to 16, 1897 Bromley.

Historic maps:

1782 British HQ: Salt marsh.
1851 Dripps: On top or on the slope of a hill, vacant.
1879 Bromley: Land of Dennis Post, vacant.
1885 Robinson: Vacant.
1893 Sanborn: Ditto.
1897 Bromley: Ditto.
1900 Sanborn: Ditto (Lot 17).
1902 Bromley: Ditto.
1913 Sanborn: Ditto.
1916 Bromley: Ditto.
1925 Bromley: Ditto.
1935 Sanborn: Ditto.
1951 Sanborn: Ditto.
1968 Sanborn: Ditto.
1977 Sanborn: Ditto.
1988 Sanborn: Ditto.

Discussion: There is no record of any building on this lot.

Conclusion: This site is considered archaeologically sensitive for prehistoric remains.

Lot 21

Address: 3842 Ninth Avenue
Dimensions: 99.92 ft. X 100 ft.
Current Use: Parking & single-story retail building
Old block/lot: Block 1A, Lots 17 to 20, 1885 Robinson; Block 2202 Lots 17 to 20, 1897 Bromley.

Historic maps:

1782 British HQ: Salt marsh.
1851 Dripps: On the slope of a hill, vacant.
1879 Bromley: Land of Dennis Post, vacant.
1885 Robinson: Vacant.
1893 Sanborn: Ditto.
1897 Bromley: Ditto.

1900 Sanborn:	Ditto (Lot 21).
1902 Bromley:	Ditto.
1913 Sanborn:	Ditto.
1916 Bromley:	Ditto.
1925 Bromley:	Ditto.
1935 Sanborn:	Ditto.
1951 Sanborn:	Ditto.
1968 Sanborn:	One-story building on the southern half of the lot "Mfg Elec. Products", at 3842 Ninth Avenue, 14 ft. wide.
1977 Sanborn:	Ditto.
1988 Sanborn:	Ditto.

Discussion: Aside from a one-story factory on the southern half of the lot, there has been no substantial building on this lot.

Conclusion: This site is considered archaeologically sensitive for prehistoric remains.

BLOCK 2200 – POTDS T

Lot 5

Address:	3801 Tenth Avenue
Dimensions:	88.92 ft. X 100 ft.
Current Use:	One-story building and yard
Old block/lot:	Block 5A, Lots 105 to 108, 1885 Robinson; Block 2200, Lots 105 to 108, 1897 Bromley.

Historic maps:

1782 British HQ:	Possibly on a hill or on its slope.
1851 Dripps:	Edge of the Sherman Creek salt marsh, vacant.
1879 Bromley:	Vacant.
1885 Robinson:	Ditto.
1893 Sanborn:	Ditto.
1897 Bromley:	Ditto.
1900 Sanborn:	Ditto (Lot 5).
1902 Bromley:	Ditto.
1913 Sanborn:	Ditto.
1916 Bromley:	Ditto.
1925 Bromley:	Ditto.
1935 Sanborn:	Ditto.
1951 Sanborn:	Ditto.
1968 Sanborn:	One story store with basement, part of an adjacent garage on Tenth Avenue.
1977 Sanborn:	Ditto.
1988 Sanborn:	Ditto.

Discussion: Between 1951 and 1968, a one-story building with basement was erected on this lot, which is still standing. The yard, however, has never been built upon.

Conclusion: This site is considered archaeologically sensitive for prehistoric remains.

BLOCK 2200 – PROJDS 8

Lot 15

Address: 416 West 204th Street
Dimensions: 99.92 ft. X 150 ft.
Current Use: Parking
Old block/lot: Blocks 5A, Lots 115 to 120, 1885 Robinson; Block 2200, Lots 115 to 120, 1897 Bromley; Block 2202, Lot 13 (part) and 17, 1900 Sanborn, 1902 Bromley.

Historic maps:

1782 British HQ: Salt marsh.
1851 Dripps: Edge of the Sherman Creek salt marsh, vacant.
1879 Bromley: Vacant.
1885 Robinson: Ditto.
1893 Sanborn: Ditto.
1897 Bromley: Ditto.
1900 Sanborn: Ditto.
1902 Bromley: Ditto.
1913 Sanborn: Ditto.
1916 Bromley: Ditto (Lot 15).
1925 Bromley: Ditto.
1935 Sanborn: Ditto.
1951 Sanborn: Ditto.
1968 Sanborn: Ditto.
1977 Sanborn: Ditto.
1988 Sanborn: Ditto.

Discussion: There is no record of any building on this lot.

Conclusion: This site is considered archaeologically sensitive for prehistoric remains.

Lot 21

Address: 3814 Ninth Avenue
Dimensions: 199.83 ft. X 100 ft.
Current Use: Parking
Old block/lot: Block 5A, Lots 121 to 128, 1885 Robinson; Block 2200, Lots 121 to 128, 1897 Bromley; Block 2202, Lots 21 and 25, 1900 Sanborn, 1916 Bromley.

Historic maps:

1782 British HQ:	Salt marsh.
1851 Dripps:	Sherman Creek salt marsh, vacant.
1879 Bromley:	Vacant, east end of lot submerged.
1885 Robinson:	About half submerged under an inlet of the river.
1893 Sanborn:	Borders an inlet of the river at Ninth Avenue, otherwise vacant
1897 Bromley:	Vacant, map shows projected filling.
1900 Sanborn:	Vacant, the land is filled – outline of the former inlet not indicated.
1902 Bromley:	Ditto.
1913 Sanborn:	Ditto.
1916 Bromley:	Ditto.
1925 Bromley:	Ditto.
1935 Sanborn:	Ditto.
1951 Sanborn:	Ditto.
1968 Sanborn:	Ditto.
1977 Sanborn:	Ditto.
1988 Sanborn:	Ditto.

Discussion: There is no record of any building on this lot.

Conclusion: This site is considered archaeologically sensitive for prehistoric remains.

Lot 29

Address:	417 West 203 rd Street.
Dimensions:	99.92 ft. X 100 ft.
Current Use:	Vehicle and open storage uses
Old block/lot:	Block 5A, Lots 129 to 132, 1885 Robinson; Block 2200, Lots 129 to 132, 1897 Bromley; Block 2200, Lots 29 and 31, 1925 Bromley.

Historic maps:

1782 British HQ:	Salt marsh.
1851 Dripps:	Sherman Creek salt marsh, vacant.
1879 Bromley:	Vacant.
1885 Robinson:	Ditto.
1893 Sanborn:	Ditto.
1897 Bromley:	Ditto.
1900 Sanborn:	Ditto.
1902 Bromley:	Ditto.
1913 Sanborn:	Ditto.
1916 Bromley:	Ditto.
1925 Bromley:	Ditto.
1935 Sanborn:	Ditto.
1951 Sanborn:	Ditto.
1968 Sanborn:	Ditto.
1977 Sanborn:	Ditto.

1988 Sanborn: Ditto.

Discussion: There is no record of any building on this lot.

Conclusion: This site is considered archaeologically sensitive for prehistoric remains.

BLOCK 2184 – PROJDS 12

Lot 20

Address: 3775 Ninth Avenue.

Dimensions: 199.83 ft. X 169.32 ft.

Current Use: Parking.

Old block/lot: 8A

Historic maps:

1782 British HQ: Vacant land around and including part of an inlet.

1851 Dripps: Vacant, salt meadow, dry land, and partly submerged.

1860 Kingsbridge: Ditto.

1879 Bromley: Vacant.

1885 Robinson: Ditto.

1888 USGS: Salt meadow.

1893 Sanborn: Vacant.

1897 Bromley: Ditto.

1900 Sanborn: A small building on the shore, the rest vacant.

1902 Bromley: Vacant (now block 2184).

1913 Sanborn: Ditto.

1916 Bromley: Ditto.

1925 Bromley: Ditto.

1935 Sanborn: Mostly vacant, "Weber Bunke Lange Co. Coal Yard", "Coal Pocket" with shafts or tracks leading from it; "Scale" (two), three small one-story buildings on the east side of the lot labeled "Trash Ho.", "Engine Ho." and "Hopper", small, one story office building in the north corner of the lot.

1951 Sanborn: Ditto.

1968 Sanborn: Vacant.

1977 Sanborn: Vacant.

2015 Sanborn: Park'g

Discussion: While the coal yard may have disturbed the area where the former "Coal Pocket" and shaftway were located, most of the area remained vacant.

Conclusion: This site is considered archaeologically sensitive for prehistoric remains.

BLOCK 2185 – PROJDS 12

Lot 1

Address: Ninth Avenue
Dimensions: 199.83 X 199.62 ft.
Current Use: Vehicle and open storage uses
Old block/lot: Block 6A, Lots 145 to 154, 1885 Robinson; Block 2185, Lots 145 to 154, 1897 Bromley; Block 2185, Lots 1, 5, 9 and 24, 1900 Sanborn, 1902 Bromley, Block 2185, Lots 1, 5, 24 and 10, 1925 Bromley.

Historic maps:

1782 British HQ: Salt marsh.
1851 Dripps: Mostly salt marsh, eastern end bisected by an inlet.
1879 Bromley: Vacant, approximately half submerged
1885 Robinson: Vacant, east end submerged.
1893 Sanborn: Ditto.
1897 Bromley: Ditto.
1900 Sanborn: Ditto.
1902 Bromley: Ditto.
1913 Sanborn: Ditto.
1916 Bromley: Ditto.
1925 Bromley: Ditto.
1935 Sanborn: “Storage of Shoring Lumber”, “Contractors Yard”, two one-story “Tool Shed” buildings, one small office building.
1951 Sanborn: Ditto.
1968 Sanborn: Vacant.
1977 Sanborn: Ditto.
1988 Sanborn: Ditto.

Discussion: Aside from two one-story buildings, there has been no substantial building on this lot.

Conclusion: This site is considered archaeologically sensitive for prehistoric remains.

BLOCK 2199 - PROJDS 13

Lot 11

Address: 499 West 202nd Street.
Dimensions: 199.83 ft. X 125 ft.
Current Use: Parking.
Old block/lot: Block 7A, Lots 157 to 159, 1885 Robinson (mostly un-numbered); Block 2199, Lots 155 to 159, 182, rest un-numbered, 1897 Bromley; Block 2199 Lots 1 (part) and 8 (part), 1900 Sanborn; Block 2199, Lots 9, 14 (part) and 34 (part), 1902 Bromley; lot 1 (part), and Lot 11, 1916 Bromley.

Historic maps:

1782 British HQ:	Possibly on a low hill, or on its slope.
1851 Dripps:	South half under Sherman Creek, north half salt marsh.
1879 Bromley:	Vacant.
1885 Robinson:	Ditto, mostly land of Blaze Moore.
1893 Sanborn:	Ditto.
1897 Bromley:	Ditto, probably still salt marsh where lots not numbered.
1900 Sanborn:	Ditto.
1902 Bromley:	Ditto.
1913 Sanborn:	Ditto.
1916 Bromley:	Ditto.
1925 Bromley:	“Dyckman Garage Village & Repair Shop”, one story brick building on the east half of the lot (lot 11).
1935 Sanborn:	“Auto Repairs Auto Houses”, one story, one row separated by an alley from two others on the east side of the lot, “Interior Partitions and Walls 3” Cinder Concrete Blocks Except Where Shown”, “1,550 Gal Gasol Tk Bd [tank buried]”.
1951 Sanborn:	Ditto.
1968 Sanborn:	Ditto.
1977 Sanborn:	Vacant save for a small one-story structure 20 ft. wide on the south lot line.
1988 Sanborn:	Parking.

Discussion: Between 1925 and 1935, a number of single car garages were built on this lot and a large gasoline tank installed below ground. The garages will not have impacted any potential archaeological resources, but the gasoline tank, if still present, would need to be removed and any hazardous conditions mitigated before archaeological investigation could proceed.

Conclusion: This site is considered archaeologically sensitive for prehistoric remains.

4. Commercial "U" sub-district

BLOCK 2223 – POTDS AM

Lot 30

Address:	521 West 207th Street
Dimensions:	100 X 100 ft.
Current Use:	Two story commercial and retail building on the front of the lot

Historic maps:

1782 British HQ:	Undeveloped land at the foot of a hill.
1851 Dripps:	Ditto.
1879 Bromley:	Vacant.
1885 Robinson:	Ditto.

1893 Sanborn:	Ditto.
1897 Bromley:	Ditto.
1900 Sanborn:	Ditto.
1902 Bromley:	Ditto.
1913 Sanborn:	Ditto.
1916 Bromley:	Ditto.
1925 Bromley:	Two story brick store on approximately the front two-thirds of the lot.
1935 Sanborn:	Ditto, only the front half of the two story store is labeled as having a basement, and "Paints".
1951 Sanborn:	Ditto, but building now labeled "MATTRESS MFG", "MEETING RMS 2." And "PAINTS" (?)
1968 Sanborn:	Ditto, labeled "Paints", "Clothing" "Furne".
1977 Sanborn:	Ditto except for "Clothing Mfg".
1988 Sanborn:	Ditto.

Discussion: The two story building with basement on the front of the lot will have negatively impacted any potential archaeological remains, but the rear of the lot has never been built upon.

Conclusion: The yard behind the building is considered archaeologically sensitive for prehistoric remains.

BLOCK 2235 – PROJDS 29

Lot 9

Address:	4910 Broadway
Dimensions:	125 ft. X 141.58 (E) /143.12 (W) ft.
Current Use:	One-story building housing a Rite Aid store on the front half of the lot
Old block/lot:	Lots 9, 10, 11, 12 and 13.
<u>Historic maps:</u>	
1782 British HQ:	Undeveloped land at the foot of a hill.
1851 Dripps:	Undeveloped land at the foot of, or on the side of a hill.
1879 Bromley:	Vacant.
1885 Robinson:	Ditto.
1893 Sanborn:	Ditto.
1895 Robinson:	Ditto.
1897 Bromley:	Ditto.
1900 Sanborn:	Ditto.
1902 Bromley:	Ditto.
1913 Sanborn:	Ditto.
1916 Bromley:	Ditto.
1925 Bromley:	Ditto.
1935 Sanborn:	One story building with basement on the front half of the lot labeled "Bowling in Basement".

1951 Sanborn: Ditto.
 1969 Sanborn: Ditto.
 1977 Sanborn: Ditto.
 1988 Sanborn: Ditto.

Discussion: While the one story building on the front of the lot will have negatively impacted any potential archaeological remains, the yard has never been developed.

Conclusion: The yard behind the building is considered archaeologically sensitive for prehistoric remains.

BLOCK 2235 – POTDS AI

Lot 5

Address: 4892 Broadway.
 Dimensions: 50 X approximately 144 ft.
 Current Use: One story commercial building "Inwood Bar and Grill".
 Old block/lot: Lots 5 and 6.

Historic maps:

1782 British HQ: Undeveloped land at the foot of a hill.
 1851 Dripps: Undeveloped land at the foot of, or on the side of a hill.
 1879 Bromley: Vacant.
 1885 Robinson: Ditto.
 1895 Robinson: Ditto.
 1893 Sanborn: Ditto.
 1897 Bromley: Ditto.
 1900 Sanborn: Ditto.
 1902 Bromley: Ditto.
 1913 Sanborn: Ditto.
 1916 Bromley: Vacant (old lots 5 and 6).
 1925 Bromley: One story brick store on approximately the front third of the lot, one story garages along the east and west lot lines at the rear.
 1935 Sanborn: Ditto, front building labeled "A's in B'st", garages labeled "Auto Houses".
 1951 Sanborn: Ditto.
 1969 Sanborn: One story building with basement, for parking, covers the lot.
 1977 Sanborn: One story brick store with basement on the front of the lot with one story addition at the rear labeled "concrete", parking in the rear third of the lot.
 1988 Sanborn: Same one story building on the front of the lot, the rest used for parking.

Discussion: The one story building with basement covering the lot shown on the 1969 Sanborn map will have negatively impacted potential archaeological resources.

Conclusion: This lot is not considered archaeologically sensitive.

BLOCK 2238 – PROJDS 28

Lot 35

Address: 4849 Broadway.

Dimensions: 100 X 150 ft.

Current Use: Vacant.

Historic maps:

1782 British HQ: Undeveloped land at the foot of a hill.

1851 Dripps: Undeveloped land at the edge of an orchard.

1879 Bromley: Vacant, with a seasonal stream running across the lot

1885 Robinson: Vacant.

1893 Sanborn: Ditto.

1895 Robinson: Ditto.

1897 Bromley: Ditto.

1900 Sanborn: Ditto.

1902 Bromley: Ditto.

1913 Sanborn: Ditto.

1916 Bromley: Ditto.

1925 Bromley: Ditto.

1935 Sanborn: One story commercial building with basement "Auto Service" on approximately the front two-thirds of the lot.

1951 Sanborn: Ditto, section at 4849 labeled "Auto Service", nos. 4851 to 4855, separated from 4849 by a "4" T COTTA WALL", labeled "MATTRESS M'F'G."

1969 Sanborn: Ditto "GARAGE & REP."

1977 Sanborn: Ditto, without labeling.

1988 Sanborn: Ditto.

Discussion: There was no building on the site before ca. 1935. The one story building with basement erected between 1925 and 1935 will have negatively impacted potential prehistoric archaeological remains. While such remains might be found along the shoreline at greater depths resulting from changes in sea level, this is not likely to be the case at this inland site.

Conclusion: This site is not considered archaeologically sensitive.

7. CONCLUSIONS AND RECOMMENDATIONS

The description of the proposed rezoning area (PRA) and of the lots assessed in this report, presented in Section 2 above, demonstrates how under-developed the eastern part of Inwood, east of Broadway, still is today. More than half of the lots assessed are currently being used for parking, vehicle storage, or automotive-related businesses, and a number are vacant.

Section 6, which lists in summary form the history of each lot's uses, shows that almost all of the lots either have never had any buildings on them or only a few one-story storage sheds, workshops, or small offices, and that in the past, as at present, automotive uses have been predominant. The exception is Block 2203 Lot 9, **PROJDS 7**, which had a swimming pool on it. If there had been remains of archaeological significance on this lot, the construction of the swimming pool would probably have obliterated them. This is one of only three lots, with **POTS AI** and **PROJDS 28**, that have been eliminated from consideration because of the potential negative impact of basement levels covering the entire lot area on possible archaeological remains. Although the coastline and height of the water table over the millennia has varied, and prehistoric remains might conceivably be found below basement levels, there are many other sites in the PRA with a higher potential for yielding prehistoric remains, particularly Woodland Period human and dog burials, and shell middens, which were found at relatively shallow depths (Fig. 8A).

Section 2 notes that coal, gas or oil storage uses have resulted in the contamination of the soils on many lots in the proposed rezoning area, which have been flagged for archaeological sensitivity. Our research shows that Block 2197, Lot 47, **part of PROJDS 4 and 33**, was the site of a large building marked "volatile fluids" that belonged to the Lotus Oil & Distribution Corporation, and that Block 2197, Lot 67, **PROJDS 2**, and Block 2199, Lot 11, **PROJDS 13** contained buried oil or gas tanks. The determination of the kind, level, and extent of the contaminants on the lots will be presented in the Draft Environmental Impact Statement for the Inwood Rezoning proposal (in preparation), and the conclusions and recommendations for mitigation, in the event of future development, will be a critical factor in planning and executing archaeological testing on these sites.

Section 3, the discussion of the environmental setting, describes what is known of the PRA's stratigraphy. A contemporary observer of the Harlem ship canal excavations in 1895 reported that bedrock was encountered at a depth of fifteen to twenty feet and that there was a thick layer of peat, approximately twelve feet thick, beginning approximately one-and-a-half feet above the bedrock and extending to within four to six feet of the surface, covered by the thick root layer of the salt marsh. The peat layer was formed after the end of the last ice age, and a mastodon tusk, dating to that era, was found in that layer, near the Tip of Manhattan sub-district. According to GRB's soil borings in the Sherman Creek sub-district, the top nine to ten feet are composed of fill material (GRB 2010, 9). The average elevation is approximately eight feet above msl, and bedrock lies approximately twenty to thirty feet below grade. This means that prehistoric remains could potentially be found at depths ten feet or more below grade, below sea level. This section further details the water and natural resources that existed in the proposed rezoning area, which attracted prehistoric hunters, gatherers and settlers.

The PRA is known to have been exploited during prehistoric eras, as evidenced by the many sites and stray finds both in the PRA and within a one mile radius of it. These finds are listed in Section 4. The documented presence of prehistoric peoples in the area, together with the topographic features described in Section 3, is one of the main criteria for determining potential prehistoric sensitivity.

Section 5 discusses the historical periods of the PRA. Only three lots were found to be potentially sensitive for historic remains of archaeological significance: Block 2229 Lots 25 and 32, **POTDS E**, and Block 2215, Lot 801 **POTDS B**.

Section 6 summarizes the topographical and historical map data for each of the lots assessed in this study. As detailed in the discussions and conclusions in that section, and as shown above on Table 1, p. 8, thirty-six of the thirty-nine lots assessed in this report are considered sensitive in whole or in part for archaeological remains.

In conclusion, this report recommends that the lots considered sensitive for archaeological remains be tested for the presence or absence of such remains prior to the commencement of any work involving ground disturbance and, further, that should any remains be located during the testing phase, a protocol for further archaeological investigation and mitigation be formulated in consultation with the Landmarks Preservation Commission.

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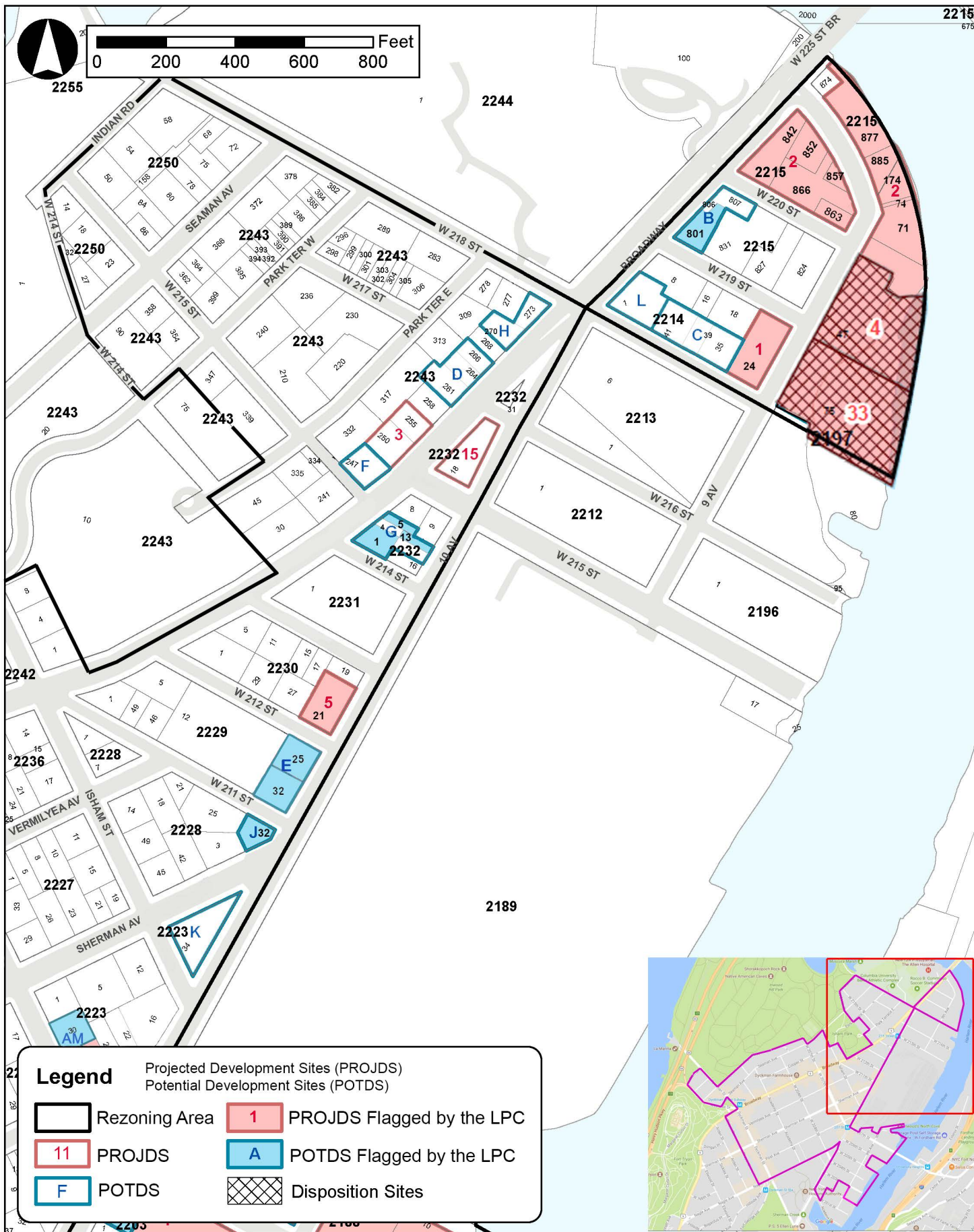


Fig. 1. Tax map showing the location of the Tip of Manhattan and Upland Wedge sub-districts of the proposed rezoning area and the sites flagged by the LPC for potential archaeological sensitivity.

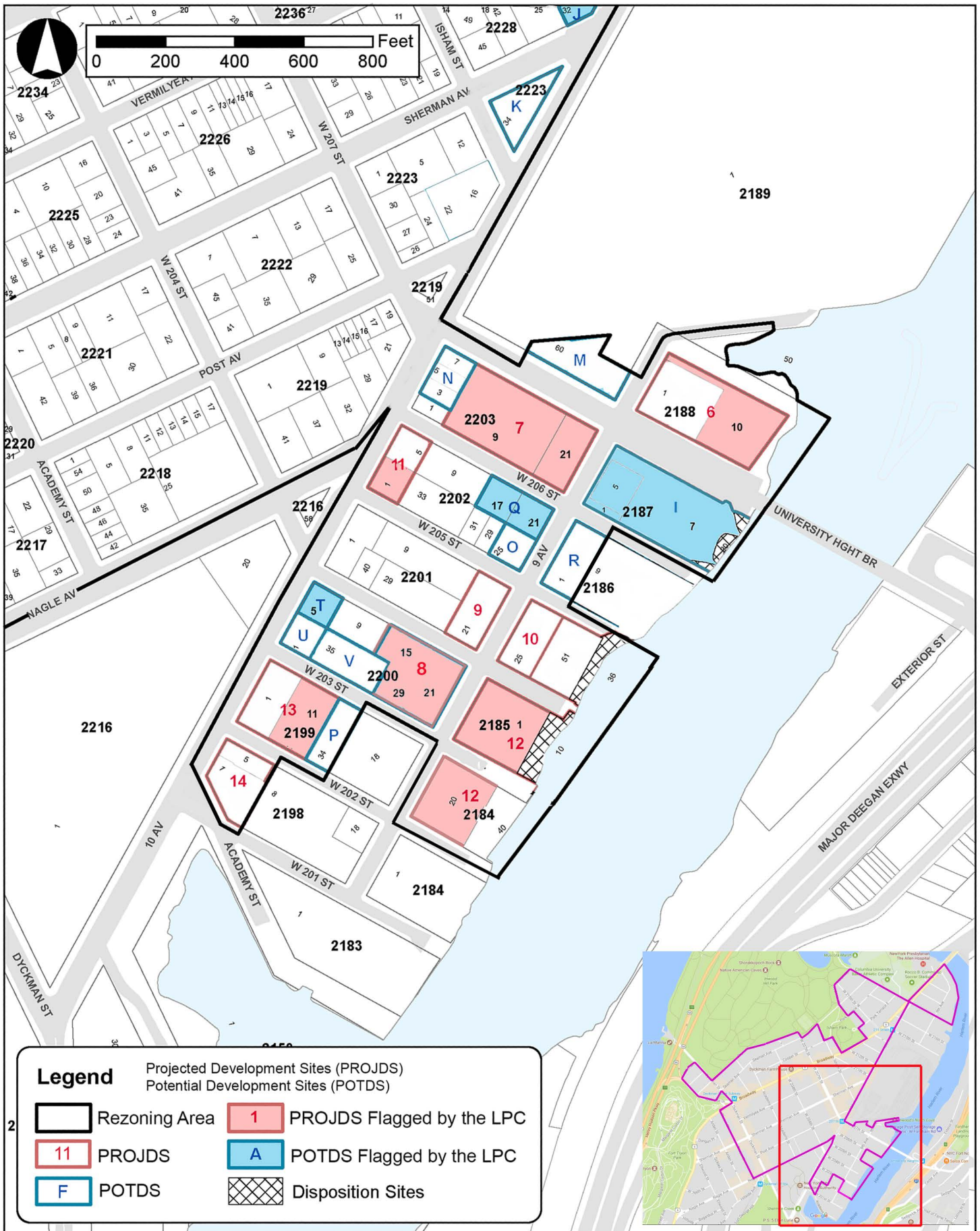


Fig. 2A. Tax map showing the location of the Sherman Creek sub-district of the proposed rezoning area and the sites flagged by the LPC for potential archaeological sensitivity. Source: NYC Department of City Planning.

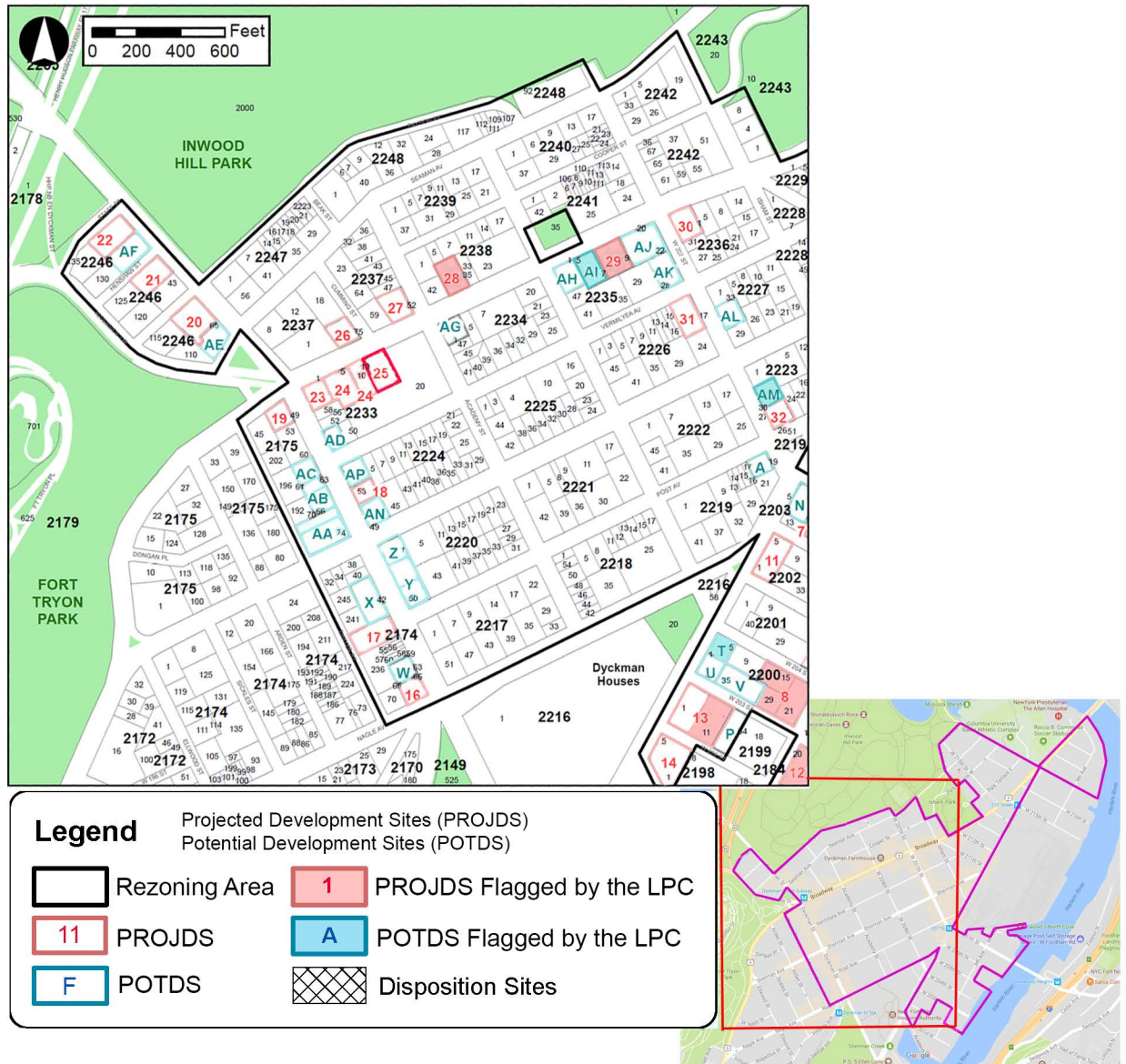


Fig. 2B. Tax map showing the location of the sites flagged by the LPC for potential archaeological sensitivity in the Commercial “U” and part of the Sherman Creek subdistricts (see also Fig. 2)

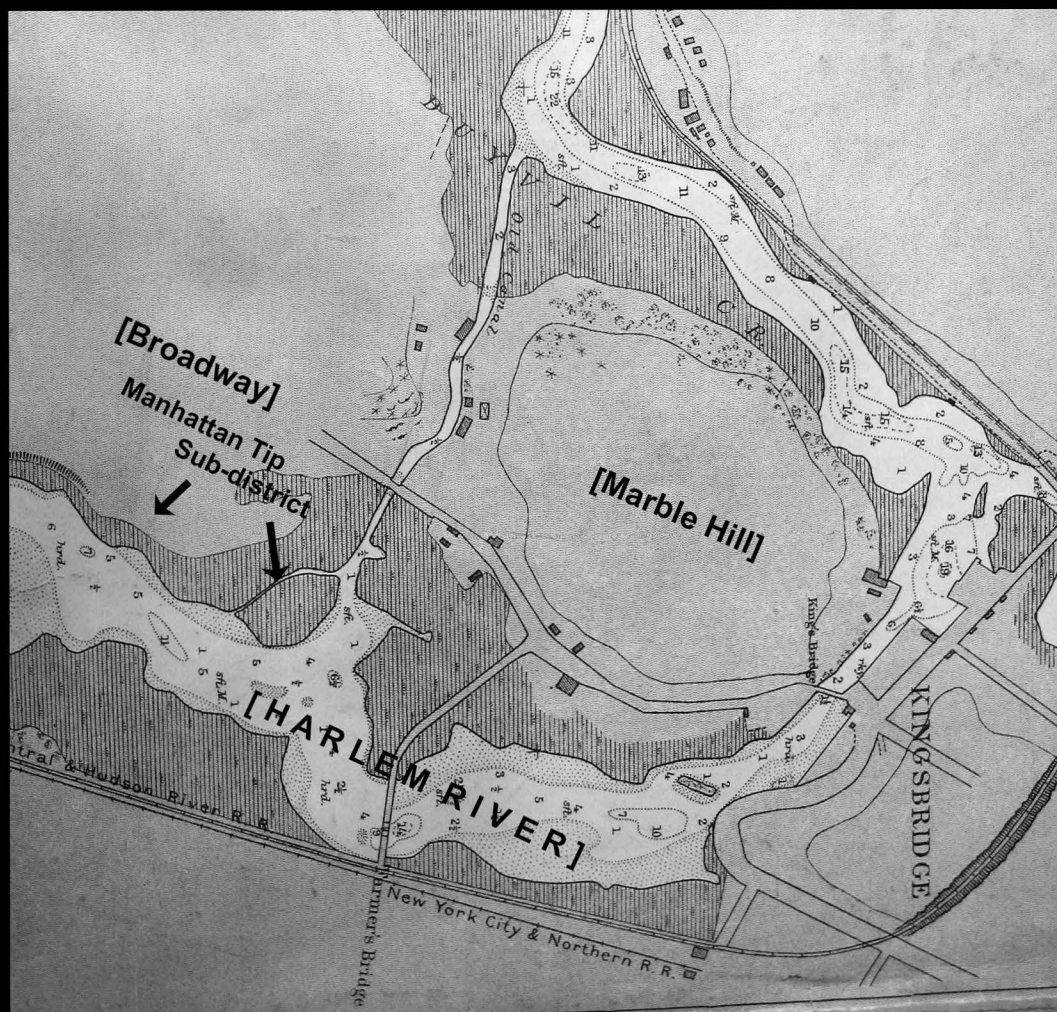


Fig. 3. 1888 USGS map showing the approximate location of the Tip of Manhattan sub-district and the "Old Canal".

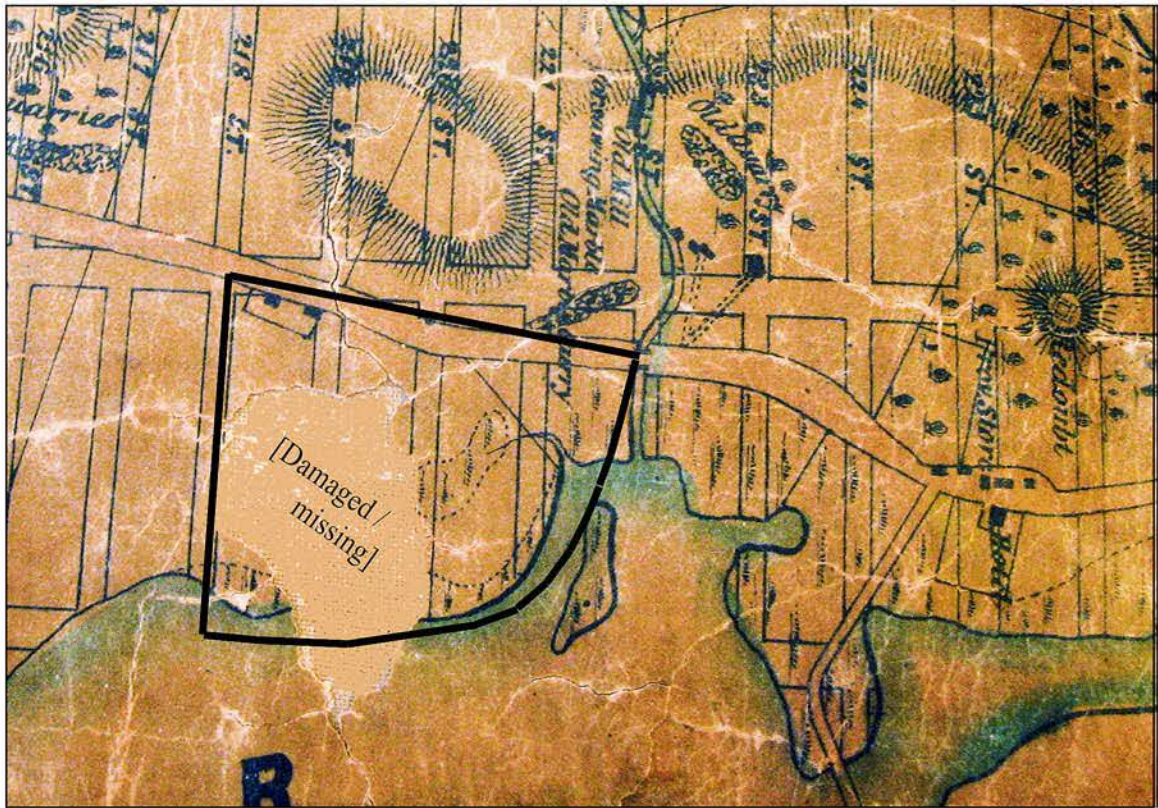


Fig. 4. 1851 Dripps map showing the location of the Tip of Manhattan sub-district

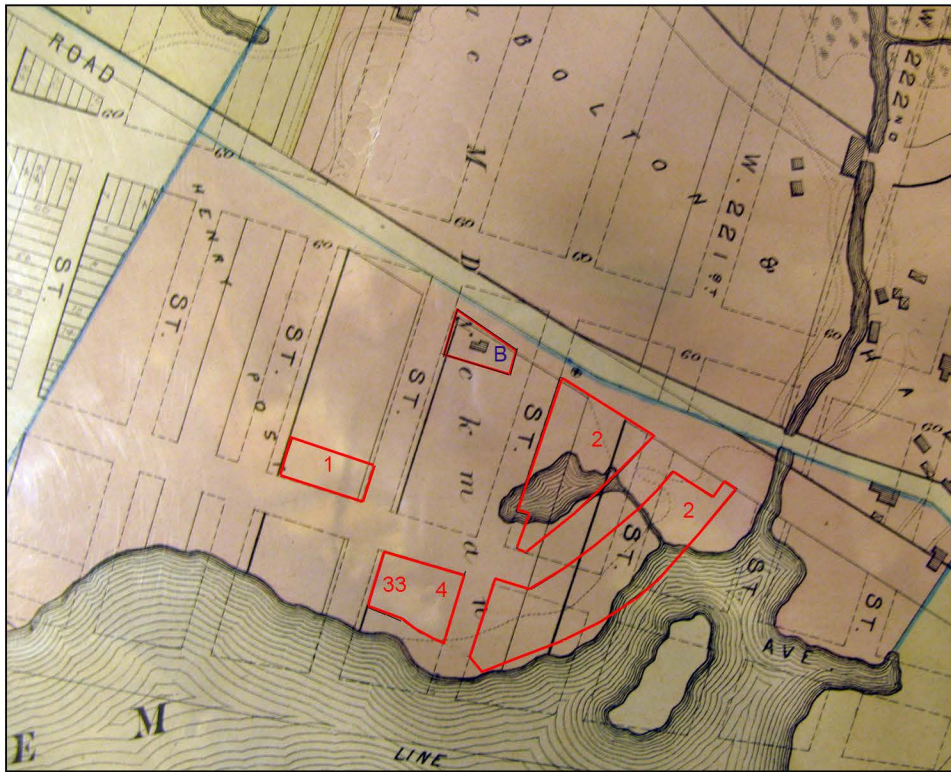


Fig. 5. 1879 Bromley map showing the lots in the Tip of Manhattan sub-district assessed in this report.



Fig. 6. 1851 Dripps map showing the approximate location of the sites in the Sherman Creek and Upland wedge sub-districts assessed in this report.

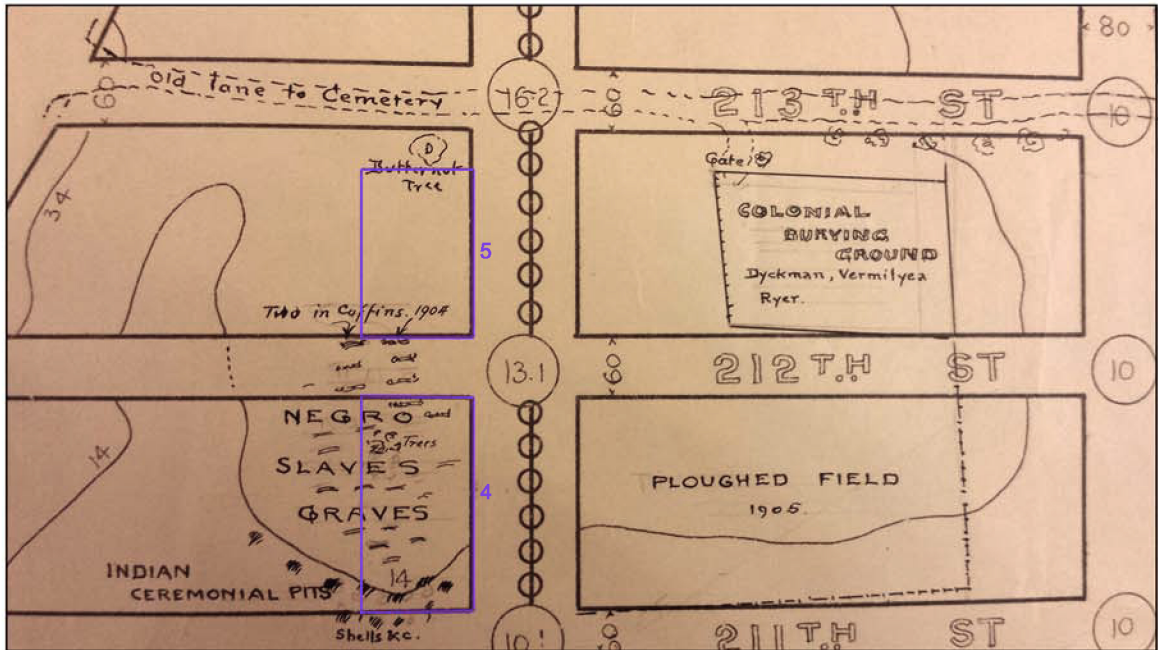


Fig. 7. R.P. Bolton map showing the site of the “Negro Slaves Graves” and the “Indian Ceremonial Pits”.



Fig. 8A. View of the "Negro Slaves Graves" and the "Indian Ceremonial Pits" site, R.P. Bolton photo, courtesy New York Historical Society.



Fig. 8B. "Pile of Human Bones Disinterred near Isham-St. and Tenth-Ave. Supposed to be the remains of negro slaves" Thompson 2015, (first published NY Daily Tribune 1903).



Fig. 8C. "The Slaves Burying Place". DFMC, Bolton Photo Album.



Fig. 8D. "The Slaves Burying place". Photo: E.W. Hall. DFMC, Bolton Photo Album.



Fig. 9. PROJDS 1 – Block 2214, lot 24, looking north.





Fig. 10. PROJDS 4 and 33 - Block 2197, lot 47, looking east from 9th Avenue.



Fig. 11. PROJDS 2 – Block 2215, looking northeast over lots 885, 174, 74 and 71.





Fig. 14. PROJDS 2 – Block 2215, lot 842, looking east from Broadway.

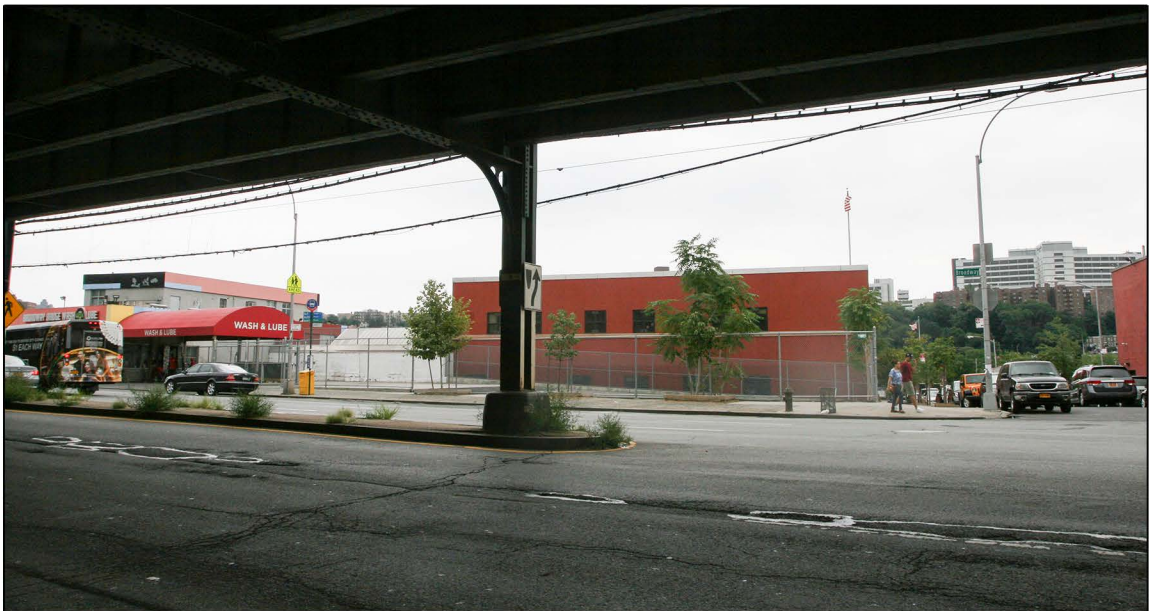


Fig. 15. POTDS B – Block 2215 lot 801, looking east from Broadway.

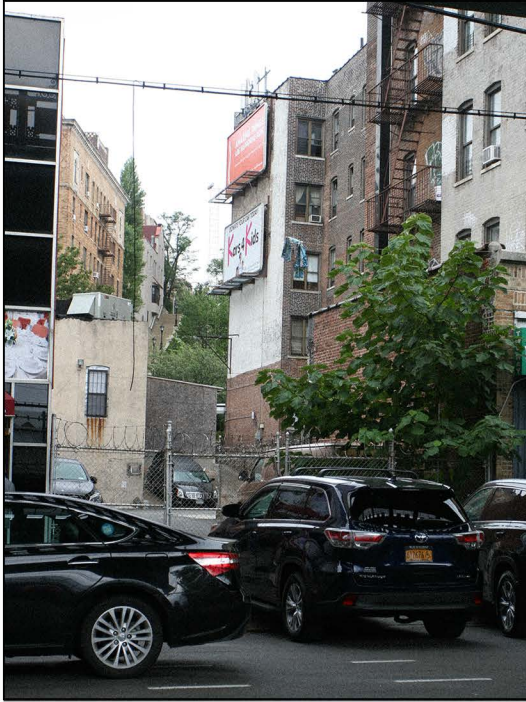


Fig. 16. POTDS G - Block 2232, lot 13, looking west from 10th Avenue (top left); lot 5 (top right), and lot 1 (bottom), looking east from Broadway.







Fig. 18A. POTDS E - Block 2229, lot 25 looking southwest from Broadway, above, and north from Broadway (below).



Fig. 18B. POTDS E - Block 2229, lot 32 looking north from Broadway.





Fig. 20. PROJDS 6 – Block 2188, Lots 10 looking north from University Heights Bridge.



Fig. 21. POTDS I – Block 2187, Lot 7 looking southwest from 9th Avenue.



Fig. 22. PROJDS 7 – Block 2203, Lots 9 and 21 looking southwest from 9th Avenue.



Fig. 23. POTDS Q – Block 2202, lot 21, looking west from 9th Avenue.



Fig. 24. POTDS Q – Block 2202, lot 17, looking south from 206th Street.



Fig. 25. PROJDS 11 – Block 2202, lot 1, viewed from 10th Avenue.



Fig. 26. PROJDS 8 – Block 2200 lots 21 and 29 from 9th Avenue looking north.



Fig. 27. PROJDS 12 – Block 2185, lot 1, viewed from 203rd Street.



Fig. 28. POTDS T – Block 2200 lot 5 from 204th Street, view of the front of the lot from 10th Avenue, looking south, above; view of the rear of the lot, below.





Fig. 29. PROJDS 13 – Block 2199, Lot 11, viewed from West 202nd Street.

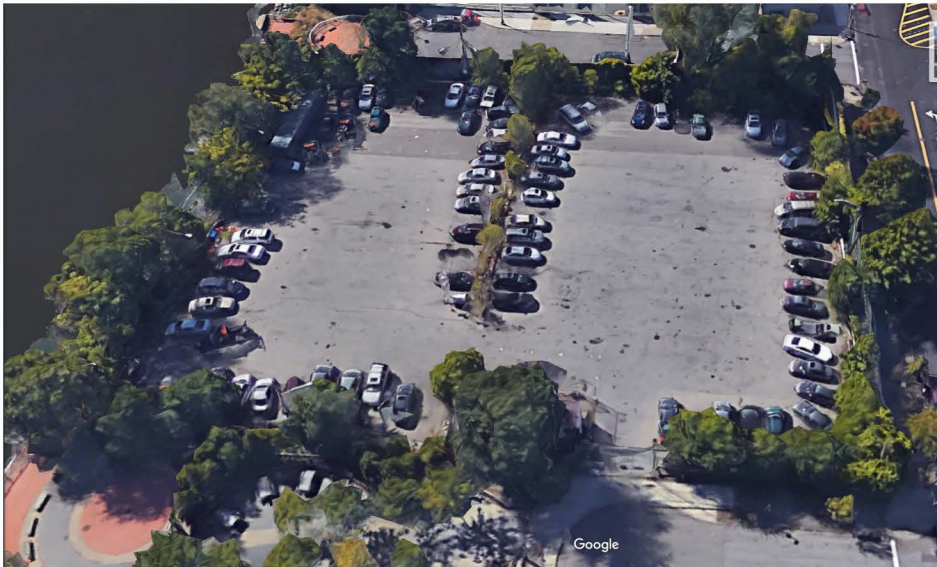


Fig. 30. PROJDS 12 - Block 2184, Lot 20, looking south over West 203rd Street.



Fig. 31. POTDS AM - Block 2223, Lot 30, looking east, from West 207th Street.



Fig. 32. PROJDS 28 - Block 2238, Lot 35, looking north, from Broadway.



Fig. 33. POTDS AI - Block 2235, Lot 5 looking south, from Broadway.



Fig. 34. PROJDS 29 - Block 2235 Lot 9 looking south, from Broadway.



Fig. 35. PROJDS 2 - Block 2215, Lot 863, looking north, from West 220th Street.