

Delafield Estates
Block 5920, Lots 368; 369; 371; 373-378; 380-382;
384-395; and 397-407

RIVERDALE, BRONX COUNTY, NEW YORK

Phase 1A Archaeological Documentary Study

Prepared for:

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Management Summary

CEQR Number: 77DCP368X

LPC Unique Project ID: 34048

Involved Agencies: New York City Planning Commission

Phase of Survey: Phase 1A Documentary Study

Location Information

Location: Block 5920, Lots 368, 369, 371, 373–378, 380–382, 384–395, and 397–407

County: Bronx County

Survey Area

Length: Approximately 950 feet

Width: Approximately 780 feet

Area: 10.5 acres

USGS 7.5 Minute Quadrangle Map: Central Park

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Date of Report: October 2019

Table of Contents

| | |
|---|-----------|
| Chapter 1: Introduction and Methodology | 1 |
| A. Introduction..... | 1 |
| B. Project Background..... | 1 |
| C. Previous Environmental Review | 2 |
| D. Research Goals and Methodology..... | 2 |
| Chapter 2: Environmental and Physical Settings | 5 |
| A. Current Conditions | 5 |
| B. Geology and Bedrock..... | 5 |
| C. Topography and Landscape Modification..... | 5 |
| D. Hydrology | 6 |
| E. Soils..... | 6 |
| Chapter 3: Precontact Period | 8 |
| Chapter 4: The Historic Period | 11 |
| A. Introduction..... | 11 |
| B. Early Colonial History of the Bronx | 11 |
| C. 18th Century Occupation and Development of the Project Site..... | 12 |
| D. Delafield Estate in the 19th Century | 13 |
| E. Development of the Riverdale/Fieldston Neighborhood in the 20th Century..... | 15 |
| Chapter 5: Conclusions and Recommendations | 16 |
| A. Conclusions..... | 16 |
| Previous Disturbance..... | 16 |
| Precontact Sensitivity Assessment | 16 |
| Historic Sensitivity Assessment | 16 |
| B. Recommendations | 17 |
| References..... | 18 |

Figures

Photographs

List of Figures

- Figure 1:** Project Location Map
- Figure 2:** 1980 FEIS Approved Site Plan
- Figure 3:** 2011 Technical Memorandum Site Plan
- Figure 4:** 1873 Department of Public Parks Topographical Survey
- Figure 5:** 1895 New York Topographical Bureau Survey
- Figure 6:** 1891 USGS Map
- Figure 7:** 1868 Beers Map
- Figure 8:** 1896 Sanborn map
- Figure 9:** 1914 Sanborn Map

List of Photographs

See **Figure 1** for camera angles.

Photograph 1: View southwest from Delafield Way in vicinity of former house destroyed by fire in 1994.

Photograph 2: A disturbed area at the northern end of the site looking northeast towards West 246th Street.

Photograph 3: Looking southeast from Delafield Way in the northwestern portion of the project site.

Photograph 4: View northeast from Delafield Way in the southwestern portion of the project site.

A. INTRODUCTION

Eretz Group is proposing to develop a 10.5-acre parcel in the Riverdale neighborhood of the Bronx (see **Figure 1**). The development requires a modification to the Restrictive Declaration associated with the approval of the original Delafield Estates project as identified in the 1980 Delafield Estates Final Environmental Impact Statement (FEIS) and subsequent approvals. The project site comprises Block 5920, Lots 368, 369, 371, 373–378, 380–382, 384–395, and 397–407. It is bounded by West 246th Street to the north, the Riverdale Temple on Independence Avenue to the east, West 240th Street to the south, and single-family residential properties fronting on Douglas Avenue to the west. The proposed project would involve the construction of 19 new homes on the project site as well as related improvements for the construction of driveways, landscaping, new utility connections, etc.

The purpose of the approved project and subsequent modifications is to implement development planned for the project site since 1980, while responding to the special qualities of the property as a natural, historic and aesthetic landscape. The site plan minimizes disturbance of trees and other natural resources and respects the internal organization of the site in terms of open space. The large-scale residential development regulates the size, location and use of the buildings and plots, the placement, bulk and height of the buildings.

B. PROJECT BACKGROUND

The development planned for the project site, “Delafield Estates,” was analyzed in a 1980 FEIS, which considered a project consisting of 34 residential units—30 single-family houses, three apartment units in an existing structure on the site, and one caretaker’s unit—and 99 accessory parking spaces including 33 spaces in an underground garage (see **Figure 2**). A Special Permit was granted by the New York City Planning Commission (CPC) to allow this development as a “large-scale residential development” within a Special Natural Area District (NA-2). In issuing this Special Permit, CPC granted authorizations for the modification of existing topography, the alteration of botanic environments, the alteration of natural features other than topography and botanic environments, the modification of use regulations to allow semi-detached or attached single-family residents, and for the development to be concentrated in clusters in a substantially steep sloped area.

Conditions associated with the previously approved project were reflected in a Restrictive Declaration adopted for the site when the Special Permit was issued in 1980. The Restrictive Declaration included requirements to minimize changes to the natural features on the site through implementation of a Construction Management Plan and a long-term landscape maintenance plan. It also included obligations to restore disturbed areas on the project site if project elements were not completed in a specified timeframe or if protected natural features were damaged or destroyed.

Since the issuance of the 1980 FEIS, the project was amended in 1985 when CPC approved an application for an authorization involving the location of buildings without regard for side lot lines, modification of topography, and the alternation of botanic environment. Subsequently in 1987, CPC approved an application for an authorization involving the location of buildings without regard for the

yard regulations and the modification of topography. In addition, a technical memorandum was prepared for the project in October 2011 (referred to herein as the 2011 Technical Memorandum). The 2011 Technical Memorandum permitted the construction of the then-remaining 22 dwelling units—including the construction of a new three-unit residential building on the site of the former Delafield House, changes to grading; a reduction in the amount of parking; and additional landscaping changes (see **Figure 3**).

C. PREVIOUS ENVIRONMENTAL REVIEW

The 1980 FEIS did not include a specific discussion of archaeological resources. Furthermore, the 2011 Technical Memorandum determined that the project as then proposed would not result in impacts on archaeological resources because the only subsurface disturbance proposed at that time involved the in-kind replacement of the former Delafield House that was destroyed by a fire in 1994. As currently proposed, the project would require subsurface disturbance for the construction of houses with cellars and driveways as well as grading associated with landscaping and road construction. The *CEQR Technical Manual* states that an assessment of impacts on archaeological resources is required for any project that will involve in-ground disturbance, defined as, “any disturbance to an area not previously excavated, including new excavation that is deeper and/or wider than previous excavation on the same site.”¹

Pursuant to CEQR, consultation was initiated with the New York City Landmarks Preservation Commission (LPC). In a comment letter issued on August 16, 2019, LPC determined that the nineteen lots included within the project site possess archaeological significance. Specifically, the lots were determined to be potentially sensitive for archaeological resources associated with the precontact (Native American) occupation of the region and requested that an Archaeological Documentary Study be prepared to further clarify the project site’s archaeological sensitivity. This Phase 1A Archaeological Documentary Study has been prepared pursuant to that request. Furthermore, Eretz Group has committed to enter into a Restrictive Declaration requiring that this additional archaeological investigation and any subsequent archaeological assessments that are determined necessary would be undertaken in consultation with LPC prior to construction of the proposed project.

D. RESEARCH GOALS AND METHODOLOGY

The Phase 1A Archaeological Documentary Study of the Delafield Estates project site has been designed to satisfy the requirements of the New York City Landmarks Preservation Commission (LPC) as issued in 2018 and also follows the guidelines of the New York Archaeological Council (NYAC). The study documents the development history of the proposed project site and its potential to yield archaeological resources, including both precontact and historic cultural resources. In addition, this report documents the current conditions of the project site, as well as previous cultural resource investigations that have taken place in the vicinity.

This Phase 1A Archaeological Documentary Study has four major goals: (1) to determine the likelihood that the project site was occupied during the precontact (Native American) and/or historic periods; (2) to determine the effect of subsequent development and landscape alteration on any potential archaeological resources that may have been located within the project site; (3) to make a determination of the project site’s potential archaeological sensitivity; and (4) to make recommendations for further archaeological analysis, if necessary. The steps taken to fulfill these goals are explained in greater detail below.

¹ *CEQR Technical Manual* (2014): Page 9-7, Section 201.

The first goal of this documentary study is to determine the likelihood that the project site was inhabited during the precontact and/or historic periods, and identify any activities that may have taken place in the vicinity that would have resulted in the deposition of archaeological resources.

The second goal of this Phase 1A study is to determine the likelihood that archaeological resources could have survived intact within the project site after development and landscape alteration (e.g., erosion, grading, filling, etc.). Potential disturbance—associated with paving, utility installation, and other previous construction impacts—was also considered. As described by NYAC in their *Standards for Cultural Resource Investigations and the Curation of Archaeological Collections in New York State*, published in 1994:

An estimate of the archaeological sensitivity of a given area provides the archaeologist with a tool with which to design appropriate field procedures for the investigation of that area. These sensitivity projections are generally based upon the following factors: statements of locational preferences or tendencies for particular settlement systems, characteristics of the local environment which provide essential or desirable resources (e.g., proximity to perennial water sources, well-drained soils, floral and faunal resources, raw materials, and/or trade and transportation routes), the density of known archaeological and historical resources within the general area, and the extent of known disturbances which can potentially affect the integrity of sites and the recovery of material from them (NYAC 1994: 2).

The third goal of this study is to make a determination of the project site's archaeological sensitivity. As stipulated by the NYAC standards, sensitivity assessments should be categorized as low, moderate, or high to reflect "the likelihood that cultural resources are present within the project area" (NYAC 1994: 10). For the purposes of this study, those terms are defined as follows:

- Low: Areas of low sensitivity are those where the original topography would suggest that Native American sites would not be present (i.e., locations at great distances from fresh and salt water resources), locations where no historic activity occurred before the installation of municipal water and sewer networks, or those locations determined to be sufficiently disturbed so that archaeological resources are not likely to remain intact.
- Moderate: Areas with topographical features that would suggest Native American occupation, documented historic period activity, and with some disturbance, but not enough to eliminate the possibility that archaeological resources are intact on the Project sites.
- High: Areas with topographical features that would suggest Native American occupation, documented historic period activity, and minimal or no documented disturbance.

As mentioned above, the fourth goal of this study is to make recommendations for additional archaeological investigations where necessary. According to NYAC standards, Phase 1B testing is generally warranted for areas determined to have moderate sensitivity or higher. Archaeological testing is designed to determine the presence or absence of archaeological resources that could be impacted by a proposed project. Should they exist on the project site, such archaeological resources could provide new insight into the precontact occupation the Bronx, the transition from Native American to European settlement, or the historic period occupation of the project site.

To satisfy the four goals as outlined above, documentary research was completed to establish a chronology of the project site's development, landscape alteration, and to identify any individuals who may have owned the land or worked and/or resided there, and to determine if buildings were present there in the past. Data was gathered from various published and unpublished primary and secondary resources, such as historic maps, topographical analyses (both modern and historic), historic and current

photographs (including aerial imagery), newspaper articles, local histories, and previously conducted archaeological surveys. These published and unpublished resources were consulted at various repositories, including the Main Research Branch of the New York Public Library (including the Local History and Map Divisions), the Library of Congress, the Westchester County Archives, and the Westchester County Clerk.² Previously identified sites and previously conducted archaeological resources in the vicinity were collected from the files of LPC; the New York State Office of Parks, Recreation, and Historic Preservation (OPRHP); and the New York State Museum (NYSM). Information on previously identified archaeological sites and previous cultural resources assessments was accessed through the New York State Cultural Resource Information System (CRIS).³ Online textual archives, such as Google Books and the Internet Archive Open Access Texts, were also accessed.

² The Bronx was historically included within Westchester County and many early property records are held in Westchester County offices.

³ <https://cris.parks.ny.gov>

A. CURRENT CONDITIONS

The project site is currently largely undeveloped and is situated in the residential neighborhood of Fieldston in the northwestern Bronx. The project site is developed with sixteen attached or free-standing homes, all but one of which are located in the southern and eastern portions of the site. Portions of the site are wooded and overgrown (see **Photographs 1** through **4**). Two ponds are located in the eastern half of the site. The project site is accessed via a driveway that extends from West 246th Street and continues as a circular road known as “Delafield Way” (see **Figure 1**).

B. GEOLOGY AND BEDROCK

The Bronx is found within a geographic bedrock region known as the Manhattan Prong of the New England (Upland) Physiographic Province. This region is a “rolling lowland area...of metamorphic rocks” dating to the Early Paleozoic, which began approximately 575 million years ago (Isachsen et al. 2000). Two bedrock types are present in the vicinity of the project site. The eastern half of the site is underlain by Fordham Gneiss, a metamorphic rock presumed to date to the Upper Proterozoic Eon, which occurred between 97 and 66 million years ago (Fisher, et al. 1970; Isachsen, et al. 2000). Along the western side of the site is Inwood Marble, which was formed in the Cambrian and Lower Ordovician periods and dates to approximately 435 million years before present (Fisher, et al. 1970; Isachsen, et al. 2000). Surficial geology in the immediately vicinity of the project site includes glacial till although pockets of exposed bedrock are present in the vicinity of the site (Caldwell, et al. 1986). The glacial till was left behind by massive glaciers of up to 1,000 feet thick that retreated from the area towards the end of the Pleistocene. There were four major glaciations that affected the region until approximately 12,000 years ago when the Wisconsin period—the last glacial period—came to an end (Schubert 1968). The rocks and sand deposits left behind as a result of glacial movements brought about the creation of hundreds of sand hills some of which were nearly one hundred feet tall.

C. TOPOGRAPHY AND LANDSCAPE MODIFICATION

Three historical maps provided topographical data for the project site in the late 19th century: two versions of a map at different scales published by the New York City Department of Public Parks in 1873 (see **Figure 4**) and a final map of Bronx street grades produced by the New York Topographical Bureau in 1895 (see **Figure 5**). These maps depict the topography of the project site in a similar configuration to that seen today. Some areas appear to have been disturbed, presumably as a result of the construction and demolition of buildings in the early 20th and late 20th centuries. The elevations presented in the 1873 and 1895 maps appear to have been recorded relative to a specific datum, or the point from which surface elevations are measured (where the elevation is considered to be zero).

These elevations were compared to current Lidar information published by the United States Geological Survey (USGS) in 2014 and were fairly consistent. The Lidar elevations are measured relative to the North American Vertical Datum of 1988 (NAVD88). It is presumed that the historical maps were recorded relative to the Manhattan Borough Datum, as the Bronx was included within New York County

at the time. Elevations of the same ground surface, recorded at the same time, but taken relative to different datum points, will obviously differ despite the fact that they refer to the same location. The Manhattan Borough Datum is situated 1.652 feet below NAVD88, so any minor differences in elevation may be the result of datum differences rather than as evidence of disturbance.

The historical topographical information indicates that prior to the modern development of the site, the undeveloped property was occupied largely by a portion of a small terrace, the highest point of which was located within the center of the site's southern half and was situated at an elevation of 180 feet although a large, flat area extended to the north at an elevation of 160 feet, occupying much of the area included within the circular Delafield Way. Despite modern development, the portion of this plateau situated within the circle of Delafield Way appears to be largely intact and at the same elevation as it was at the end of the 19th century except in the southeastern portion where three houses were constructed in the 1980s.

The comparison of historic and modern topographic information also depicts disturbance/landscape modification at the northern side of the project site between Delafield Way and 246th Street and along the project site's eastern side. Both modern and historical data show a steeply sloping hillside along the western side of the project site.

D. HYDROLOGY

As the aforementioned glaciers receded, the ensuing runoff created streams, rivers, and lakes as well as thick tracts of marshland in the low-lying areas along the coast of the Bronx. The project site is situated on a bluff that was historically approximately 700 feet east of the Hudson River. The site was approximately 3,500 feet west of the marshes that surrounded the former Tibbets Brook, a large creek that bisected much of what is now the northwestern portion of the Bronx. Smaller streams extended west from that body of water, including one that ended approximately 1,900 feet west of the project site as seen on an 1891 USGS map (see **Figure 6**). Two artificial ponds are currently located within the project site and historical maps dating between the 19th and early- to mid-20th centuries do not depict any bodies on water on the project site itself.

E. SOILS

The *Web Soil Survey* maintained the National Resource Conservation Service of the United States Department of the Interior¹ indicates that project site is associated with two soil complexes that occupy the western and eastern halves similar to the two different types of bedrock that underlie the site. The western half of the site is associated with the “Urban Land Greenbelt complex” (UGDI), which is characteristic of steeply sloped (15 to 25 percent) urban areas that area often on well-drained summits. The eastern half of the site is characterized by the “Urban Land-Greenbelt-Chatfield-Rock Outcrop” complex (UGCRB). These soils are typically found in more level (0 to 8 percent slopes) urban areas on well-drained hills or summits where bedrock is either exposed or is generally shallow (within 25 inches of the ground surface).

¹ <https://websoilsurvey.sc.egov.usda.gov/>

Table 2-1
Study Area Soils

| Series Name (Map Symbol) | Soil Horizon Depth (in) | Soil Type | Slope (%) | Drainage | Landform |
|--|----------------------------|---------------------|---------------------------------|--------------|---------------------------------------|
| Chatfield Complex | A: 0 to 7 | Loam | 0 to 8 | Well-drained | Hills |
| | Bw: 7 to 25 | Fine sandy loam | | | |
| | 2R: 25 to 79 | Bedrock | | | |
| Greenbelt Complex | ^A: 0 to 5 | Loam | UGCRB: 0 to 8 UGDI: 15 to 25 | Well-drained | Summits, backslopes, footslopes |
| | ^Bw1: 5 to 16 | Loam | | | |
| | ^Bw2: 16 to 30 | Loam | | | |
| | ^C: 30 to 79 | Sandy loam | | | |
| Urban Land, Till Substratum | M: 0 to 15 | Cemented material | UGCRB: 0 to 8 UGDI: 0 to 25 | Well-drained | Summit |
| | 2^C: 15 to 79 | Gravelly sandy loam | | | |
| Sources: Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Web Soil Survey. Available online at http://websoilsurvey.nrcs.usda.gov/ . Accessed September 24, 2019. | | | | | |

In general, Native American habitation sites are most often located in coastal areas with access to marine resources, near fresh water sources and areas of high elevation and level slopes (less than 12 to 15 percent) (NYAC 1994). Further indication of the potential presence of Native American activity near a project site is indicated by the number of precontact archaeological sites that have been previously identified in the vicinity. Information regarding such previously identified archaeological sites was obtained from various locations including the site files of OPRHP and NYSM (accessed via the New York State Cultural Resource Information System), and from published accounts. More than three dozen sites have been identified within one mile of the project site as recorded in in databases maintained by OPRHP and NYSM (accessed via the New York State Cultural Resource Information System) and LPC (i.e., Boesch 1996). Furthermore, the site is located within a generalized area of archaeological sensitivity as mapped by OPRHP. These sites are summarized in **Table 3-1**, below.

Table 3-1
Precontact Archaeological Sites in the Vicinity of the Project Site

| Site Name/ Number | Site Type | Distance from Project Site | Additional Source Information |
|--|---|-------------------------------|----------------------------------|
| NYSM Site 4058 Parker Site 8 | Shell midden | 500 feet | Parker 1920 |
| Riverdale Park Archaeological District LPC Site 113 | Possibly Archaic and/or Woodland shell middens | 500 feet | |
| Pascal Avenue, Fieldston Road LPC Site 7 | Camp sites and shell middens possibly associated with nearby villages | 800 feet | Bolton 1922 |
| Shorakapkok/Dodge Pond LPC Site 60 | Camps in association with pond | 1,250 feet | McNamara 1996 |
| OPRHP Site 00501.000072 | Midden with Late Archaic components (chert and quartz points; quartz scraper; quartzite uniface; and flakes) in context with historic artifacts | 1,500 feet | DeCarlo 1985 |
| Kappock Street I LPC Site 74 | Possibly Woodland shell deposit with pottery | 1,500 feet | |
| Nipnichsen NYSM Site 8375 | Chief village of the Wickquesgeck tribe, dated to the Late Woodland | 1,750 feet | Parker 1920 |
| Camp Site LPC Site 71 | Camp site with shell midden | 1,900 feet | Bolton 1922 |
| Flake Site OPRHP Site 00501.000068 | Lithic flakes (chert, quartzite, and quartz) associated with tool retouching | 2,000 feet | DeCarlo 1985 |
| Woodland Shell Midden Site OPRHP Site 00501.000069 | Late Woodland (AD 950 to 1350) site with incised and cord-marked pottery, flakes (quartz, quartzite, and chert) and fire-cracked rock | 2,000 feet | DeCarlo 1985 |
| LPC Site 127 | Isolated projectile point | 2,000 feet | |
| Wave Hill Park LPC Site 112 | Possibly Woodland shell deposit and fishing camp | 2,300 feet | |
| LPC Site 126 | Isolated bannerstone | 2,300 feet | |
| Camp Site LPC Site 76 | Shell midden | 2,400 feet | |
| NYSM Site 4057 | Shell midden | 2,800 feet | Parker 1920 |
| Riverside Park Prehistoric Site OPRHP Site 00501.000073 | Late Archaic to Late Woodland with shells, lithic objects (quartz and chert), potter, and fire cracked rock | 3,000 feet | DeCarlo 1985 |

Table 3-1 (continued)
Precontact Archaeological Sites in the Vicinity of the Project Site

| Site Name/ Number | Site Type | Distance from Project Site | Additional Source Information |
|--|---|-------------------------------|----------------------------------|
| Ewen Park LPC Site 63 NYSM Site 4063 | Shell and ash deposits | 3,000 feet | |
| Henry Hudson Monument LPC Site 64 | Storage pit | 3,100 feet | |
| Spuyten Duyvil Hill LPC Site 62 | Late Woodland to Contact Period camp site and shell midden | 3,250 feet | |
| NYSM Site 5320 LPC Site 110 | Traces of Native American occupation | 3,400 feet | Parker 1920 |
| NYSM Site 2838 Parker Site 16 LPC Site 95 | Village site at the mouth of Tibbett's Brook | 3,400 feet | Parker 1920 |
| Paparinemin LPC Site 65 | Late Woodland to Contact Period village and agricultural associated with a hassock amid marshland associated with Tibbetts Brook | 3,400 feet | |
| NYSM Site 5321 | Traces of Native American occupation | 3,500 feet | Parker 1920 |
| Chapel Farm II NYSM Site 7729 OPRHP Site 00501.000791 LPC Site 2 | Quartz quarry and workshop with lithic debris, determined to be extensively disturbed | 3,600 feet | |
| Camp Site LPC Site 77 | Pit features filled with shells | 3,750 feet | |
| LPC Site 125 | Isolated hammerstone and pottery fragments | 3,800 feet | |
| Riverdale Station LPC Site 111 | Shell midden | 3,900 feet | |
| NYSM Site 2823 Parker Site 1A | Village site | 4,000 feet | Parker 1920 |
| Kappock NYSM Site 709 LPC Site 75 | No known information | 4,000 feet | |
| Tibbetts Brook Site I LPC Site 67 | Village site at the mouth of Tibbetts Brook | 4,000 feet | |
| Tibbetts Brook Site I LPC Sites 66 | Traces of occupation found in association with Tibbetts Brook | 4,100 feet | |
| NYSM Site 4056 Parker Site 6A | Native American trail worn into exposed bedrock | 4,200 feet | Parker 1920 |
| Camp Site LPC Site 68 NYSM Site 4065 | Traces of occupation | 4,500 feet | Parker 1920 |
| Van Courtlandt Park Mansion LPC Site 6 | Shell midden probably dating to the Woodland period | 4,600 feet | |
| Spuyten Duyvil Railroad Station LPC Site 72 | Scattered shell deposit | 4,600 feet | |
| Mosholu or Keskekick Bolton (1922): Site 19 | Village site on western side of Mosholu Brook; Possible the same as NYSM Site 2823 and in association with planting fields | 5,000 feet | Bolton 1922 |
| Van Cortlandt Park Planting Field LPC Site 3 | 14-acre planting field on level ground near Tibbetts Brook in use in the Woodland period and possibly the Contact period, in association with Mosholu | 5,000 feet | |
| Kingsbridge Post Office LPC Site 80 | Possibly Woodland site with burials, pottery, and lithic points | 5,200 feet | |
| NYSM Sites 7727 Parker Site 1B | Camp with fire pits | 5,250 feet | Parker 1920 |
| Wading Place LPC Site 61 NYSM Site 4539 | Camp site | 5,250 feet | |
| Sources: New York State Cultural Resource Information System (CRIS); Boesch 1996; Bolton 1922; Parker 1920. | | | |

The sites summarized in Table 3-1 include several more substantial village sites as well as smaller campsites. A number of sites comprised only a small number of artifacts or were isolated finds. In close proximity to the project site, “traces of native stations” were documented near the former intersection of Fieldston Road and 247th Street (Bolton 1922: 94). Bolton hypothesized that the stations were associated with *Keskeskick*, a village site, also called *Mosholu*, a large 14-acre site that was located less than a half mile east of the project site within what is now Van Cortlandt Park (ibid). Shell middens and burial pits were among the features identified during archaeological investigations at this site in the early 20th century (Bolton 1975). Parker (1920) provides a map of the village site and identifies the locations of fire pits near the western shore of Van Cortlandt Lake. A number of historical and precontact sites making up the Riverdale Park Archaeological District were identified in the 1980s (Boesch 1996; Hauser 2018).

Another precontact archaeological site that has been better documented in the vicinity of the project site is known as Chapel Farm II. The site is situated approximately 500 feet to the north of the property at 4680 Fieldston Road and is generally bounded by Fieldston Road and West 250th and 253rd Streets. The Chapel Farm II site features topography similar to that seen at 4680 Fieldston Road: moderately to steep slopes with plateaus, rock outcroppings, and level grassy areas (City/Scape 1990). Numerous archaeological investigations of the site were completed by City/Scape (1990 and 1993), Hartgen Archaeological Associates (1990), Historical Perspectives, Inc. (1991 and 1993), LaPorta Associates (1993), and Sheffield Archaeological Consultants (1994). Ultimately, it was determined that the site represented a “lithic workshop at which quarried quartz was reduced to blanks suitable to be further worked into tools” (Sheffield Archaeological Consultants 1994: 53). However, as a result of significant disturbance to the site as a result of 20th century development and landscaping, the site was determined to be ineligible for listing on the State and National Registers of Historic Places and no further archaeological investigations of the site were warranted.

One Native American village was identified within one mile of the project site. The site, known as *Paparinemin*, was a semi-permanent settlement located approximately 3,400 feet to the south of the project site on what was formerly an island surrounded by marshland on the southern shore of the Bronx near Spuyten Duyvil (Boesch 1996). The site was allegedly used as a shellfish processing and hunting and gathering station and was considered a “favorite resort of the *Reckgawawanc*” (Bolton 1975: 83). It appears to have been in use through the end of the 17th century (Boesch 1996). Bolton (1975) identified another Native American village, *Nappeckamak*, another *Reckgawawanc* “resort” in what is now Yonkers.

Portions of modern Bailey Avenue and Broadway were constructed along the line of a former Native American trail which connected the *Reckgawawanc* settlements along the southern shore of the Bronx near Spuyten Duyvil with the site in modern Van Cortlandt Park and other sites to the north (Grumet 1981). It has been suggested that Indian Road, which forms the northern boundary of the project site, may indicate the general location of a Native American campsite (Boesch 1996). However, the name “Indian Road” was given to the property by its former owner, Major Joseph Delafield likely because it was fashionable at the time to use Native American-influenced names in the late-19th century and the name may have nothing to do with the area’s history (McNamara 1996).

A. INTRODUCTION

The Bronx was historically included within Westchester County, which was one of the twelve counties established in New York State in 1683. The western portion of modern Bronx County, including the Riverdale neighborhood, was annexed to what was then New York City in 1874. The project site was included within what was historically known as New York's 24th Ward and that portion of the Bronx located to the east of the Bronx River was annexed in 1895. The five boroughs of the City of New York were consolidated in 1898, although the Bronx remained part of New York County until the two were formally separated in 1914.

B. EARLY COLONIAL HISTORY OF THE BRONX

New York was “discovered” by Giovanni de Verrazano in 1524 and explored by Henry Hudson in 1609, thus marking the beginning of European occupation in the area. By 1621, the area had become part of a Dutch colony and the States-General in the Netherlands chartered the Dutch West India Company (“WIC”) to consolidate Dutch activities in the New World. It was at this time that the WIC began to purchase large tracts of land from the Native Americans. The WIC purchased *Keskeskeck* from the local Native Americans in 1639 (Hansen 1950).

Towards the end of the 17th century, the increasing European population rapidly displaced the Native American population in the Dutch colony of New Amsterdam and the English colony of New York. The first settler of the area was Adriaen van der Donck, who in 1646 was granted a patroonship that included a large area extending 16 miles north of Spuyten Duyvil at the tip of Manhattan and as far east as the Bronx River (Hansen 1950). As part of his role as patroon, Van der Donck was responsible for finding settlers to inhabit the land. He advertised the land as having an abundance of “woods, marshes, meadows, pastures, waters, lakes, creeks, rivulets, fishing, hunting, fowling, [and] timber” (ibid: 22). The Albany Post Road, built along the line of a Native American trail in the vicinity of modern Broadway, was constructed in 1669 (Jenkins 1912).

After Van der Donck's death, his widow sold the land to Elias Doughty who then divided it and sold it in 6 smaller parcels (City/Scape 1990). The project site was included within a large tract that was sold by Doughty to William Betts and George Tippet (or Tibbett), for whom the nearby brook was named (Jenkins 1912). The property to the north of the project site was sold to Frederick Philipse, who then established the Manor of Philipsburg (ibid). Many vast tracts of land were originally included within larger properties that were purchased from the Native Americans before being officially chartered as Manors by the British crown. The manor system as it existed in the Americas was not a feudal system, as it was in England, but instead a way for the British to grant land in such a way that it promoted “the growth and development of their new possession under their own laws and customs” (DeLancey 1886: 90). Tenants leased their farms for life-long periods, and in some instances, were eventually able to buy their property from their landlord (Hansen 1950). Philipse received his patent from the British crown in 1680 (ibid). The land was made into a Manor in 1697 (DeLancey 1886). Beginning in 1699 Colonel Jacobus Van Cortlandt, the son-in-law of Frederick Phillipse and Mayor of New York from 1710 to 1719,

began to purchase land in the area as well (Jenkins 1912). Van Cortlandt was responsible for damming Tibbett's Brook and creating Van Cortlandt Lake (*ibid*).

C. THE 18TH CENTURY OCCUPATION AND DEVELOPMENT OF THE PROJECT SITE

During the 17th and 18th centuries, the project site does not appear to have been developed, possibly because of its shallow bedrock and sloping terrain though portions may have been used as orchards or for other agricultural purposes. While the southwestern Bronx saw military activity at the beginning of the war, little occurred in the immediate vicinity of the project site. C.J. Sauthier's 1777 map of military activities that took place in the area in 1776 shows that troops marched up and down the Albany Post Road to the east of the project site and soldiers camped in areas to the north and in what is now Van Cortlandt Park to the east. Additional troops moved along the Hudson River waterfront to the west of the project site as they traveled between New Jersey and Spuyten Duyvil/Kingsbridge, where a great deal of military activity occurred during the war and where several forts were located.

During the Revolutionary War, life was difficult for the residents of Westchester County, in which the Bronx was located at the time, during the war. Soldiers stationed in the area commandeered clothes, blankets, food, and other provisions from the area's residents. Tensions between British loyalists and American patriots peaked in the late 1770s. In 1779, the New York Legislature confiscated the land of many loyalists, including that of Frederick Phillipse. After the war was over, the confiscated land was sold off by the Commissioners of Forfeiture, most often to the tenants already inhabiting it (Pelletreau 1886).

The small number of residents living in the vicinity of what is now the Riverdale/Fieldston neighborhood during the war included the Hadley family, who appear to have had a presence in the area since Joseph Hadley settled there before 1687 (Bolton 1848). William Hadley purchased a plot of land from Jacob and Elizabeth Van Cortland (*sic*) in 1761. As shown in **Table 4-1**, while a deed recording this transaction could not be located, the sale was later referenced in later deeds for the same property (Westchester County Liber 31, Page 190). William Hadley and George Hadley were supportive of the American cause during the Revolutionary War (Jenkins 1912). Following the war, the land of those who had remained loyal to the British crown was confiscated for resale by a municipal body known as the Commissioners of Forfeiture. In 1786, the Commissioners sold to William Hadley a 92-acre plot of land formerly owned by Isaac Green that was situated north of his property (Westchester County Liber 31, Page 144). With this purchase, Hadley's real estate holdings grew to more than 257 acres, including the project site. The Hadley family house was located to the east of the project site along the Albany Post Road (Scharf 1886). The Hadley family would retain ownership of the large farm through the first quarter of the 19th century.

Table 4-1
Early Conveyance Records for the Project Site

| Document Date | Liber | Page | Grantor | Grantee | Property Description | Cost | Other |
|---|-------|------|--|------------------|---|-------------------------|--|
| 8/1/1784 | K | 66 | John DeLancey | William Hadley | Two parcels of land in Yonkers: 1) bounded south and west by the high road, north and east by land of Augustus Van Cortlandt, 2) bounded north and west by land of William Hadley, south by land of Frederick Van Cortlandt; and a plot of salt meadow on Spiten Divil (sic) Creek; total is 36 acres | 407 pounds | Parcels contained buildings, gardens, orchards, fences, woods, pastures, meadows, water, water courses |
| 5/18/1786 | 31 | 144 | Isaac Stoutenbugh and Philip Vn. Cortlandt, comm. of forfeitures | William Hadley | 92-acre portion of Manor of Philipsburgh bounded north by property of George Hadley, east by the road, south by the Yonkers line, and west by the Hudson River | 647 pounds 10 shillings | Hadley is a farmer of Westchester County; property was formerly owned by Isaac Green |
| 7/24/1827 | 31 | 190 | Charles and Isaac W. Hadley, exrs. For William Hadley | Francis Price | 257.46 acres in Town of Yonkers, northern part is the parcel Hadley purchased in 1786, southern part sold to Hadley by James and Elizabeth Van Cortland (sic) on July 16, 1761 | \$7,710 | |
| 8/25/1827 | 31 | 292 | Francis and Jane Price | Patrick Doherty | 257.46 acres in Town of Yonkers | \$14,000 | |
| 11/18/1829 | 37 | 201 | Thomas Wills, Master in Chancery | Joseph Delafield | 257.46 acres; Premises formerly conveyed to Charles and Isaac W. Hadley as executors to William Hadley | \$6,000 | |
| Source: Westchester County Clerk Records Online. | | | | | | | |

William Hadley died shortly after the turn of the 19th century in 1801. His will transferred ownership of his farm to his son, Charles. It also granted his wife the right to continue to reside on the farm in the bedroom of her choice as long as she remain unmarried, as well as one third of all the produce grown on the farm, one cow, and one horse, and also transferred her ownership of an enslaved woman named Hester “who she may dispose of as the way she think proper” (Westchester County Wills Volume A, Page 62). William Hadley’s executors, sons William, Charles, and Isaac, were also ordered to sell the remainder of the farm stock, blacksmith tools, and enslaved persons after his death in order to pay off debt. Census records indicate that the Hadley farm was heavily dependent on the forced labor of enslaved persons prior to the emancipation of slaves in New York State in 1827. The 1790 federal census identifies nine enslaved persons on the Hadley farm. Six enslaved persons and two “other free persons” lived on the property in the 1800 census; 2 enslaved persons and one free person in 1810; and one enslaved person in 1820.

D. THE DELAFIELD ESTATE IN THE 19TH CENTURY

In 1827, several decades after the death of William Hadley, his surviving sons Isaac W. and Charles Hadley sold the 257 acre farm. In 1827, the farm was first sold to Francis Price, who almost immediately sold it to Patrick Doherty. Doherty purchased the property with a mortgage and after it was foreclosed upon, a master-in-chancery sold the farm to Joseph Delafield in 1829 (Westchester Liber 37, page 201). The Delafield family would continue to own most of the property through the remainder of the 19th century and it was collectively known as the “Delafield Estate.” Major Joseph Delafield (1790 to 1875) was a veteran of the War of 1812 who later became a lawyer and amateur mineralogist, and his father, John Delafield, owned extensive property in Manhattan and Queens (*New York Times* 1875a; Pelletreau 1907; Jenkins 1912). Delafield and his heirs would own the property through the early 20th century. The

family appears to have maintained the massive property as a country estate while their main place of residence was in Manhattan. The family of Joseph Delafield was recorded as residents of Manhattan in the 1840, 1850, and 1870 censuses but could not be located in censuses taken in 1830 and 1860.

One of the earliest uses on the land was limestone quarrying. Joseph Delafield's career in the Army's Engineer Corps related to the construction of forts, inspiring him to open a lime mortar business (Dodge 1991). The 257-acre property was ideal for this effort, and he appears to have purchased it for lime slag production before he resided on the property (ibid). Joseph Delafield had constructed a lime kiln "on a French plan, which could be kept in continuous operation, a quality theretofore unknown in America...[that] yielded large returns without requiring much of his personal time or attention" (Pelletreau 1907: 264). The quarried lime was converted into mortar and shipping from a dock Delafield constructed along the waterfront and a former toll house from Manhattan was relocated to the estate to serve as a home for the quarry's foreman (LPC 2006). It is unclear if buildings were present on the project site prior to 1849, when Delafield is reported to have constructed his summer home on the property (ibid). Delafield shared the home with his wife, Julia Livingston (1801-1882), whom he married in 1833, several years after purchasing the estate (ibid). The earliest maps clearly depicting land ownership and the presence of some buildings in the vicinity of the project site were published beginning in the mid-19th century. The 1851 Sidney and Neff map of Westchester depicts the massive Delafield property in a largely undeveloped area between the former Albany Post Road (in the vicinity of modern Broadway) and the Hudson River waterfront. The Delafield house is shown towards the center of the estate and "Delafield Dock" was located at the waterfront to the west. A narrow road wound through the property to the south of the family home to connect the Post Road and the waterfront. The 1853 Connor map of Westchester depicts the Delafield property—identified as "Fieldstone"—in a similar manner. In the vicinity of the project site to the southwest of the Delafield mansion, the map depicts an unidentified building as well as what appears to be an orchard. The map's accuracy makes it difficult to determine if the building was within the project site or adjacent to the northeast. The 1858 Merry, 1860 Walling, and 1867 Beers maps include little detail about the property's development beyond depicting the Delafield home, although the former identifies the estate as "Fieldston." "Fieldston" was the name of the Delafield family's estate in England and Joseph Delafield borrowed the name for his home in New York (McNamara 1996). Fieldston Road, which was not laid out until 1919, and the neighborhood of Fieldston were in turn named after the Delafield home (ibid).

The 1868 Beers (see **Figure 7**) and 1872 Beers maps of Yonkers identify the project site as a vacant part of the Delafield estate, which was otherwise developed with the Delafield house and the lime kiln along the waterfront. Delafield died of pneumonia in 1875 within several days of the death of two of his brothers, also as a result of pneumonia (*New York Times* 1875a; *New York Times* 1875b). Following his death, his estate was valued at \$200,000 and was inherited by his children, Lewis L. (1834-1883), Maturin L. (1836-1917), and Julia L. Delafield (*New York Times* 1875c; Pelletreau 1907; *New York City Wills*, Volume 232, Page 57). Delafield's will referenced two cottages on the Fieldston property, one that was occupied by Joseph and Julia Delafield and the other that was occupied by Lewis L. Delafield, as well as a stable, coach house, a laundry, and an old quarry (*New York City Wills*, Volume 232, Page 57). Maturin Delafield constructed a stone house on his father's Fieldston estate in 1869 which served as his primary residence (Pelletreau 1907).

Numerous maps published in the late 19th and early 20th centuries continue to depict the project site as an undeveloped portion of the former estate of Joseph Delafield, including the 1879 Bromley atlas, the 1885 Robinson atlas, the 1893 Bromley atlas, and the 1896 Sanborn map (see **Figure 8**). Each of these maps depicts a winding network of driveways/roads through the project site. These roads were laid out by Frederick Law Olmsted, who helped to design Central Park, and James R. Croes as part of a survey of the 23rd and 24th Wards that was completed in 1876 (LPC 2006). Whereas streets in Manhattan had been

designed in a uniform grid, the roads laid out by Olmsted and Croes were winding in order to take advantage of the area's natural topography and to give the area a more suburban feel relative to other parts of the city (ibid).

E. THE DEVELOPMENT OF THE RIVERDALE/FIELDSTON NEIGHBORHOOD IN THE 20TH CENTURY

The neighborhood of Riverdale and Fieldston changed dramatically in the early 20th century, when the Interborough Rapid Transit line was constructed to connect the Bronx and Manhattan in 1904 (Burrows and Wallace 1999). As a result, development began to increase in the newly accessible Bronx. With the advent of the automobile, street construction intensified as new networks of highways and parkways were constructed throughout the Bronx during the 20th century. As a result, the increasingly urban areas were no longer a suitable location for a summer home. During the early 20th century, the Delafield heirs invested in the construction of streets and installation of utilities in advance of the area's development for residential purposes (LPC 2006). The sale of individual lots and the construction of homes began in the early 1910s.

The 1911 Bromley atlas is the first to depict development within the project site. The map depicts two large homes in the center of the site: a 3-story (with basement) brick structure with wood frame additions and a 3-story (with basement) wood frame house. Four smaller wood frame buildings were constructed on the property and several proposed, but not constructed, streets were located within the project site. The 1914 Sanborn map (see **Figure 9**) depicts the same two buildings, but suggests that the northern home was a 2-story (with basement and attic) plaster-clad wood frame building and that the southern home was a 3-story (with basement) wood frame dwelling. At least nine smaller buildings were present within the southeastern portion of the project site, almost all of which were wood frame, including a garage. The map The 1921 Bromley atlas of the Bronx depicts the property in the same manner. The 1938 Bromley atlas depicts at least eleven small wood frame buildings in the eastern half of the project site, including several barns or sheds. The 1950 Sanborn map identifies the occupant of the home in the northern portion of the project site as M. Conroy and occupant of the building in the center of the project site as "E.C. Delafield." The property appears in a similar manner in a version of the same atlas that was updated through 1957.

The project site was included within a portion of the estate donated to Columbia University by Edward Delafield in 1967 (Rosenberg 1979). In 1979, the University sold the property to real estate developers (ibid). The remainder of the buildings currently situated on the project site were constructed in 1987. The circa 1911 former Delafield mansion in the center of the project site, sometimes erroneously identified as the original Delafield summer home, was destroyed after a fire in 1994 (Sugarman 1994).

A. CONCLUSIONS

As part of the background research for this Phase 1A Archaeological Documentary Study, various primary and secondary resources were analyzed, including historic maps and atlases, historic photographs and lithographs, newspaper articles, and local histories. The information provided by these sources was analyzed to reach the following conclusions.

PREVIOUS DISTURBANCE

The project site has been disturbed as a result of two distinct episodes of development. The first occurred in the early 20th century when two large houses were constructed in the central and northern portions of the project site. The second wave of development occurred in the 1980s, when the existing on-site buildings were constructed. The house in the center of the site, formerly the residence of Edward C. Delafield, was destroyed by fire in the 1990s and the other early 20th century home on the site appears to have been demolished. Comparisons of historical and modern topographical data indicate that landscape in the northern and eastern portions of the project site has been heavily modified. However, the ground surface of the central hilltop terrace historically located within the center of the project site appears to be the least modified with the exception of those locations where homes were constructed.

PRECONTACT SENSITIVITY ASSESSMENT

The precontact sensitivity of project sites in New York City is generally evaluated by a site's proximity to level slopes, watercourses, well-drained soils, and previously identified precontact archaeological sites. As described in **Chapter 3, "Precontact Period,"** the project site is located within one mile of more than three dozen documented precontact archaeological sites representing former Native American settlements, tool processing locations, or that contained other evidence of Native American activity. The hilltop terrace located in the central portion of the project site would have been ideal for a short-term Native American settlement. Absent previous disturbance, this portion of the site would be expected to be highly sensitive. However, Native American archaeological sites are typically shallowly buried and are often within 5 feet of the original ground surface, which appears to be in the vicinity of the current ground surface. The extent to which the project site has been disturbed as a result of the construction and demolition of buildings is currently unknown, although portions of the terrace may remain intact. The project site is determined to have low to moderate sensitivity for archaeological resources associated with the precontact occupation of the area. The area of sensitivity is depicted on **Figure 10** and does not include the locations of existing or former houses.

HISTORIC SENSITIVITY ASSESSMENT

The project site was included within the larger 257-acre Delafield estate and appears to have been largely occupied by woodlands until the early 20th century, when the site was developed for residential use. Given the absence of historical development on the project site, the site is determined to have low sensitivity for archaeological resources dating to the historic period.

B. RECOMMENDATIONS

The site has been determined to have low to moderate sensitivity for archaeological resources dating to the precontact period in the area of archaeological sensitivity as depicted on **Figure 10**. A Phase 1B archaeological investigation of that area is recommended to confirm the presence or absence of archaeological resources on the property. Prior to the completion of the Phase 1B study, an Archaeological Work Plan must be filed with and approved by LPC before the Phase 1B investigation can commence.

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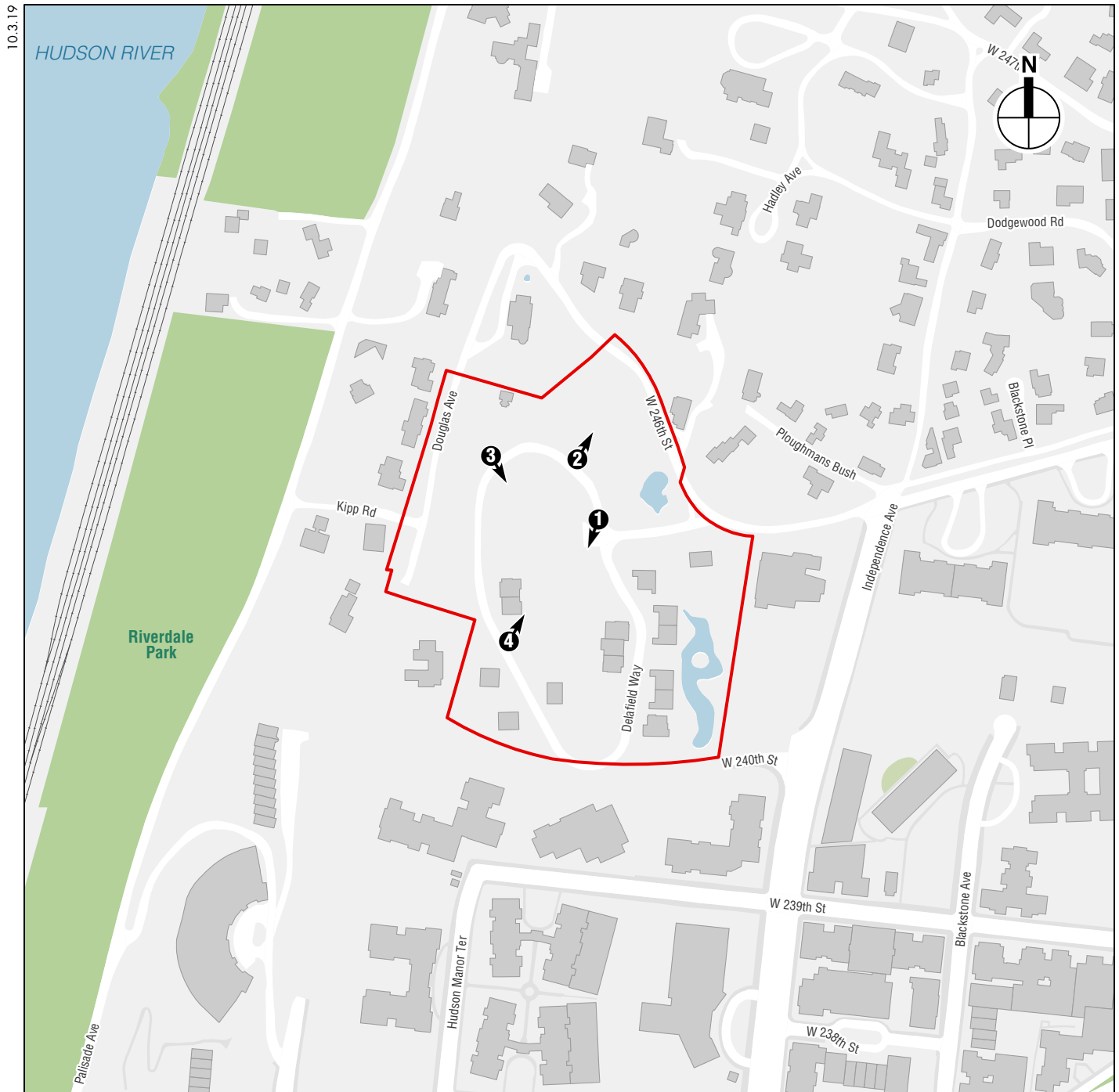
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Figures

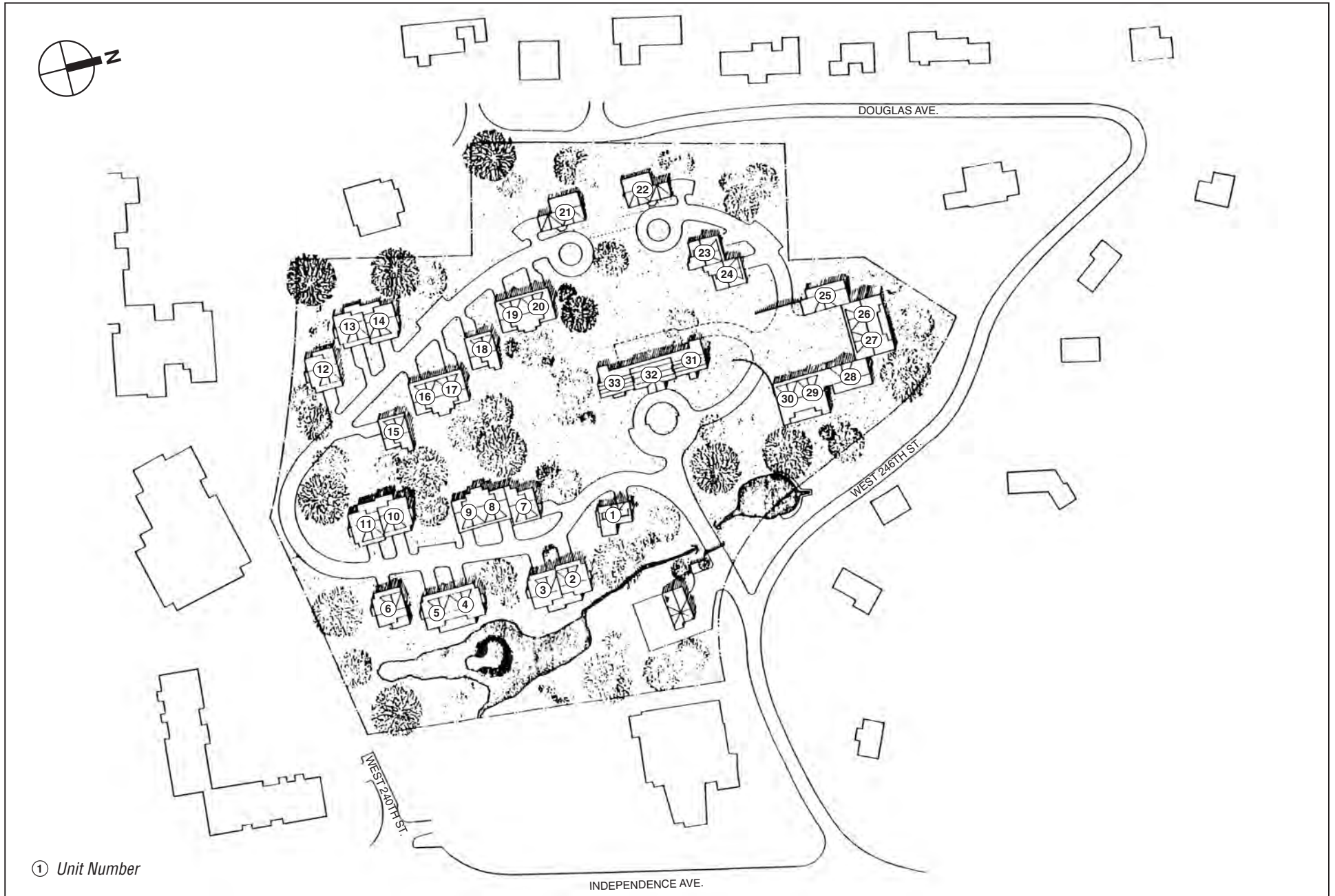


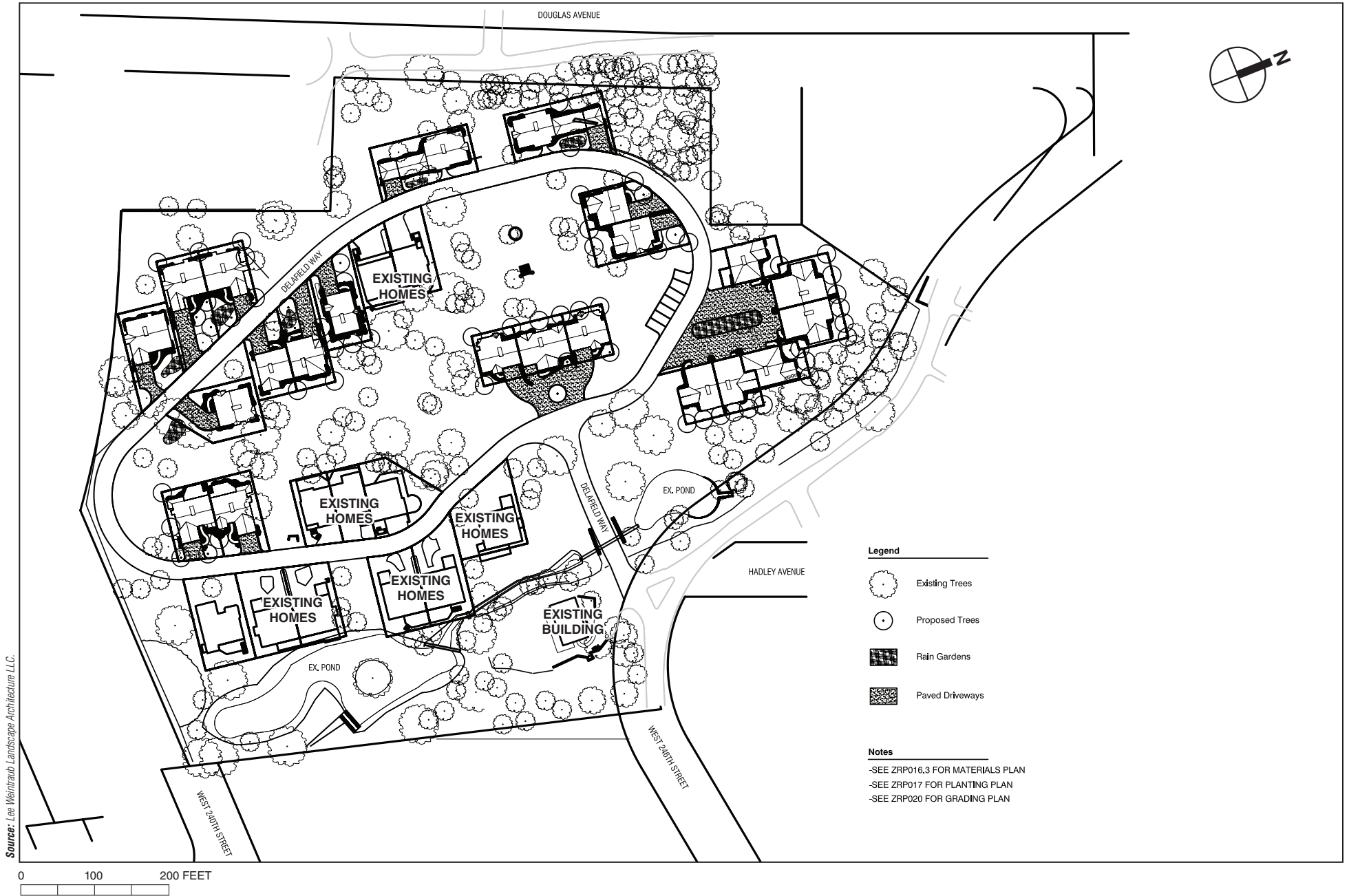
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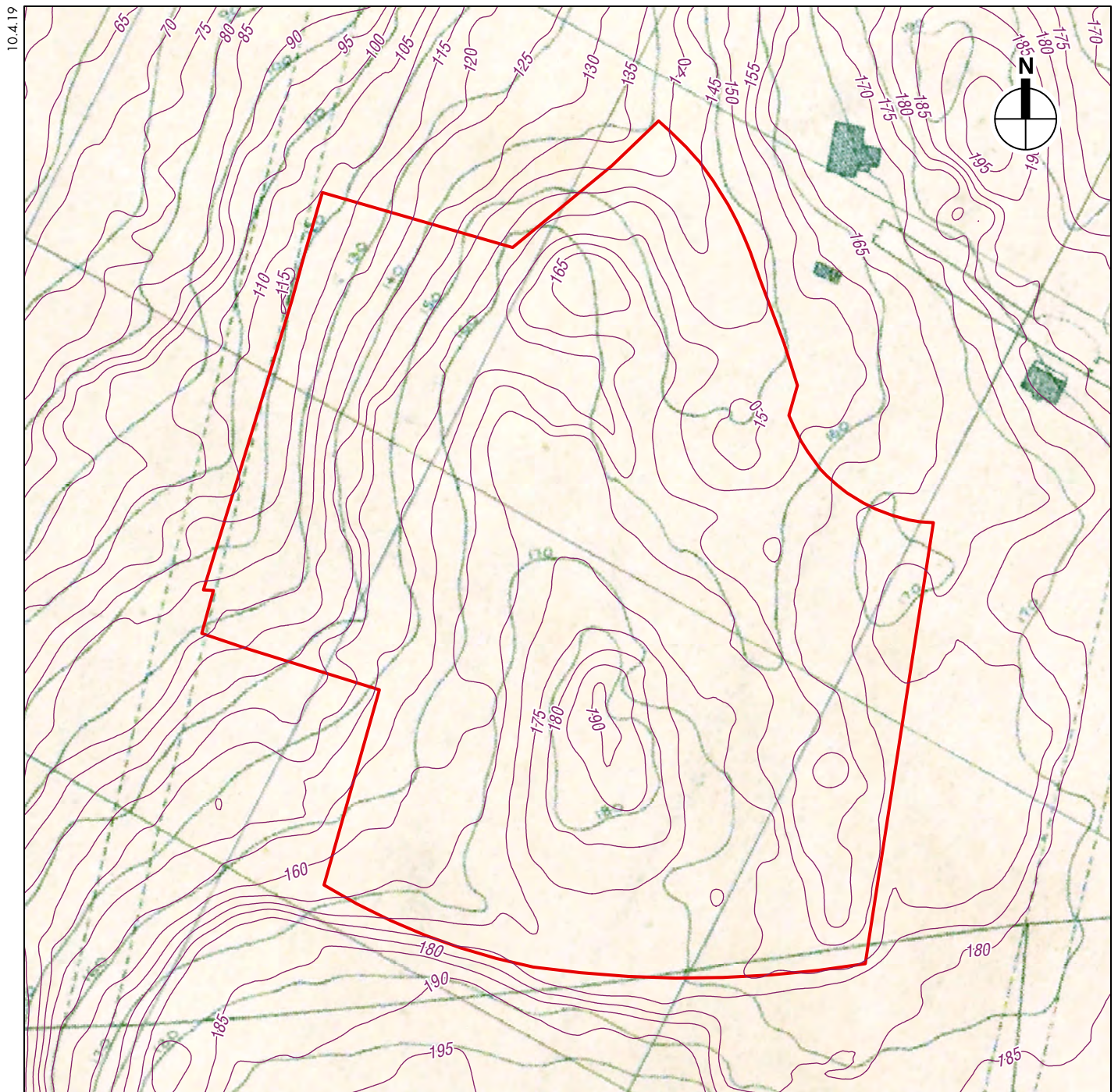
Project Site

Photograph View Direction and Reference Number









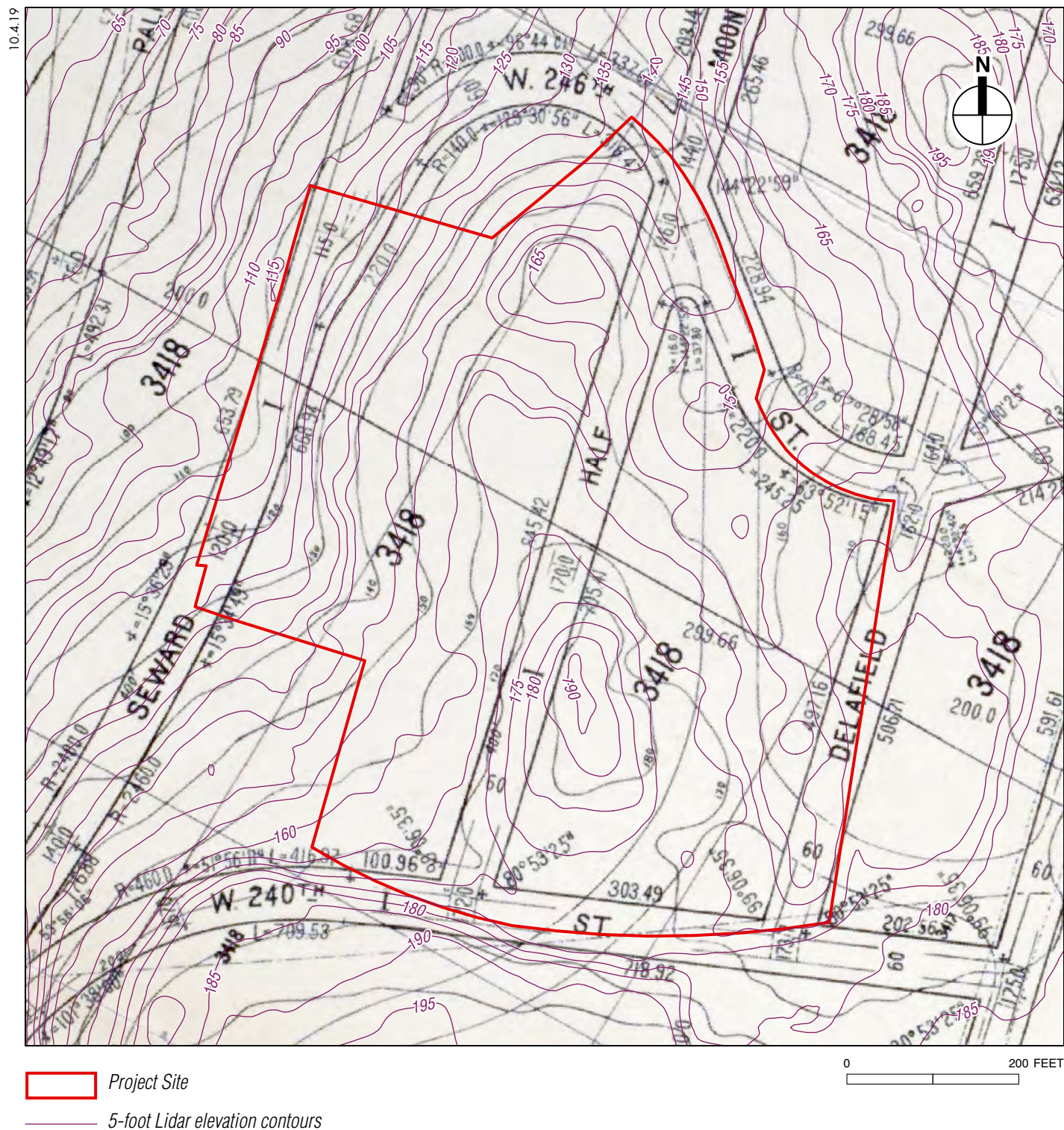
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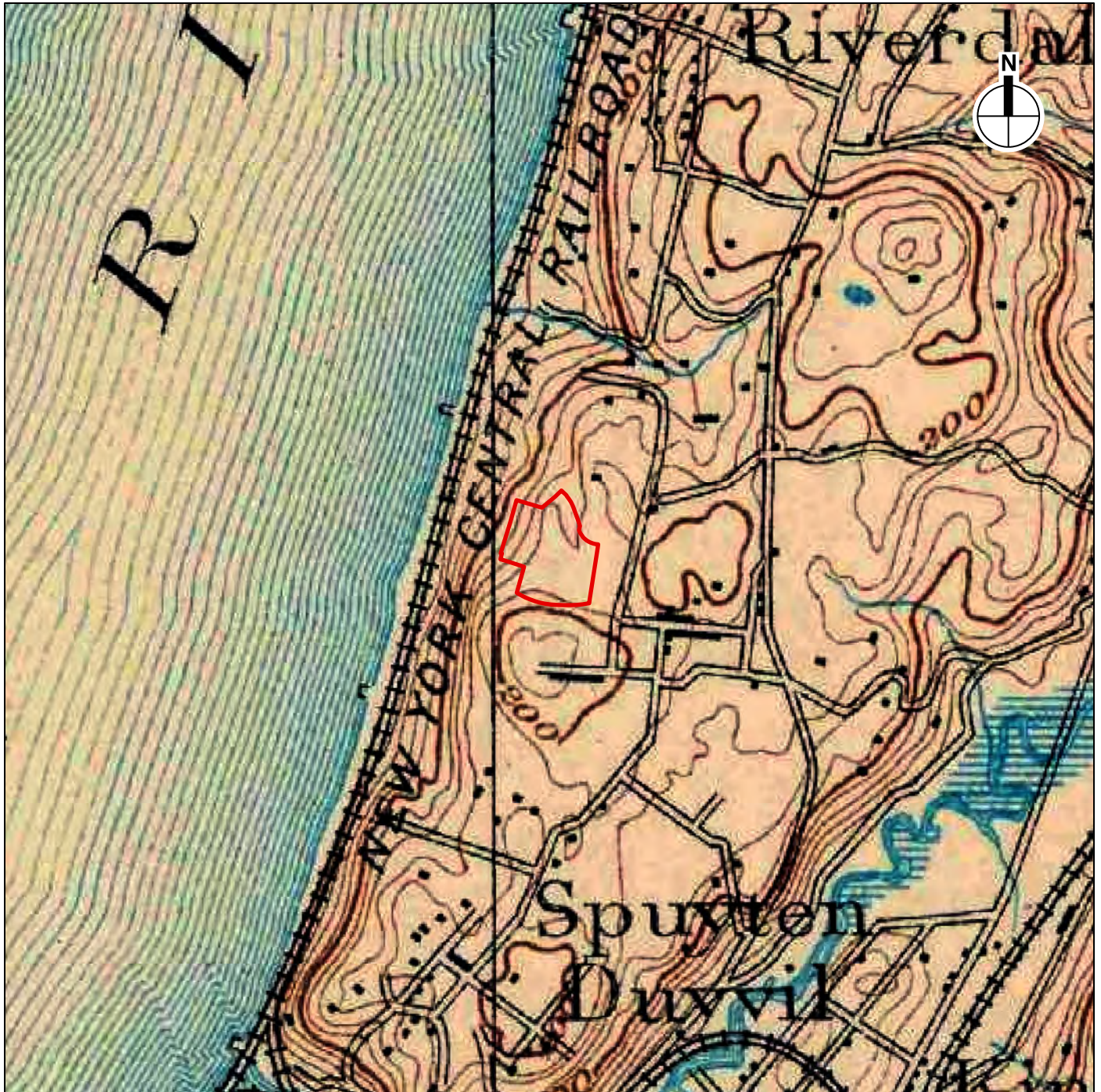
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1873 Department of Public Parks
Topographical Map


DELAFIELD ESTATES

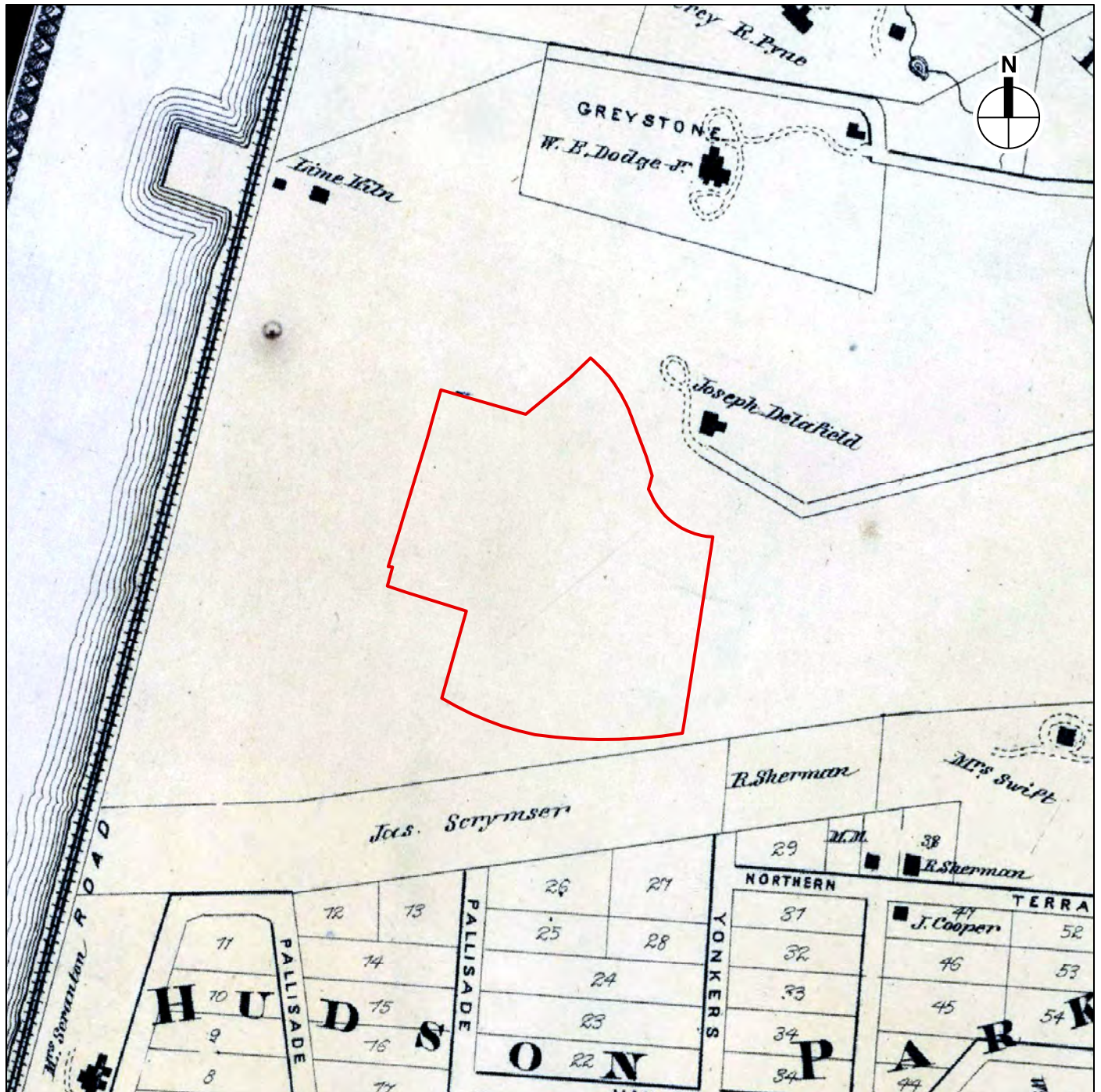
Figure 4






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 Project Site

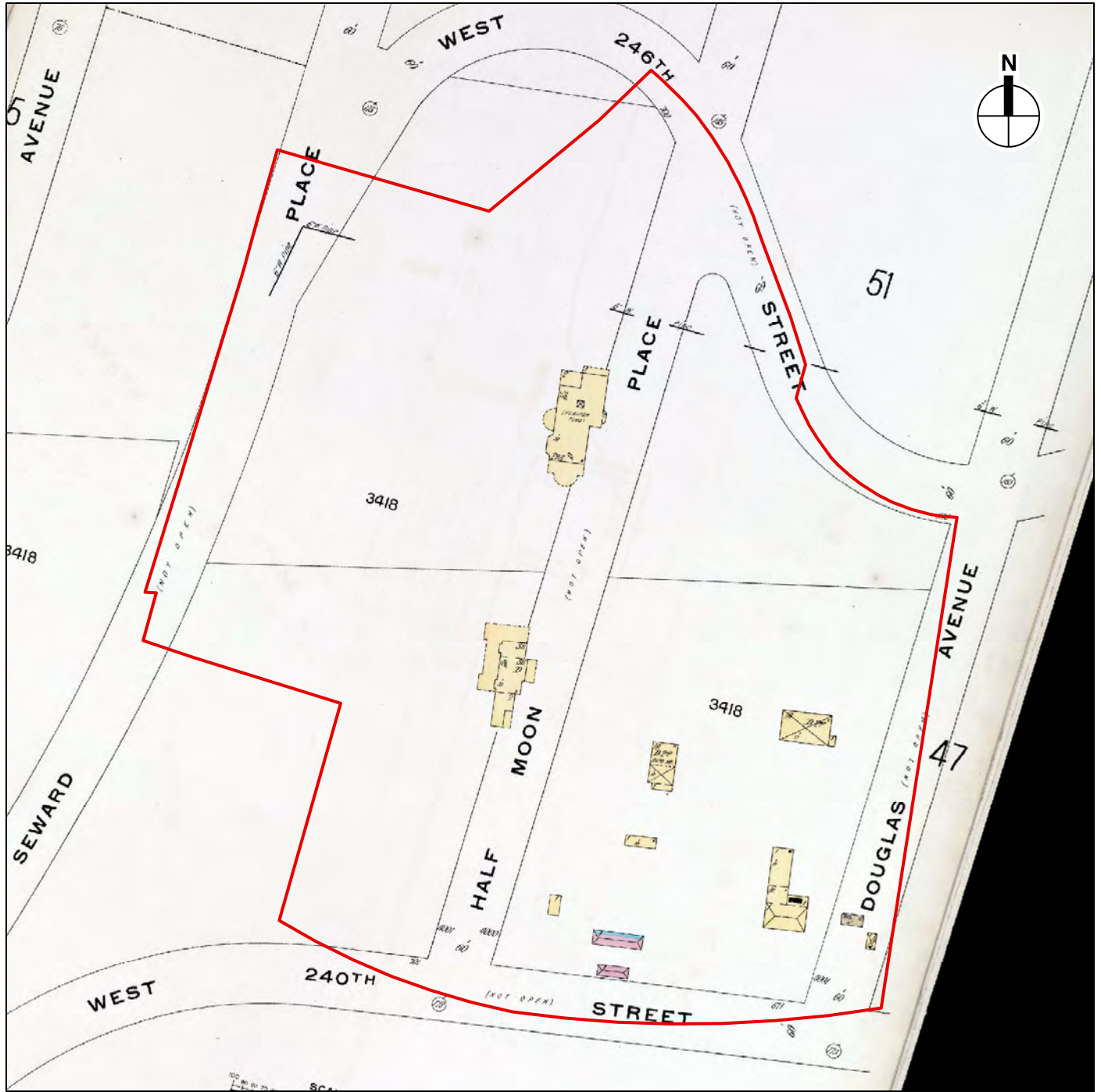
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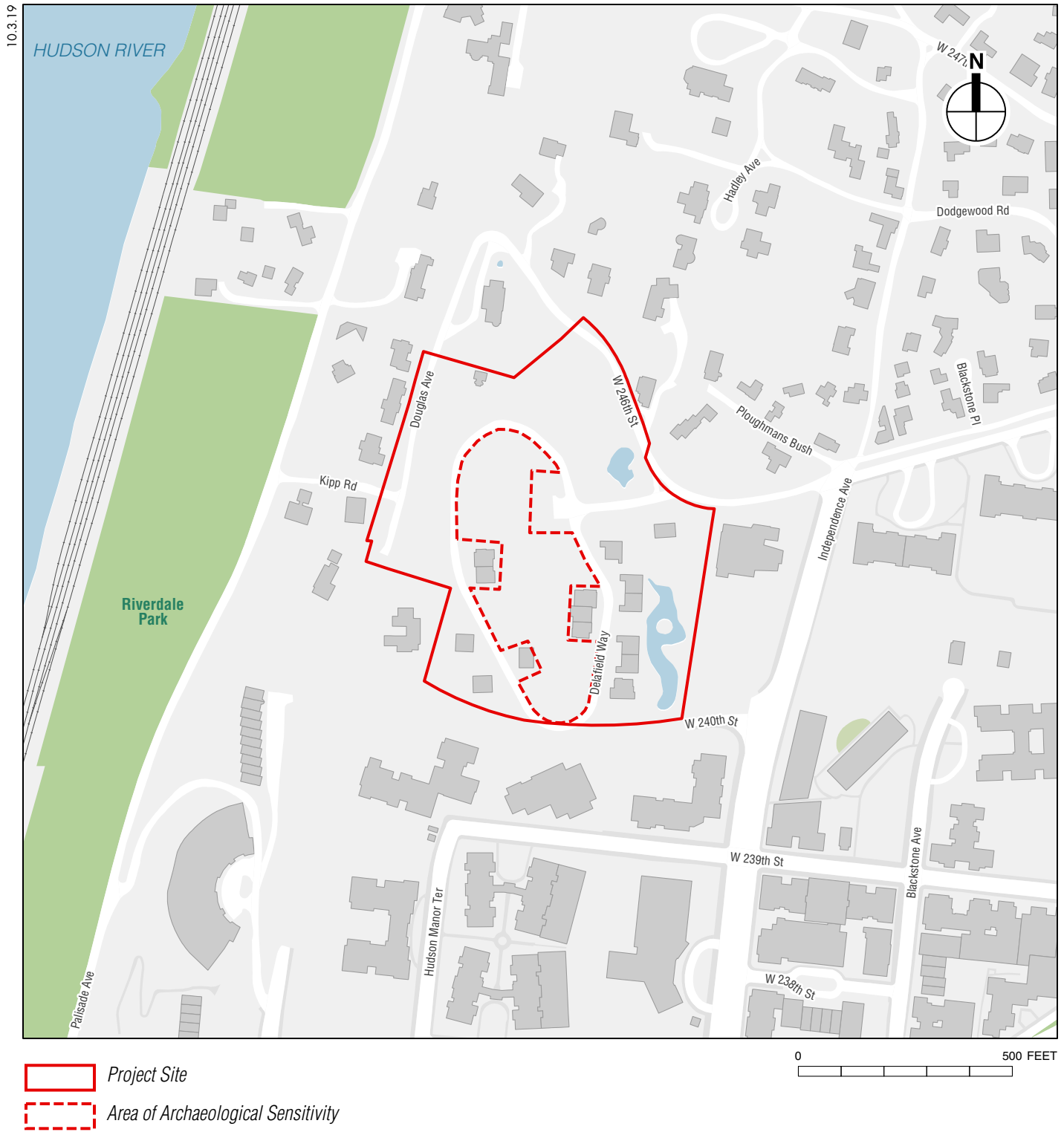


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 Project Site



Area of Archaeological Sensitivity
Figure 10

Photographs



View southwest from Delafield Way in vicinity of former house destroyed by fire in 1994

1



A disturbed area at the northern end of the site looking northeast towards West 246th Street

2



Looking southeast from Delafield Way in the northwestern portion of the project site **3**



View northeast from Delafield Way in the southwestern portion of the project site **4**