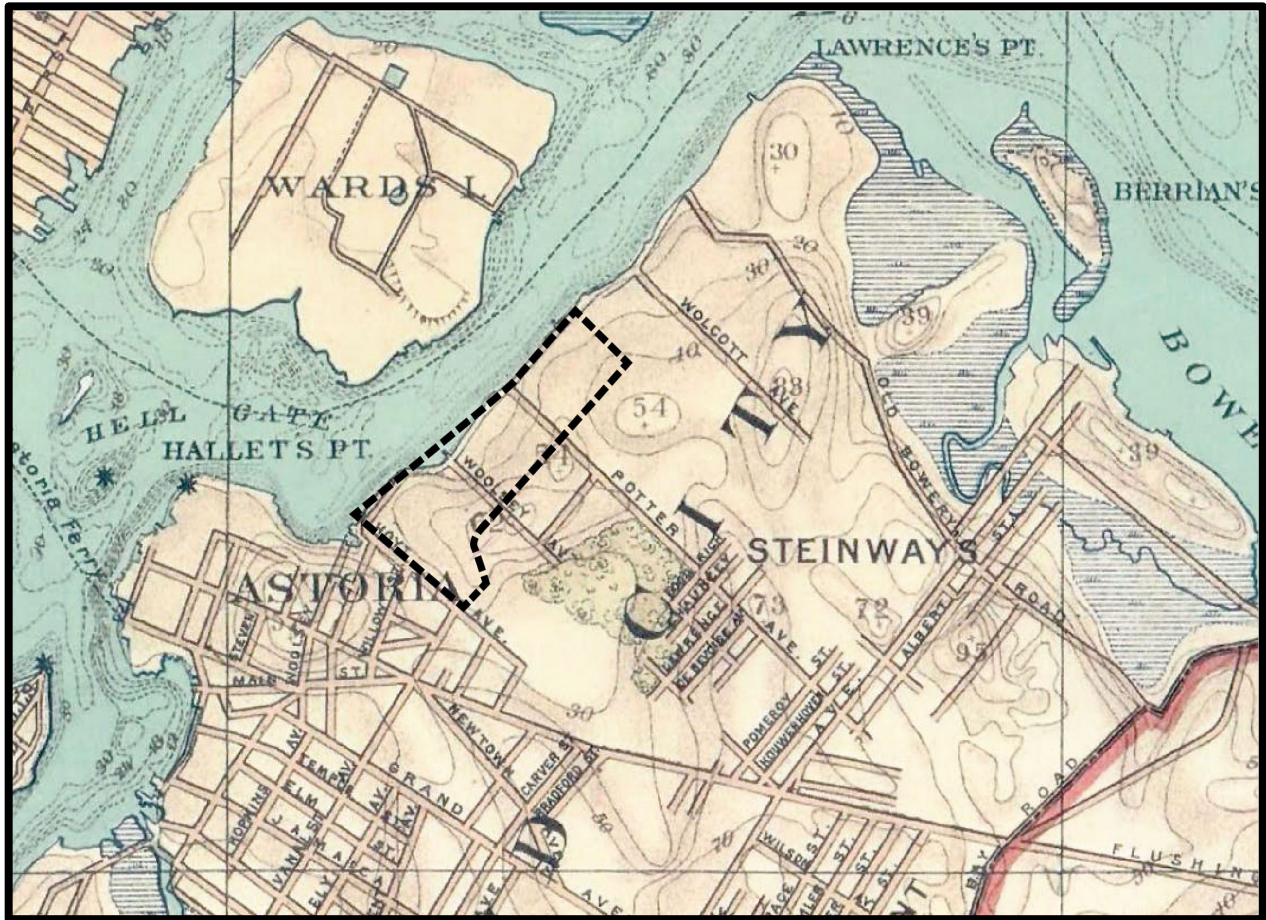

Astoria Park 1A Archaeological Assessment

(Block 898, Lot 1 in Part and Portions of the Adjacent Public Way)

Astoria, Queens



Bien/Vermeule 1890/1891, detail. The project APE is defined by a dashed line

Prepared for the New York City Department of Parks & Recreation
Through Nancy Owens Studio, LLC
Prepared by Joan H. Geismar, Ph.D., LLC
March/April 2017

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ABSTRACT

This 1A archaeological assessment for Astoria Park, Queens (Park (Block 898 Lot 1 in part and portions of the adjacent public way) addressed the issue of the entire park's archaeological potential. Joan H. Geismar, Ph.D., LLC conducted the assessment as a subconsultant to Nancy Owens Studio, LLC the designer of a park master plan. Research determined that in the last half of the 19th century wealthy New Yorkers created expansive rural retreats in the area of potential affect (APE) on former farmland. It also determined that the development history of the park site undoubtedly adversely affected the archaeological potential of the APE. This was not only the result of the park's creation in 1913, but also construction of the New York Connecting Railroad (opened in 1917), now AMTRAK, and the Triborough Bridge (opened in 1936), now the Robert F. Kennedy Bridge (RFK Bridge). Park development after 1913 included the Astoria Pool and Play Center constructed in 1936, now a New York City Landmark, and extensive land alterations. The park's low archaeological potential is despite evidence of prehistoric within the APE documented by archaeologists almost 100 years ago. It is also despite a terrain that, in its natural state, included access to fresh water and to the East River, a food procurement and transportation resource. While the park's potential for archaeological resources is now low, as a precautionary measure, it is recommended that an archaeologist be on call to address any unanticipated finds when excavations below the current ground surface are in progress. This is particularly so in the northern third of the park where a disturbance analysis suggests relatively minimal disturbance despite construction of the aforementioned New York Connecting Railroad. Ideally, an archaeologist should be consulted to review plans when excavation is scheduled north of the AMTRAK viaduct where a mid-to-late 19th-century "mansion" was located. In addition, a protocol should be in place that calls for a stop work in any area of discovery to allow for an archaeological assessment and, if deemed necessary, documentation of the find.

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INTRODUCTION

This report presents the methods and findings of a 1A archaeological documentary study to assess the potential archaeological sensitivity of Astoria Park (Block 898 Lot 1 in part and portions of the adjacent public way) in Astoria, Queens (Figures 1 and 2). Joan H. Geismar, Ph.D., LLC prepared the report for the New York City Department of Parks and Recreation (Parks) as a sub-consultant to Nancy Owens Studio, LLC who is designing a Master Plan for the park (Figure 3).

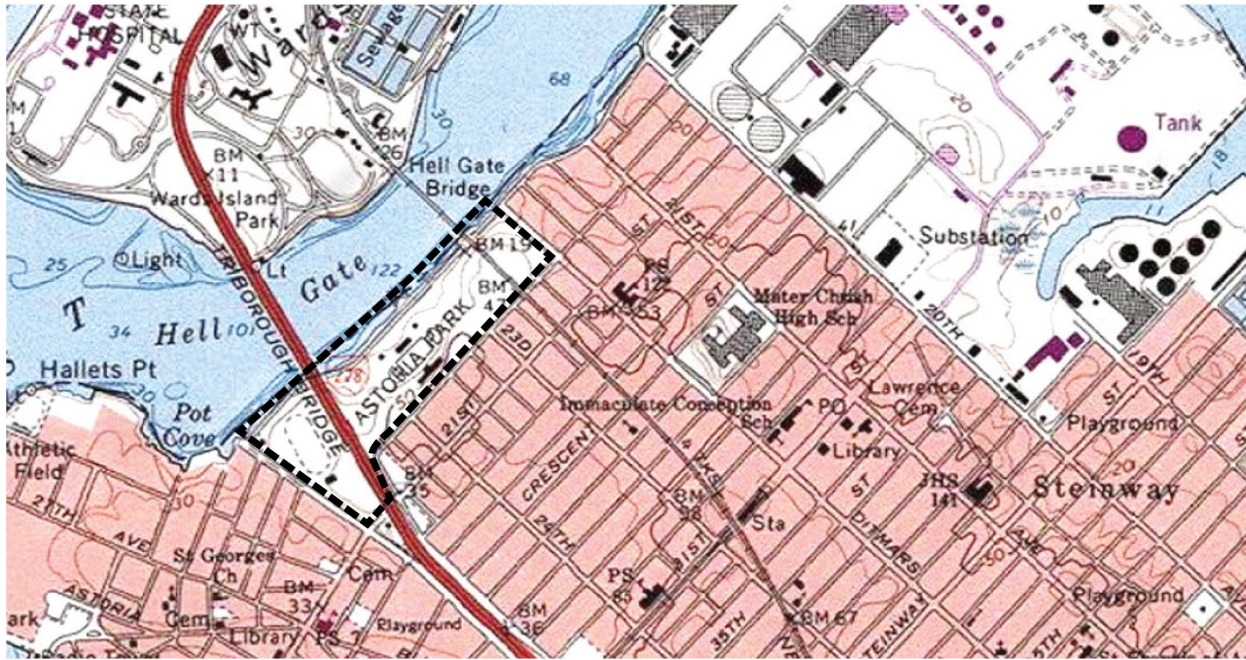
Research entailed visits to the 56.92-acre East River waterfront site to document existing conditions (see SETTING; Photos 1-6) as well as a review of maps, agency documents, and reports to reconstruct the park's development history in an archaeological perspective. With the goal to create a comprehensive archaeological sensitivity model, the entire park is considered the area of potential affect (APE), that is, where impacts could or would occur. The archaeological assessment is intended to address current plans and to inform any future in-ground activities that might impact significant archaeological resources that could include prehistoric and historic-era cultural material and sites.

In 1913, Parks acquired the acreage for an East River waterfront park in Astoria through condemnation and, at its inception, named it for William J. Gaynor, a former New York City mayor instrumental in the park's creation. Shortly thereafter, however, it was renamed Astoria Park (see Park History below). Among the park's noteworthy features is the Astoria Park Pool and Play Center, a major park component since its construction in 1936. One of eleven pools introduced in an ambitious city-wide Parks and WPA project, the pool complex, including portions of its surrounding site, was designated a New York City Landmark in 2006 (Presa 2006; see Figure 3 for location). However Astoria Park in its entirety is not a landmark.

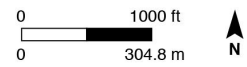
The park site is bounded to the south by Astoria Park South (formerly Hoyt Street or Hoyt Street South), to the east by 19th and 20th Streets (formerly Barclay and Van Alst Streets respectively), to the north by Ditmars Boulevard (originally Ditmars Avenue), and to the west by the East River (see Figure 2).¹ Major site features include two transportation bridges that loom over the park: the AMTRAK Railroad Bridge (initially the NY Connecting Railroad Bridge) in the northern part of the park and the Robert F. Kennedy (RFK) Bridge in the southern part, the former officially opened in 1917, the latter in 1936 as the Triborough Bridge. While neither bridge is specifically park related, they are consequential park features both visually and, in an archaeological perspective, for their construction impacts.

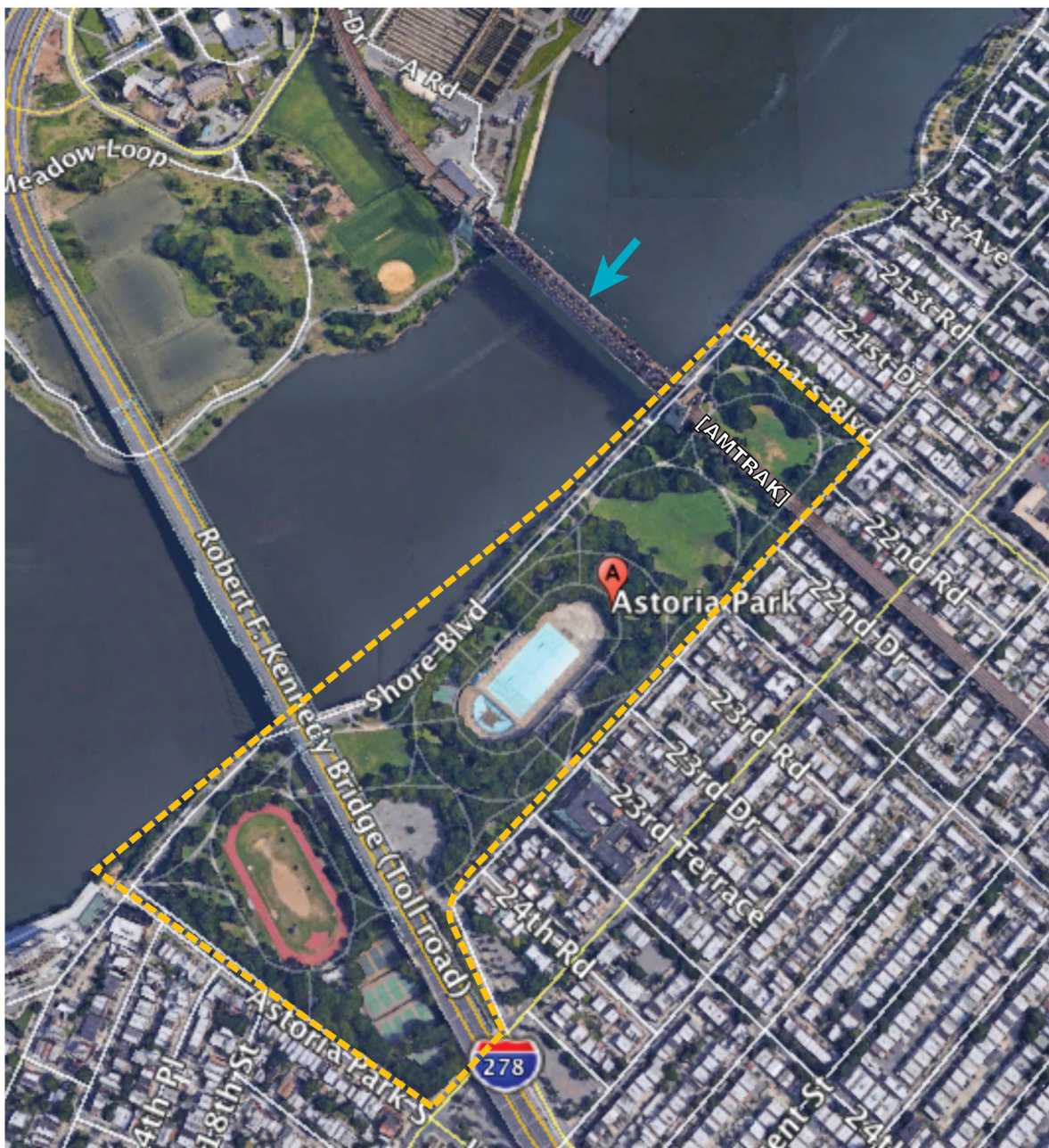
A site assessment depends not only on original research but also, if one is fortunate, it can often be enriched or augmented by the work of others. In this case, an archaeological 1A assessment for development adjacent to the park to the south, the Astoria Cove Development project, was helpful (Bergoffen 2013) as were 1A and 1B surveys for nearby Randalls Island (GRA 2012). In addition, MTA Bridges & Tunnels Special Archive (MTAB&T) generously made photographs available that record construction of the Triborough Bridge in the early to mid 1930s.

¹ Land for Ralph Demarco Park, a 10-acre "ribbon" of land along the waterfront adjacent to Astoria Park north of Ditmars Boulevard, was acquired by Parks in 1966 but is not part of this study.



----- project area and APE





- project area and APE
- ← Hell Gate Bridge



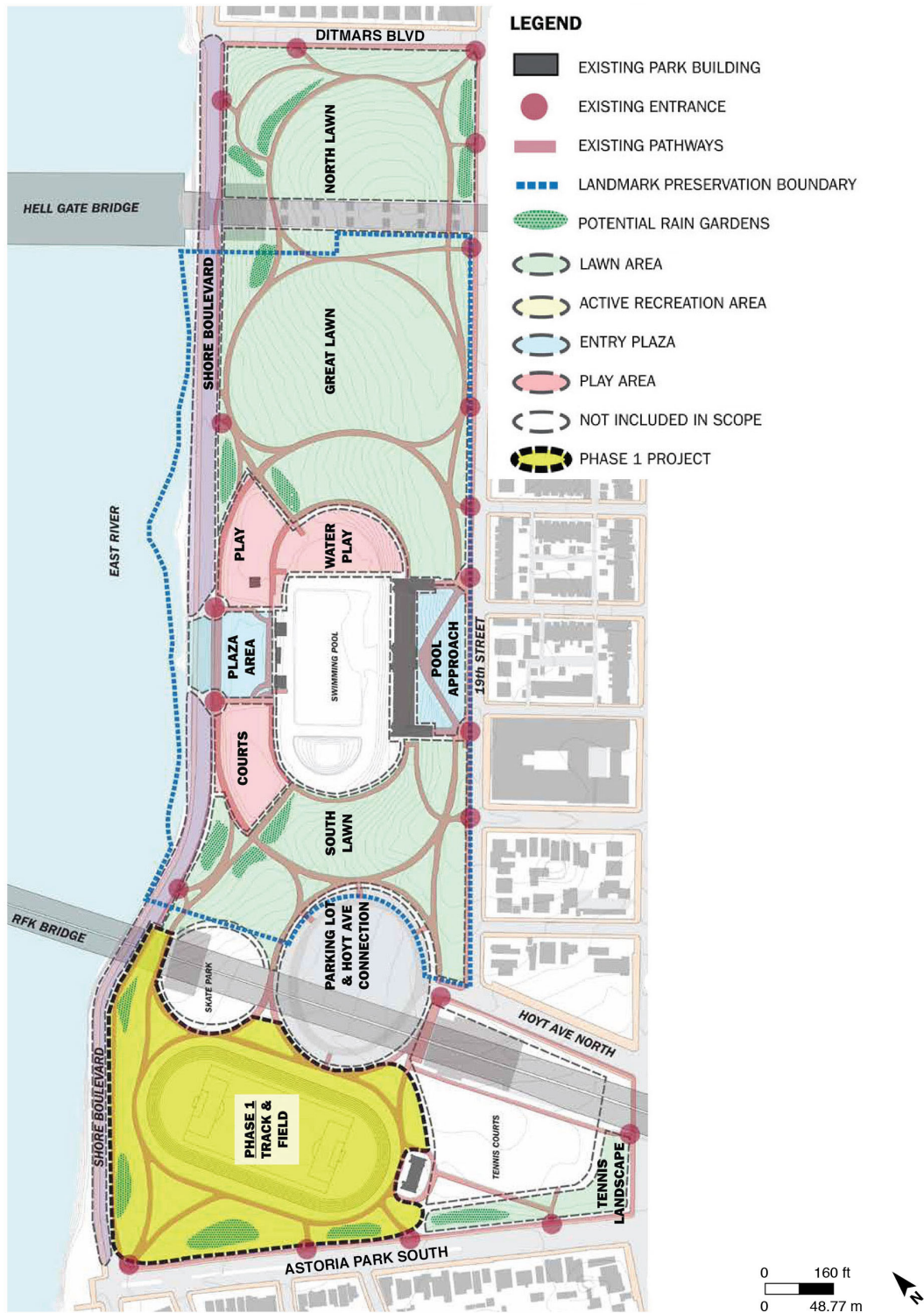




Photo 1. Looking south from the west side of Shore Boulevard. In the far left background, beyond the park, are the tall buildings of Astoria (Pot) Cove development. Protective riprap and the East River beach run below the concrete wall with its pipe fence. (Photo: Geismar 12/8/2016)



Photo 2. Looking north from the west side of Shore Boulevard. While the riprap and stone and pebble-strewn beach are clearly visible only the bottom of the Hell Gate Bridge can be seen in the image. (Photo: Geismar 12/8/2016)



Photo 3. View is southeast toward the track (beyond the benches and chain-link fence [arrow]) and bleachers with buildings on 19th Avenue and Astoria Park South in the background. (Photo: Geismar 12/8/2016)



Photo 4. The parking lot under and beyond the RFK Bridge is in the left background and the track shown in Photo 3 (arrow) is to the right. (Photo: Geismar 12/8/2016)



Photo 5. The Astoria Park Pool and Play Center can be seen in the left background and its comfort station to the right. The former, seven-story Eagle Electric Building at 19-19 24th Avenue, now apartments, is in the background. (Photo: Geismar 12/8/2016)



Photo 6. Looking northeast across Shore Boulevard to the AMTRAK elevated road that runs across the north side of the park on an easement that predates the park. (Photo: Geismar 12/8/2016)

METHOD

As noted above and described below, site visits and document research were major components of the park's archaeological assessment and several reports by others provided information. In addition, deeds, atlases, insurance maps, photographs, newspaper accounts and articles, and prehistoric site information were invaluable resources as were the Parks Department's Annual Reports, a wonderful on-line trove albeit with some gaps. A major research goal was to assess, to the degree possible, how and to what extent the natural landscape of the APE has been altered since 1913 when this large waterfront tract became a park.

SETTING

According to available soils data, the waterfront setting of Astoria Park comprises slopes that range from 3 to 15 percent with soils classified as loam and till except where construction or resurfacing has occurred to alter the natural landscape. This includes the park's parking lot, pool complex, and shoreline road (Shore Boulevard) where soils are classified as "Urban land" (Websoil Survey 2016). Visually, this translates into a park with variable, gently rolling hills. Single family, one and two story houses border the east side of the park (an exception being the former Eagle Electric Building, a seven-story structure at 24th Street converted to apartments). On the north and south side of the park are mainly low-rise apartments (here, too, the exception is a seven story apartment building on Astoria Park south). Beyond the immediate park area, to the south at Hallett's, Pot, or Astoria Cove, are new high-rise apartment buildings.

As noted in the introduction, two major transportation arteries cross the park. In the northern part of the park, the AMTRAK Railroad Bridge rises above the park within the limits of the 1907 easement to the New York Connecting Railroad noted as an exception in the park's 1913 deed (NYCR; Liber of Deeds [LD] 1902:182). To the west, beyond the park, the railroad's Hell Gate Bridge over the East River's east channel provides a spectacular park visual (Photo 7). To the south is the Queens segment of the vehicular bridge (as mentioned, until relatively recently the Triborough) that has joined the boroughs of Manhattan, Bronx, and Queens since 1936 (see Photo 7) Now renamed the Robert F. Kennedy (RFK) Bridge, the Queens anchorage and piers are located in the southern part of the park. A track, which will be reconstructed, a comfort station, and tennis courts are located south of the bridge, and an asphalt parking lot under the bridge also extends beyond it to the north.

The 1936 Astoria Park Pool and Play Center, with its Olympic size pool, wading pool, and comfort station, is situated within an oval plaza located between the two bridges, the site of an earlier athletic track. Shore Boulevard is a 30-foot wide, concrete roadway that separates the park from the East River shore (see below). Below the roadway's perimeter concrete wall riprap protects a narrow, undulating, pebble and stone covered sand beach. The road, documented as the Hell Gate Shore Road on an 1840 map (Figure 4), predates the park by decades. North of Ditmars Boulevard (Ditmars Avenue on earlier maps), it continues as a public road.

PRE-PARK HISTORY

The park site would have been attractive to both prehistoric and early-historic-era populations for similar reasons: its shoreline location for transportation purposes and food resource, its rolling hills above the water, and the fresh water available from the brooks or creeks that emptied into the East River. The original 17th-century deed to William Hallett for land that included "Hallett's Neck" (or Astoria Cove) adjacent to Astoria Park was from three original Indian "owners" (Munsell 1882:266).



Photo 7. View of the RFK and Hell Gate Bridges and the East River's east channel from a hill in the southern part of the park. (Photo: Geismar 12/8/2016)

Figure 4

ASTORIA PARK 1A APE in 1840 (Anon. 1840, detail)



----- project area and APE

- ① Charles Richmond farm (later Edwin Hoyt)
- ② John Lawrence farm (later Edward Woolsey)
- ③ Dow Ditmars farm (later Barclay *et al.*)



Among the available fresh water sources was Linden Brook, a small watercourse that ran at or near what is now the park's southern limit (see Beers 1873; Figure 5a; USGS 1924; Figure 5b). The area's earliest European settlers were Dutch with many of their names once immortalized in old Astoria street names (for example, Kouwenhoven and Luyster) but are now numbered streets [Morse et al. 2004].² It is more than likely that the APE was included in the Indian Patent to William Hallett that included most if not all of what became Astoria (Munsell 1882:260, 266).

The history of the project area includes Revolutionary War activities (purportedly 10,000 British troops were on Hallett's land after the successful Battle of Brooklyn on August 27, 1776) (Munsell 1882:269-271). A local major war event was the sinking of the *Hussar*, a British frigate that carried a shipment of gold and was caught in the swirling eddies and tides of the Hell Gate and sunk on the 130-foot-long "Pot Rock" (Bergoffen 2013:7; Munsell 1882:274). Apparently only at high tide, however, was the Hell Gate a danger (Washington Irving 1824 cited in Bergoffen 2013:7), one that was eliminated (at least in part) when the Hell Gate rocks were dynamited out in 1876, an undertaking that was six years in the planning (Bergoffen 2013:7-8). The *Hussar* and its treasure have never been retrieved.

By 1840, the year after Astoria was incorporated as a village (Riker 1852:247), Charles Richmond owned the southern part of the APE and John Lawrence (more than likely a member of the local Lawrence family), the northern part (Anon.1840; see Figure 4). Deeds indicate these shoreline properties were the western limit of larger tracts and at least one interim owner is documented before the shoreline components of these properties were sold to successful New York City businessmen. For example, Edwin Hoyt, a New York City resident, purchased the former Richmond property, a 26-acre tract, from Jacob Cram (Crane) also of New York in 1847 rather than from Charles Richmond himself (LD 73: 271). Although John Lawrence was deceased by 1847, he had sold his property "at Hellgate Neck" to Edward Woolsey, also of New York (LD 54:27) two years earlier. Hoyt and Woolsey were both wealthy New York merchants whose waterfront property at Hell Gate was meant as summertime retreats.³ As noted in the Hoyt deed, his conveyance included the use of "several landing places" on the neighboring Lawrence property (Hassler 1851; Figure 6) as well as the rights to a spring in front of the house (LD. 272:2; see Figure 6).

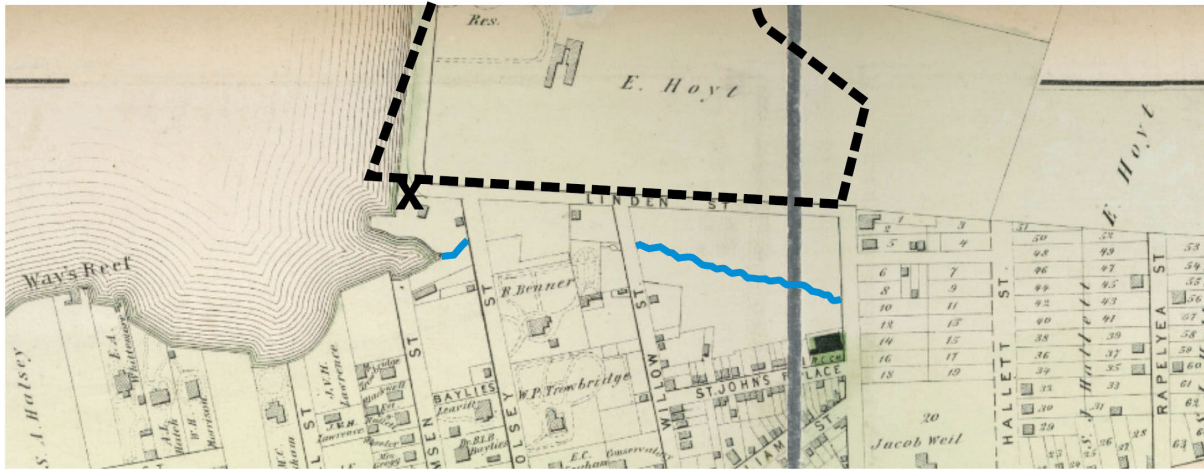
Most of these wealthy property owners or their heirs had divested themselves of their Hell Gate holdings by the late 1890s. Stately homes documented on the 1891 Wolverton map (Figure 7) were demolished. The exception was Henry Barclay's substantial mansion (Figure 8) then located just north of the NY Connecting Railroad's 1907 easement (cited in LD 1902:182).⁴ The last survivor of the grand homes within the APE, the Barclay Mansion stood until 1913 (e.g., Parks 1913; see Figure), the year Astoria Park became a reality. The land transactions that lead to the park's creation illustrate the real estate dealings of that particular time and place (see Table 1).

Augustus D. Julliard, a New York City resident was instrumental in amassing the land that ultimately became the park. Julliard began to acquire the property in question in 1872, the year he received

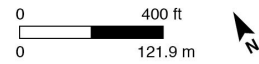
² Nearby Riker's Island is named for the Riker (Rycken) family, of German descent but who came to Long Island via Amsterdam in the 17th century (Munsell 1882:242-243). The name is a reminder of the early Dutch presence in Astoria's past.

³ An exception was Dow Ditmars who owned the land just north of the park. Born in nearby Jamaica of an old Long Island family, Ditmars became a doctor and established a "lucrative" practice in South America but returned after fourteen years to spend the "remainder of his long life" on his Hell Gate property, that is until his death in 1860 (Munsell 1882:250-a).

⁴ Map data suggest the Barclay Mansion was relocated and reoriented after 1851 but before 1891 (see Figures 7 and 8).



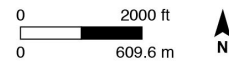
- project area and APE
- Linden Brook
- X** identified Indian site location, approx.



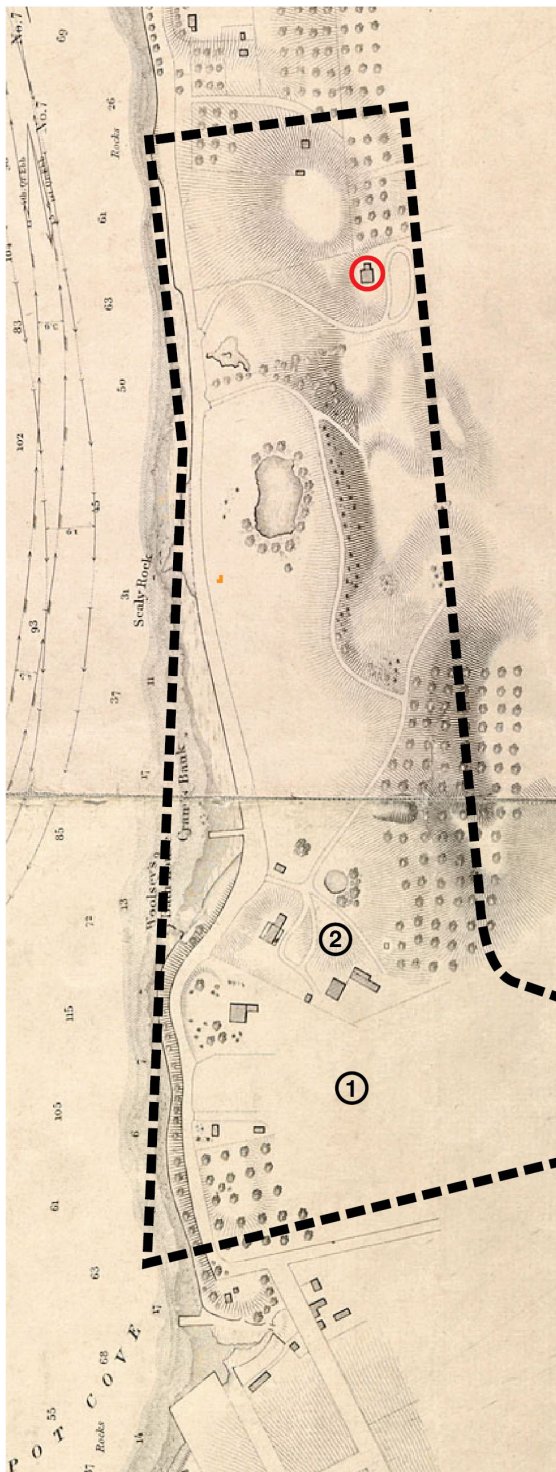
5a. Linden Brook 1873 (Beers 1873, detail)



- project area and APE
- Linden Brook, p/o

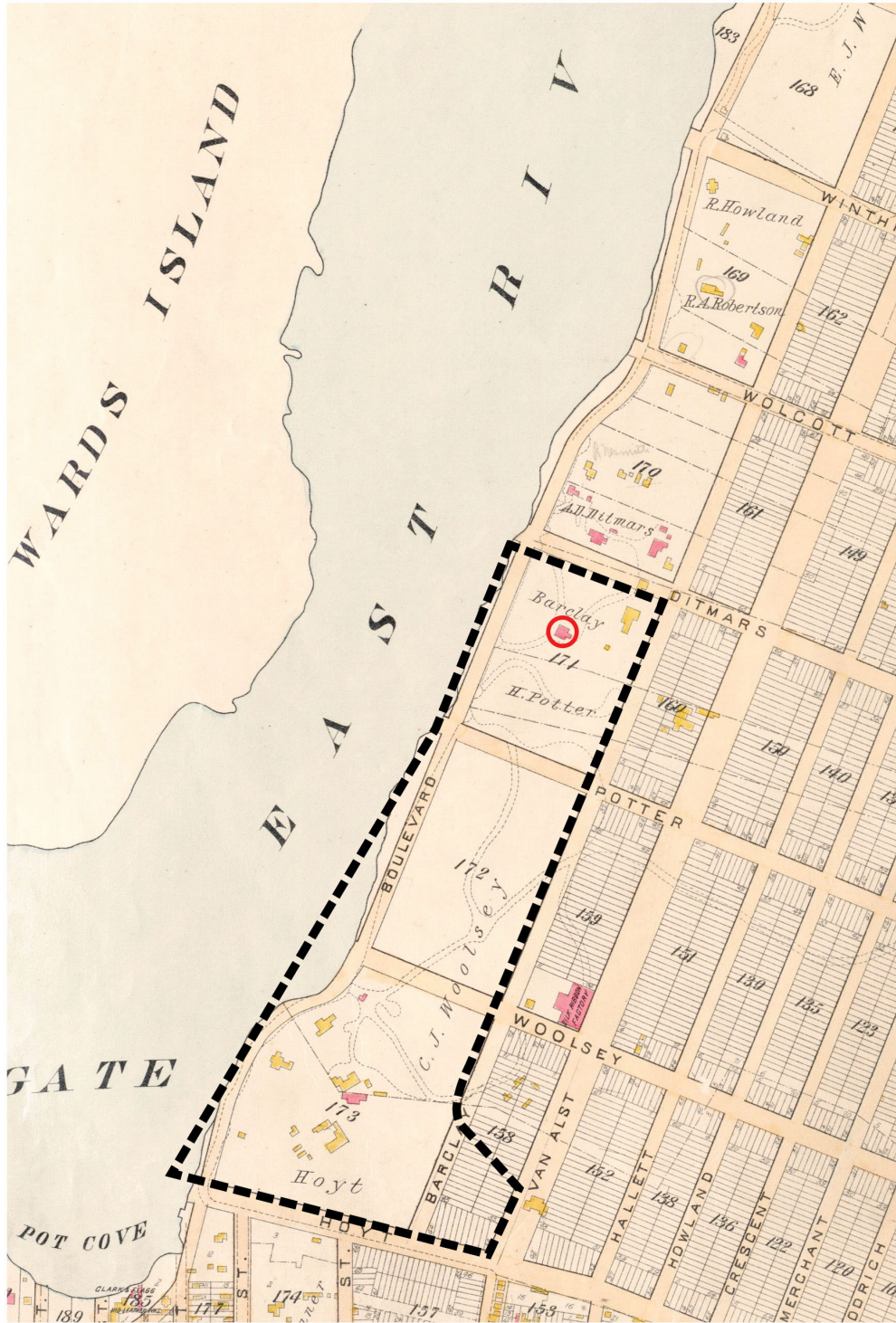


5b. Linden Brook 1924 (USGS 1924 [updated 1888 survey], detail)



- project area and APE
- earlier Barclay Mansion location/orientation?
- ① Edwin Hoyt
- ② Edward Woolsey





--- project area and APE

○ Barclay Mansion

0 400 ft
0 121.9 m





Henry Barclay's brick mansion in an undated photo but probably shortly before it was demolished in 1913. Erected in 1840 (Greater Astoria Historical Society 2007:48), map data suggest the building was moved and reoriented on Barclay's property sometime between 1851 and 1891 (see Figures 6 and 7 this report).

ASTORIA PARK 1A APE in 1909 with NY Connecting Railroad Easement (and Line) and the Barclay Mansion (Brick) Indicated (Bromley 1909, detail)



ASTORIA PARK 1A Table 1. Deeds Related to Park Property 1872-1913

Liber:Page	Date Made	Date Registered	Grantor	Grantee	Description
42: 262	12/12/1872		Patent letter	Edwin Hoyt	LD 1186:36 ff (see page 40)
751:356	7/17/1888	8/24/1888		Augustus D. Juilliard	26 acres, 3roods & 15 links. Bounded by the East River & the lands late of Stephen Hallett; Also one of the several landing places on land of the late John Lawrence (see Figure 5)
802:163	11/12/1889	12/11/1889	Susan Francklyn	Sir Bache Cunard, Baronet	East River, Hoyt Ave, Barclay Ave and Van Alst Sts
0917:238	3/25/1892	4/25/1892	Sir Bache Cunard, Baronet	Union Manufacturing Co.	Same property as 802:163, but subject to taxes & liens to expire 5/11/1892
1006:371	10/18/1889	1/6/1894	Susan G. Francklyn <i>et al.</i>	Augustus D. Juilliard	East River, Hoyt Ave, Barclay and Van Alst Sts
1034:310	8/6/1894	8/15/1894	John G. Hagemayer	Augustus D. Juilliard	Howland, Hoyt, lands late of Edward Woolsey & lands of Juilliard
1035:477	5/25/1894	8/24/1894	Union Manufacturing Co	Augustus D. Juilliard	Same as 917: 238
1052:60 & 64	12/26/1894	1/8/1895	Edward J. Woolsey, exc.	Augustus D. Juilliard	Property of Emily Woolsey, Francklyn, Shore Rd Woolsey Ave.; also an adjoining property
1186:36 & 38	12/23/1897	4/19/1898	Charles G. Francklyn	Augustus D. Juilliard	Property of the late Edwin Hoyt
1363:263	3/22/05	4/10/1905	August D. Juilliard	East River Land Co.	All the property formerly of Edwin Hoyt, Edward Woolsey, and lots underwater to the bulkhead line of the East River
1539:492	11/11/07	11/13/1907	East River Land Co.	New York Connecting Railroad	\$100,000; Right of way along Potter Avenue, the Boulevard and the Bulkhead line; 13,566 sq ft.
1902:182	9/20/1913	9/25/1913	East River Land Co.	City of New York	By petition; obtains property bounded by Barclay Street, Hoyt Avenue the bulkhead line of the East River and Ditmars Avenue. Except for the land sold to the New York Connecting Railroad

a letter patent for Edwin Hoyt’s Hell Gate property (LD 42:262) two years before Hoyt died at the age of 78 (*NY Times* 1874). A Hoyt heir confirmed this transaction twenty-three years later (LD 1186:36, 38). Deeds indicate that Julliard not only acquired the Hoyt and Woolsey properties but ultimately also parcels with interim owners, such as Henry Potter, the Union Manufacturing Company, and Woolsey heirs and executors. In 1905, Julliard sold the former Hoyt and Woolsey properties and lots under water to the bulkhead line of the East River to the East River Land Company (LD 1363:263). Born of French parents during their transatlantic crossing in 1836, by the 1890s, Julliard was a wealthy New York City textile merchant, entrepreneur, and an executive of multiple banks. While his Astoria real estate investments were instrumental in amassing what became parkland, his recognition centers on the large behest he made to a music foundation that today is the Julliard School of Music (*NY Times* 1924).

In 1907, the New York Connecting Railroad acquired a 13,566 square foot right-of-way from the East River Land Company (LD 1539:492). Excepting this right-of-way, New York City acquired by petition the property bounded by Barclay Street, Hoyt Avenue, the Bulkhead Line of the East River, and Ditmars Avenue in 1913 for the park (LD 1902:182). This was followed by condemnation proceedings.⁵

PARK HISTORY 1907 to 1937

Astoria Park opened to the public in 1913, but its planning dates to 1907, the year the New York Connecting Railroad acquired an easement from New York City for the railroad to run in Queens on a viaduct beyond the Hell Gate Bridge (e.g., see Bromley 1909:Figure 9). While the railroad’s plan moved forward, the park’s plan stalled. This and other park details are noted in the aforementioned Parks’ Annual reports. Despite a minor gap in available reports (1931 to 1935), they provide information to reconstruct much of the park’s development history through 1937.

Although located in Queens, Astoria Park was intended for both Queens and Manhattan residents and the opening of the NY Connecting Railroad in 1917 fostered this multi-borough use. However, Parks’ annual reports indicate this railroad access was available at least a year before the line officially opened. Before this, the future park site was accessible by nearby ferry service between New York City and the Astoria Ferry Landing south of the park as well as local horse railway connections (Parks 1914: 296; Munsell 1882:259). Title to the park was acquired by resolution of the Board of Estimate on October 9, 1913 (Parks 1913:247) but a park plan had been underway for as much as eight years before this.

The 1913 annual report notes that the park site “contains a brick building 54 by 74 feet, originally a costly mansion now badly in need of repair (Parks 1913:247).” This was the aforementioned Barclay Mansion. Although a plan was developed to stabilize this “valuable” building (three other, unnamed buildings in the southern part of the park are also mentioned), it never materialized even though a comprehensive park plan included the Barclay Mansion as a park feature (Figure 10). Instead this forlorn

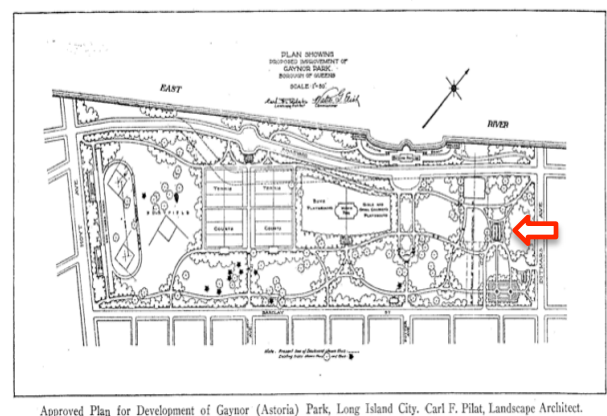


Figure 10. Park Plan with Barclay Mansion (arrow) (Parks 1913:245)

⁵ In 1915, development is documented on three isolated but adjacent Barclay Avenue (19th Street) house lots on former Hoyt property (not illustrated).

structure was demolished. Gaynor Park became Astoria Park on December 31, 1913 by the Proceedings of the Board of Aldermen (Parks 1913:247). As such it was heralded as:

“...the first city park of any considerable size, in which the great question of providing space for recreation in the form of organized play versus recreation and inspiration as derived from the contemplation of landscape beauty and physical exercise in rural surroundings has been frankly faced and solved (Parks 1913:247).

Yet, in 1915, the park was described as “an undeveloped field” although it was “the resort of thousands from Manhattan who swim in the waters it borders and crowd the grass plots on Sundays.” The report goes on to say, “At present it is park property, but looked upon as No Man’s Land...its development will take time and money” (Parks 1915:303). Moreover, it lacked a comfort station, a failing that would take years to rectify.

A bandstand first contemplated in 1923 (Parks 1923:20) was completed in 1925 (Parks 1925:18) and flooding an athletic oval provided wintertime ice skating. In 1926, 2,500 boulders were removed “from lawn” (Parks 1926:23) although the location of the lawn is not identified. It was also the year that plans to improve Shore Road were underway. Ultimately 3,100 feet long, the 30-foot wide, 7-inch thick, reinforced concrete road was to connect Hoyt and Ditmars Avenues. It called for building a retaining wall “of varying height” topped by a 26-inch pipe rail fence along the shorefront with catch basins and through-the-wall outlets providing drainage. A 5-foot grass strip separated the new road and a 10-foot wide sidewalk. The work was completed and the road “thrown open to the public on October 5, 1926” (Parks 1927-1928:18).

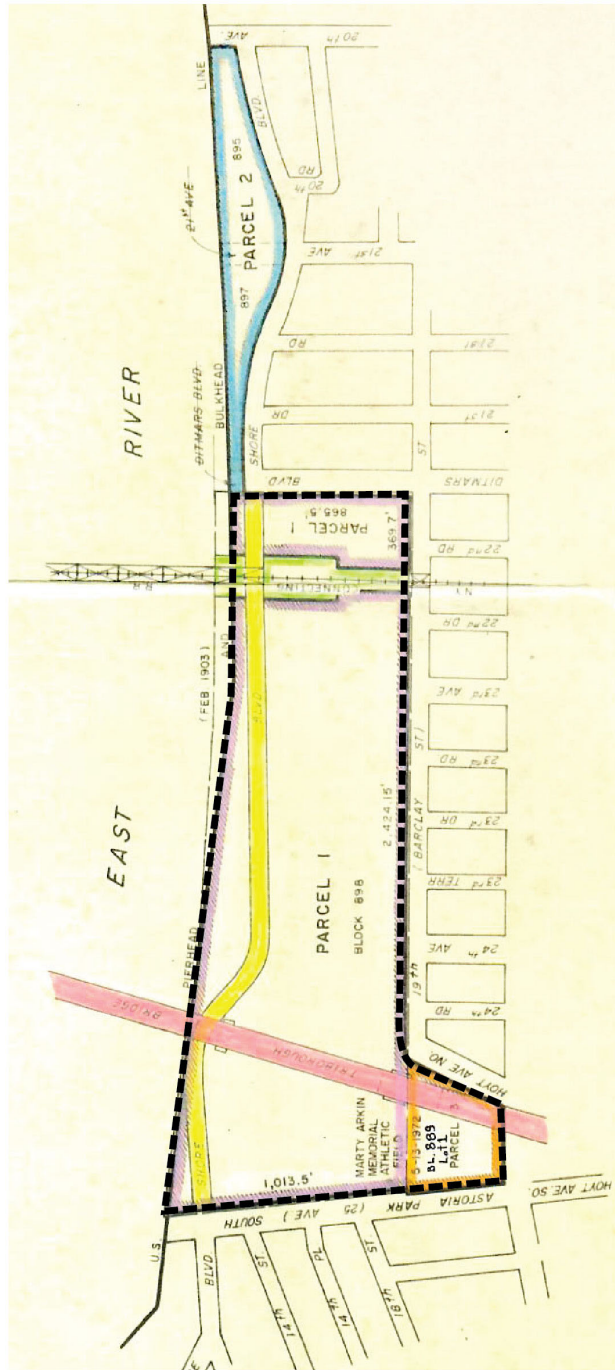
Several reports mention contracts for a comfort station that were then canceled, but in 1927, “the comfort Station was to be repainted” and the plumbing improved, so one had apparently been built (Parks 1927:47). Recreational features at the time included one play ground, ice skating, six tennis courts, two baseball fields, and one athletic field (1927:80). In 1928, a caretaker’s cottage (see Photo 9) was repainted and it was noted that the 56-acre park mainly comprised lawns and play-grounds that required maintenance (Parks 1928:58). In addition to benches and trees, a new park feature in 1929 was the Astoria Park War Memorial “in memory of those who served and died in the World War” (Parks 1926:29). Six additional tennis courts were added in 1929 (Parks 1929:135).

Construction of the Astoria Park Pool and Play Center, which replaced an earth-bottom wading pool constructed in 1930, and the Triborough Bridge anchorage and piers were major park events in the 1930s. Completed in 1936, both caused major social and disturbance-related impacts to the park. A new concrete-surfaced “parking field” constructed under the bridge in 1937 that could accommodate 384 cars was deemed “a great convenience for patrons of the popular Astoria pool, which has had as many as 14,619 visitors in one day” (Parks Press Release July 24,1937).

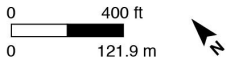
Figure 11 illustrates the park’s land acquisition in parcels. It includes the land for Ralph Demarco Park (Parcel 2), a ribbon of land north of Ditmars Boulevard, that is not part of this study.

PREHISTORIC CONSIDERATIONS

As noted previously, the location and original terrain of the park would have been attractive to prehistoric populations and several Native American sites have been identified within and near the



----- project area and APE



APE in the past (Parker 1922; Bolton 1934, 1922*) and more recently (Boesch 1996). The fresh water brooks or streams, the low to moderately high hills⁶ overlooking these watercourses, and the East River, translate into ideal locations for finding such sites where the setting has not been altered.

Reginald Bolton writing in 1934 identified twenty-one Indian sites in Queens, only one of them near the APE (No. 133) (Bolton 1934:148; Figure 12). However, Eugene Boesch, in his survey of known Queens sites, identifies a total of 75 such sites in the county and, most importantly, two within the APE (both No. 15) (Boesch 1996:4; Figure 13). As noted above, in its natural state, the APE would likely have been a location for prehistoric or early-historic era use by Native American populations, evidenced perhaps in the form of shell heaps (middens), the detritus of food procurement (the information provided by Boesch for the two sites in the APE and another immediately to the north in Ralph Demarco Park also noted by Schuldenrein 2012:10).⁷ These are sites with “Traces of occupation and shell midden” (Boesch 1996:4). All, recorded in the early 1920s, were located before the park’s shoreline was altered.

DISTURBANCE ANALYSIS

There is no question that both creating and updating Astoria Park disturbed the park’s natural terrain. Even before this, construction of 19th-century or earlier farmsteads would have caused some disturbance as would the subsequent building of the mansions and out buildings of the site’s wealthy 19th-century summertime residents. As noted previously, construction of the two bridges that cross the park caused well-documented major disturbance, particularly in the case of the Triborough Bridge, where construction impacts are recorded in photographs from the archives of the MTA B&T. These images document the upheaval of excavations to accommodate construction of the bridge’s Queens Anchorage (Photos 8-10).

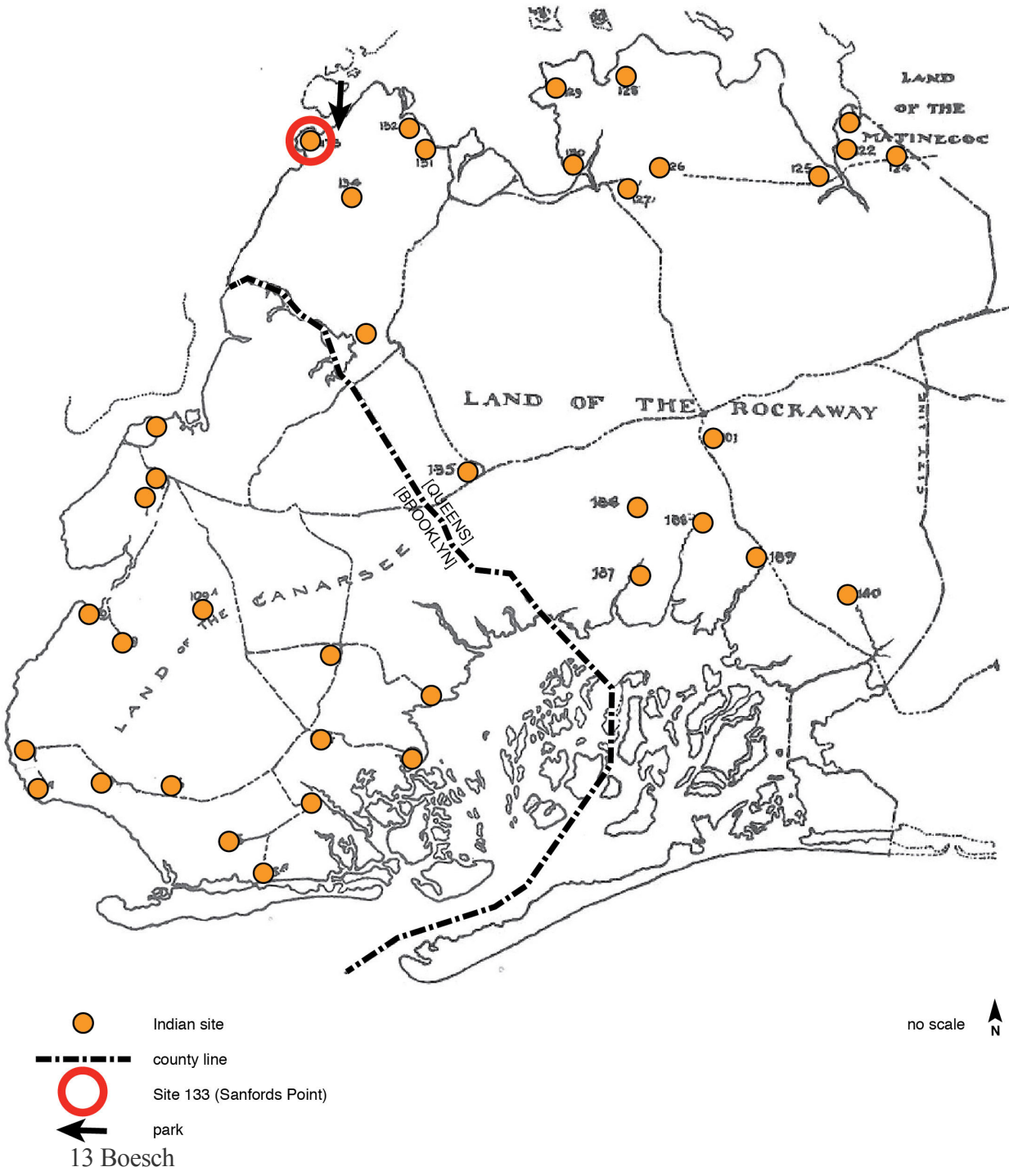
Excavations to and into bedrock for the Triborough’s Queens anchorage during the early 1930s were considerably more expansive than the bridge itself. For example, excavations to accommodate equipment and other ancillary excavations were located beyond the bridge footprint. While the extent of earlier excavations for the NY Connecting Railroad Bridge are not known, it can be assumed they affected soils within the easement and may also have extended beyond these limits (it has been said that construction of the railroad was why the Barclay Mansion just to the north was demolished [Greater Astoria Historical Society 2007:48], but this might only have been one reason given the structure’s dilapidated condition noted above). It can only be assumed that the impacts of construction extended beyond the footprint of both bridges.

With all this in mind, four topographical surveys that record the park’s contours were compared to determine where and how much the park terrain has changed over time. With some caveats, surveys from 1890 (Bien & Vermeule 1890/1891; Figure 14), 1935 (Parks 1935), 1982 (Parks 1982), and 2017 (Gallas Surveying 2017) were compared to assess disturbance within the APE (Figure 15). The most important caveat pertains to datum changes over time.



*Reginald Bolton, in *Indian Paths in Greater New York*, does not identify any nearby Indian pathways but cites the local Indian presence recorded in a 1664 deed from Shawestcote and Erramorhas “to Colonists” for land south of “Sinct Sink” (Bolton 1922:175-176). This was a stream located on the south side of the Astoria promontory at Hell Gate (Pot Cove, adjacent to the park, is on the north side) and, therefore, well south of Astoria Park (Munsell 1882:260). It was land later in the possession of Stephen Hallett as noted in Table 1.

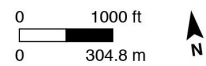
⁶ Slopes of 18% or greater are not considered viable for prehistoric sites.

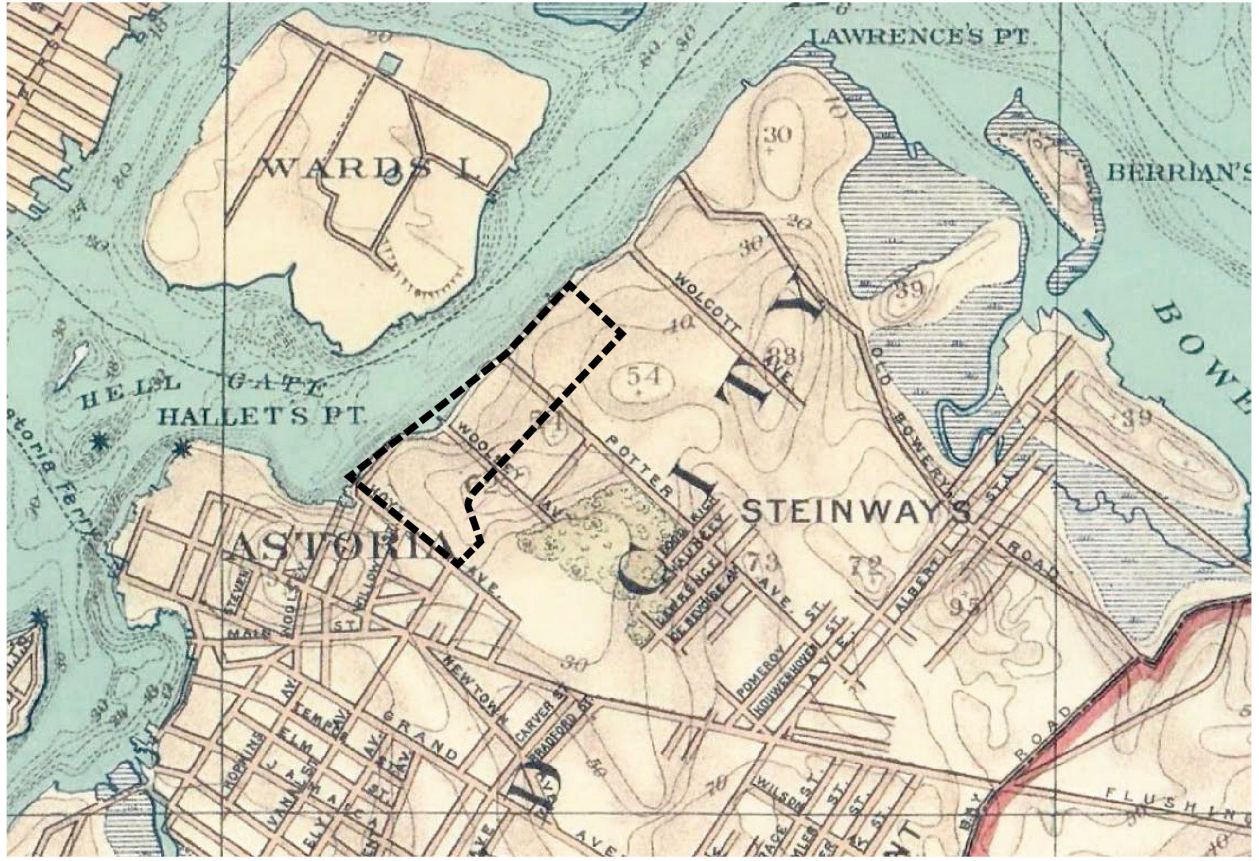
⁷ Boesch cites Parker 1922, Schuldenrein cites Parker 1920, but the New York State Museum number is the same.





 project area and APE
 identified Indian site





----- project area and APE



The datum used for all but the 2017 survey is virtually the same (mean sea level [MSL], the earliest datum, was essentially renamed NAVD29 in 1929). The 2017 survey datum, NAVD88 established in 1988, is 1.08 feet lower than either MSL or NAVD29. Therefore, there is approximately a 1-foot (0.31 m) datum difference between surveys if NAVD88 (NAVD88 is used). However, a local datum can be different (e.g., the Queens datum is 2.72 feet rather than 1.08 feet lower than NAVD88 [Gregory Gallas, Gallas Surveying, 2017:personal communication]).⁸ That said, the difference is insignificant at the scale of the current comparison where 10-foot interval contour lines either documented on or extracted from the four maps were compared (see Figure 15).

Taking this a step further, a comparison of 19th-century and current contour configurations in addition to contour elevations might best illustrate changes in the terrain. For example, comparing the contour configurations of the 1890/91 Bien/Vermeule survey with those on the 2017 Gallas survey clearly reveals that the park terrain has been subject to extensive alteration over the past 126 years (Figure 16). It should be noted that prior to 1890, the APE was the location of the summertime residences of wealthy owners who undoubtedly also altered the terrain, albeit to an unknown extent. This was also true of the owners of earlier farmsteads.

ARCHAEOLOGICAL POTENTIAL

There is little doubt that the project APE, that is, all of Astoria Park, in its natural state would have been attractive to prehistoric and early-historic era Native American populations. However, it is highly unlikely that the somewhat ephemeral evidence, such as shell middens or indications of occupation, could survive the park's creation and development. It is also unlikely that significant evidence of historic-era use would remain, although remnants of the mid- to late 19th-century rural retreats of wealthy New Yorkers might survive, but even this is doubtful. Therefore, archaeological potential in the park is considered low. That said, the site of the Henry Barclay Mansion, apparently relocated in the northern part of the park sometime between 1851 and 1891, could conceivably harbor evidence of mid-to late 19th-century domestic occupation.

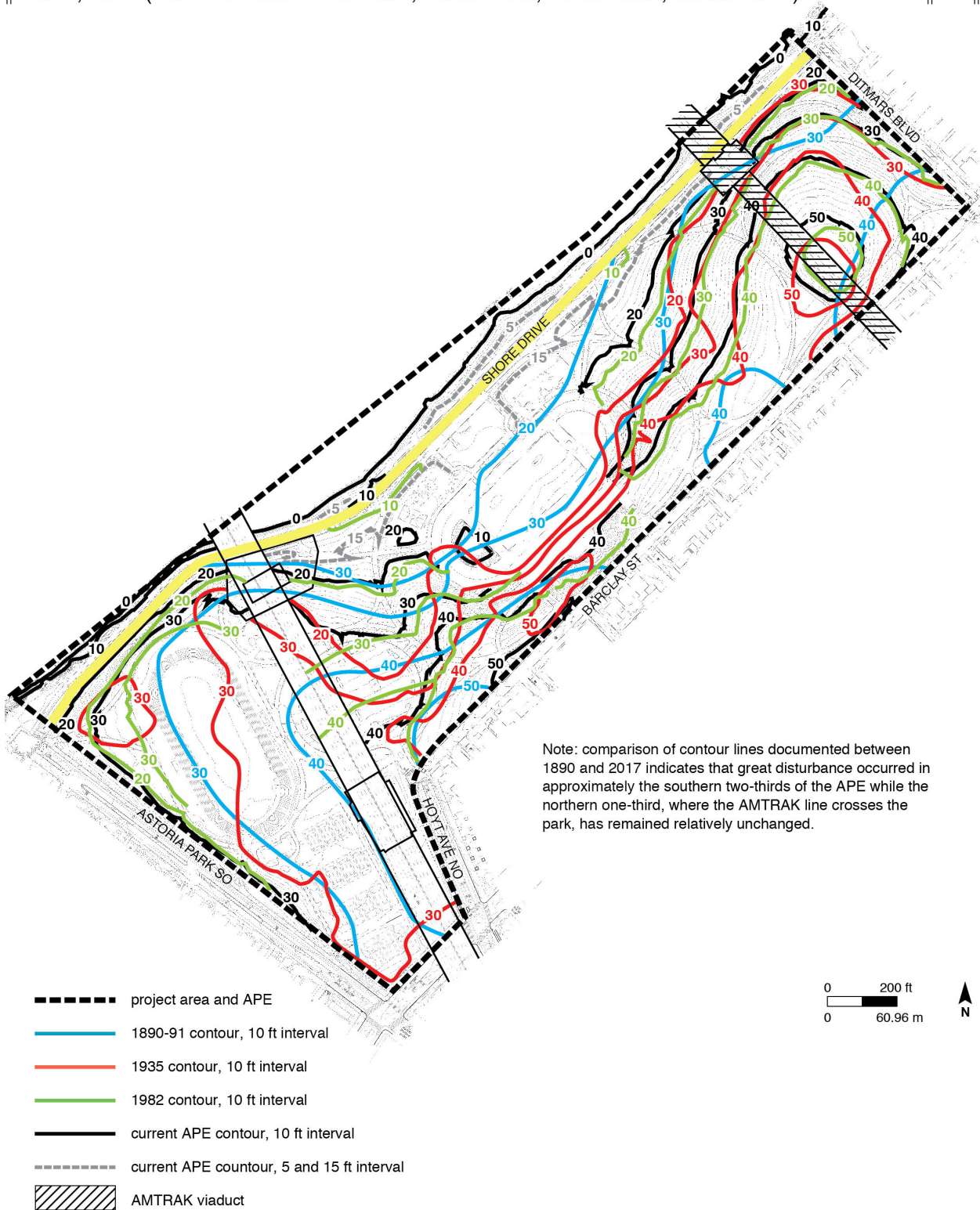
SUMMARY AND FINDINGS

The documentary survey conducted for this 1A archaeological documentary study determined that creation of Astoria Park in 1913, as well as subsequent construction of a major bridge, a railroad viaduct, and multiple park features, as well as initial creation of the park, would have eliminated significant archaeological potential. This is despite the known evidence of prehistoric or early historic-era Native American use, documented in early in the 20th century, and early-historic era settlement nearby. This is also despite a terrain that, in its natural state, included access to fresh water from streams and brooks that emptied into the East River, itself a food procurement and transportation resource.

Major aspects of the assessment were a review of images that document construction of the Queens anchorage of the Triborough, now RFK, Bridge in the early 1930s and a comparison of historical and current land contours. This research established the APE has been subject to alteration of the landscape to create Astoria Park in its current iteration, and particularly in the southern two-thirds of the park.

⁸ I am grateful to Gregory Gallas, of Gallas Surveying for this information.

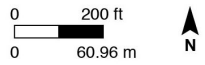
While the potential for archaeological resources is now low, as a precautionary measure it is recommended that an archaeologist be on call to address any unanticipated finds when excavations are in progress. This is particularly so in the northern one-third of the park where a disturbance analysis suggests less disturbance than elsewhere in the park despite construction of the aforementioned New York Connecting Railroad (now AMTRAK). Ideally, an archaeologist should be consulted to review plans when excavation is scheduled north of the AMTRAK viaduct where a mid-to-late 19th century “mansion” was located. In addition, a protocol should be in place that calls for a stop work in any area of discovery to allow for an archaeological assessment and, if deemed necessary, documentation of the find.





Note: comparison of contour configurations documented in 1890 and 2017 illustrates that land alteration occurred most dramatically in the southern two-thirds of the APE.

- project area and APE
- 1890-91 contour, 10 ft interval
- current APE contour, 10 ft interval
- current APE contour, 5 and 15 ft interval
- ▨ AMTRAK viaduct
- X Barclay Mansion, approx. location



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