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Phase 1A Archaeological Investigation for the FDNY Fort Totten Wind Turbine Project, Fort Totten, Queens County, New York

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June 19, 2024

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Technical Report No.: 24-289

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Management Summary

Landmarks Preservation Commission Project Review Number: LA-CEQR-Q (NYC Fire Department)

Involved State and Federal Agencies: City Environmental Quality Review

Phase of Survey: Phase 1A

Location Information:

Location: Fort Totten, Willet's Point

Minor Civil Division: Borough of Queens

County: Queens County

Survey Area (Metric & English): 11,000 linear feet (3352.8 linear meters)

USGS 7.5-Minute Quadrangle Maps: Flushing, NY 1966 (1984 ed.)

Archaeological Survey Overview

A Phase 1A archaeological sensitivity assessment was conducted for the FDNY Fort Totten Wind Turbine Project in Fort Totten, Borough of Queens, Queens County, New York. The Project will include the installation of one wind turbine, which will be comprised of one 125-ft (38.1-meter [m])-tall tower, three rotor blades, and a structural concrete foundation consisting of a 12- to 20-ft (3.7- to 6.1-m) square pile cap atop drilled piles.

The Phase 1A documentary research conducted for this investigation indicated that the proposed Project area is sensitive for Indigenous and Euro-American archaeological sites. Six archaeological sites, on State Register of Historic Places (SRHP)- and National Register of Historic Places (NRHP)-Eligible historic districts, and 147 SRHP- and NRHP-Eligible or Listed buildings were identified within 1 mile (1.6 kilometers) of the Project area. Two prehistoric and two historic sites have been identified in prior Phase 1B investigations conducted adjacent to the Project area. Map research identified the presence of one map-documented structure (MDS) on the northern edge of the Project area and one MDS to the south of the Project area. Topographic maps may indicate the presence of fill, but the depth and date of the filling event are not recorded. Further testing, such as a Phase IB archaeological investigation or archaeological monitoring, is recommended.

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Date of Report: June 18, 2024

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1 Introduction

Chronicle Heritage (PaleoWest, LLC, dba Chronicle Heritage) was contracted by Cameron Engineering, an IMEG Company, on behalf of the Fire Department of New York (FDNY) to conduct a Phase 1A archaeological investigation for a proposed wind turbine construction project (Project) on Fort Totten, Queens County, New York. The Project area is located in the southeastern part of the FDNY Emergency Medical Services Training Academy on the Willets Point Peninsula south of Fort Totten Park in Queens Community District 7. The proposed project includes the installation of one wind turbine, which will be comprised of one 125-foot (ft; 38.1-meter [m])-tall tower, three rotor blades, and a structural concrete foundation consisting of a 12- to 20-ft (3.7- to 6.1-m) square pile cap atop drilled piles. The total vertical height of the turbine with the rotor blades installed will be 210 ft (64 m). The turbine will be connected to the Fort Totten electrical system through a 4-inch (in; 10 centimeter [cm]) underground electrical conduit that will run approximately 100 ft (30.5 m) southwest from the turbine footing to a nearby utility pole.

Prior review by the New York City Landmarks Preservation Commission (LPC) found that there is potential for the recovery of the remains of Indigenous people in the Project area. Based on these findings, the LPC recommended a documentary review and assessment of the Project area sensitivity, in compliance with the standards set forth in the City Environmental Quality Review (CEQR) technical manual (2021). The purpose of this Phase 1A investigation was to identify previously recorded archaeological resources near the Project area and to assess the likelihood that unrecorded resources may be present within the Project area (New York Archaeological Council [NYAC] 1994). The investigation included documentary and historical map research, site file and literature search, examination of properties listed in the State Register of Historic Places (SRHP) and the National Register of Historic Places (NRHP), preparation of a summary of the Indigenous American and historic contexts of the Project area, assessment of the sensitivity of the Project area for cultural resources, assessment of previous disturbances within the Project area, and photographic documentation of field conditions. A site visit, which included photographic documentation of the current conditions in the Project area; positioning of nearby structures, roads, and parking lots; and positioning of visible utilities and drainage, was conducted by Benjamin DiBiase on May 23, 2024.

This cultural resource investigation was conducted in compliance with the National Historic Preservation Act (as amended), the National Environmental Policy Act, the New York State Historic Preservation Act, and the State Environmental Quality Review Act as well as all relevant federal and state legislation. The investigation was also conducted according to the NYAC (2000) Standards for Archaeological Investigations and the New York State Historic Preservation Office's (New York State Historic Preservation Office [NYSHPO] 2005) guidelines.

Jenna Anderson, M.A., served as Principal Investigator; Dr. Benjamin DiBiase conducted the field visit and site photography; Lex Vancko, M.A., served as Geographic Information Systems specialist; and Mark Steinback, M.A., served as Project Director.

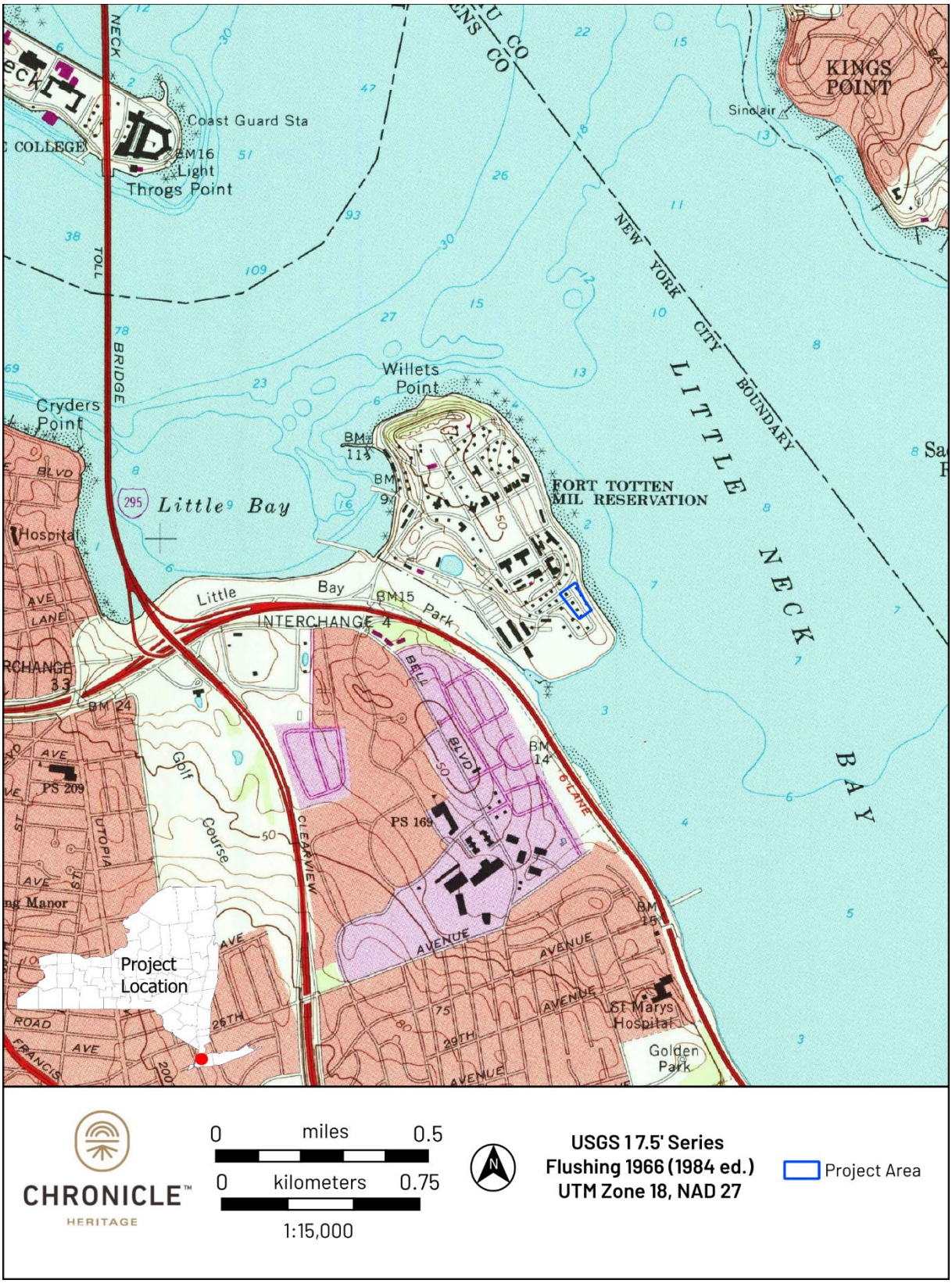

Figure 1-1. Location of the Project area on Willet's Point/Fort Totten, Queens County, New York (USGS 1966).

Figure 1-2. Detail map of Project area, showing proposed location of wind turbine, footing, and electrical conduit (Esri 2024).

2 Environmental Setting and Background Research

2.1 Environment

2.1.1 Topography

The Project area is located in the Atlantic Coastal Plain physiographic province (Schuberth 1968). Fort Totten is situated on a peninsula on the north shore of Long Island, with Little Bay to the west, the East River to the north, and Little Neck Bay to the east and southeast. The northern shore of the peninsula is steeply sloped, rapidly reaching a maximum elevation of 52 ft above mean sea level. The southeastern part of peninsula, where the Project area is located, has a more gradual slope. Older topographic maps show the southern and southwestern areas as being periodically inundated wetland (e.g., USGS Brooklyn NY 1891).

2.1.2 Geology

The bedrock in this region consists of the Lloyd Sand Member of the Raritan Formation overlain by Magothy Formation–Monmouth Group sand. These components are of Upper Cretaceous age and are overlain by sand, gravel, and till deposited during the Quaternary Period (Isachsen et al. 2000; Soren 1978).

2.1.3 Soils

There are two soil types present within the Project area, and these are summarized in Table 2-1 and represented in Figure 2-1 (Soil Survey Staff 2024). The predominant soil type is the Urban land–Greenbelt complex, 3–8 percent slopes, followed by Urban land–Laguardia complex.

Table 2-1. Soils within and Adjacent to the Project Area

Name	Soil Horizon Depth, in (cm)	Color	Texture	Slope Percentage	Drainage	Landform
Urban land–Greenbelt complex, low impervious surface (UGBI)	0–15 (0–38)	Not available	Cemented material	0–8	Well	Summit
	15–79 (38–200)	Not available	Gravelly sandy loam			
Urban land–Laguardia complex (ULA)	0–15 (0–38)	Not available	Cemented material	0–3	Well	Summit
	15–79 (38–200)	Not available	Gravelly sandy loam			
Greenbelt–Urban land complex (GUC)	0–5	Not available	Loam	8–15	Well	Summit
	5–16		Loam			
	16–30		Loam			
	30–79		Sandy loam			
Laguardia–Ebbets complex (LEA)	0–8	Not available	Coarse sandy loam	0–3	Well	Summit
	8–26		Coarse sandy loam			
	26–79		Coarse sandy loam			

Figure 2-1. Soils in and adjacent to the Project area.

2.1.4 Drainage

The Project area is located along the eastern edge of the Willet's Point peninsula, with the Little Neck Bay to the east and south. There are two small artificial bodies of water on the Willet's Point peninsula: a circular retention pool to the northeast of Duane Road and Fort Totten Lake, located southwest of Duane Road. A small unnamed stream runs southeast from Lake Totten into the bay. Lake Totten appears to have been created during the filling event that raised the elevation of the southern end of the peninsula.

2.1.5 Vegetation

The Project area is situated on a grass lawn between the concrete seawall to the northeast and the paved General R W Berry Drive and a parking lot to the southwest. Some mature trees and shrubs are located to the northeast of the Project area along the water's edge (Appendix A: Photographs).

2.1.6 Forest Zone

Long Island is within the Oak Forest Zone, characterized by several species of oak that thrive in the warmer temperatures and thinner soils of the area. The forests in this area have been subject to intense and prolonged pressure due to the high population density and have become scrubby, often with plenty of open space allowing bushes to grow. In the sands and rocky soils of Long Island, the oaks grow alongside pitch pine and red cedar, with scattered red maples, aspens, fire cherries, hickory, and black locust trees appearing in old agricultural fields. There are also occasional southern species, such as the tulip poplar and sweet gum trees (de Laubenfels 1977:93–95).

2.1.7 Existing Features and Alterations

The Project area is located between General R W Berry Drive to the southwest and the concrete seawall to the northeast, with structures related to the FDNY and New York Police Department (NYPD) training facilities located to the northwest and southeast of the proposed tower location (Appendix A: Photographs). The area to the west of General R W Berry Drive is a parking lot. A buried stormwater drainage system runs parallel to General R W Berry Drive, approximately 25 ft (7.62 m) southwest of the proposed location of the concrete foundation.

3 Phase 1A Methodology

A Phase 1A archaeological investigation is designed to identify and assess the potential for locating archaeological resources within the area affected by a proposed project. These resources include Indigenous American or Euro-American archaeological and related aboveground features. The investigation consists of a literature search, a site file search, and a field reconnaissance of the project area. The geography and history of the region has been reviewed to provide background and context for any resources that may exist within the Project area. Archaeological and historic site files at the New York State Office of Parks, Recreation & Historic Preservation's online Cultural Resources Information System (CRIS) were reviewed as an initial step to determine the presence of known archaeological sites within 1 mile (mi) (1.6 kilometers [km]) of the APE. These files include data recorded at both the OPRHP and the New York State Museum. The field investigation included photographically documenting the setting and general conditions (e.g., disturbances, drainage, sensitive terrain) of the Project area. Information collected during the

Phase 1A survey (i.e., background research and field investigation) was used to assess the sensitivity of the project area for the presence of archaeological resources. Areas are considered to have low archaeological sensitivity include:

- graded and cut areas through surrounding terrain (e.g., hills or gorges), such as those resulting from road construction;
- areas that appear to have large amounts of fill;
- areas previously altered by construction of utilities, drainage ditches, or streets or other obvious areas of significant earth movement;
- terrain with poorly drained soils and wetlands; and
- areas having slopes greater than 12 percent.

Areas of high archaeological sensitivity include:

- undisturbed areas that have relatively level, well-drained soils or are in the vicinity of potable water such as springs, streams, or creeks (these characteristics typify known site locations in the region);
- areas near known archaeological site locations;
- areas near map-documented structures that are more than 50 years old; and
- areas in or near Traditional Cultural Properties or locations with elevated historical importance.

4 Background Research

4.1 Archaeological Context

The earliest human occupation of the coastal areas of New York State, including Long Island, took place approximately 12,000 years ago, after the retreat of the Wisconsin continental glacier (Ritchie 1969:3). Archaeologists have divided the last 12,000 years into six named time periods: the Paleoindian, Archaic, Transitional, Woodland, Contact, and Historic periods (Funk and Pfeiffer 1965; Ritchie 1980). The archaeological evidence from Long Island from each of these periods is summarized below.

4.1.1 Paleoindian Period (ca. 12,000–10,000 B.P)

The earliest evidence for human occupation of coastal New York State dates to the end of the Pleistocene Epoch and the retreat of the Wisconsin glacier, approximately 12,000 years ago. As the climate warmed, the vegetation gradually shifted from tundra to coniferous forest, and humans began to move into these areas. The Paleoindian Period on Long Island is represented by isolated finds of large, fluted lanceolate projectile (spear) points of the Clovis tradition. These include a point recovered from the Wickham Farm on the North Fork in 1923 and some scattered surface finds of unreliable provenience (Saxon 1973). No Paleoindian habitation sites have been identified on Long Island. The nearest Paleoindian habitation site is Port Mobil on Staten Island (Eisenberg 1978; Kraft 1977).

The scattered and sparse distribution of Paleoindian sites suggests that populations were small and highly mobile during this time (Ritchie 1980:3). Despite earlier theories that the Paleoindian

diet was focused on megafauna, more recent evidence suggests that subsistence strategies were diverse, incorporating migratory game species, especially caribou, and a variety of smaller fauna (Seeman et al. 2008). Evidence from adjacent regions that plant resources were also an important part of subsistence during this period (Hill 2007; Kitchel 2008).

4.1.2 Early Archaic Period (ca. 10,000–8000 B.P.)

Around 10,000 B.P., the climate of Long Island became warmer, precipitation increased, and forests changed from coniferous to a mix of coniferous (spruce, fir, and pine) and deciduous (oak) species (Cantwell and Wall 2001). The transition from the Paleoindian to the Archaic Period also took place at this time. Early Archaic groups were still organized into small bands, although subsistence changed in response to the shifting environment, possibly leading to an increased emphasis on logistical and seasonal mobility (Kraft and Mounier 1982; Ritchie 1980; Ritchie and Funk 1971). Archaeological evidence of Early Archaic occupation on Long Island is scarce, likely due to shifts in the coastline, and is mainly represented by isolated finds.

Three technological traditions emerged during the Archaic in the Northeast: the Laurentian, Piedmont, and Susquehanna. On Long Island, the Laurentian tradition appeared in the Middle Archaic Period and was followed by the Susquehanna (Orient Culture) tradition at the end of the Archaic. Projectile point forms changed during this time, shifting from the lanceolate points of the Paleoindian toolkit to corner- and side-notched forms (Justice 1995). Early Archaic projectile point types recovered on Long Island include Lamoka points (Ritchie 1971).

4.1.3 Middle Archaic Period (ca. 8000–6000 B.P.)

The material culture of the Middle Archaic Period on Long Island (ca. 7000-4500 B.P.) is similar to that of the Early Archaic but with the appearance of the Laurentian Tradition and a reduction in the variety of formal point types (Justice 1995; Ritchie 1980). Diagnostic types from this period include Stanley Stemmed, Morrow Mountain I and II (Justice 1995), Genesee, Brewerton side- and corner-notched, Normanskill, Otter Creek, and Vosberg (Ritchie 1971). The characteristic artifacts of the Laurentian include the gorge, adz, plummet, ground slate points and knives (particularly those with a lunar or ulu form), broad-bladed and side-notched forms of projectile points, and barbed bone points (Ritchie 1980:79).

Although limited on Long Island, archaeological evidence from other parts of the eastern United States suggests that there was an increased emphasis on logistical mobility during the Middle Archaic as temperatures continued to warm and the climate became more stable (Jefferies 1997). Evidence for semi-permanent architecture, such as the structures discovered at the Koster site in Illinois (Sassaman and Ledbetter 1996), may indicate that residential mobility was starting to decline during this period.

4.1.4 Late Archaic Period (ca. 6000–3700 B.P.)

The beginning of the Late Archaic Period on Long Island saw a shift from a highly mobile residential pattern that incorporated many different resource zones to a pattern that included fewer moves and that mostly stayed within riverine zones (Pagaloulatos 2009). This change coincided with a shift to very dry climactic conditions (Carbone 1976; Custer 1984). By the end of the Late Archaic Period, vegetation and climactic conditions had assumed modern conditions across Long Island.

Late Archaic projectile point types found on Long Island include Brewerton Corner-notched, Brewerton Side-notched, Brewerton Ear-notched, Lamoka, Pomranky, Vosburg Corner-notched,

Genesee, Savannah River, and Snook Kill (Justice 1995). The Wading River point is the most common Late Archaic type found across Long Island (Wyatt 1977).

The most complete data on the Late Archaic Period as manifested on Long Island comes from the Wading River locality on the north shore of Suffolk County (Wyatt 1977). The Late Archaic component at Wading River included shellfish baking and refuse pits, hearths, fire-cracked rock (FCR) concentrations, a cache of 13 ovate bifaces manufactured from quartz, and an articulated dog burial.

4.1.5 Transitional Period (ca. 3700–2700 B.P.)

The Transitional or Terminal Archaic Period was a time of significant socio-cultural change on Long Island. These changes are well documented relative to earlier periods on Long Island because more sites have been found and excavated that date to this period. These include four cemeteries (Orient I, Orient II, Jamesport, and Sugar Loaf Hill) and two habitation sites (Stony Brook and Cutchogue), which have provided the bulk of our understanding of this ceremonial complex and lifeway (Ritchie 1980). The Stony Brook site (radiocarbon dated to 2880 B.P.) contained a rich Orient Culture occupational deposit overlaying an earlier Middle Archaic Laurentian transition occupation at the site. The Baxter Site, located near Cutchogue, Long Island, contained a dense midden containing nine diagnostic Orient fishtail projectile points located below a Woodland Period layer (Salwen 1962).

The Orient Culture emerged during this period and is most distinctive for its complex mortuary rituals and customs. Caches of burial offerings at these eastern Long Island pre-contact cemeteries usually included four main components: a cosmetic kit, a fire-making kit, a woodworking kit, and a hunting kit (Cantwell and Wall 2001). The Orient culture was also characterized by the fishtail projectile point, soapstone vessels quarried in Rhode Island and Connecticut, and the intense exploitation of shellfish (Ritchie 1980). Projectile points diagnostic of the Transitional Period on Long Island include the Orient Fishtail, Susquehanna Broad, and Perkiomen Broad (Justice 1995; Ritchie 1971).

4.1.6 Early Woodland Period (ca. 2700–2000 B.P.)

The transition to the Early Woodland Period is marked by the appearance of fired clay ceramic vessels. The steatite vessels used by the people of the Orient Culture were Vinette I, the earliest type of crushed rock–tempered pottery (Cantwell and Wall 2001). Projectile points diagnostic of this period on Long Island include the Meadowood, Cresap Stemmed, Adena Stemmed, and Robbins (Justice 1995; Ritchie 1971).

The subsistence practices of this period are mostly a continuation of earlier Archaic (and Transitional) patterns, although with an increased reliance on shellfish (Ritchie 1980). Around 2450 B.P., people began to intensify their use of local plant species, tending to them in ways that led to their domestication. As communities became more sedentary, these domesticated species were grown in gardens near the settlements (Wymer and Abrams 2003).

4.1.7 Middle Woodland Period (ca. 2000–1000 B.P.)

Sedentism continued to increase during the Middle Woodland Period (ca. 2000–1200 B.P.), and people began to settle in semipermanent villages (Ritchie and Funk 1973:349). These villages were supported by the development of incipient forms of agriculture and increased reliance on

horticulture of native plants. These new forms of food production were used alongside hunting, fishing, and gathering (Cantwell and Wall 2001).

Excavations at the Muskeeta Cove site in present day Glen Cove (on the north coast of Suffolk County, ~9 mi [14.48 km] from the Project area) uncovered two distinct lenses of Windsor Tradition deposits (Occupation A and B) separated by sterile soil (Salwen 1968). The site yielded a rich assemblage of ceramics (n = 1,013), including Vinette Interior Cord-Marked, Clearview Stamped, North Beach Net-Marked, Bowman's Brook Stamped, Owasco Corded Horizontal, Clasons Point Stamped, and Van Cortlandt Stamped, among other undecorated sherds.

4.1.8 Late Woodland Period (ca. 1000–400 B.P.)

The Late Woodland Period (ca. 1200–400 B.P.) in coastal New York is defined by the increased significance of agriculture in subsistence. Direct archaeological evidence for agriculture on Long Island is scant and has only been documented at the Sebonac site on the South Fork. The site was originally excavated between 1899 and 1902 by Mark Harrington. Thirty-five corn kernel fragments were recovered from the site and have yielded a calibrated date range of 690–465 B.P. A date of 680 B.P. ±136 has been derived from thermoluminescence dating of a Windsor Cord-Marked sherd from the same site (Ceci 1990). However, the use of maize agriculture during this time has been well documented throughout the region by studies carried out in nearby Fishers Island (Funk and Pfeiffer 1988), Connecticut (Lavin 1988; McBride and Dewar 1987), and Martha's Vineyard (Ritchie 1969).

Projectile points diagnostic of the Late Woodland Period on Long Island include Levanna, Madison, Jack's Reef Pentagonal, Jack's Reef Corner-notched, and Raccoon Side-notched (Justice 1995; Ritchie 1971).

4.1.9 Contact Period (ca. 400–300 B.P.)

The Contact Period (ca. A.D. 1550–1750 [400–200 B.P.]) refers to the first large-scale interactions between Native Americans and Europeans. At this time Indigenous groups continued hunting and gathering as they had in the Late Woodland Period. They practiced some seasonal mobility, moving between semipermanent village sites near agricultural fields, fishing areas on the coast, and inland and upland areas rich in game (Cronon 1984:48).

Long Island Native Americans were part of the Algonquian cultural and linguistic groups that occupied large portions of the Northeast. The western part of Long Island was occupied by the Canarsie, Matinecock, Merrick, and Rockaway peoples, who maintained mostly amiable relations with European settlers at that time (Brasser 1978; Salwen 1978).

4.1.10 Euro-American Period (ca. 300 B.P.–present)

The area that is now known as Long Island was settled by Europeans, specifically the Dutch and the English, starting in the 1630s. In 1639, the Dutch West India Company purchased the land that makes up most of modern-day Queens and Nassau counties from Chief Sachem Mechowodt, a representative of the Matinecock Nation (Gehring 1980). The Matinecock and other Indigenous groups were permitted to continue living in the area under the protection of the Dutch, but relations between the Indigenous peoples and the settlers were tense and sometimes violent. The Director of the New Netherland colony, Willem Kieft, attempted to impose taxes on the Indigenous inhabitants, and disputes between Indigenous inhabitants and European settlers were common. This culminated in "Kieft's War," which ended in 1645 with the signing of a peace treaty. At that time

Kieft granted a charter for the settlement of the Town of Flushing. In 1664 a treaty was signed that surrendered New Netherland to the English. The colony was renamed New York, and all of Long Island was incorporated into it (Wood 1828:86).

Initially, European settlements were small and had little impact on the surrounding area. They imported domestic animals, such as sheep, cattle, horses, swine, and fowl, as well as grain and seeds. The area surrounding Willet's Point, which is now the neighborhood of Bayside, remained sparsely populated farmland until the late eighteenth to the early nineteenth century. As towns grew oak trees were cut to build houses and ships, and the forests were depleted (Barlow 1971; Booth 1859; Kieran 1971). Population density in this area increased in the early twentieth century as the industry and population of New York City grew. The local population also expanded significantly in the late 1940s and 1950s after a Long Island Railroad station was established at Port Washington, providing a direct line to Manhattan.

Fort Totten

The U.S. government purchased the land for the military reservation at Willet's Point in two transactions: one in 1857 and one in 1863. The original stone fortification, known as the Fort at Willet's Point, was constructed from 1862 to 1864 (Roberts 1988:586). The fort was active during the Civil War, when it served as a recruit depot and temporary lodging for troops traveling to the front.

After the Civil War ended, the U.S. Army's Engineer Battalion was stationed at Fort Totten, and they developed an early, informal version of the School of Application. The school was formally recognized by the War Department in 1885, and in 1890 the name was changed to the United States Engineer School. The fort was renamed Fort Totten in 1898, after Chief Engineer Major General Joseph G. Totten. The Engineer school was moved to Washington, D.C., in 1901 (U.S. Army Corps of Engineers [USACE] 2017).

During World War I, Fort Totten served as a training and embarkation point for soldiers. During World War II, the Fort became the headquarters of the Eastern Defense Command's anti-aircraft division. During the Cold War, Fort Totten served as the regional headquarters for the U.S. Army anti-aircraft missile program, Project Nike (Lonnquest and Winkler 1996). In 1954 Fort Totten received anti-aircraft missiles, which remained on site until the 1970s (Roberts 1988:586).

Fort Totten was placed on inactive status in 1967 and afterward became a subinstallation of Fort Hamilton, New York. In 1995 Fort Totten underwent Base Realignment and Closure actions, and part of the facility was used to establish a U.S. Army Reserve enclave. This enclave was designated the Ernie Pyle USARC/AMSA under the control and responsibility of the 77th Regional Readiness Command (USACE 2017).

In 1995, when it was announced that the Fort would close, members of the Matinecock Tribe claimed there is an ancestral burial ground located below the fort (LeDuff 1997; Lii 1995). This claim was not investigated at the time despite the presence of known Indigenous burial sites in College Point and Flushing.

4.2 Site Files and Record Review

Phase IA background research comprised a desktop review of known archaeological and historic resources and previous cultural resource investigations in and near the Project area. This included a search of the New York CRIS database and a literature review. The New York CRIS search found seven previous archaeological surveys (Table 4-1) and six documented archaeological sites within 1 mi (1.6 km) of the Project area (Table 4-2). The northern edge of the Project area is just outside of the Fort Totten Historic District, which includes 144 historic buildings.

4.3 Previous Cultural Resource Investigations

Seven archaeological surveys have been conducted within 1 mi (1.6 km) of the current Project area (Table 4-1). Three of these surveys identified archaeological sites. The 1985 investigation by Louis Berger and Associates identified the Glacis Site, but a copy of the full report was not available online. The 1998 investigation identified the Fort Totten historic and Prehistoric sites. This investigation included the excavation of 114 shovel test pits (STPs) and 18 excavation units of various sizes. Finally, the Little Bay Site was identified by a 2006 investigation by the Louis Berger Group that included the excavation of 79 STPs, of which 19 were positive for prehistoric artifacts and 17 were positive for historic and modern material. The stratigraphy observed in the STPs in level areas showed a thick (41-cm [1.35-ft]) Stratum A of dark brown sandy loam (10YR 3/3) over a yellowish-brown (10YR 5/4) sandy loam that extended to STP termination at 60 cm (1.97 ft) below ground surface (bgs). The upper layer was interpreted as a mix of Ap and colluvium or landscape fill, and two biface reduction flakes and one piece of lithic shatter were recovered from this deposit. There was a second stratigraphic profile that consisted of a plowzone (Ap horizon) to 24 cm (0.79 ft) bgs, underlain by black (10YR 2/1) deposit with dense shell deposits, which extended to 50 cm (1.64 ft) bgs. This horizon was interpreted as a shell midden and was underlain by a dark yellowish-brown (10YR 4/6) C horizon. STPs placed close to an artificial pond in the survey area encountered fill but penetrated the fill and reached the underlying intact strata.

The Phase I investigation performed by USACE (2017) overlapped with the southern edge of the current Project area. That investigation used a sensitivity model developed by Luhmann et al. (2007) and determined that the area had medium to low sensitivity for archaeological resources. They did not place any shovel tests in this area because on-site observations confirmed it had been disturbed by the construction of parking lots associated with the NYPD and FDNY training facilities.

Table 4-1. Previous Cultural Resource Investigations within 0.5 Mile (0.8 km) of the Project Area

Report No.	Date	Authors	Title	Distance from Project area, mi (km)	Results
–	1985	J. Kratzer (Louis Berger & Associates, Inc.)	A Cultural Resource Overview and Management Plan for the U.S. Coast Guard Property, Fort Totten, Queens, New York	No data	Identified Glacis Site
–	1998	P. F. Bienenfeld, H. Leininger (Tetra Tech, Inc.)	A Phase IA/B Archaeological Survey of Fort Totten, Queens County, New York City, New York	No data	Identified Fort Totten historic and Prehistoric sites (Woodland)
–	1998	H. Leininger and P. F. Bienenfeld (Tetra Tech, Inc.)	A Phase II Investigation of Fort Totten, Queens County, New York City, New York	No data	15 flakes/fragments, 1 Levanna point; masonry foundations

Report No.	Date	Authors	Title	Distance from Project area, mi (km)	Results
03SR54001	2003	J. B. Pelletier and S. Turner (R. Christopher Goodwin & Associates, Inc.)	Archaeological Survey of Seven Anchor Locations in the East River for the Eastchester Pipeline, Bronx County, New York	0.71 (1.14)	No cultural resources identified
06SR56776	2006	R. Vernay, P. Sabol, N. Rinehart, & H. E. Luhman (Louis Berger & Associates, Inc.)	Phase I Archaeological Survey, Proposed New Facility, Armed Forces Reserve Center, Fort Totten, Flushing, Queens County, New York	0.29 (0.47)	Identified Little Bay Site (Late Archaic and Woodland)
20SR00159	2007	H. E. Luhmann, R. Brodeur, P. Sabol, R. Ciuffo, D. Gould (Louis Berger Group, Inc.)	Phase IA Archaeological Survey 77th Regional Readiness Command	0–0.48 (0–0.77)	Sensitivity model, recommendations for further investigation
13SR62039	2013	A. Loorya, C. Ricciardi, D. George (Chrysalis Archaeological Consultants, Inc.)	Phase 1A Historical Documentary Report and Archaeological Assessment of the Reconstruction of the Parking Lot and Comfort Station at Totten Avenue and the Cross Island Parkway (aka Little Bay Park), Queens County, New York (Q010-112M)	0.46 (0.74)	Recommended further testing, Phase 1B
16SR00758	2016	N. A. Stehling (AECOM)	Preliminary Phase IA Archaeological Sensitivity Assessment for the Installation of Fender Protection at Towers and Anchorages of the Throgs Neck Bridge, Brox and Queens Counties, New York	0.99 (1.59)	No effect; no further testing recommended
19SR00704	2017	Baltimore District, U.S. Army Corps of Engineers	Phase I Archaeological Resource Investigation Ernie Pyle U.S. Army Reserve Center (NY023) U.S. Army Reserve, 99th Regional Support Command Fort Totten, Borough of Queens, New York City, New York	0–0.48 (0–0.77)	Avoidance or Phase II northwest of pond
24SR00106	2023	AECOM	Beacon Offshore Wind: Beacon Wind Project (BW1 and BW2) Construction and Operations Plan, Appendix U Marine Archaeological Resources Assessment	0.77 (1.24)	Extensive mapping of underwater resources in East River and Long Island Sound

4.4 Cultural Resources Reported within 0.5 Mile of the Project Area

4.4.1 Register Listings

There are 161 Building USNs listed within 1 mi (1.6 km) of the Project area. Most of these buildings (n = 144) are located within and contributing to the Fort Totten Historic District. The district, which is eligible for inclusion on the NRHP, is located immediately to the north of the current Project area. There are 144 contributing historic buildings within the district (Appendix B, Table B-1). One building—the Officer's Club (Building 208)—is listed on the SRHP and the NRHP.

There are 17 structures outside of the Fort Totten Historic District that have been evaluated for inclusion in the SRHP and NRHP (Table 3-2). Of these, two have been determined to be eligible for listing on the SRHP and NRRHP. The first is the Stone Jetty (formerly the Engineer's Pier) located to the north of Fort Totten in Little Bay. The second is the Bay Terrace Jewish Center, a Mid-Century Modern style building designed by architect Arthur Silver and built in 1962.

Table 4-2. SRHP- and NRHP-Evaluated Properties within 1 Mile (1.6 km) of the Project Area

USN	Name	Distance to Project area in miles (km)	NRHP Status
08101.006315	Building 112 well or pump house	0.37 (0.60)	Not eligible
08101.006316	Building 113 Circular building	0.37 (0.60)	Not eligible; demolished
08101.012420	Army Reserve Center	0.19 (0.31)	Not eligible
08101.000146	Building 118 Gun shed	0.20 (0.32)	Not eligible
08101.000147	Ernie Pyle USARC Building 121	0.16 (0.26)	Not eligible
08101.000148	Ernie Pyle USARC Building 123	0.14 (0.23)	Not eligible
08101.006398	Building K Stone Jetty (Formerly Engineers Pier)	0.64 (1.03)	Eligible
08101.012021	Bay Terrace Jewish Center (13-00 209th Street)	0.62 (1.00)	Eligible
08101.011339	Residence, 216-05 15th Rd	0.31 (0.50)	Not eligible
08101.011729	Bay Terrace Branch, Queens Public Library	0.50 (0.80)	Not eligible
08101.011212	P.S. 169-Q	0.55 (0.89)	Not eligible
08101.012147	Bay Terrace Shopping Plaza	0.64 (1.03)	Not eligible
08101.011216	Queens Library/Windsor Park Library	0.62 (1.00)	Not eligible
08101.011892	24th Avenue Pumping Station	0.51 (0.82)	Not eligible
08101.012162	212 26th Avenue	0.79 (1.27)	Not eligible
08101.011381	St. Mary's Children's Hospital	0.83 (1.34)	Not eligible
08101.014201	PS-284 Clearview Pump Station	0.92 (1.48)	Not eligible

4.4.2 Archaeological Sites

A search of the New York CRIS database identified six documented archaeological sites within 1 mi (1.6 km) of the Project area, including two historic sites, two historic cemeteries, and two prehistoric sites (Table 4-3). Four of these—the Glacis site, the Fort Totten Historic Archaeological site, the Little Bay Site, and the Fort Totten Prehistoric Site—are located on Willet's Point within the historic Fort Totten. The Fort Totten Prehistoric Site is a Woodland Period site located just south of Weaver Avenue. Artifacts collected during excavations included 15 flakes or flake fragments, made on quartz, quartzite, and chert, and one Levanna point, made on quartz (Bienenfeld and Leninger 1998). The Little Bay site is a multicomponent site situated southwest of Underhill Road, with materials dating to the Late Archaic (4000–3500 B.P.) and Woodland (3000–500 B.P.) periods. Materials recovered from this site include one Susquehanna Broad projectile point, one hammerstone, six pieces of FCR, and six nondiagnostic ceramic sherds. A shell midden was also identified (Vernay et al. 2006).

The Fort Totten Historic Archaeological Site is a SHRP- and NRHP-Eligible site located in the central green of Fort Totten Park, between Weaver and Store Avenues. The site was a historic foundation, and excavation recovered masonry materials such as bricks, mortar, and cement. This site has been dated to the period between 1857 and 1910 (Bienenfeld and Leininger 1998). Finally, the Glacis site was an earthen embankment dating to the Civil War/Reconstruction Period at the Fort (Klein et al. 1985).

Two historic cemeteries were previously located on Willet's Point peninsula, but these have been removed. The Thorne-Wilkins Cemetery was a family cemetery active from 1709 to 1775. It has been reported as moved or destroyed, but no date is known for when the graves were removed, and human remains may still be present in the area (Meade 2020). The Fort Totten Cemetery was active from 1862 to 1886, and many Union soldiers who died in the Civil War were interred there. In 1902 the U.S. Government awarded George W. Peasell the contract to remove the bodies of 63 army men to the National plot in Cypress Hills Cemetery (Brooklyn Times Union 1902; Meade 2020).

Table 4-3. Documented Archaeological Sites within 1 Mile (1.6 km) of the Project Area

USN	Site Name	Site Type	Period	Distance to Project area, mi (km)	Description
08101.000141	Fort Totten Historic Archaeological Site	Historic	1857–1910	0.24 (0.39)	Masonry foundation (brick, mortar, concrete)
08101.006539	The Glacis Site	Historic	Civil War/Reconstruction	0.22 (0.35)	Earthen embankment
08101.007357	Fort Totten Prehistoric Site	Prehistoric	Woodland (A.D. 700–1200)	0.38 (0.62)	Levanna point, 15 flakes or fragments
08101.011172	Little Bay Site	Prehistoric	Late Archaic (4000–3500 B.P.); Woodland (3000–500 B.P.)	0.31 (0.50)	Susquehanna Broad projectile point, 6 ceramic sherds, 1 hammer stone, 6 FAR, 48 flakes or fragments

USN	Site Name	Site Type	Period	Distance to Project area, mi (km)	Description
08101.014059	Thorne-Wilkins Family Cemetery	Historic cemetery	1709–1775	0.42 (0.68)	Cemetery, presumed destroyed in 2020
08101.014060	Fort Totten Cemetery	Historic cemetery	1862–1886 (Civil War/Reconstruction)	0.24 (0.39)	Cemetery, relocated

The literature review determined that four additional sites have been reported along the shoreline in Bayside and College Point. These sites are all more than 1 mi (1.6 km) distant to the Project area but occur in shoreline contexts similar to that of the Project area. Parker (1922) listed two sites near Little Neck Bay: a shell heap at Douglass point and a burial site "near Bayshore Beach (or Van Nostrand) and Little Neck bay." Parker also reported a village and burial site near College Point, on the eastern shore of Flushing Bay. The Gugliotta Site, a shell midden containing ceramic sherds, project points, and animal bones, is located 1.7 mi (2.74 km) south of the current Project area.

4.5 Historical Map Analysis

A series of historic maps were studied to gain a better understanding of the historic occupation and development of Fort Totten and the surrounding area. The earliest of these, like many early representations of the area, shows Willet's Point as an island rather than a peninsula (Figure 4-1) (Barber 1777). This may have been due to slightly higher water levels at the time or due to the wetlands that separate the southern part of the peninsula from the mainland. By 1849, some residential development had started in Flushing, with more roads and structures beginning to appear (Figure 4-2) (Atwood and Colton 1849). Willet's Point is represented as a peninsula on this map but is labeled "Wilkins Neck."

The 1873 F.W. Beers Atlas is the first map studied here that shows the peninsula after it was purchased by the U.S. government in 1869 Figure 4-3. This map shows that early structures built at the Fort were concentrated on the northern side, near Little Bay. There was a jetty or pier constructed on the southeastern corner of the peninsula, to the southeast of the Project area. By 1891 the Fort was beginning to expand to the south, and there is a structure located on the northwestern edge of the Project area (Figure 4-4) (USGS Brooklyn, NY 1891). The jetty present on the 1873 map is shown here, although this time there is a blue hashed symbol along the southeastern and southern end of the peninsula. This indicates the presence of a seasonal wetland, and there are some structures on the edge and even within the blue area. A road or bridge over the stream between the southern part of the peninsula and the mainland appears for the first time on this map.

A shift takes place in the topography of the peninsula in the mid-twentieth century, and this is captured by the 1947 and 1955 topographic maps (Figure 4-5 and Figure 4-6). The map from 1947 shows a stone seawall that extends along the northern and eastern edges of the peninsula. This wall passes through the Project area and appears to generally follow the path of the current seawall. This map also shows additional structures in the southern part of the peninsula and does not indicate the presence of wetlands. It is difficult to tell from this map if a filling event took place because the contour interval is relatively wide (20 ft). The 1955 map has a smaller contour interval (10 ft), and the 10-ft contour is visible very close to but just above the shoreline. This map may indicate that the area was filled, although this investigation found no other documentation of a filling event.

Figure 4-1. Location of the Project area in 1777 (Barber 1777).

Figure 4-2. Location of the Project area in 1849 (Atwood and Colton 1849).

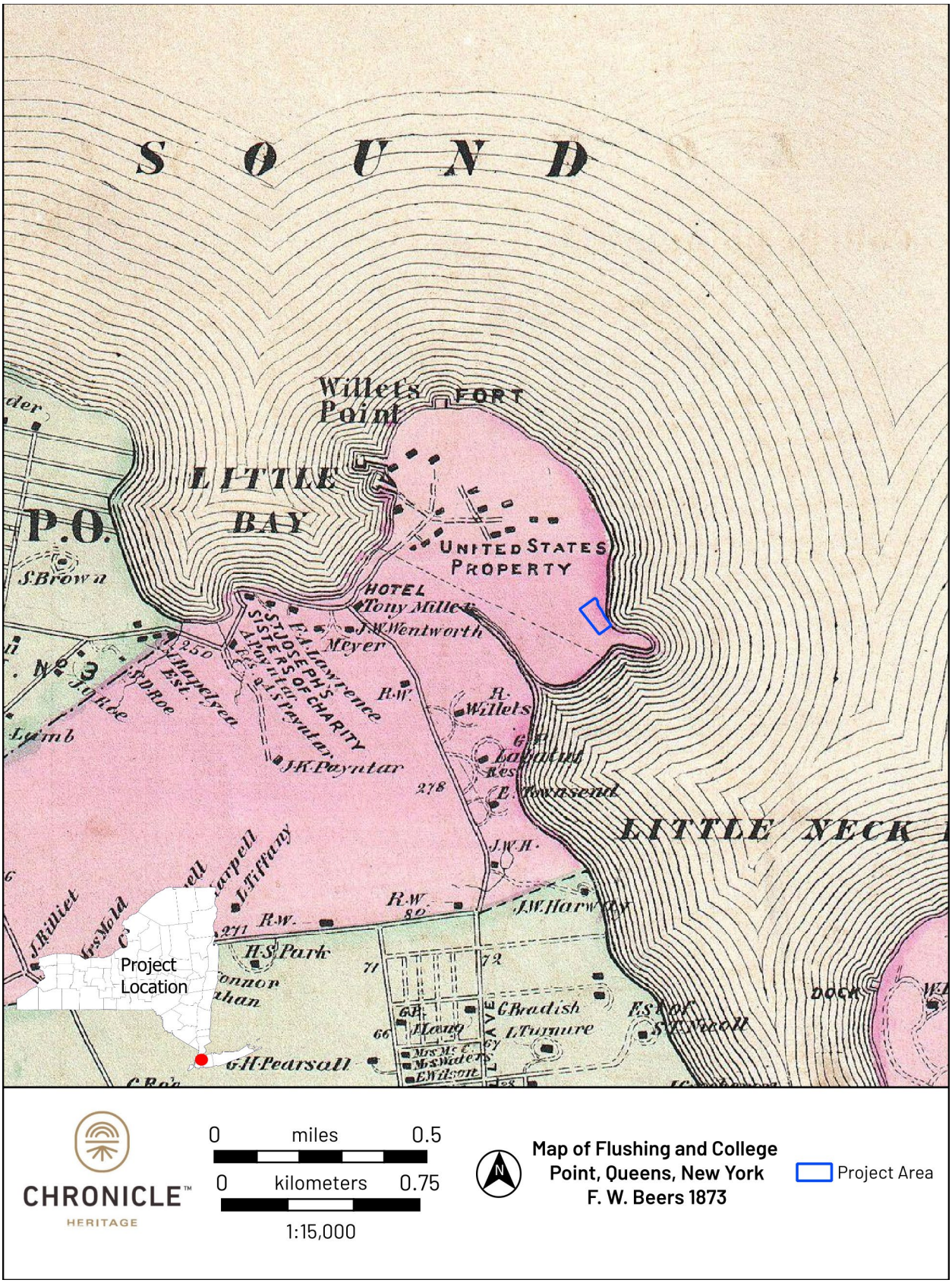

Figure 4-3. Location of the Project area in 1873 (Beers 1873).

Figure 4-4. Location of the Project area in 1891 (USGS Brooklyn NY 1891).

Figure 4-5. Location of the Project area in 1947 (Flushing, NY; USGS 1947).

Figure 4-6. Location of the Project area in 1955 (Flushing, NY; USGS 1957).

5 Field Reconnaissance and Sensitivity Assessment

A field reconnaissance of the project area was conducted on May 23, 2024, by Benjamin DiBiase of Chronicle Heritage. This consisted of field observations and photographic documentation of the setting and general conditions of the Project area (e.g., disturbances, erosion, potential intact soils). Photographs taken of the Project area are presented in Appendix A: Photographs, and photograph locations and angles are indicated in Figure 5-1. The area has been extensively modified by the construction of training facilities, parking areas, and residential structures as well as the installation of a buried storm drainage system (Appendix A: Photograph 10).

The Project area is situated on a grass-covered lawn between a residential building to the northwest, a paved road, a parking and training area to the southwest, the NYPD Emergency Service K-9 facilities to the southeast, and Little Neck Bay to the northeast (Appendix A: Photographs 2–5). The ground surface slopes gently upward toward the paved area and down to the sea wall near the water's edge. A storm drain was observed to the west of the proposed location of the concrete footing (Appendix A: Photograph 1). The path of the buried drainage pipe is visible in aerial photographs (Figure 5-1), passing from the southeast (near the K-9 facility) to the drain, intersecting with the proposed path of the electrical conduit. The drainage pipe also extends to the north toward the residential structure.

A concrete seawall runs along the eastern edge of the project area (Appendix A: Photograph 7). A chain link fence runs along the top of the wall, and the bay side of the wall is protected with stone rip rap. The proposed tower location is approximately 25 ft (7.6 m) southwest of the seawall (Appendix A: Photograph 8).

Figure 5-1. Map of photograph locations and directions.

6 Conclusions and Recommendations

The Phase 1A documentary research conducted for this study indicates that the Project area is sensitive for Indigenous and Euro-American archaeological sites. There are six documented sites within 1 mi (1.6 km) of the Project area, and the northern edge of the Project area overlaps with the Fort Totten Historic District. There are 144 contributing historic properties located within the Fort Totten Historic District, one of which is listed on the SRHP and the NRHP (the Officers Club, Building 208). The historic map study identified a map documented structure located on the northern edge of the Project area and a jetty dating to the earliest periods of the fort to the south. A literature review found that this area of the north shore of Long Island is sensitive for Indigenous archaeological sites, particularly those dating to the Woodland Period. It also found that members of the Matinecock Tribal Nation have claimed there may be ancestral remains buried at Fort Totten. There is limited evidence for a filling event, but there is no record of the depth of fill. Additionally, previous investigations have penetrated the fill to reach intact strata. Based on these results, Chronicle Heritage recommends a Phase IB investigation or archaeological monitoring of the areas of direct impact within the Project area, specifically the area that will be disturbed by the drilling of the piles, the construction of the concrete foundation, and the installation of the electrical conduit.

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Appendix A. Photographs

Photograph 1. Looking into tower location, facing southeast (Chronicle Heritage, 2024).

Photograph 2. Looking north from center of tower location (Chronicle Heritage, 2024).

Photograph 3. Looking south from center of tower location (Chronicle Heritage, 2024).

Photograph 4. Looking west from center of tower location (Chronicle Heritage, 2024).

Photograph 5. Facing east from center of tower location (Chronicle Heritage, 2024).

Photograph 6. Project area, facing southwest (Chronicle Heritage, 2024).

Photograph 7. Seawall at the north end of the Project area, looking south (Chronicle Heritage, 2024).

Photograph 8. Tower location from sea wall, looking southwest (Chronicle Heritage, 2024).

Photograph 9. Proposed location of underground electrical junction, facing north (Chronicle Heritage, 2024).

Photograph 10. Project area overview, facing north (Chronicle Heritage, 2024).

Photograph 11. Project area overview, facing east (Chronicle Heritage, 2024).

Photograph 12. Project area, facing east (Chronicle Heritage, 2024).

Photograph 13. Project area viewed from parcel boundary, facing southeast (Chronicle Heritage, 2024).

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Appendix B. Table of SRHP- and NRHP-Eligible Buildings within the Fort Totten Historic District

Table B-1. Fort Totten Historic District Contributing Buildings

USN	Building No.	Building Name and Type	Location	SRHP and NRHP Status
08101.000144	130	Tunnel to fortifications	Lee Road	Eligible
08101.000145		Original battery	Totten Avenue	Eligible
08101.000149		Garage	Sgt Beers Lane	Eligible
08101.000150	133	Garage	Sgt Beers Lane	Eligible
08101.000151	416	Garage	Walter Reed Road	Eligible
08101.006251	103	Guard house	Totten Avenue	Eligible
08101.006252	105	Switch station	Duane Road	Eligible
08101.006253	107	Switch station	Duane Road	Eligible
08101.006254	124	Former blacksmith shop	Duane Road	Eligible
08101.006255	128	Ernie Pyle USARC Building 128	128 Duane Road 11359	Eligible
08101.006256	129	Office and residence	Sgt Beers Avenue	Eligible
08101.006257	131	Two-family residence	Sgt Beers Avenue	Eligible
08101.006258	132	Two-family residence	Sgt Beers Avenue	Eligible
08101.006259	202	Wood garage	Unnamed service road	Eligible
08101.006260	203	Officers' quarters	Totten Avenue	Eligible
08101.006261	204	Garage	Unnamed service road	Eligible
08101.006262	206	Ernie Pyle USARC building	206 Totten Avenue 11359	Eligible
08101.006263	207	Officers' quarters	Totten Avenue	Eligible
08101.006264	211	Commanding officers' quarters	Murray Avenue	Eligible
08101.006265	222	Classrooms	Murray Avenue	Eligible
08101.006266	304	Hospital	Shore Road	Eligible
08101.006267	305	Single-family residence	Shore Road	Eligible
08101.006268	306	Two-family residence	Shore Road	Eligible
08101.006269	307	Two-family residence	Shore Road	Eligible
08101.006270	308	Two-family residence	Shore Road	Eligible
08101.006271	309	Bakery	Pratt Avenue	Eligible
08101.006272	310	Two-family residence	Sgt Beers Avenue	Eligible
08101.006273	312	Two-family residence	Sgt Beer Avenue	Eligible
08101.006274	314	Two-family residence	Sgt Beers Avenue	Eligible
08101.006275	316	Two-family residence	Sgt Beers Avenue	Eligible
08101.006276	319	Gymnasium	319 Murray Avenue and Westway Road	Eligible

USN	Building No.	Building Name and Type	Location	SRHP and NRHP Status
08101.006277	325	Hospital barracks	Pratt Avenue	Eligible
08101.006278	330	Double Coast Artillery Barracks/USARC	330 Pratt Avenue 11359	Eligible
08101.006279	332	Theatre	Pratt Avenue	Eligible
08101.006280	333	Post exchange	Pratt Avenue	Eligible
08101.006281	400	Officers' quarters	Murray Avenue	Eligible
08101.006282	401	Double officers' quarters	Murray Avenue	Eligible
08101.006283	402	Double officers' quarters	Murray Avenue	Eligible
08101.006284	405	Engineers' barracks	Whistler Avenue	Eligible
08101.006285	409	Officers' quarters	Shore Road	Eligible
08101.006286	411	Officers' quarters	Shore Road	Eligible
08101.006287	413	Officers' quarters	Shore Road	Eligible
08101.006288	415	Officers' quarters	Weaver Avenue	Eligible
08101.006289	418	Officers' quarters	Weaver Avenue	Eligible
08101.006290	420	Officers' quarters	Weaver Avenue	Eligible
08101.006291	422	Commanding officers' quarters	Weaver Avenue	Eligible
08101.006292	502	Warehouse	Lee Road	Eligible
08101.006293	515	Battery Sumner #1	Lee Road	Eligible
08101.006294	516	Battery Graham #1	Lee Road	Eligible
08101.006295	516	Battery Graham #2	Lee Road	Eligible
08101.006296	517	Torpedo storage vaults	Lee Rad	Eligible
08101.006297	519	Battery Sumner #2	North Loop	Eligible
08101.006298	601	Warehouse – now offices	Totten Avenue	Eligible
08101.006299	602	Weigh station	Willets Street	Eligible
08101.006300	604	Warehouse	Willets Street	Eligible
08101.006301	635	Officers' quarters	Bayside Street	Eligible
08101.006302	637	Administration – now supply and recruiting	Totten Avenue	Eligible
08101.006303	639	Battery Mahan #1	North Loop	Eligible
08101.006304	640	Battery Mahan #2	North Loop	Eligible
08101.006305	641	Battery Burnes	Circle Drive	Eligible
08101.006306	642	Battery Stuart	Circle Drive	Eligible
08101.006307	643-644	Battery Baker	North Loop	Eligible

USN	Building No.	Building Name and Type	Location	SRHP and NRHP Status
08101.006308	100	Main gate	Totten Avenue	Eligible
08101.006309	101	Sentry post	Totten Avenue	Eligible
08101.006310	104	Underground chamber	Duane Road	Eligible
08101.006311	108	Storage shed	Duane Road	Eligible
08101.006312	109	Circular conic foundation	Duane Road	Eligible
08101.006313	110	Stable	Duane Road	Eligible
08101.006314	111	Unidentified use	Duane Road	Eligible
08101.006317	134	Two-story residence	Sgt Beers Avenue	Eligible
08101.006318	135	Two-story residence	Gen R W Berry Road	Eligible
08101.006319	136	Two-story residence	Gen R W Berry Road	Eligible
08101.006320	200	Garage/temporary storage shed	Duane Road	Eligible
08101.006321	208	Officers' club	Totten Avenue	Listed
08101.006322	209	Transformer vault brick	Underhill Road	Eligible
08101.006323	210	Tennis court	Murray Avenue	Eligible
08101.006324	300	Parade ground	Murray Avenue	Eligible
08101.006325	301	Flagpole moved from parade ground	Totten Avenue	Eligible
08101.006329	303	Brick transformer vault	Shore Road	Eligible
08101.006330	311	Garage	Theatre Road	Eligible
08101.006331	313	Brick transformer vault	Theatre Road	Eligible
08101.006332	315	Garage	Theatre Road	Eligible
08101.006333	318	Administration building (formerly YMCA)	Murray Avenue	Eligible
08101.006334	320	Antenna tower	Westaway Road	Eligible
08101.006335	321	Brick transformer vault	Murray Avenue	Eligible
08101.006336	322	Two- or three-story barracks	Story Avenue	Eligible
08101.006337	323	Two- or three-story barracks	Story Avenue	Eligible
08101.006338	324	Brick transformer vault	Westaway Road	Eligible
08101.006339	326	Post dispensary	Story Avenue	Eligible
08101.006340	327	Small storehouse	Red Cross Lane	Eligible
08101.006341	328	Brick transformer vault	Rd Cross Lane	Eligible
08101.006342	329	Garage	East Loop	Eligible
08101.006343	331	Firehouse	Pratt Avenue	Eligible

USN	Building No.	Building Name and Type	Location	SRHP and NRHP Status
08101.006344	334	Gasoline station	Westaway Road	Eligible
08101.006345	335	Tennis court	Theater Road	Eligible
08101.006347	336	Bachelor officers' quarters	Shore Road	Eligible
08101.006349	337	Chain link transformer enclosure	Shore Road	Eligible
08101.006350	338	Swimming pool	Story Avenue	Eligible
08101.006351	339	Wading pool	Story Avenue	Eligible
08101.006352	340	Concrete bulk storage building with flat roof	Story Avenue	Eligible
08101.006353	341	Baseball diamonds	Story Avenue	Eligible
08101.006354	342	Men's and women's dressing rooms	Story Avenue	Eligible
08101.006355	344	Bus stop shelter	Sgt Beers Avenue	Eligible
08101.006356	402	Garage	Sylvester Lane	Eligible
08101.006357	404	Brick transformer vault	Sylvester Lane	Eligible
08101.006358	406	Two-story residence	Murray Avenue	Eligible
08101.006359	407	Two-story residence	Murray Avenue	Eligible
08101.006360	410	Garage	Unnamed service road	Eligible
08101.006361	414	Garage	Walter Reed Road	Eligible
08101.006362	417	Garage	Walter Reed Road	Eligible
08101.006363	419	Garage	Walter Reed Road	Eligible
08101.006364	421	Garage	Sylvester Lane	Eligible
08101.006365	432	Bus stop shelter	Abbot Road	Eligible
08101.006366	500	Battery King baseball field	North Loop	Eligible
08101.006367	501	Brick transformer vault	North Loop	Eligible
08101.006368	503	Terra cotta block stable/garage	Lee Road	Eligible
08101.006370	600	Concrete coal bunkers	Exit Road	Eligible
08101.006372	605	Quartermaster Pier	Willets Street	Eligible
08101.006373	606	Quartermaster Wharf building/pier		Eligible
08101.006374	607	Quartermaster storage shed/pier		Eligible
08101.006375	609	Brick transformer vault	Little Bay Road	Eligible
08101.006376	610	US Coast Guard building (old officers' laboratory)	Little Bay Road	Eligible

USN	Building No.	Building Name and Type	Location	SRHP and NRHP Status
08101.006377	611	Brick store house	Little Bay Road	Eligible
08101.006378	612	Corrugated sheet metal storage building	Little Bay Road	Eligible
08101.006379	614	Storage shed one story	Little Bay Road	Eligible
08101.006380	615	Torpedo storage house two story	Little Bay Road	Eligible
08101.006382	619	Concrete storage	Little Bay Road	Eligible
08101.006383	620	Residence	Circle Road	Eligible
08101.006384	621	Garage	Circle Road	Eligible
08101.006385	622	Barracks building bay terrace volunteer ambulance	Bayside Street	Eligible
08101.006386	623	Outbuilding	North Loop	Eligible
08101.006387	624	Machine shop	North Loop	Eligible
08101.006388	625	Storage (abandoned)	North Loop	Eligible
08101.006390	633	Garage	Chapel Road	Eligible
08101.006391	634	Two-story residence	Bayside Street	Eligible
08101.006392	636	Transformer vault	Chapel Road	Eligible
08101.006393	637	Administration building/Army medical center	Totten Avenue	Eligible
08101.006394	638	Chapel	Totten Avenue	Eligible
08101.006395	317	BLDG A Old Battery (stone fort)	Totten Avenue	Eligible
08101.006396		BLDG B vehicular tunnel	Totten Avenue	Eligible
08101.006397		BLDG C main magazine	Lee Road	Eligible
08101.006399		FEATURE L ice pond	Duane Road	Eligible
08101.006400		Willets Memorial	Bayside Street	Eligible
08101.006564		Two-family residence	Murray Avenue	Eligible

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