STAGE 1A ARCHAEOLOGICAL INVESTIGATION OF THE
Y.M.C.A. STATEN ISLAND PROJECT AREA,
BOROUGH OF RICHMOND, NEW YORK
CEQR No.: 94-BSA-052R

by
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I. INTRODUCTION

This study presents the results of a Stage Ia archaeological survey of the Y.M.C.A Staten Island project area (CEQR No. 94-BSA-052R) located at 3939 Richmond Avenue in the Borough of Richmond, New York (Figures 1 and 2). This survey has been conducted and this document prepared in accordance with the New York City Environmental Quality Review Act.

The study objectives are to assess the likelihood that possibly significant cultural resources are present within the project area and to recommend any necessary further investigations. Ground disturbance will result from the construction of the Y.M.C.A. facility, the excavation of utility lines, landscaping of the property, etc.

A. Project Area Description

The project area is a roughly rectangular shaped parcel approximately 540 feet (north to south) by 220 feet (east to west - see Figure 2). It is located approximately 200 feet southeast of the junction of Amboy Road and Richmond Avenue and is bounded by the latter roadway on the west, Ridgecrest Avenue on the east, Oakdale Street on the south, and commercial property belonging to the Y.M.C.A Counseling Service to the north.

The northern half of the project property consists of part of a large, well drained knoll with a relatively level top. The northern two-thirds of this area is currently the location of an existing Y.M.C.A. building, an associated gravel parking lot, paved walkways, grassy lawns, and a children's playground (Plates 1 and 2). The remaining portions of the knoll within the project area, including its southern and eastern slopes, are primarily wooded with some areas of scrub and brush (Plate 3). A small portion of the eastern slope of the knoll has been cut away, apparently relatively recently, creating a sharp drop off. Except for the areas where the Y.M.C.A. building is currently situated and where utilities are located, ground disturbance on the knoll appears to be minimal. (However, prior disturbance associated with the construction of historic period residences may have occurred in some locations - see below.) The gravel parking lot is minimally downcut into the knoll (Plate 4) and landscaping of the playground area and lawns has not been extensive although the former area may have been partially filled.

The southern half of the project area consists of a wooded, relatively level, terrace-like area, approximately 40 to 80 feet wide, situated at the base of the knoll (Plates 5 and 6). There are no obvious signs of extensive disturbance in this area.
although it appears that heavy equipment has recently driven onto portions of the eastern edge of the property. According to Mr. Philip Lloyd Rampulla of Rampulla Associates Architects, percolation tests were recently conducted in those areas. The terrace-like area immediately overlooks a low-lying marsh which extends over the southernmost 140 to 150 feet of the property (Plates 7 and 8). This marsh was formerly a pond created in the 1930's to facilitate drainage in the area of Richmond Avenue (Philip Lloyd Rampulla 1994: personal communication). A small stream extends from the eastern end of the marsh and flows through a culvert beneath Ridgecrest Avenue (Plate 9).

South of the marsh is an area of raised ground which is probably the remnants of a small floodplain for the adjacent stream. The area is between 8 and thirty feet wide. Other portions of the floodplain were apparently disturbed by the construction of Oakdale Street.

The stream that flows through the marsh is indicated on mid-nineteenth century maps (see Chapter IV:B) of the area suggesting that it is a natural water course and not the result of recent drainage modifications.

Piles of fill extend along the periphery of the project area bordering Richmond Avenue, Oakdale Street and Ridgecrest Avenue (Plates 10 and 11). Some of these piles were apparently deposited some time ago since they have small trees and other brush growing from them. Other piles appear to be more recent. Large sewer/water pipes are situated along the Oakdale Street and Ridgecrest Avenue borders of the project area (Plates 12 and 13), apparently being stored there for use as part of the Richmond Avenue Interceptor Sewer Project (Mr. Philip Rampulla, Jr. 1994: personal communication).

B. Methodology

This stage Ia archaeological survey involved documentary research on the prehistory and history of the project area and a pedestrian reconnaissance. Research for the project was conducted at the following repositories:

New York Public Library, Local History, Map, and General Research Divisions;
Elmer Holmes Bobst Library, New York University;
The New York City Municipal Archives;
The New York City Landmarks Preservation Commission;
The Staten Island Institute of Arts and Sciences.

The pedestrian reconnaissance was conducted on June 16th, 1994.

A request was made to the staff of the New York State Museum to search their prehistoric archaeological site files for listings
in the vicinity of the project area. The New York State Museum response to the information request is included as Appendix A to this report.

A second request was made to the staff of the New York State Office of Parks, Recreation, and Historic Preservation to search their archaeological and architectural site files for listings in the vicinity of the project area. No written response was received from that office to date.

Based on the documentary research and pedestrian reconnaissance, the archaeological sensitivity of the project area was assessed. Assessment of prehistoric sensitivity was based on the location of known archaeological sites listed in site files and reported in the literature, as well as a consideration of the former and current topographic and physiographic characteristics of the project area. Assessment of historic period sensitivity was based on an analysis of 18th - 20th century maps as well as a review of other documentary sources.
II. ENVIRONMENTAL SETTING OF THE PROJECT AREA

This section provides background information on the environmental setting of the project area which is located in the gently undulating southwestern corner of Staten Island.

A. Geology

Two major geomorphic/physiographic provinces are represented on Staten Island. The northwestern portion of the island is located within the Piedmont Lowlands and the remainder, including the present project area, is part of the inner lowland sub-province of the Coastal Plain. The border between the two provinces extends along a line running from approximately north of Stapleton to Westerleigh and Bloomfield. Generally the Coastal Plain province is a broad, low-lying land form that slopes gently towards the Atlantic Ocean. The inner lowland portion consists of generally level to gently undulating terrain that is between 20 and 50 feet in elevation. (However, the province is traversed by the terminal moraine of the Wisconsin glaciation, a topographic feature that is 100 to 350 feet in elevation; the processes that resulted in the formation of the morainal feature were independent from those which formed the Coastal Plain - see below. The moraine is located approximately one half mile north of the present project area.)

Most of the inner Coastal Plain is underlain with gently southeastward dipping, unconsolidated marine and fluvial deposits of clay, silt, sand, and gravel of Late Cretaceous and Tertiary age (Wolfe 1977:207). Large areas are also covered with interglacial fluvial deposits of Quaternary age (Wolfe 1977:207).

B. Surface Geology

The portion of the inner Coastal Plain present on Staten Island, was greatly affected by the Wisconsin glaciation. Glacial drift covers most of the area north of the terminal moraine of the Wisconsin glaciation while south of the moraine (including the present project area), the Coastal Plain is not much more than a ridge of glacial outwash sediments that almost completely overly the Cretaceous and Teritary layers. The moraine extends northward roughly from Perth Amboy, located slightly inland from the Atlantic shore line (the routes of van Duzer Street, Richmond Road, and Amboy Road run, approximately, along the front [or southern] edge of the moraine) crossing the Narrows to Brooklyn where it is referred to as the Ronkonkoma moraine (Isachsen, Landing, Parnow, Richard, and Rodgers 1991). In addition, glacioluvial events created kames, kame terraces, outwash plains, and eskers within the inner Coastal Plain province.
C. Flora and Fauna

The three predominant pre-contact period habitats present within the inner Coastal Plain province on Staten Island were saltwater/brackish water marshes and flats, freshwater marshes and upland forests (Robichaud and Buell 1973:106).

Freshwater marshes were present along the edges of lakes, ponds, rivers, and wherever depressions of land were kept flooded on a regular basis by high water tables (Robichaud and Buell 1973:105). In pre-contact freshwater marsh environments, the plant community was typically dominated by reed grass, cat-tail, and/or wild rice (the latter made practically extinct in the area due to the effects of pollution). All of these would have been important economic plants for Native American groups. Other plants that would have been common in pre-contact freshwater marshes were low-growing grass-like sedges, bulrushes, arrow-arum, blue flag, spike rush, bur reed, water dock, marsh fern, orange touch-me-not, and the swamp milkweed (Robichaud and Buell 1973:125-127).

The remaining portions of the Coastal Plain in pre-contact Staten Island are characterized as upland forest because the most abundant or dominant type of vegetation present were tall growing, deciduous, broadleaf trees (Robichaud and Buell 1973:106). The forests are specifically described as Oak-Chestnut Forests composed primarily of mixed oaks (white, red, and black) with some chestnut trees also present on drier slopes (Robichaud and Buell 1973:106). Beech, several varieties of hickory, sugar maple, white ash, and black cherry would also have been numerous (Shelford 1974). All of these species were probably present in the project area or its immediate vicinity during the prehistoric and historic periods. Chestnuts, oak, and hickory trees could potentially have been exploited by Native American groups for subsistence purposes while some of the other varieties had other economic uses (e.g. medicinal, dwelling construction, craft manufacture, household needs, firewood, etc.).

Pre-contact faunal species present within the forests of the Coastal Plain included game birds, small mammals, deer, bear, and during at least a portion of the prehistoric period, elk (Shelford 1974). In the province's freshwater rivers, marshes, and lakes were found mussels, fish, certain amphibians and reptiles, migratory fowl, and semi-aquatic mammals (Shelford 1974). All of these economically useful forms would have been present in the project vicinity during the prehistoric and historic periods.
III. DOCUMENTARY RESEARCH AND ANALYSIS OF ARCHAEOLOGICAL SENSITIVITY - PREHISTORIC AND CONTACT PERIODS

A. Background Culture History

The prehistory of Staten Island includes the PaleoIndian, Archaic, Transitional, and Woodland periods. The PaleoIndian period (10,000-8,000 B.C.) represents the earliest occupation of the area. The Archaic (8,000-1,700 B.C.) refers to a time prior to the introduction of horticulture and pottery manufacture and is divided into Early, Middle, and Late periods. The Transitional period (1,700-1,000 B.C.) witnessed a gradual change in Archaic lifestyles with the development of "Woodland" period traits. The Woodland period (1,000 B.C.-1,600 A.D.), which is characterized by the use of pottery and reliance on horticulture, is also divided into Early, Middle, and Late periods.

The PaleoIndian period corresponds with the end of the Wisconsin glaciation (80,000-11,000 B.P.). The advance of the ice sheet associated with this stage reached its maximum approximately 18,000 years B.P., covering most of Staten Island with glacial ice. After approximately 18,000 B.P. world wide temperatures started to rise and melting and northward retreat of the ice sheet began. A continuous morainal feature consisting of mixed sands, silts, clays, and boulders, marks the southernmost advance of the ice sheet; on Staten Island the terminal moraine extends down the east shore and into New Jersey at Perth Amboy (Wolfe 1977; see Chapter II:B).

Sea levels were lower during this period due to sea water being trapped in glacial ice and did not reach their modern level until approximately 7,000 B.P (the early to mid-Archaic period). Staten Island during most of this era was located well inland from the Atlantic coast, being a tract of raised ground surrounded by glacial lakes and meltwater rivers.

A tundra environment characterized the landscape of Staten Island during the late glacial and immediate post-glacial periods. As the glaciers retreated northward, water drained from the melting ice sheet creating large inland lakes, bogs, and marshes. Two of the larger of these lakes, Glacial Lake Passaic (present day Great Swamp) and Glacial Lake Hackensack (present day Hackensack Meadows), were located northwest and west of Staten Island.

The tundra and lacustrine landscape was rapidly succeeded by forest. Local forests consisted mainly of spruce and fir with small amounts of oak and other deciduous species (Snow 1980). Many faunal species now extinct or no longer native to...
the area were present. These included mammoth, mastodont, horse, caribou, giant beaver, sloth, elk, moose, and peccary (Wolfe 1977; Snow 1980; Kraft 1986). The remains of two mastodons have been found in central and southern Staten Island (Kraft 1973:60) and three mammoths have been found in nearby areas of New Jersey. Two were discovered at Middletown and the third at North Plainfield (Wolfe 1977:168).

Little is known about cultural activities during the PaleoIndian period although it is generally accepted that the region was first inhabited by man approximately 10,000 B.C. (Funk 1976; Ritchie 1980). Small nomadic bands of hunters and gatherers probably subsisted on the animal species mentioned previously as well as small game, certain riverine resources, and a variety of plants. Population density, however, was very sparse.

A variety of functionally diverse site types have been identified for the PaleoIndian period based upon intersite variability of artifact assemblages and environmental settings. These include base camps, quarry workshops, rockshelter habitations, open air hunting camps, kill and butchering sites, and other temporary camps (Funk 1972; Moeller 1980; Gramley 1982). Most evidence of PaleoIndian activity, however, is represented by scattered surface finds of Clovis Fluted points, a diagnostic PaleoIndian artifact (Funk 1976:205). Almost all of the fluted projectile points found throughout Staten Island were recovered as surface finds. One such find was found in the vicinity of the Great Kills Yacht Club located approximately 7,000 feet southeast of the project area (Staten Island Institute Archaeological Site File; Site No. A-085-01-0163; see Figure 4:1).

Information from known PaleoIndian sites in the New York-New Jersey-Pennsylvania-Connecticut region suggests that high, well-drained areas near streams, rivers, or wetlands were the areas preferred for occupation. Portions of the present project area fit this description. Rock shelters, areas near lithic sources, and river/stream terraces (a topographic feature present within the project area) also were subject to PaleoIndian occupation and use (Funk 1976; Moeller 1980; Ritchie 1980; Marshall 1982).

On Staten Island, evidence of Paleo-Indian occupation is most frequently found in the area between Rossville and Tottenville. In this area, populations were apparently occupying the high, well-drained ground overlooking the Arthur Kill and exploiting subsistence resources located in that waterway and in the Fresh Kills wetlands. The Port Mobil site (Port Socony-north; see Figure 3:P) contained diagnostic PaleoIndian artifacts such as fluted points and spurred end scrapers as well as lithic debitage (Ritchie 1980). PaleoIndian components may also be located at the Cutting site, Smoking Point and
Charleston Beach (Sainz 1962; Rubertone 1974; Silver 1984; Figure 3:O, K, and A respectively).

Fluted points have also been recovered along the beach in Kreischerville (see Anderson 1967; see Figure 3:L) although it is probable that they were not in primary context but had eroded onto the beach from an unknown bluff top location.

During the Archaic period, the environment changed from a coniferous forest to an increasingly deciduous forest which achieved an essentially modern character by 2,000 B.C. (Salwen 1975). While Archaic cultures have been traditionally thought of as reflecting a forest-based adaptation, more recent research has produced a picture of an increasingly varied subsistence pattern based on the seasonal exploitation of various faunal and floral resources (Ritchie and Funk 1973; Funk 1976; Kraft 1986).

Archaic hunters and gatherers were still nomadic and organized into small bands which occupied localities along the Atlantic coast and estuaries, including Raritan Bay and its tributaries, during the warmer months and interior regions during the colder months (Ritchie 1980; Kraft 1986). Population growth throughout the period resulted in an increase in both site density and the number of functional site types represented in the archaeological record. Site types recognized for this period include spring fishing camps along streams and rivers, fall open air hunting camps, rockshelter habitations, shellfish collecting and processing stations, mortuary sites, quarry and workshop sites, and semi-permanent villages (Brennan 1974, 1977; Dincause 1976; Barber 1980; Ritchie 1980; Snow 1980; Weigand 1980, 1983; Kraft 1986). Ritchie states that most Archaic sites were small and multicomponent, lacking traces of substantial dwellings, fortifications, storage pits, and graves (Ritchie 1980:32 and 35). Evidence of house patterns attributable to the Late Archaic period, however, has been reported from the Howard site in Old Lyme, Connecticut near Long Island Sound (Pfieffer 1983).

Most information concerning the Archaic period comes from Late Archaic sites since evidence for Early and Middle Archaic sites in the Staten Island region is almost as scarce as for PaleoIndian sites. The rarity of Early Archaic (8,000-5,000 B.C.) sites is probably due to the dominance of a coniferous forest in the region during that period (Ritchie 1980). Such environments are inhospitable to human exploitation, offering few plants and animals for consumption. In the vicinity of the project area, Early Archaic components have been identified at Charleston Beach, Wards Point, and Richmond Hill sites (Florance 1982; Jacobson 1980; Kraft 1977b; Ritchie and Funk 1971, 1973:38-39; Salwen 1968; see Figure 3:A, B, and C respectively). These Staten Island sites represent the first inarguable evidence of an Early Archaic presence in New York State (Ritchie and Funk 1973:38).
Early Archaic life styles and adaptations are generally considered to be similar to PaleoIndian lifestyles and adaptations (Gardner 1974).

During the Middle Archaic (5,000 - 2,500 B.C.) the region’s coniferous forests receded and were replaced by deciduous forests which provided humans with more exploitable resources. Sites dating to this period tend to be located on floodplains and low terraces of major rivers and streams and in association with marsh and estuarine environments (Ritchie and Funk 1973; Funk 1972, 1976; Ritchie 1980). The present project area contains similar topographic and physiographic features (low terrace overlooking a stream and marsh). Although rare (or rarely recognized) on Staten Island, Middle Archaic components have been identified at Wards Point and possibly at Chemical Lane and Harik’s Sandy Ground (Florance 1982; Jacobson 1980; Lavin 1980; Rubertone 1974; Figure 3:D and E).

Human population, site density, and site size increased in the Staten Island region during the Late Archaic period (2,500 - 1,500 B.C.). Some sites appear to have been occupied on a semi-permanent basis. Late Archaic sites have been found in low-lying areas in close proximity to area estuaries (Pottery Farm, Smoking Point; see Rubertone 1974; Silver 1984; see Figure 3:J and K) and along interior streams and rivers (Sandy Brook, Wort Farm; see Lenik 1987; Yamin and Pickman 1986a; see Figure 3:F and G). Temporary hunting camps associated with this period are frequently located on knolls and localized areas of sandy soil. Such sites have been discovered in Clay Pit Pond Park and along Clay Pit Pond Road (Yamin and Pickman 1986b; see Figure 3:H and I).

Sites dating to the Transitional Period (or Terminal Archaic; 1,500 - 1,000 B.C.) are most frequently found along the coast and major waterways (Funk 1976; Ritchie 1980; Vargo and Vargo 1983) although smaller sites are known from the interior (Funk 1976; Vargo and Vargo 1983). New and radically different broadbladed projectile point types appeared during this period as did the use, during the latter half, of steatite (soapstone) vessels. On Staten Island, transitional period components have been found at the Pottery Farm and Wards Point sites (Figure 3:J and B). Orient Fish Tail projectile points have also been recovered along the beach at Kreischerville, probably having eroded from sites located on the top of the nearby bluffs (Anderson 1967; see Figure 3:L).

During the Early Woodland period (1,000 B.C. - A.D. 1), the use of fired clay ceramic vessels gradually replaced the reliance on steatite vessels. Subsistence practices included a continuation of the hunting, gathering, and fishing of the Archaic but were supplemented by an increase in shellfish collecting. It has been suggested that this indicates a trend towards more
sedentary lifestyles (see Funk 1976; Snow 1980). Evidence of Early Woodland occupation is fairly widespread on Staten Island (see Boesch 1994).

Human populations during the Middle Woodland period (A.D. 1 - 800) gradually adopted a more sedentary lifestyle. Although it is generally felt that subsistence was essentially based on hunting and gathering supplemented by fishing and shellfish collecting (Williams and Thomas 1982), there has been speculation that domestication of various plants occurred during this period (Ritchie and Funk 1973; Snow 1980). Most Middle Woodland sites are located near estuaries although smaller inland sites, situated near a source of fresh water, are also known (Funk 1976; Ritchie 1980). Middle Woodland components on Staten Island been found at the Huguenot Site, Wort Farm, Pottery Farm, and Page Avenue North (Anderson 1962, 1965; Deustra 1969; Horowitz 1971; Rubertone 1974; see Figure 3:M, G, J, and N).

By Late Woodland times (A.D. 900 - 1600) horticulture was the primary subsistence base (Ritchie 1980; Snow 1980). Late Woodland sites are relatively numerous on Staten Island. Large base camps/villages are usually located adjacent to streams and rivers. These were probably occupied on a permanent basis. Smaller inland sites, usually located near a fresh water source, that were probably occupied on a seasonal or temporary basis have also been recognized (Funk 1976; Ritchie 1980; Snow 1980).

Late Woodland subsistence apparently relied extensively on horticulture although hunting, gathering, and in some locations, shellfish collecting also continued to be practiced.

1. Native American-European Contact Period

The Contact period (A.D. 1600 - ca. 1750) is the time of the first large scale contacts between Native Americans and European colonists. By the latter part of the Late Woodland period Native American cultures began to resemble those of groups that were encountered by seventeenth century Europeans. At this time Staten Island Native Americans were part of the widespread Algonquian cultural and linguistic stock. Specifically they were a group of Munsee (Minsi) speakers who migrated into Staten Island during Late Woodland times (Goddard 1978a; 1978b; Salwen 1978). The Munsee speakers were a linguistic subgroup of the Lenape or Delaware whose English appellation derived from the river named in 1610 by Captain Samuel Argall of the pinnace Virginia in honor of Thomas West, Lord de la Warr, the second Governor of Virginia (Hosler 1967; Salomon 1982:15). The Unami and the Wampanoag were the other two subgroups of the Lenape (Goddard 1971, 1978a; Salomon 1982). The southern limit of Munsee territory (including Staten Island - see below)
bordered the territory of the Unami speaking Lenape and some scholars feel that the Native Americans who resided on Staten Island (see below) were not Munsee speakers but Unami speakers. The Lenape consisted of autonomous, loosely related bands or lineages living in small family groups or hamlets (Kraft 1975:61). They never formed a politically united tribe. The origin of the name "Lenape" is unclear. Goddard (1978b:236) states that the name translates roughly as "real people." Salomon (1982:14) agrees in a general sense stating that the name means "the real men" or "common people."

Originally the name Lenape (and Delaware) was applied only to the Unami-speaking bands. By the mid-eighteenth century it had also become associated with the Munsee and Unalachtigo speaking bands which had migrated away from their traditional homelands and merged.

The Munsee occupied most of the land south of the Catskill Mountains to a line drawn from the headwaters of the Lehigh River through the Delaware water gap area to the Raritan River in New Jersey, and east, approximately, to the New York-Connecticut border and New York City-Nassau County border (Goddard 1978a:214, Figure 1). They composed a relatively large, loosely related group who shared the same totemic symbol, the wolf (Ruttenber 1872:47).

Munsee settlements included camps along the major rivers with larger villages located at the river mouths (Salomon 1982). Small hunting, gathering, and agricultural sites were located in the interior. Despite references to such sites by early European explorers and settlers, only a few Contact Period sites have been identified on Staten Island (see below).

Robert Juet, an officer on the "Half Moon", provides an account in his journal of some of the Contact Period Lower Hudson Valley Native Americans who probably were Munsee speakers. In his entry for September 5, 1609 he states:

This day the people of the country came aboard of us, seeming very glad of our coming, and brought creene tobacco, and gave us of it for knives and beads. They goe in deere skins loose, well dressed. They have yellow copper. They desire cloathes, and are very civill. They have great store of maize or Indian wheate whereof they make good bread. The country is full of great and tall oakes.

This day [September 5, 1609] many of the people came aboard, some in mantles of feathers, and some in skinnes of divers sorts of good furres. Some woman also came to us with hempe. They had red
copper tabacco pipes, and other things of copper they did wear about their necks. At night they went on land againe, so wee rode very quite, but durst not trust them (Juet 1959:28).

The political, linguistic, and social relationships that existed among the various bands of Munsee speakers will probably never be fully understood for a number of reasons. The native groups themselves had no fixed boundaries and "ownership" of particular areas may have overlapped with use rights shared. EuroAmerican colonists also frequently misunderstood and misrecorded Native American associations with particular areas. Finally, early pressure on some native groups by colonial expansion probably resulted in frequent shifts of villages and territories (Goddard 1978b).

What is known is that in political terms the Munsee were divided into six to 21 main groups or chieftaincies, depending upon which authority is consulted, and numerous smaller political and dialectic sub-groups and bands (Ruttenber 1872:47, 89-93; Goddard 1971, 1978a, 1978b; Salomon 1982). Little is known about these divisions. Scholars have usually associated the Raritan and Hackinsack groups with Staten Island (Ruttenber 1872:90; Hodge 1910:II:79; Bolton 1920).

Knowledge of the exact territories that these bands inhabited is elusive. The Raritans were traditionally located in the valley of the Raritan River and its tributaries and from there east to the Atlantic Ocean and northeast to the Hudson River and the southern part of Staten Island (Ruttenber 1872:89-90). The Hackinsacks traditionally occupied the Hackinsack and Passaic River Valleys as well as northern Staten Island (Ruttenbur 1872:90).

The Raritans (and probably the Hackinsacks) apparently moved inland to the Kittatinny valley and mountain area in northwestern New Jersey from their traditional homeland in the 1640's as a result of a series of violent confrontations with Unami speaking Lenape and Dutch colonists between 1640 and 1641 and because spring floods, in the early years of the decade, had destroyed much of their stored food (Ruttenber 1872:90; Bolton 1920; van der Zee and van der Zee 1978; Goddard 1978a:213). By 1649, members of the Wechquaesgeek, a sub-group of the Wappinger Confederacy traditionally associated with western Westchester County, had emigrated to the territory, seeking to escape their own troubles with the Dutch. These immigrants were thereafter referred to by EuroAmericans as the Raritans (Goddard 1978a: 213).

Although, the Raritans and Hackinsacks were apparently the traditional residents of Staten Island, other groups seem to have had usufructuary rights there (Goddard 1978a:215). By
1652, a group of Nayacks who had sold their homeland on Brooklyn, moved to Staten Island (Goddard 1978a:215). Bolton (1920:285-297) implies that this indicates that a familial relationship existed between the Nayacks and the Raritans and/or Hackinsacks.

Although Native Americans were emigrating from their traditional homelands on Staten Island by the early 1640's, their lands were not formally deeded to the Dutch, and later the English until 1651, 1655, 1657, 1664, and 1670 (Ruttenber 1872:90, 362; Bolton 1920:61-73). The present project area was included in each of these purchases. The several purchases of the same lands, each necessitating additional payments, were made "on the principal that it was easier and safer to pay them [the Native Americans] another price than to make them understand that the property had passed from one white to another" (see Fox 1926:73). Some Native Americans apparently still resided in the area late in the seventeenth century. The 1679 travel account by Jasper Danckaerts and Peter Suyter relates their encounter after a long period of heavy rain with some Native Americans along a tributary of the Raritan River:

...we saw the houses of the Indians on the right and went to them partly for the purpose of drying ourselves, for though the rain seemed at times to abate it still continued, and partly to inquire the best way to go, in order to cross the large creek. We entered their dwelling where we dried ourselves and breakfasted a mouthful out of our traveling sacks. We presented the Indians some fish-hooks which pleased them. While we were in this house a little naked child fell from its mother's lap, and received a cut in its head, whereupon all who sat around that fire, and belonged to that household, began to cry, husband and wife, young and old and scream more than the child, and as if they themselves had broken their arms or legs. In another corner of this house, there sat around a fire, forming another household, a party whose faces were entirely blackened, who observed a gloomy silence and looked very singular. They were in mourning for a deceased friend.

...they offered us some boiled beans in a calabash, cooked without salt or grease, though they brought us our own kind of spoons to take them out with. It was the queen who did this, and was more dressed than the others. She gave us also a piece of their bread, that is, pounded maize kneaded into a cake and baked under the ashes (Danckaerts 1861:247-248).
Staten Island was referred to in Contact period accounts and deeds by different aboriginal names. In a 1631 account the island is referred to as "Matawucks"; in a 1655 deed, it is referred to as "Eghquaous", and in 1657, as "Monocknong" with the clan occupying it referred to as "Monatons" (Ruttenbur 1872:362).

Problems and conflicts during the Contact period between local Indians and the Dutch resulted in the deaths of large numbers of Native Americans (see Washburn 1978). The introduction of European diseases, such as smallpox, further devastated local Native American populations. During the early years of European Contact, the total population of the Munsee is estimated to have been approximately 4,500 individuals (Goddard 1978a:214). Others, however, feel that figure is low and an accurate number is closer to 10,000 (Nelson 1913). The population of the Raritan alone was estimated to be approximately 1,200 (Nelson 1913:252). By the year 1779, the total population of Munsee speakers has been estimated to have been reduced to approximately 1,200 individuals (Goddard 1978a:214).

In southern Staten Island, Contact period components have been identified at Ward's Point (Jacobson 1980; see Figure 3:B).

B. Prehistory of the Project Vicinity

Research indicates that southern Staten Island was the location of extensive Native American activity (see Boesch 1994). Although no prehistoric or Contact Period remains have been reported within the project site, the presence of identified sites and artifact scatters within a two mile radius of the project area indicates that prehistoric activity did occur in the region. The nearest known evidence of Native American activity was recovered approximately 2,000 feet southwest of the project site in the area south of Amboy Road and Arden Avenue (Figure 4:2). A scatter of Native American artifacts, including Late Woodland type projectile points, were recovered there in the late nineteenth century (Proceedings of the Natural Science Association of Staten Island 1895). No other information is available about that site which has traditionally been referred to as the "Woods of Arden" site (Proceedings of the Natural Science Association of Staten Island 1895).

Native American artifacts were reportedly recovered at the end of the last century on a hill ("Indian Hill") in Annadale. The location of the hill is approximately 3,500 feet west of the project area (Proceedings of the Natural Science Association of Staten Island 1895; see Figure 4:10).

Parker (1922) indicates the presence of a shell midden (Site No. ACP-Rich-27) west of what is currently the Richmond County Yacht Club (Figure 4:3 and Figure 5). This location is approximately
6,000 feet southeast of the project area and approximately 1,000 southwest of the Great Kills Yacht Club where a fluted point was discovered (Figure 4:1; see Chapter III:A). A small campsite was reportedly located in the same area, on Crookes Point at the mouth of Great Kills Harbor (Staten Island Institute Archaeological Site File Listing, Site No. A-085-01-0162; see Figure 4:4). The project area is located approximately 7,000 feet northwest of Crookes Point.

Parker (1922) also indicates that traces of Native American occupation were found in the vicinity of Amboy Road in Great Kills (Figure 4:9 and Figure 5) approximately 2,000 feet east of the project area (New York State Museum Archaeological Site Number 4617 - see Appendix A) and along Annadale beach (Figure 4:5 and Figure 5) located approximately 6,000 feet southwest of the project area (New York State Museum Archaeological Site Number 4622 - see Appendix A).

A camp site containing "early relics" was formerly located "between Journeay Avenue and Annadale Road, near Richmond Plank Road," now Richmond Avenue (Parker 1922:682; New York State Museum Archaeological Site Number 4601 - see Appendix A). This location is approximately 3,000 feet north of the present project area (Figure 4:11 and Figure 5).

Other evidence of Native American occupation, in the form of lithic debitage, was discovered along the west shore of Arbutus Lake located approximately 8,000 feet southwest of the project site (Pickman and Yamin 1984; see Figure 4:6). "Indian implements" were also reportedly discovered north of Arbutus Lake (Figure 4:7) in the vicinity of Arbutus Avenue and Jansen Street (Proceedings of the Natural Science Association of Staten Island 1895). This location is also approximately 8,000 southwest of the project area.

A small campsite, referred to as the Fiddler's Green site, was reportedly located in the vicinity of Annadale Road and Drumgoole Boulevard approximately 6,000 feet northeast of the project site (Proceedings of the Natural Science Association of Staten Island 1895; Skinner 1903, 1909; see Figure 4:8). This site reportedly contained large quantities of lithic debitage but no ceramic pottery (Proceedings of the Natural Science Association of Staten Island 1895).

C. Assessment of Archaeological Sensitivity - Prehistoric Period

The reported presence of Native American sites and activity in the vicinity of the project area indicate that in general the vicinity of the project witnessed Native American occupation and utilization. The possible use of the area by Native Americans is not surprising given its favorable topography and physiography (high ground/knoll and low terrace overlooking a
stream) and the resulting subsistence potential (stream area for waterfowl and plants; fresh water as an attraction for game; the knoll top as a location for plant gathering/horticulture) of the area.

The portions of the project area having these characteristics (the knoll top and terrace area) would have been excellent locations for temporary camps oriented towards the exploitation of game animals moving towards the small stream. The top of the knoll and the terrace may also have been the location of gathering/horticultural camps. The apparent lack of extensive disturbance within portions of the project area, particularly the southern part of the knoll and the level terrace area overlooking the marsh, suggests that Native American sites could be present within it.

Accordingly portions of the project area are considered sensitive for the possible presence of prehistoric archaeological resources.

As part of the New York State Museum’s response to our information request, the museum staff assessed the overall sensitivity of the project area based on the nature of the terrain. Their evaluation was that the project area has a "high probability of producing archaeological data" (see Appendix A). They base their evaluation on the fact that:

A recorded site is indicated in the general vicinity or some distance away [from the project area]. Due to the margin of error in the location data it is possible the site actually exists in or immediately adjacent to the [project] location.

The terrain in the location is similar to terrain in the general vicinity where recorded archaeological sites are indicated.

The physiographic characteristics of the location suggest a high probability of prehistoric occupation or use (see Appendix A).

In addition, the museum staff found three sites listed in the museum's prehistoric site files that are located within one mile of the project area (see Appendix A and Chapter III:B).
IV. DOCUMENTARY RESEARCH AND ANALYSIS OF ARCHAEOLOGICAL SENSITIVITY - HISTORIC PERIOD

A. Overview

1. Seventeenth and Eighteenth Centuries

The initial settlements on Staten Island were established during the seventeenth century, mostly on the portion of Staten Island closest to New York City. Grants of land in the southwestern portion of Staten Island were made to various individuals during this period. The largest of these, encompassing the entire southwestern tip of Staten Island, was granted to Christopher Billop in 1676 and 1687. The Billop house, also known as the Conference House, is located just north of Hylan Boulevard in Tottenville. The project area was located within the boundary of the patent obtained by William Darvall in 1680 and Thomas Coddington in 1697 (Skene 1907).

The first maps of Staten Island which show the location of structures with any degree of accuracy date to the later part of the eighteenth century. These maps show Amboy Road, which had been laid out prior to 1774 (Morris 1900:II:449). The project area can be located on these maps with regard to Great Kills and Prince’s Bay and the road extending southwest (now Richmond Avenue) from Arthur Kill Road (compare Figure 1 with Figures 6 and 7).

The Taylor and Skinner map (1781; see Figure 6) and the Sprong and Conner map (1797; see Figure 7) indicate that no structures were located in or near the project area at this time.

2. Nineteenth Century

In the early to mid-nineteenth century the chief industries in Staten Island were farming and oyster planting (Morris 1900 II:468; Steinmeyer 1987).

When New Amsterdam was first settled the bottom of New York Bay was reportedly covered with shellfish, particularly oysters. By the early nineteenth century, however, overharvesting had depleted the beds. Oysters, in particular, virtually disappeared. Taking advantage of an economic opportunity, seed oysters were brought by oystermen from Long Island and the Chesapeake Bay region and planted in Prince’s Bay and probably Great Kills harbor. By the second decade of the century, Staten Island oysters had become well established and the oyster business boomed reaching its height in the 1850’s. Most families in southwestern Staten Island were involved in the oyster industry during this period and the population of the area grew. The oyster industry began to decline in the 1880’s.
1890's chiefly due to pollution (Pickman 1990). By the second decade of the twentieth century, commercial oystering on Staten Island had essentially ceased.

Comparison of maps dating from the 1850's and 1874 (see Plates 14-16), suggests that the project vicinity developed into a thriving community during this period, most likely as a result of the growth of the oyster industry.

B. Project Area History: The Mid-Nineteenth to Early Twentieth Centuries

Beginning in the mid-nineteenth century, fairly detailed maps were drawn which indicated land ownership and land-use within the project site. A number of maps dating to the last half of the nineteenth century were analyzed (Butler 1853; Walling 1859; Higginson 1860; Beers 1874; Vermeule and Bien 1890; and Robinson 1898).

Both the 1853 Butler map (Plate 14) and the 1859 Walling map (Plate 15) indicate that a residence was located approximately 450 feet south of the intersection of Amboy Road and Richmond Avenue on the east side of the latter roadway. This location is within the present project site approximately 200 feet south of the existing Y.M.C.A. building. The 1853 map does not indicate the name of the resident associated with the structure. The 1859 map, however, indicates that the house was the residence of A. Journeay, Jr. A visual inspection of this area during the pedestrian reconnaissance did not reveal any indications of a structure foundation or features although some fragments of historic period ceramics (plain whiteware) were noted on the surface.

The 1859 Walling map also indicates the presence of a stream flowing passed the Journeay house to its south. This is apparently the small stream that still flows through the marsh in the project area.

The 1860 Higginson map (Figure 8) also indicates the presence of a structure in the same location relative to the project area as do the 1853 and 1859 maps.

The 1874 Beers map indicates that a 50 acre area that includes the present project property was owned by A. Journeay (Plate 16). Two buildings were apparently located on the Journeay tract at this time adjacent to, or slightly removed from, Seaside Avenue (Richmond Avenue). The southernmost of the two structures (the smaller of the two) is indicated as being located approximately 400 feet south of the intersection of Amboy Road and Seaside Avenue and slightly east of the latter roadway. This structure is probably the same structure that is indicated on the 1853 Butler map, the 1859 Walling map, and the
1860 Higginson map. A second, slightly larger structure, is indicated on the 1874 map as located approximately 75 feet north and slightly west of the first (southernmost) structure and immediately adjacent to Seaside Avenue. This building is depicted as located approximately 300 feet south of the Amboy Road and Seaside Avenue intersection. The location is approximately 50 feet south of the existing Y.M.C.A. building. The indicated size of this structure suggests that it probably represents a residence. It is possible that a second house built on the Journeay land sometime after 1859, perhaps to accommodate an increasing family size or as the residence of a married son or daughter. Another explanation for the presence of two structures is that one represents a farm out building of some sort.

By 1890 the two structures indicated on the previously discussed maps were apparently no longer present. No structures are indicated on the Vermeule and Bien map of that year as located east of Seaside Avenue south of its intersection with Amboy Road (Figure 9). The project location at that time apparently consisted of cleared land and was probably used for agricultural purposes.

By 1898 a building was again located within the present project area within a 22 acre tract owned by Anna E. Barrett. As indicated on the Robinson map of that year, the structure was located approximately 240 feet south of Amboy Road (Plate 17). This location is currently part of the site of the Y.M.C.A. building and north of the structure locations indicated on the 1853 and 1859 maps. It is possible, however, that the 1890 Vermeule and Bien map is erroneous and that the structure indicated on the Robinson map is actually the northernmost of the two buildings indicated on the 1874 Beers map.

Another building and property, owned by L. Patesta, are also indicated on the Robinson map. These, however, were located north of the present project site. The southern boundary of the Patesta tract appears to correspond, at least in part, to the northern boundary of the present project area.

By 1910, the project area was part of a parcel owned by C.F. Barrett who was probably an heir of Anna E. Barrett (Belcher Hyde 1910; see Plate 18). Richmond Avenue is referred to on this map as Eltingville Road. No residential structures are indicated on the 1910 Belcher Hyde map so it is unknown if a building was still located within the project area at that time. However by 1917, as indicated on the Bromley map dated to that year (Plate 19), the Barrett structure is no longer present. The project area at that time was part of a large tract owned by Julia Barrett. The southwest flowing stream indicated on this map may represent the stream that currently flows through the southern portion of the project area.
C. Assessment of Archaeological Sensitivity - Historic Period

Historic period cultural resources possibly present within the project area may be associated with the occupations of the mid to late nineteenth century Journeay residences or the late nineteenth to early twentieth century Barrett residence. On historic period domestic sites archaeological deposits can exist in the form of surficial middens which represent refuse discarded during the residential occupations. Historic period artifact deposits are also typically found in sub-surface "features" such as wells, cisterns, and privies. The artifacts could have been accidentally deposited during the period of use of the feature. In addition, such features were often used to dispose of refuse after their period of primary use. This period ended either when new features were constructed, or when the use of such features became unnecessary after the introduction of public services. Features as well as midden deposits, are typically found to the rear of residential structures.

Present day Richmond Avenue appears to be wider than the roadway depicted on the mid to late nineteenth century maps analyzed for this project. It is possible that foundation remains may have been destroyed by roadway construction associated with the road widening or buried beneath the existing road. Such construction activities, however, would have extended for only 10 to 20 feet beyond the limits of the original roadsides. Backyard areas and backyard features would have been outside (east) of the area impacted by road widening and may be located within the project area.

Due to the possible presence of such deposits and remains, portions of the project area are considered sensitive for the presence of historic period archaeological resources.

Any historic period archaeological data recovered from the project area could be used in a comparative analysis with data recovered from contemporary sites located in other portions of Staten Island (see Askins 1980, 1982; Schuyler 1974; Pickman and Boesch n.d.).
V. CONCLUSIONS AND RECOMMENDATIONS

The results of this Stage Ia archaeological investigation indicate that portions of the Staten Island Y.M.C.A. project area may contain possibly significant archaeological resources. Such resources would be associated with occupations of the area dating from the mid-nineteenth to early twentieth centuries and could provide information concerning the development and growth of the Eltingville community. Such deposits could also provide information which could be analyzed in conjunction with that obtained from other Staten Island archaeological investigations. Archaeological resources could be contained within midden deposits and/or sub-surface archaeological "features" which could remain intact beneath topsoil and/or fill.

Portions of the property may also have been suitable locations for Native American campsites.

It is recommended that a program of sub-surface testing be undertaken to determine whether or not possibly significant deposits are present on the property. The portions of the property to be examined are indicated on Figure 10 as Zones 1, 2, and 3 and are discussed below:

Zones 1 and 2

Zone 1 consists of the portion of the property that was the vicinity of the structure indicated on the 1853 Butler map, 1859 Walling map, and 1874 Beers map (Figure 10). Zone 2 consists of the portion of the property that was the vicinity of the (northernmost) structure indicated on the 1874 Beers map (Figure 10). Testing in these zones should consist of the excavation of shovel tests using standard archaeological techniques placed at ten foot intervals to determine if midden deposits, or other evidence of historic period occupation, are present. Shovel testing in these zones would also detect any prehistoric deposits which may be present.

Excavation in any historic period sub-surface features encountered during the recommended testing should be undertaken only so far as is necessary to determine whether artifact deposits are, in fact, present within the features. Further evaluation of such deposits would be undertaken during future phases of work.

Zone 3

Zone 3 consists of the remainder of the terrace-like area and knoll not included in Zones 1 or 2 (see Figure 10). This zone is considered sensitive for the presence of Native American
cultural resources. Sub-surface testing in this zone should consist of a series of shovel tests conducted at fifty foot using standard archaeological techniques. If the gravel parking lot is found to be extensively disturbed, the testing strategy for that area can be modified.

Marsh

No sub-surface testing is necessary in the marsh or in the portion of the project area located to its south.

Other

Due to the construction of the Y.M.C.A. building and placement of associated utilities, it is considered unlikely that archaeological deposits and/or architectural remains associated with the structure indicated on the 1898 Robinson map remain intact.
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Figure 1
Project location
Base map: U.S.G.S. 1966
Scale: 1:24,000
Figure 2
Project area
Scale: 1 inch = 40 feet
Figure 7
Prehistoric archaeological sites in the
project vicinity
Base map: U.S.G.S. 1:24,000
Scale: 1:24,000

What are these two sites? M & N?
### Figure 3 Key
Native American Archaeological Sites in the Project Vicinity

<table>
<thead>
<tr>
<th>Letter</th>
<th>Site Name/Identifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.</td>
<td>Charleston Beach (Kraft 1977; Salwen 1968)</td>
</tr>
<tr>
<td>B.</td>
<td>Wards Point Conservation Zone (Jacobson 1980; Florance 1982)</td>
</tr>
<tr>
<td>C.</td>
<td>Richmond Hill (Jacobson 1980; Ritchie 1980)</td>
</tr>
<tr>
<td>D.</td>
<td>Chemical Lane (Rubertone 1974)</td>
</tr>
<tr>
<td>E.</td>
<td>Harik’s Sandy Ground (Rubertone 1974; Lavin 1980)</td>
</tr>
<tr>
<td>F.</td>
<td>Sandy Brook (Lenik 1987)</td>
</tr>
<tr>
<td>G.</td>
<td>Wort Farm (Deustua 1969; Horowitz 1971)</td>
</tr>
<tr>
<td>H.</td>
<td>Clay Pit Pond (Yamin and Pickman 1986a, 1986b)</td>
</tr>
<tr>
<td>I.</td>
<td>Clay Pit Pond Road (Yamin and Pickman 1986a, 1986b)</td>
</tr>
<tr>
<td>J.</td>
<td>Pottery Farm (Rubertone 1974)</td>
</tr>
<tr>
<td>K.</td>
<td>Smoking Point (Rubertone 1974; Silver 1984)</td>
</tr>
<tr>
<td>L.</td>
<td>Kreischerville Beach (Anderson 1967)</td>
</tr>
<tr>
<td>M.</td>
<td>Huguenot Site (Anderson 1962)</td>
</tr>
<tr>
<td>N.</td>
<td>Page Avenue North (Anderson 1965)</td>
</tr>
<tr>
<td>O.</td>
<td>Cutting Site (Sainz 1962)</td>
</tr>
<tr>
<td>P.</td>
<td>Port Mobil (Kraft 1977)</td>
</tr>
</tbody>
</table>
Figure 4
Known Native American sites within two mile radius of the project area
Base map: U.S.G.S. 1965
Scale: 1:24,000
<table>
<thead>
<tr>
<th>Number</th>
<th>Site Name/Identifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Fluted Point at Great Kills (Staten Island Archaeological Site File)</td>
</tr>
<tr>
<td>2.</td>
<td>Woods of Arden (Proc. Staten Island Institute of Arts and Sciences 1895)</td>
</tr>
<tr>
<td>3.</td>
<td>Shell Midden west of Richmond County Yacht Club (Parker 1922)</td>
</tr>
<tr>
<td>4.</td>
<td>Crookes Point (Staten Island Archaeological Site File)</td>
</tr>
<tr>
<td>5.</td>
<td>Annadale Beach (Parker 1922)</td>
</tr>
<tr>
<td>6.</td>
<td>West Shore Arbutus Lake (Pickman and Yamin 1984)</td>
</tr>
<tr>
<td>7.</td>
<td>Arbutus Avenue and Jensen Avenue (Proc. Staten Island Institute of Arts and Sciences 1895)</td>
</tr>
<tr>
<td>8.</td>
<td>Annedale Road and Drumgoogle Boulevard (Skinner 1903, 1909)</td>
</tr>
<tr>
<td>9.</td>
<td>Amboy Road in Great Kills (Parker 1922)</td>
</tr>
<tr>
<td>10.</td>
<td>Indian Hill in Annadale ((Proc. Staten Island Institute of Arts and Sciences 1895)</td>
</tr>
<tr>
<td>11.</td>
<td>Journeay Avenue and Annadale Road, near Richmond Avenue (Parker 1922:682)</td>
</tr>
</tbody>
</table>
Figure 5
Archaeological Sites on Staten Island
Source: Parker (1922)
Figure 6
1781 Taylor and Skinner map
Scale: 2.54 cm. = 1 mile
Figure 7
1797 Sprong and Conner map
Scale: 2.54 cm. = 0.5 mile
Figure 8
1860 Higginson map
Scale: 2.54 cm. = 1 mile
Figure 9
1890 Vermeule and Bien map
Scale: 1 cm. = 500 feet
Figure 10
Archaeologically sensitive locations within the project area
Scale: 1 inch = 40 feet

SITE PLAN (EXISTING CONDITIONS)
SCALE 1" : 40'-0"
Plates 1 (top) and 2
Existing YMCA building, playground, and gravel parking lot.
Plate 3
Knoll top vegetation
Plate 4
Gravel parking lot
Plates 5
Terrace-like area
Plates 6
Terrace-like area
Plate 7
Terrace-like area and adjacent marsh
Plate 9
Marsh area and stream
Plates 10 (top) and 11
Piles of dirt along periphery of project area
Plates 12 and 13
Sewer/water pipes bordering the project area
Plate 14
1853 Butler map
Scale: 2.4 cm. = 0.25 mile
Plate 15
1859 Walling map
Scale: 2.54 cm. = 0.25 mile
Plate 18
1910 E. Beicher Hyde map
Scale: 2.54 cm. = 2000 feet
Plate 19
1917 Broirley map
Scale: 1 cm. = 75 feet
APPENDIX A

NEW YORK STATE RESPONSE TO INFORMATION REQUEST
To:
EUGENE J. BOESCH
377 BARRETT HILL ROAD
MAHOPAC, NY 10541

Proposed Project: YMCA STATEN ISLAND PROJECT AREA
7.5' U.S.G.S. Quad: STATEN ISLAND

In response to your request our staff has conducted a search of our data files* for locations and descriptions of prehistoric archaeological sites within the area indicated above. The results of the search are given below.

If specific information requested has not been provided by this letter, it is likely that we are not able to provide it at this time, either because of staff limitations or policy regarding disclosure of archaeological site data.

Questions regarding this reply can be directed to the site file manager, at (518) 474-5813 or the above address. Please refer to the N.Y.S.M. site identification numbers when requesting additional information.

Please resubmit this request if action is taken more than one year after your initial information request.

* [NOTE: Our files normally do not contain historic archeological sites or architectural properties. For information on these types of sites as well as prehistoric sites not listed in the N.Y.S.M. files contact The State Historic Preservation Office; Office of Parks, Recreation & Historic Preservation; Agency Building #1; Empire State Plaza; Albany, NY, 12238 at (518) 474-0479.

RESULTS OF THE FILE SEARCH:

Recorded sites ARE located in or within one mile of the project area. If so, see attached list.

Code "ACP" = sites reported by Arthur C. Parker in The Archeology Of New York, 1922, as transcribed from his unpublished maps.

SEARCH CONDUCTED BY: ZW (initials) Anthropological Survey, NYS Museum

cc: N.Y.S. OFFICE OF PARKS, RECREATION AND HISTORIC PRESERVATION; HISTORIC PRESERVATION FIELD SERVICES BUREAU

The New York State Museum is a Program of the State Education Department/University of the State of New York
6/27/94 To: EUGENE J. BOESCH,

Project: YMCA STATEN ISLAND PROJECT AREA Topo. Maps: STATEN ISLAND

New York State Museum Prehistoric Archaeological Site Files

EVALUATION OF ARCHAEOLOGICAL SENSITIVITY FOR PREHISTORIC (NATIVE AMERICAN) SITES

Examination of the data suggests that the location indicated has the following sensitivity rating:

HIGH PROBABILITY OF PRODUCING PREHISTORIC ARCHAEOLOGICAL DATA.

The reasons for this finding are given below:

[] A RECORDED SITE(S) IS(ARE) INDICATED IN, ADJACENT TO, OR IN THE VICINITY OF THE LOCATION AND WE HAVE REASON TO BELIEVE IT(THEY) COULD BE IMPACTED BY THE PROPOSED ACTIVITY.

[✓] A RECORDED SITE IS INDICATED IN THE GENERAL VICINITY OR SOME DISTANCE AWAY. DUE TO THE MARGIN OF ERROR IN THE LOCATION DATA IT IS POSSIBLE THE SITE ACTUALLY EXISTS IN OR IMMEDIATELY ADJACENT TO THE LOCATION.

[✓] THE TERRAIN IN THE LOCATION IS SIMILAR TO TERRAIN IN THE GENERAL VICINITY WHERE RECORDED ARCHAEOLOGICAL SITES ARE INDICATED.

[✓] THE PHYSIOGRAPHIC CHARACTERISTICS OF THE LOCATION SUGGEST A HIGH PROBABILITY OF PREHISTORIC OCCUPATION OR USE.

[ ] THE PHYSIOGRAPHIC CHARACTERISTICS OF THE LOCATION SUGGEST A MEDIUM PROBABILITY OF PREHISTORIC OCCUPATION OR USE.

[ ] THE PHYSIOGRAPHIC CHARACTERISTICS OF THE LOCATION SUGGEST A LOW PROBABILITY OF PREHISTORIC OCCUPATION OR USE.

[ ] EVIDENCE OF CULTURAL OR NATURAL DESTRUCTIVE IMPACTS SUGGESTS A LOSS OF ORIGINAL CULTURAL DEPOSITS IN THIS LOCATION.

[ ] THE PHYSIOGRAPHIC CHARACTERISTICS OF THE LOCATION ARE MIXED, A HIGHER THAN AVERAGE PROBABILITY OF PREHISTORIC OCCUPATION OR USE IS SUGGESTED FOR AREAS IN THE VICINITY OF EITHER PRESENT OR PREEXISTING BODIES OF WATER, WATERWAYS, OR SWAMPS. A HIGHER THAN AVERAGE PROBABILITY IS SUGGESTED FOR ROCK FACES WHICH AFFORD SHELTER OR FOR AREAS SHELTERED BY BLUFFS OR HILLS. AREAS IN THE VICINITY OF CHERT DEPOSITS HAVE A HIGHER THAN AVERAGE PROBABILITY OF USE. DISTINCTIVE HILLS OR LOW RIDGES HAVE AN AVERAGE PROBABILITY OF USE AS A BURYING GROUND. LOW PROBABILITY IS SUGGESTED FOR AREAS OF EROSIONAL STEEP SLOPE.

[ ] PROBABILITY RATING IS BASED ON THE ASSUMED PRESENCE OF INTACT ORIGINAL DEPOSITS, POSSIBILITY UNDER FILL, IN THE AREA. IF NEAR WATER OR IF DEEPLY BURIED, MATERIALS MAY OCCUR SUBMERGED BELOW THE WATER TABLE.

[ ] INFORMATION ON OTHER SITES MAY BE AVAILABLE IN A REGIONAL INVENTORY MAINTAINED AT THE FOLLOWING LOCATION(S).

COMMENTS:

CC: N.Y.S. OFFICE OF PARKS, RECREATION AND HISTORIC PRESERVATION, H. P. FIELD SERVICES BUREAU
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