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180 EDGEGROVE AVENUE

STATEN ISLAND.

RICHMOND COUNTY, NEW YORK.

STAGE 1B ARCHAEOLOGICAL FIELD INVESTIGATION

(DEP) 95 DEP213R

Prepared For:

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180 EDGEGROVE AVENUE
STATEN ISLAND. RICHMOND COUNTY, NEW YORK

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INTRODUCTION

On May 24, 1995 CITY/SCAPE: Cultural Resource Consultants completed a field reconnaissance level archaeological survey of the *180 Edgegrove Avenue* site, Staten Island, Richmond County, New York. (Map 1) A work plan was submitted to the New York City Landmarks Preservation Commission (LPC) and approved by Daniel Pagano, Director of Archaeology. A copy of this correspondence appears in Appendix D.

Archaeological field work was supervised by Stephanie Roberg-Lopez, M.A., S.O.P.A., Principal Investigator. Preparation of the final report and Field Reconnaissance Map were completed by Stephanie Roberg-Lopez. Preparation of the shovel test excavation record, photographs and production of the report were completed by Gail T. Guillet.

PROJECT AREA DESCRIPTION

The project area is a single 40 foot by 100 foot lot located in south central Staten Island. It is bounded to the west by Edgegrove Avenue, to the north by a single family house on a lot of approximately the same dimensions, to the east by another single family home and to the south by a vacant 40 foot by 100 foot lot that slopes acutely down from 180 Edgegrove Avenue and is bisected by a stream running east to west.

The parcel in its present form is a vacant lot ranging in elevation from Edgegrove Avenue at 80 feet above sea level, to the eastern boundary of the property at 86 feet above sea level, resulting in a strong east-west slope. Taken in context with the lot to the south, the topography is consistent with a general downward movement toward the stream bed. It is additionally important to note that the line of a Wetland Adjacent Area crosses the northeast corner of the site, indicating the project area lies in a locus of interlocking wetlands (see Stage 1B Archaeological Survey, 278 Edgegrove Avenue, CITY/SCAPE: Cultural Resource Consultants, April 1995).

With the exception of a single berry bearing tree in the center of the lot, most of the surface is clear of vegetation other than tufts of grass. (Photo 1) A small band (approximately 6' by 40') of apparently undisturbed land surface makes up the eastern boundary of the lot, and there are several recent growth hardwood trees located in this area. There is little surface evidence of small fauna, however, numerous bird species were noted.

Recently deposited piles of fill form two large surface obstructions on the site. (see Field Reconnaissance Map & Photo 2) Approximately 20 percent of the site is covered with heaps of sand and glacial outwash gravel. A zone of approximately 10 feet from Edgegrove Avenue is disturbed due to road construction.

As with all sites on Staten Island, a question of primary concern is the degree to which the original land surface may have been obscured or changed by episodes of filling. The *180 Edgegrove Avenue* site was relatively easy to evaluate by virtue of its proximity to the southern lot, which had clearly never been developed due to the fact that there is a stream running directly down its center. (Photo 3) Empirical observation confirmed that the slope angle on the *180 Edgegrove Avenue* site was a natural incline, as it conforms closely to the undisturbed slope next to it. The degree of filling was determined by comparing the elevation of the land surface with that of the pristine lot, by evaluating shovel test results and by analyzing historic topographical maps of the area.

ENVIRONMENTAL AND ARCHAEOLOGICAL SETTING

A very complete Archaeological Evaluation and Sensitivity Assessment of Staten Island was completed in 1994 by Eugene J. Boesch for the New York City Landmarks Commission. In this study, a number of research problems are addressed, and the overall island is assessed zone by zone for archeological sensitivity. The ramifications of this study will be considered in both the following archaeological discussion and in the formulation of a testing strategy.

The project area lies within one of two geophysical provinces that make up Staten Island. The northwestern 20% of the island is Piedmont Lowland that gradually slopes south easterly until it meets the Atlantic Ocean. This long, sloping landscape is part of the Atlantic Coastal Plain, a geophysical and archaeological zone that unites the east coast. The Piedmont Lowland is underlain by shales, siltstones and sandstones, while the Coastal Plain is underlain with unconsolidated clay, silt, sand and gravel overlain by glacial deposits from the Wisconsin period (Boesch, 1994:3). Boesch reports that in pre-contact times, there were three predominant eco-zones, "saltwater/brackish water marshes", "freshwater marshes" and "upland forests". These eco-zones would be present in a mosaic of interlocking landscapes all over the island, grading from the saltwater estuaries, up brackish streams to freshwater streams. Wetland flora as well as oaks, chestnuts, beech, hickory maple, white ash and black cherry were present on the landscape (Boesch, 1994:5)

Among the food sources available to the prehistoric peoples of Staten Island would have been abundant fish and shellfish (clams, oysters, scallops and snails), mammals in the form of deer, bear, elk and smaller species such as rabbit and squirrel, many forms of birds and nuts, berries and tubers (Boesch, 1994:6). In later periods, the prehistoric residents would have cultivated corn, beans and gourds. Reports by Dutch travelers indicate that agricultural fields were abundant on Staten Island during contact times.

PREHISTORIC BACKGROUND

As the first native Americans, indeed the first humans, entered the region that is now Staten Island during the Paleo Indian period some 12,000 years ago, their logical route

would be along the mighty river systems that were the "super-highways" of the times and along the open seacoast. At this time, with world-wide sea levels lower, Staten Island would have been part of the mainland. the Hudson River trench was located between modern Staten Island and New Jersey.

Not only humans, but the post Pleistocene mega fauna, the mammoth, the mastodon and the caribou that inhabited this tundra-like area would be logically drawn to these corridors. (Map 2) The glaciers reached their maximum extension in 18,000 B.C., covering most of Staten Island with a thick layer of ice. As the great ice sheets began to retreat from southern New England both the hunter, the Paleo Indian, and the hunted began to move into this region.

Research indicates that the post glacial landscape was tundra-like, the colonizing grasses, sedges and herbs supporting a variety of large and small game animals. Among the fauna were mastodon and mammoth (two mastodons have been found in central and southern Staten Island and three mammoths in nearby New Jersey (Boesch, 1994:9)), giant beaver, giant ground sloth, and horse, all of which became extinct, as well as the caribou, musk-ox and bison that persist to modern times.

Paleo-Indians, as these small bands of nomadic hunter-gatherers are called by archaeologists, appear to have entered the previously uninhabited northeast from the south and west. Their sites, identified primarily by characteristically fluted points, are found all over North America. It has traditionally been assumed that these nomadic peoples were strictly "big game" hunters; however that assumption has been called into question by the discovery of fish, bird, small mammal bones and some plant remains found in association with Paleo-Indian sites. It now seems that in addition to the large animals that comprised their principal food source, the Paleo-Indians also hunted small game and gathered a wide variety of plants to support their diet. Paleoindian sites are quite rare in the archaeological record, and have been found in association with major waterways such as the Hudson, and in quarry zones such as the Wallkill Valley. Staten Island, however, has emerged as a major focus of Paleoindian activity. The most intense locus of Paleoindian activity is the area between Rossville and Tottenville. The sites here are characterized as high, well-drained spots overlooking the Arthur Kill (Boesch, 1994:9) The Port Mobil site is among the best known Paleoindian sites in the northeast. Map 3) A number of other finds have been made to the south of this rich region, however they consist largely of surface finds of fluted points, collected in the absence of controlled excavation, and therefore subject to flaws in interpretation. Bearing in mind that the entire continental shelf was a vast tundra region, now submerged beneath the Atlantic Ocean, and that several Paleoindian points have been recovered from the ocean floor, the lower coastal plain zone of Staten Island might be seen as an inland buffer between this vast coastal plain and the higher lands of the New Jersey Piedmont.

The Archaic period in Staten Island is better represented than the Paleo-Indian. It is divided into four stages: the Early Archaic, the Middle Archaic; the Late Archaic and the Terminal Archaic. In many important respects, the nature of life in the Archaic period was little different from the nomadic lives lived by the Paleo-Indians; however, during the time

span of the Archaic significant changes in the environment occurred. The tundra-like landscape began to give way, first to spruce forest and then to a forest composed of various conifers, hemlocks and hardwoods. As the hardwood forests advanced northward, a new ecosystem became available, an ecosystem that provided a range of nuts (in particular the acorn), grasses and tubers that supported both the smaller game of the Archaic period and the human population as well.

Population growth is inferred for this time period as sites increase in density and versatility. The Late Archaic period is well represented on Staten Island. The period lasted from roughly 4000 BC to 1700 BC, a time during which the Copper and Bronze Ages and the construction of the great Pyramids of Giza were all taking place in the Old World (Snow, 1980:187). Archaic sites on Staten Island include the Hollowell, Old Place, Charleston Beach, Ward's Point, Travis, Richmond Hill, Chemical Lane, Harik's Sandy Ground, Pottery Farm, Bowman's Brook and a number of others.

The people of this time followed a life-way called the "Mast Forest Tradition", an adaptation that focused on the processing of a broad range of nuts and plant foods that supplemented the hunting of the white tail deer and other small game. Ritchie says "seeds, nuts, berries, roots (and) dried meat . . ." were processed with a variety of grinding implements, with the main focus being acorn meal (Ritchie 1969a:62). Sites are not large, but they are numerous.

A number of excavations have yielded evidence of small houses based on a spiral plan, with overlapping walls creating the entryway. Few burial sites have been excavated, but it is suggested that cremation was the preferred mortuary practice for these people (Snow, 1980:231). On Staten Island, Long Island and along the southern coast of New England, shell middens associated with the consumption of coastal and riverine shellfish are abundant. The overall profile of these Late Archaic people, then, is of a group of nomadic hunter-gatherers organized in relatively small groups with an extremely flexible adaptation to a varied landscape.

The Archaic period in Staten Island is followed by the Transitional Stage. Chief among the general characteristics that separate the Transitional Stage from the earlier period is the use of stone vessels. With soapstone being the usual raw material, these vessels were extremely heavy, and were later replaced by pottery vessels of various types. The Transitional period is identified by the highly distinctive Orient Fishtail projectile point, by the use of soapstone vessels, whose raw materials were most probably quarried in Rhode Island and in Bristol Connecticut, by distinctive burials and by the intense exploitation of shellfish. Boesch indicates that a radically different broad-bladed projectile point type arrived in Staten Island at this time (probably the "Susquehanna Broad" tradition). Transitional sites have been found at the Pottery Farm, Wards point, Old Place and the Travis site. Orient Fish Tail points have been recovered along the beach at Kreischerville (Boesch, 1994:12)

The Woodland Stage, like the Archaic is divided into several substages, including the early Woodland Stage, the Middle Woodland Stage, and the Late Woodland Stage.

Sites used by Woodland groups tend to be away from the major waterways and are frequently located on inland streams. In later periods there is some indication of the presence of palisaded villages. Around these sites, on the alluvial plains of nearby streams, the Indian fields were located. Horticulture, although practiced in other parts of North America at an earlier date, does not appear in this area until c. 1000 AD. The changeover to cultivation of a variety of domesticates, among them maize, beans, gourds, sumpweed and sunflower, created a marked change in the pattern of land use and settlement. With the advent of sedentary or semi-sedentary occupations, the character of sites changed.

By the time the Europeans arrived the dominant indigenous groups inhabiting Staten Island were the Lenape/Delaware, Munsee speakers who had migrated into the area during the Late Woodland. The Munsee are a sub-group of the very extensive Algonquian cultural and linguistic group.

Population figures are difficult to calculate due to the lightening speed with which European diseases wiped out the indigenous population. Snow states that "There are almost no data on which to base a population estimate for the middle and lower Connecticut and central Long Island population". This assessment would be equally true of Staten Island. With the coming of first the Dutch, then the British settler, the indigenous population of New England decreased to its current negligible size.

An assessment of the broader ecological setting in the general region of the project area indicates that substantial streams and wetlands exist in the area. As the subsistence patterns of the indigenous inhabitants of the northeastern United States have become clearer to modern archaeologists, it has become increasingly accepted that not only the streams, but the associated tidal marshes, wetlands and their fringes were intensively exploited as one of the richest subsistence zones available. Wetlands and abundant streams provided aquatic life such as the fish, frogs, shellfish, water insects and water flora. Avian resources in the form of the birds that were themselves attracted to the teeming life of the wetlands abounded, as did the large game species that watered in these spots. The mosaic of food sources available to the inhabitants of the project area would have been quite rich.

In terms of the greater archaeological context, the project area rests in the center of a dense locus of prehistoric activity. Very close to the site are Fiddler's green, a small site identified as a campsite just to the north of Edgegrove, Indian Hill just to the south, which is identified anecdotally as "Native American artifacts found on the hill" and Woods of Arden, also just south of Edgegrove, with no further information available.

Virtually all prehistoric phases up the contact period are represented on Staten Island. The ecological richness of this landscape in addition to the proximity of known archaeological sites indicate that the Edgegrove site possesses a moderate (Boesch) to high potential to yield prehistoric cultural resources.

TESTING STRATEGY

Testing strategy for the *180 Edgegrove Avenue* site was structured around the knowledge that the property possessed a moderate to high probability to yield prehistoric cultural resources. Although the site is extremely small, it was believed that sub surface testing presented the potential to recover cultural material.

The area selected for testing was identified after a careful walkover of the site, and a review of the occupational history of the lot. As mentioned above, a major concern was determining if the site had been subjected to a major filling or grading episode since prehistoric times. In addition to the methods outlined above, a shovel test excavated as a stratigraphic control at the eastern, undisturbed border of the lot yielded a set of strata consistent with known Staten Island sediments rather than trucked in fill.

At least 50% of the southern half of the site is inaccessible due to large piles of sand and gravel deposited for septic fill. Testing therefore focused on the northern half of the site, with two extra shovel tests placed along the eastern edge of the property. The designated test area was subjected to shovel testing at intervals of twenty-five feet apart. This particularly fine grid was selected to maximize the potential for recovering cultural material. The shovel tests were laid out using the western boundary as the baseline. One transect of four test and two transects of two test each were excavated.

FIELD METHODOLOGY

Field Methodology for the *180 Edgegrove Avenue* site consisted of several stages of investigation. These included:

1. A walkover and visual assessment of the site to assess areas of disturbance versus areas of potential sensitivity for prehistoric activity.
2. The excavation of a stratigraphic control test to establish the stratigraphy of the soil of the site and to identify the depth and composition of the sterile glacially deposited sub soils.
3. Shovel testing the area identified as having a potential sensitivity for prehistoric remains.
4. Photographic documentation of the overall site (see Appendix C).

Because of the small size of the site and in order to thoroughly investigate the potential of the site to yield prehistoric cultural resources, it was decided to employ a fine grid system (25' grid rather than the standard 50' grid). Within the sensitive area identified 40 cm diameter shovel tests were excavated along the 25' grid system. Soils were passed through a 0.25 inch steel mesh screen and the materials remaining in the screens were carefully examined for historic and prehistoric artifacts. Items, had they been recovered, would have been assigned to the stratum from which they were obtained. The stratigraphy

of each test was recorded, including the depth and the soil description of each stratum (Appendix B: Shovel Test Record).

FIELD RESULTS

As indicated above, once a testing strategy had been established, and areas unsuitable for testing eliminated from the survey, approximately 50% of the site was judged to have potential to yield cultural remains.

Shovel Test One on Transect One was established as the stratigraphic control. The top stratum consisted of 11" of unstratified overburden clearly deposited on the site. Stratum two consisted of yellow brown damp sandy silt to a depth of 20". From 20" to 26" soils consisted of a damp red clay with a hue so intense that it does not register on the 10YR soils chart. This red layer was quite wet, and appears to be an alluvial or wetland deposit. Shovel Test Two yielded an upper layer of mixed overburden to a depth of 20", and like Shovel Test One was underlain by a layer of extremely red clay to a depth of 31". At 31" the clay had become so saturated that it would not pass through the screen. Shovel Test Three yielded a layer of mixed overburden to 21" below surface. A clear quartz debitage flake was found in the fill at 16", however, since it was not original to the site, it was not considered in the assessment. The overburden was underlain by yellow brown silty sand with gravel inclusions to a depth of 36", at which point it became too saturated to pass through the screen. Shovel Test Four produced a layer of yellow brown silty clay from 0 to 18". Coal slag and a single porcelain fragment were noted at 10 inches below surface. At 18" the soils became too saturated to pass through the screen.

Shovel Test Five on Transect Two produced a 20" stratum of unstratified fill which terminated in a rock obstruction. Shovel Test Six, to the east, produced a 4" layer of organic loam underlain by a 20" layer of unstratified fill. This test also terminated in a rock obstruction. It should be noted that both of these shovel tests are located very near to the piles of sand and gravel fill that obstructs the southern half of the site.

Shovel Tests Seven and Eight were placed along the eastern border of the site in the area most likely to produce undisturbed strata. Shovel Test Seven yielded a 0 to 21" layer of yellow brown sandy silt underlain by a layer of dark yellow brown silty clay with pebble inclusions that terminated at 26" in saturated soils. Shovel Test Eight exhibited similar strata, with a layer of dark brown silt from 0-21" underlain by a stratum of dark yellow brown silty sand. This test was terminated by a root obstruction, however, soils were rapidly becoming too saturated to screen. Bottle glass fragments were noted in the 0 to 7" stratum of this test.

The results of the sub-surface testing at 180 Edgegrove Avenue indicate that the site, although not currently wet on the surface, is part of a much larger wetland system. Once artificial fill strata had been identified and eliminated from the evaluation of the prehistoric condition of the site an entirely different landscape became evident. The fine silt and clay soils which became saturated once a depth of approximately 20" was reached are

without a doubt alluvial, or water deposited soils. Because of the fine consistency of the soils the deposition had to be in a wetland or slow-moving water body as opposed to the sandy/gravelly type of deposit typical of the fast moving torrents of glacial outwash. Soil colors are very typical of Staten Island -- an intense reddish hue that is even more exaggerated in the clay than it is in the sands and gravels characteristic of this zone. The conclusions that the area was a prehistoric wetland is further supported by the presence of the Wetland Adjacent Area line running through the property.

No prehistoric or historical cultural materials of any kind associated with the site were recovered.

CONCLUSIONS AND RECOMMENDATIONS

A walkover reconnaissance was completed on the *180 Edgegrove Avenue* site, located in Staten Island, New York. A thorough review of the existing body of archaeological data relevant to the project area was undertaken and conclusions drawn concerning the probability of encountering prehistoric cultural remains on the site. No areas of prior disturbance were identified and the location potentially sensitive for prehistoric cultural resources was selected for sub surface testing.

Using a fine 25' grid system, a total of eight shovel tests was excavated in the area considered to possess a probability of yielding prehistoric cultural material. All tests proved to be sterile down to the point of saturation, whereupon saturated soils made further excavation impossible. No prehistoric cultural material was recovered in any of the tests and no further archaeological testing is recommended for the *180 Edgegrove Avenue* site.

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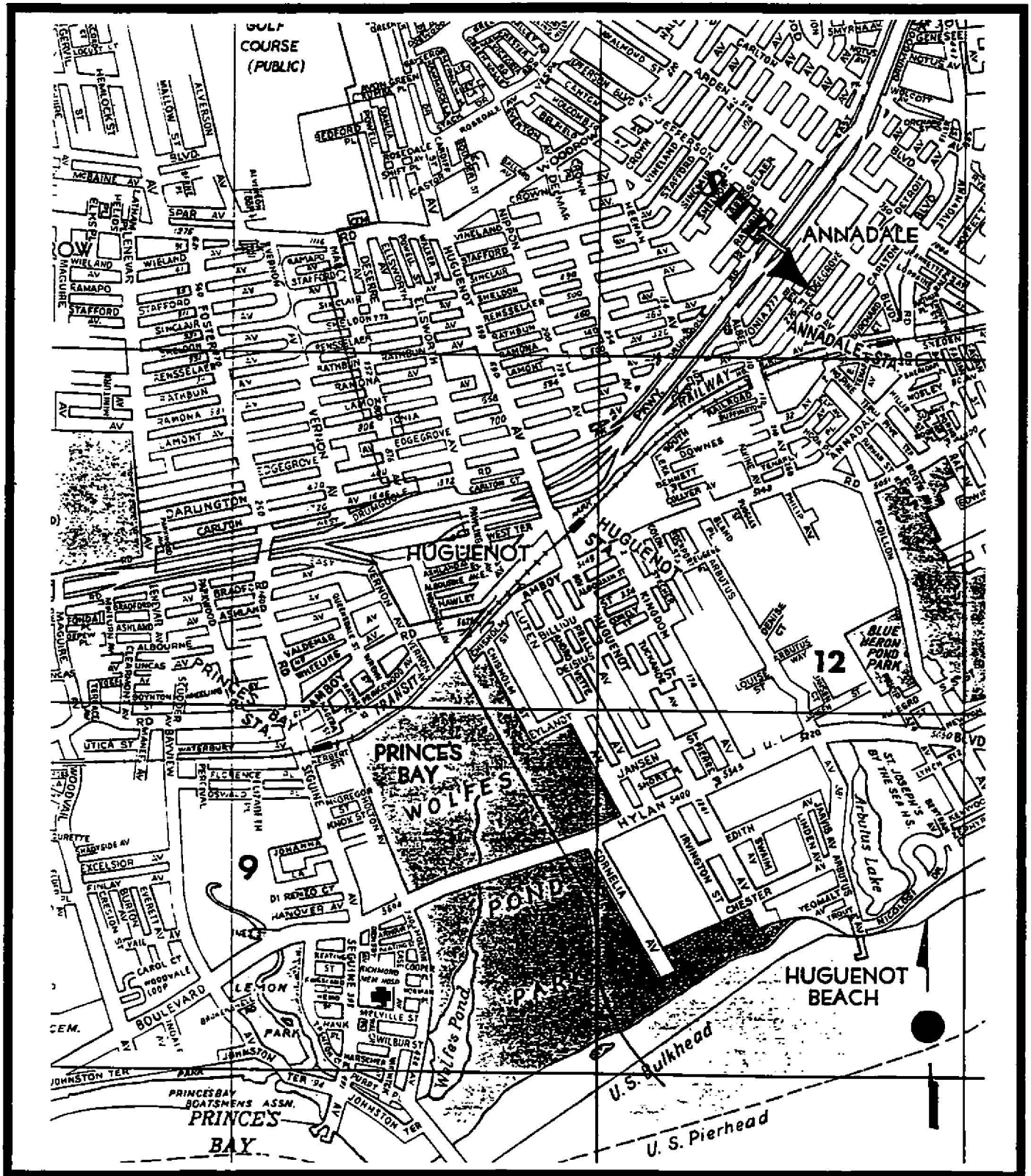
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APPENDICES

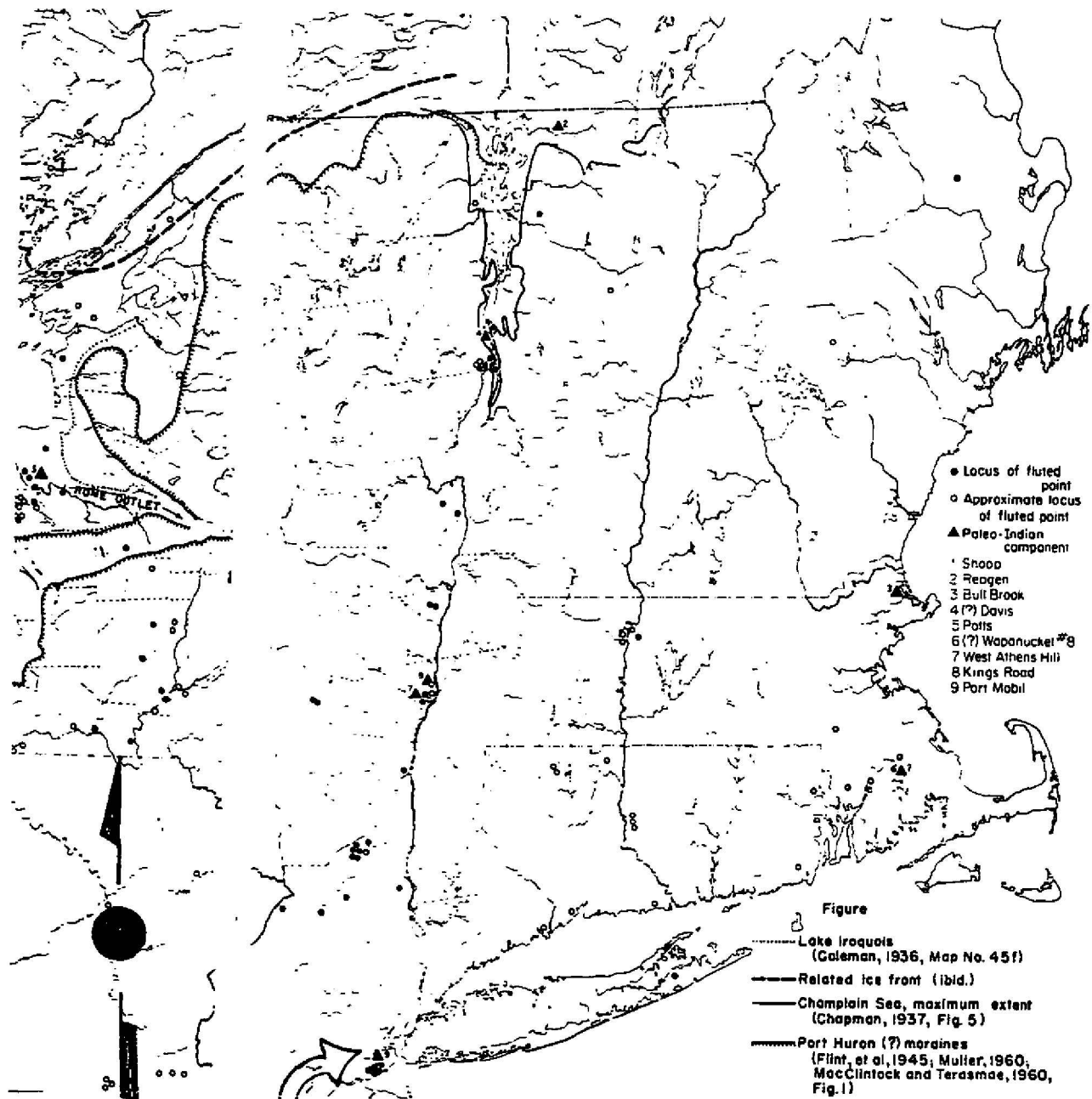
APPENDIX A

MAPS



Map 2: Discoveries of Pleistocene Mammals in New York State (taken from Ritchie, 1980)

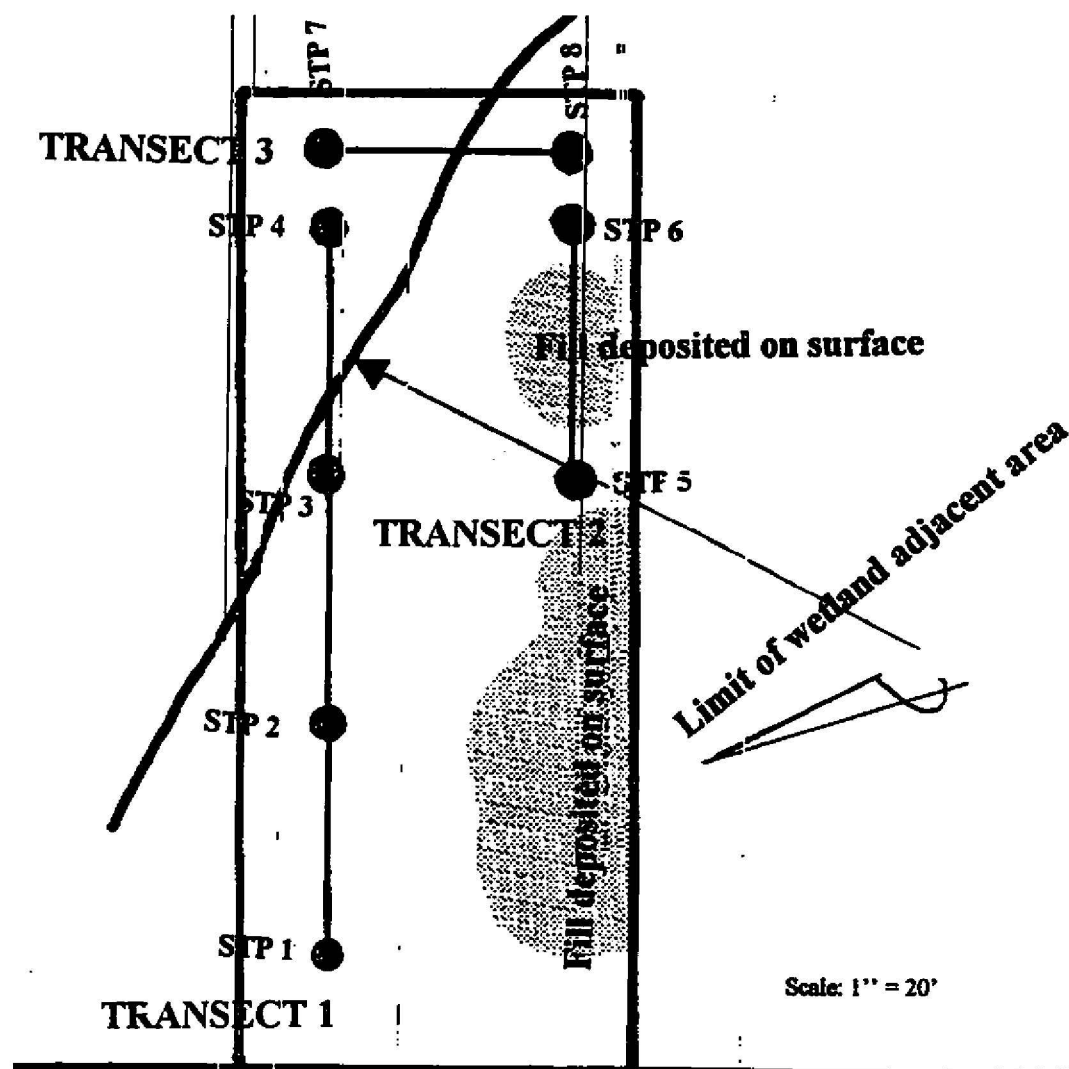




PORT MOBIL

PALEO-INDIAN SITE

Archaeological Field Reconnaissance Map



EDGEGROVE AVENUE

APPENDIX B

SHOVEL TEST RECORD

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180EDGE

			180 EDGE GROVE AVENUE - STATEN ISLAND		
			Stage 1B Shovel Test Record		
			Munsell	Soil Description	Cultural Material Recovered & Comments
TRANSECT 1	ST 1	0-11"	*	mixed overburden	NCM
		11-20"	10YR3/4	dark yellowish brown sandy silt	NCM
		20-26"	*	red clay	NCM
		.		Rock obstruction	
	ST 2	0-20"	*	mixed overburden	NCM
		20-31"	*	wet red clay - water increases	NCM
				will not pass through screen @ 31"	
		..		Test pit terminated	
	ST 3	0-21"	*	mixed overburden	quartz flake recovered from overburden
		21-36"	10YR3/4	dark yellowish brown silty sand with pebbles - saturated	NCM
		.			
	ST 4	0-18"	10YR3/6	brown silty clay	1 frag. porcelain noted @ 10"
		..			slag noted in upper stratum
		18-19"	10YR4/6	dark yellowish brown silty clay	
		.		soil too saturated to screen	
		...		Test pit terminated	
TRANSECT 2	ST 5	0-20"		unstratified fill	NCM
		.		Rock obstruction	
	ST 6	0-4"	10YR3/4	dark yellowish brown organic loam	NCM
		4-24"		unstratified fill	
TRANSECT 3	ST 7	.		Rock obstruction	
		0-21"	10YR4/6	dark yellowish brown sandy silt	NCM
		21-26"	10YR3/6	dark yellowish brown silty clay with pebbles - saturated	NCM
	ST 8	0-7"	10YR3/2	dark brown silt	bottle glass noted (not collected)
		7-21"	10YR3/6	dark yellowish brown sandy silt	NCM
				Root obstruction	
NOTE			* =	No equivalent on	
			.	10YR Munsell	

APPENDIX C

PHOTOGRAPHS



Photo 1: Condition of surface of lot at the eastern edge of site. View to east..



Photo 2: Fill has been deposited on a portion of the site for the septic system. Silt fence in foreground. View to northeastern corner of lot. Stream is to right in photo.



Photo 3: Stream flowing through vacant lot south of 180 Edgegrove Avenue.

APPENDIX D

CORRESPONDENCE

ENVIRONMENTAL REVIEW

DEP/95DEP213R
PROJECT NUMBER

05/11/95
DATE RECEIVED

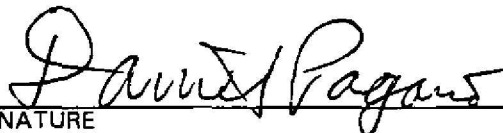
PROJECT

180 EDGE GROVE AVE:

- ☒ [X] No architectural significance
- ☐ [] No archaeological significance
- ☐ [] Designated New York City Landmark or Within Designated Historic District
- ☐ [] Listed on National Register of Historic Places
- ☐ [] Appears to be eligible for National Register Listing and/or New York City Landmark Designation
- ☒ [X] May be archaeologically significant; requesting additional materials

COMMENTS

Scope of work for archaeological field testing is accepted. Notify LPC if significant remains from Native American occupation are identified so a site visit may be conducted.


SIGNATURE

05/18/95
DATE

cc: Gail Gullet