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517 SHELDON AVENUE

STATEN ISLAND.

RICHMOND COUNTY, NEW YORK.

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STAGE 1B ARCHAEOLOGICAL FIELD INVESTIGATION

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517 SHELDON AVENUE

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INTRODUCTION

On May 24, 1995 CITY/SCAPE: Cultural Resource Consultants completed a field reconnaissance level archaeological survey of the 517 Sheldon 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 C.

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 south by Sheldon Avenue, to the north by lot #18 on Sinclair Avenue, to the east by lot #43 on Sheldon Avenue, and to the west by lot #47 on Sheldon Avenue. None of the abutting lots are developed, and exist as either wetland (43 Sheldon Avenue and 18 Sinclair Avenue) or artificially filled landscape (47 Sheldon Avenue). Forty feet to the west of the lot is a DEC Limit of Freshwater Wetland line (see Field Reconnaissance Map).

The parcel in its present form is a vacant lot. The few trees located on this small lot are recent growth hardwoods. The land surface is overgrown with fragmite, jewel weed and coarse grass. (Photo 1) There is surface evidence of small fauna such as squirrels and chipmunks. A number of bird species were noted on the site.

The project area is a flat bench created by the deposition of a large quantity of sand and gravel fill at an undetermined time in the past. (Photo 2 & 3) It is surrounded to the north and east by a shallow body of water that is now stagnant. (Photo 4) Several junked cars and other debris are deposited in this wetland area. The wetland now exhibits classic flora, fragmite reed, jewel week and other water loving species, however, hardwood trees also occur in this wetland zone.

The lot that borders the 517 Sheldon Avenue site is also a land surface created by dumping a large volume of fill, probably the same filling episode that created the project area.

A percolation test excavated to a depth of three feet on the southern border of the lot reveals a deep deposit of unstratified fill, and it is probable that this fill layer is substantially deeper judging by the much lower elevation of the wetland soils.

A review of the historic maps available for the region indicates that the site is located on or adjacent to a series of small streams that no longer flow naturally through the region. (Bein, 1891) Judging from the presence of the modern designated wetland, and the extensive

517 Sheldon Avenue, Staten Island, Richmond County, New York

filling evident in all developed areas surrounding the site, it appears to have been a wetland zone unsuitable for prehistoric habitation or use.

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 huntergatherers 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 riches 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 Sheldon, 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 Sheldon, with no further information available.

Virtually all prehistoric phases up to the contact period are represented on Staten Island. The ecological richness of this landscape in addition to the proximity of known archaeological sites indicated that the 517 Sheldon Avenue site possessed a moderate (Boesch) potential to yield prehistoric cultural resources.

TESTING STRATEGY

The initial testing strategy for the 517 Sheldon Avenue site was structured around the knowledge that the property possessed a moderate 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.

A careful walkover of the site revealed immediately that, although the greater region possesses a moderate probability for prehistoric cultural remains, the site itself, in its current condition, possesses an extremely low probability for cultural remains. (see Photo 2 & 3) A major concern was determining if the site had been subjected to a major filling or grading episode since prehistoric times. As mentioned above, empirical observation of the surrounding lots demonstrated that all other houses in the area of the 517 Sheldon Avenue

site were very obviously built on fill "mounds" overlying the wetland. The surface of the site lies well above the associated designated wetland.

It was therefore determined that sub-surface examination of the site in the form of shovel testing would be ineffective in assessing the site. The strategy was then modified to making a sound determination on the sensitivity of the area, which was accomplished through the above methods which led to a determination that

- 1. the site had probably been wetland, and
- the fill deposited above the wetland surface would likely serve to seal in any prehistoric deposits in the unlikely event that they exist on the 517 Sheldon Avenue site.

FIELD METHODOLOGY

Field Methodology for the 517 Sheldon 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 examination of a percolation test excavated to three feet in depth in an effort to establish the stratigraphy of the site and to identify the depth and composition of the fill layer that makes up the solid land surface on the lot..
- Photographic documentation of the overall site (see Appendix B).

CONCLUSIONS AND RECOMMENDATIONS

A walkover reconnaissance was completed on the 517 Sheldon 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. Areas of prior disturbance were identified and the site was evaluated in the contexts of its modern and probable prehistoric ecologies.

It was determined after careful consideration that the site, before being filled, was almost certainly an active wetland both prehistorically and up to modern times, a condition that rules it out for consideration as a likely locus of prehistoric activity.

On this basis, no further archaeological investigation for the 517 Sheldon Avenue site is recommended.

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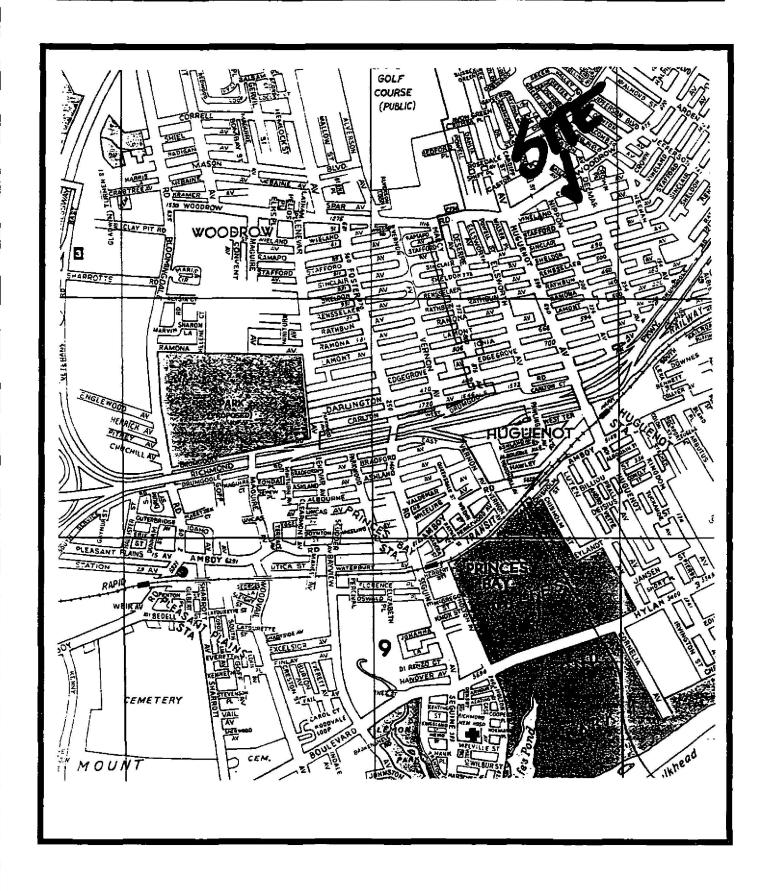
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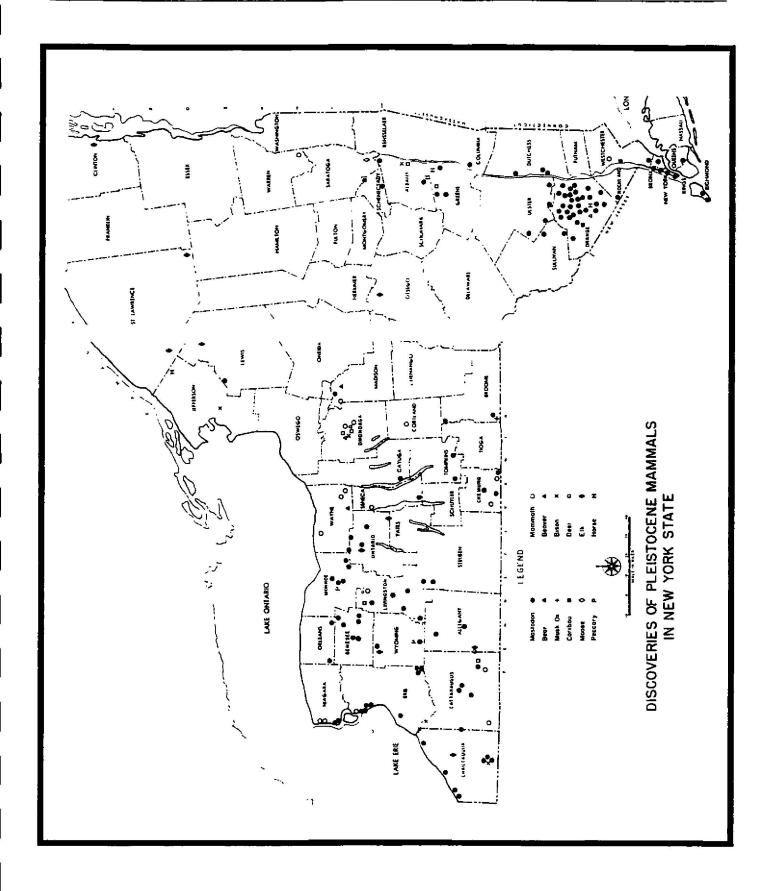
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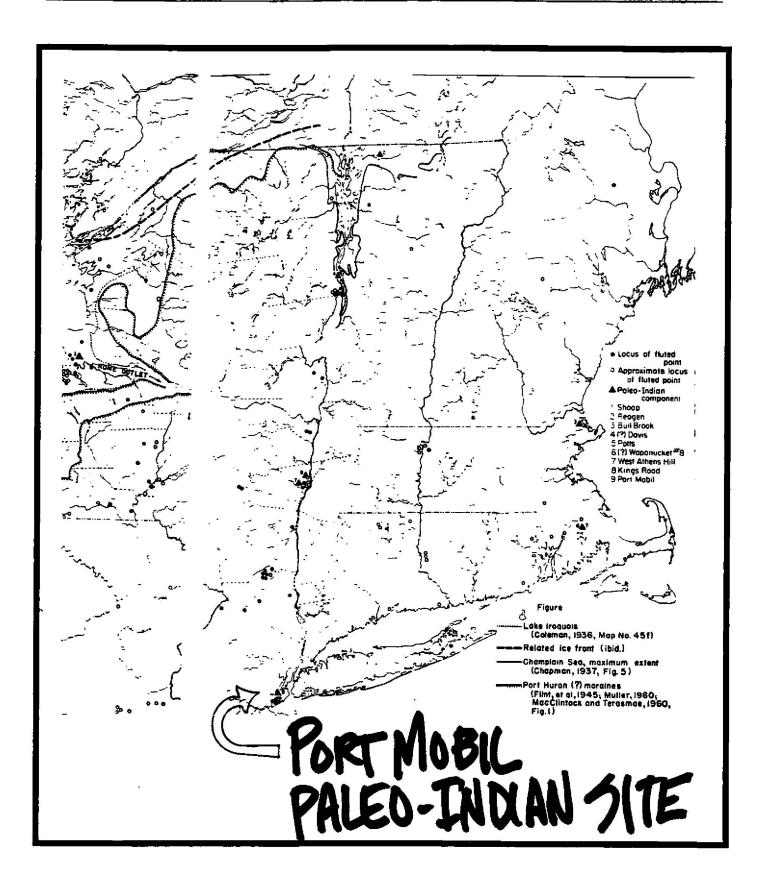
APPENDICES

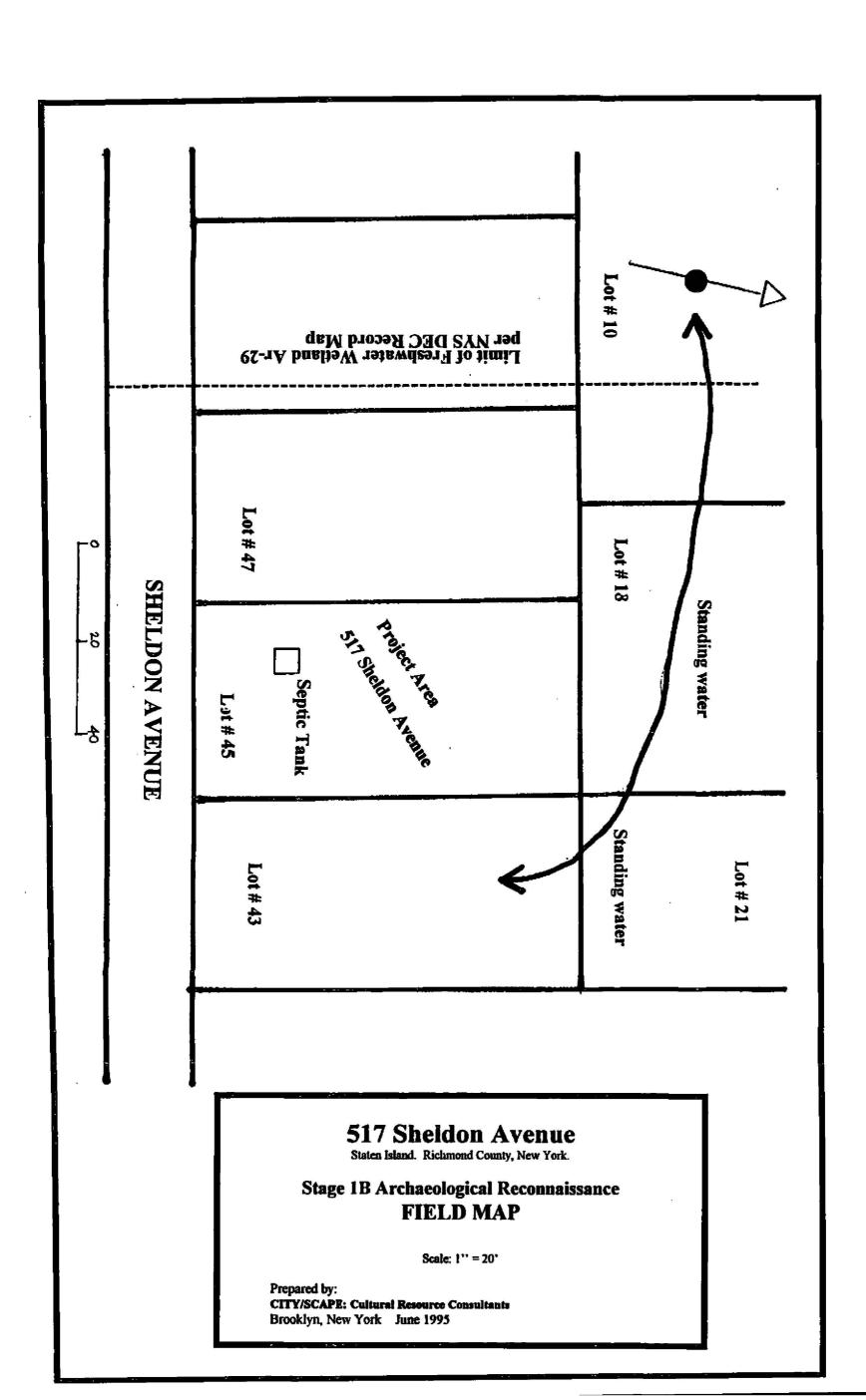
APPENDIX A

MAPS









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APPENDIX B

PHOTOGRAPHS



Photo 1: Fragmites grew abundantly on and adjacent to the site..



Photo 2: Evidence of recent dumping. Some associated with preparations for septic system.



Photo 3: At some time in the past, fill of sand and gravel had been dumped on site.



Photo 4: Author of report standing at edge of site looking at area of stagnant water (off site).

APPENDIX C

CORRESPONDENCE