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LANDMARKS PRESERVATION COMMISSION

#### SUMMARY OF ARCHEOLOGICAL INVESTIGATIONS **IN CONNECTION WITH THE OAKWOOD BEACH SECTION 103** STORM DAMAGE REDUCTION PROJECT OAKWOOD BEACH, STATEN ISLAND, RICHMOND COUNTY, NEW YORK

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September 1996

Project Background

The U.S. Army Corps of Engineers, New York District (Corps), is conducting studies at Oakwood Beach, Staten Island, Richmond County, New York in connection with the Oakwood Beach Section 103 Storm Damage Reduction Project (Figure 1), originally initiated under Section 14 authority. The Corps' previous cultural resources studies of this area recommended subsurface testing along the northernmost of two proposed levee alignments (Attachment 1). A limited program of subsurface testing was undertaken in August 1995 and prehistoric artifacts were recovered from several of the tests. Further investigations were anticipated, however, the project schedule was delayed due to extensive coordination with New York City planning agencies. During the delay, a private developer constructed several dwellings in the location of the proposed northern levee alignment and on the prehistoric site. As a result, project plans for the proposed northern levee were changed to reflect the presence of the new dwellings in the project area.

The southern levee, as proposed, runs through the wetlands fringing the beach. This alignment has not changed. The 1994 study determined that subsurface testing was not necessary in this area and the New York State Historic Preservation Officer concurred with this assessment (Attachments 2, 3 and 4). This summary describes the fieldwork undertaken in 1995 and subsequent cultural resources activities conducted in August 1996. The project area's prehistoric and historic background were presented in the attached 1994 report and are not reiterated here.

#### **Project Description**

The northern levee, as originally proposed, was to cross a finger of high ground jutting into the surrounding marshland which was determined to be sensitive for prehistoric resources. The new plans, as proposed, call for segments of project area roads to be raised. This activity will involve creating an earthen berm along portions of the existing road alignments on Dugdale Street, Tarlton Street, Mill Road and the access road to the septic tank discharge area within the Oakwood Beach Waste Water Treatment Facility, which will then be topped with an asphalt surface (Figure 2, 3 and 4). Disturbances will be limited to the current road rights-of-way which extend approximately five feet on either side of the existing roads. Work along the southern alignment will consist of the construction of a levee and tide gates.

#### **Field Investigations**

Fieldwork was initially undertaken from August 9 through 11,1995 in the vicinity of the northern levee as originally proposed. Subsurface testing followed the recommendations of the Corps' 1994 study which determined that the area was very sensitive for prehistoric remains based on the fact that numerous sites had been documented on high ground along the south shore of Staten Island. The New York State Museum evaluated the project area as highly sensitive. Historically, based on map research, the project area appears to have been under cultivation. A



#### SECTION 103 STORM DAMAGE REDUCTION PROJECT, OAKWOOD BEACH, STATEN ISLAND, RICHMOND COUNTY, NEW YORK Figure 1. Project location. Arrows point to the roads proposed to be raised and to the proposed southern levee. Sources: USGS Arthur Kill quadrangle. 1966.



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tree lined lane crossed a stretch of the proposed project area. Structures were located in the project vicinity but not near the proposed project area itself. Fieldwork was conducted by Corps employees under the direction and close supervision of a Corps staff archaeologist.

The 1995 fieldwork concentrated on the stretch of levee proposed to run north-south between the Dugdale Street/Merkle Place intersection and the Oakwood Beach Waste Water Treatment Facility. Initial testing was restricted to properties for which rights-of-entry had been secured. Vegetation was extremely dense at the time of survey which necessitated the clearing of a narrow band through the woods in an attempt to establish a baseline along the center of the proposed levee. Clearing was kept to a minimum and included the removal of small branches, saplings, and bushes.

A pedestrian survey of the project area was conducted but ground inspection was severely hampered by ground cover. No cultural features or anomalies were observed. A total of 15 shovel tests (STs) were excavated during this initial survey. Two tests were excavated during the subsequent field effort (see Figures 2, 3 and 4 for test locations and Attachment 5 for soil descriptions). All but two of these tests were located in the vicinity of the proposed north-south alignment, as originally proposed. Tests 14 and 15 were placed in the area of recent construction on the northern side of Merkle Place (Plate 1). Subsurface testing was conducted at 50 feet intervals. Spacing for several tests, (STs 4, 10, 11 and 12), was reduced to 25 feet after Native American materials were recovered, in an attempt to define the limits of the cultural deposits. All soils were screened through 1/4 inch hardware mesh. Recovered materials were bagged according to provenience. Certain materials, such as coal ash, were noted and discarded in the field. An inventory of artifacts retained in the field is contained in Attachment 6.

The soil profile was quite uniform, except for areas near the roadways where the soils were found to be disturbed or stripped to subsoil. In general, a brown loam root mat of 2 to 3 inches was found to overlie a dark brown clayey loam plowzone. This in turn was underlain by subsoil, which ranged from mottled yellowish brown clayey silt to a coarse sandy silt, and was encountered at approximately 10 inches below ground surface.

Artifacts were recovered from nine shovel tests (STs 1, 2, 4, 5, 6, 7, 9, 10, and 11). These materials were recovered primarily from the plowzone. Native American materials were encountered in tests 2, 4, 9 and 10. A jasper flake was recovered from ST 2 along with a possible, very weathered, argillite flake. A single black chert flake was found in each of tests 4 and 9. Shovel test 10 yielded a worked jasper cobble core. Approximately half of its cortex remains. The southern and western limits of the archaeological site were not ascertained due to access restrictions. The northern and western extent was apparently destroyed by road construction and housing development. A house was built on the site in the winter of 1996 before any further work could be undertaken (Plate 2). Portions of the site may remain within the undisturbed section of the property but as Corps project plans have been changed to accommodate the new housing development this area will no longer be impacted by proposed project plans and no further testing was undertaken.



Plate 1. View looking northwest to the housing on the southwest side of Dugdale Street near its intersection with Merkle Place. These structures were under construction at the time of the initial archaeological investigations in August 1995 (Photographer: Lynn Rakos, August 1996).



Plate 2. View looking southwest to a newly constructed house on the southwest side of Dugdale Street, just south of Merkle Place. Prehistoric materials were encountered on this site (Photographer: Lynn Rakos, August 1996).

Historic ceramics were encountered in ST 1, 2, 4, 5, 6, 7, 10 and 11. These finds consisted primarily of undecorated whiteware, three sherds of blue and white transfer print, and one sherd of porcelain. Two pieces of flat glass were found in ST2. Two small pieces of brick were recovered as were several pieces of coal and coal ash, most of which was noted and discarded in the field. Several fragments of modern bottle glass were also noted and discarded in the field.

Limited testing was undertaken along the southwestern side of Dugdale Street to examine the level of disturbance associated with recent housing construction. A small trench, excavated for utility line installation near the intersection of Dugdale and Riga Street, was also examined for stratigraphic information. Based on two tests (ST 14 and 15) and the utility trench, it appears that in the soils were heavily disturbed by construction near Merkle Place but that the stratigraphy, while disturbed, is less so towards Riga Street where several inches of plowzone were observed in the trench. Southeast of Merkel the road fringe is heavily disturbed. Subsoil and backhoe tracks are visible on the ground surface. Shovel test 13 was excavated to confirm the disturbance. Subsoil was encountered immediately beneath the root mat.

A new dwelling was built on the northeastern side of Dugdale Street at its intersection with Merkle Place. Dense vegetation and large mounds of fill and construction debris line the rest of this side of Dugdale Street. The area appears to be disturbed but the presence of five to ten foot high mounds of fill and debris prohibited testing in this area.

Additional fieldwork was conducted on August 1, 1996 to examine the area that will potentially be impacted by the proposed new plan. Two shovel tests were excavated along the northern side of the access road to the septic tank discharge area within Oakwood Beach Waste Water Treatment Facility (Plate 3). These tests, ST 16 and 17, contained dense clayey rocky fill to at least 2 feet below surface. The fill was too compact to penetrate and natural soils were not encountered. Standing water was encountered at 27 inches below surface in ST 17. Modern bottle glass and fragments of a chain-link fence were recovered from these tests and discarded in the field.

A sewer line was recently installed along the northern end of the access road. The area at the intersection of Mill Road with the access road was very disturbed by the construction activity (Plates 4 and 5). Phragmites line the western edge of the Mill Road - Tarlton Street intersection. No subsurface testing was undertaken in these areas due to the presence of standing water (Plate 6).

A prehistoric archaeological site was encountered through preliminary subsurface testing in the project area as originally proposed. Private development destroyed most of the site before further investigations could be conducted. Project plans were altered to reflect the new development and currently proposed project activities will be limited to the existing road alignments. Testing adjacent to the roads indicates that the area is disturbed by road construction. The recently installed sewer line also impacted the preservation of intact soils in the project area.



Figure 3. View looking southwest along the access road to the septic tank discharge area at the Oakwood Beach Waste Water Treatment Plant (Photographer: Lynn Rakos, August 1996).



Plate 4. View looking southwest at the southwest corner of the Mill Road and Tarlton Street intersection. The Oakwood Beach Water Treatment Facility is visible in the background (Photographer: Lynn Rakos, August 1996).



Plate 5. View looking southwest to the intersection of Mill Road with the access road to the septic tank discharge area at the Oakwood Beach Waste Water Treatment Facility which is visible in the background. This area was graded recently when a sewer line was installed (Photographer: Lynn Rakos, August 1996).



Plate 6. View looking east at the southeast corner of the Mill Road and Tarlton Street intersection. (Photographer: Lynn Rakos, August 1996).

It is in the opinion of the Corps that the Oakwood Beach Section 103 Storm Damage Reduction Project will have no effect on any National Register of Historic Places properties or on any properties eligible for the Register if project plans remain as proposed and work is limited to the road rights-of-way.