HP2006

New York City Department of Environmental Protection South Richmond Drainage Storm Water and Sanitary Drainage Plan

Lemon Creek Drainage Area

Phase 1B Archaeological Field Testing and Photo documentation of BMP LC-3B: Kramer Avenue, BMP LC-12: Woodvale Avenue and BMP SP-5: Islington Pond Staten Island, New York

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LANDMARKS PRESERVATION COMMISSION



New York City Department of Environmental Protection South Richmond Drainage Storm Water and Sanitary Drainage Plan

South Shore Golf Course Drainage Area

Phase 1B Archaeological Field Testing and Photo documentation of BMP LC-3B: Kramer Avenue, BMP LC-12: Woodvale Avenue and BMP SP-5: Islington Pond Staten Island, New York

Prepared For:

DIFAZIO Industries 38 Kinsey Place Staten Island, NY 10303

Prepared By:

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February 2006

Management Summary

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SHPO Project Review Number (if available):		
Involved State and Federal Agencies (DEC, CORPS, FHV	VA,etc.): NYC DEI	P
Phase of Survey: Phase 18 Archaeologie NYC DEP	cal Field Testing in Lemo	on Creek Watershed,
Location Information		
Location: 3 separate small, storm/sewer intalla	ation sites:	
BMP-SP-5 at Islington Street and Gr		····
BMP-LC-3B at Kramer Avenue, imm		Pond
BMP-LC-12 at Woodvale Avenue, in		
Minor Civil Division: Staten Island, New Yor		
County: Richmond		
Survey Area (Metric & English)		
[length and width provided for each	of the three small install	ation parcels1
Islington Street at Greaves Avenue,		Woodvale Avenue
Length: <u>50ft/15.24m</u>	CALCULATED AND A CONTRACT OF CONTRACT OF CALCULATION OF CONTRACT OF CALCULATION OF CONTRACT OF CONTRACT.	100ft/30.48m
Width: 35ft/10.67m		50ft/15.24
Depth (when appropriate):		
Number of Acres Surveyed:		
Number of Square Meters & Feet Excavated (Ph	ase II. Phase III only):	
Percentage of the Site Excavated (Phase II, Phase I)		<u> </u>
· · · · · · · · · · · · · · · · · · ·		
U.S.G.S. 7.5 Minute Quadrangle Map: Arthur Kill, N	IV-NJ	
Archaeological Survey Overview		
Number & Interval of Shovel Tests:	6 ST (40 cm x 40 cm).	at 15 meter intervals, total
No testing o	onducted at BMP-LC-12	at Woodvale
Number & Size of units:		
Width of Plowed Strips:		
Surface Survey of Transect Interval:		
• 5.5 25.5		
Results of Archaeological Survey		
Number & name of prehistoric sites identified:	none	
Number & name of historic sites identified:	none	
Number & name of sites recommended for Phase	II/Avoidance	·····
Results of Architectural Survey		
Number of buildings/structures/cemeteries within	project area:	NA
Number of buildings/structures/cemeteries adjace	· ·	
Number of previously determined NR listed or el		cemeteries/districts:
Number of identified eligible buildings/structures		
Report Author (s): James A. Cox, M.A.		
Date of Report: March, 2006		

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INTRODUCTION

The New York City Department of Environmental Protection (DEP) has developed a drainage plan for the sanitary collection and storm water management of the Lemon Creek Watershed drainage area in Staten Island, New York. The storm water management plan includes the construction and installation of Best Management Practices (BMPs). A Phase 1A documentary study of the Lemon Creek Drainage Area was completed by Historical Perspectives, Inc. (HPI) in 1997/Amended 1998. This report concluded that specific BMP areas within the Lemon Creek Watershed (LC), possessed sensitivity for prehistoric, or Native American, resources. The HPI study became part of a 2001 Environmental Impact Statement (EIS) for the South Richmond Drainage, Staten Island (CEQR No. 01DEP004R).

A Phase 1B Fieldwork investigation is often required to satisfy state and local review agencies, including the standards of the New York City Environmental Quality Review (CEQR) manual. Therefore, as the installations of in-street piping has moved forward in the Lemon Creek Watershed, those BMP areas identified as sensitive have undergone further investigations. In 2003, BMP-LC-7B, located west of the intersection of Darlington Road and Lenevar Avenue, within city parkland, was field tested by HPI and a report was filed with the DEP.

Three additional Lemon Creek BMP areas are the subject of this field report. The current LC BMP LC-3B, Kramer Avenue corresponds to a location considered sensitive in the original evaluation (BMP-LC-4). A significant Native American site has been identified in this area of Kramer Avenue.

BMP-LC-3B is located approximately 152 meters (500 feet) east of PS 56R, previously scrutinized under an archaeological investigation in 1995 (Historical Perspectives, Inc. 1995). The initial archaeological survey indicated that the entire area was sensitive to the presence of both prehistoric and historic materials. Subsequent testing in 1996 identified materials extending from the Early Archaic Period (ca. 8000-7000 years Before Present, B.P.), to Late Woodland Period (ca. A.D. 1000 to European contact). Most materials dated to the Late Archaic (ca. 6000-3700 BP) (Historical Perspectives, Inc. 1996). Activities represented included hunting and butchering, cooking, food processing, food storage and varied tool use. Analysis indicated that the area was a seasonal, inland, hunting and food processing encampment repeatedly used over a period of time. The same materials and habitation patterns may be present within the BMP LC-3B: Kramer Avenue APE.

Two other currently proposed BMP locations, *BMP-LC-12*, Woodvale Avenue, and SP-BMP-5, Islington Pond, were not included in the original evaluation and must be assessed to the same criteria for determination of sensitivity. Stage IB archaeological testing and/or photo-documentation of the aforesaid sites was conducted February 18, 2006 by James Cox and David Gubkin. The Phase 1B testing included the excavation of archaeological shovel tests (STs), placed at15-meter intervals, and by judgmental placement. Location of the shovei tests was dictated, in large part, by topographic conditions. Those zones within the BMP APEs that were disturbed, under water, or poorly-drained wetlands were not archaeologically tested. Testing focused on flat to gently sloping and seemingly well-drained surfaces.

All excavated soils were screened through 1/4" hardware cloth, and cultural material encountered was collected and recorded according to natural stratigraphy. Field forms were kept in the field to collect relevant data about each ST such as location, stratigraphy, depth, soil color and composition, anomalies, and artifact content. All cultural material collected was washed, measured, and catalogued and specific attributes were also recorded including composition, form, and function. Photographs were taken of the fieldwork in progress, and a map of the fieldwork was completed.

The following report details the testing procedures, results of fieldwork and recommendations for sites BMP LC-3B: Kramer Avenue, BMP LC-12: Woodvale Avenue and BMP SP-5: Islington Pond.

AREA OF POTENTIAL EFFECT

HPI/SoRichmon/LC BMP/1B

The Area of Potential Effect (APE) is defined as "...the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist" (36 CFR 800.16).

The archaeological APE is the project's potential area of ground disturbance (i.e., the footprint of construction and any associated site work). The current study seeks to address the impact of the construction related activities at three distinct sites: BMP-LC-3B: Kramer Avenue, BMP-LC-12: Woodvale Avenue and BMP SP-5: Islington Pond. The APE for each area is described below.

BMP LC-3B: Kramer Avenue

The project APE is located south and east of the eastern terminus/dead end of Kramer Road extending along the southern reaches of Kramer Road and running in an east-west alignment through a lightly wooded stand of trees into Porzio's Pond. The alignment originates from a point approximately 10.66 meters (35 feet west) of the terminus of Kramer Road along the southern boundary of the road. The alignment begins as approximately 3-6.1 meters (10-20 feet) in width for approximately 30.5-36.6 meters (100-120 feet) and then opens to 12.2-18.3 meters (40-60 feet) width before opening at its greatest extent, within Porzio's Pond to a maximum width of approximately 30.5 meters (100 feet) (Figure 4; Photos 1-4).

BMP LC-12: Woodvale Avenue

The project APE is located south of Amboy Road along the eastern side of Woodvale Avenue west of a creek. At its widest the APE is approximately 61 meters (200 feet) northwest-southeast and 67.1 meters (220 feet) northeast-southwest. The L-shaped project area is covered with *phragmites* a plant normally associated with wetlands *and* human disturbance (Figure 6, Photos 5 and 6).

BMP SP-5: Islington Pond

The project APE is located north-northwest of the intersection of Islington Street and Greaves Avenue following the creek along its eastern and western banks. At its southern terminus the APE is bounded by the intersection of Islington Street and Greaves Avenue. The southern boundary runs along Islington Street for 9.1 meters (30 feet) and extends northwest along Lemon Creek before pinching in to approximately 3.7 meters (12 feet) and again ballooning out to a width of approximately 8.5 meters (28 feet) southwest-northeast. At its maximum length the APE extends from Greaves Avenue north-northwest approximately 14.6 meters (48 feet) (Figure 5; Photos 7-8).

ENVIRONMENTAL SETTING

The three project areas are associated with the Lemon Creek Watershed, but are isolated geographically from each other. All three areas are undeveloped wooded lots situated next to rapidly expanding suburban developments. Specific details of each location are described below.

BMP LC-3B: Kramer Avenue

Located in the Rossville section of Staten Island, the APE is bounded by Kramer Avenue and residential development to the north and west, wooded marshland to the south and east and Porzio's Pond to the east (see Figure 1 and 4). The poorly drained and level project site is situated within wooded marshland. Field-testing indicated that the water table within the APE is approximately 25 cm (9.8 inch) below grade throughout much of the site. It is likely that Porzio's Pond occasional spills over its bounds and floods into the woods based on the wet soil conditions closer to the pond and the non existent pond bank. At the time of the survey most of the under story vegetation was dead, but characterized by thorn bushes. The area is used as a backwater dumpsite as the area is littered with modern trash.

BMP LC-12: Woodvale Avenue

HPI/SoRichmon/LC BMP/1B

Located in the Pleasant Plains section of Staten Island, the APE is bounded by Woodvale Avenue and Staten Island Railway to the south. Amboy Avenue, though not bounding the project area, is located to the north-northeast. The L shaped APE is located along the top of the western bank of the creek and is characterized by extremely wet marshes with *phragmites*, a plant normally associated with wetlands *and* human disturbance. The area abutting Woodvale Avenue is disturbed through road construction related activities.

BMP SP-5: Islington Pond

Located within the Great Kills section of Staten Island, the APE is bounded by Greaves Avenue and Islington Street to the south. The APE extends northwest along the creek and covers both the north and south banks. The creek drains northwest into Islington Pond. The project site is presently undeveloped woodland and due to the narrow alignment of the APE is characterized by the steeply sloping creek banks. The highest level grounds are immediately adjacent to the roadbeds and within the northeast quarter of the project area at its greatest southwest-northeast extent. The areas immediately adjacent to the roadbeds are disturbed and are covered with concrete refuse piles.

METHODOLOGY and RESULTS OF IB FIELD INSPECTION

When deemed appropriate -based on culturally favorable environmental conditions -shovel tests were placed within the APE of specific project areas. Where environmental conditions did not indicate a level of human occupation and/or data recovery, photo documentation was utilized in lieu of excavation. The method for each area is discussed below.

BMP LC-3B: Kramer Avenue

A total of 5 shovel tests (STs) were placed within the project site APE at 15-meter (50-foot) intervals. Each of the approximately 40 x 40 centimeter (15 x 15 inch) STs were hand excavated and soils screened through 1/4-inch wire mesh. The STs were numbered sequentially (1, 2, 3, etc.) (Figure 4, Photo 9, Table 1).

Evident from the field survey, the area is poorly drained with a very high water table approximately 25cm (9.8in) below grade. Three distinct soil horizons were identified through field-testing. Level 1 consisted of a silty sand humic deposit ranging from 10YR 2/1 (black) (STs 2-5) to 10YR 3/2 (very dark grayish brown) (ST 1). Level 2 offered the greatest variability and together with Level 3 exhibited the episodic flooding or marshy conditions of the site. ST 1, Level 2 consisted a mottled wet silty clay 7.5YR 4/6 (strong brown) with 7.5YR 5/1 (gray); ST 2, Level 2 consisted of a fine sandy silt 10YR 3/3 (dark brown); STs 3-4, Level 2 consisted of a fine sand 10YR 5/1 (gray). ST 1, Level 3 consisted of medium sand 7.5YR 3/3 (dark brown); ST 2, Level 3 consisted of mottled fine sandy silt 10YR 3/4 (dark yellowish brown) with 10YR 5/6 (yellowish brown); ST 3, Level 3 consisted of fine sand 10YR 5/3 (brown) with 10YR 5/6 (yellowish brown).

BMP LC-12: Woodvale Avenue

The standing water and marshy conditions of the site prohibited excavations within the APE. Instead, numerous photos were taken (see Photo 5 and 6) and a brief reconnaissance level survey conducted.

BMP SP-5: Islington Pond

HPI/SoRichmon/LC BMP/1B

A single shovel test was placed on the highest, level ground within the APE along the eastern edge of the creek. Level 1 of the shovel test consisted of a silty sandy humic deposit 10YR 2/1 (black); Level 2 consisted of a sandy clay 2.5YR 4/6 (red); Level 3 consisted of a clay with sand inclusions and gravel 2.5YR 4/6 (red); Level 4 consisted of a rock impasse (Figure 6, Photo 10, Table 2). No cultural features, horizons or materials were identified during field-testing.

LABORATORY ANALYSIS

BMP LC-3B: Kramer Avenue

From the 5 shovel tests placed within the APE a single historic artifact was recovered from ST 5, Level 1. The Albany Slip (19th century: 1805-1920) buff bodied vessel with partial handle was retrieved from the upper strata of Shovel Test 5 within the flood plain of Porzio's Pond (Miller, et al. 2000: 10). The presence of the artifact does not connote an intact site or horizon, but instead likely represents episodic dumping within the drainage resulting in a dispersal of artifacts ranging from the aforesaid artifact to detergent bottles and other materials presently strewn across the site.

BMP LC-12: Woodvale Avenue

No cultural materials were retrieved during field-testing.

BMP SP-5: Islington Pond

No excavations were performed, no cultural materials were retrieved.

HPI/SoRichmon/LC BMP/1B

CONCLUSIONS AND RECOMMENDATIONS

Summary of Findings: Precontact Period

No evidence of a prehistoric site was identified during archaeological field-testing or reconnaissance on any of the sites. Because no precontact artifacts or features were found during testing and due to the soil/drainage/topographic conditions, no additional consideration is recommended for precontact resources at these LC BMP locations.

Summary of Findings: Historical Period

A single isolated Albany Slip buff bodied ceramic fragment was identified on the BMP LC-3B: Kramer Avenue location. However, the location of the material in the first level/horizon and adjacent to and within the flood plain of a pond indicates that it may have been dumped into what was deemed a backwater and does not represent a significant historic deposit.

Because no significant historic features and/or indications of historical-period resources were identified in any of the three BMP-LC locations, no additional archaeology is recommended.

HPI/SoRichmon/LC BMP/1B

BIBLIOGRAPHY

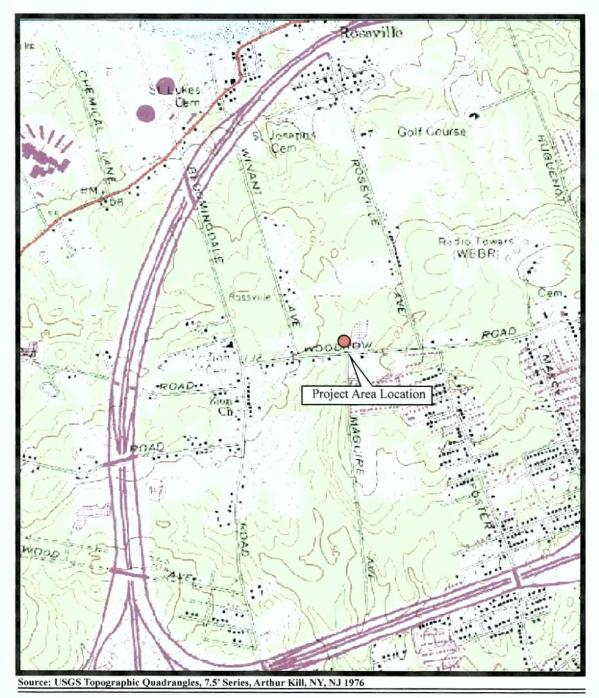
Historical Perspectives, Inc.

- 1995 New York City School Construction Authority, P.S. 56R Project Site, Woodrow, Staten Island, New York Phase IA Archaeological Assessment Report, May.
- 1996 Final Report, Phase 3 Archaeological Data Recovery of the P.S. 56R School Site, Staten Island, New York, November.
- 1997 NYC DEP Phase 1A Cultural Resources Sensitivity Evaluation of the Blue Heron, Arbutus Creek and Lemon Creek/Sandy Brook Watersheds in South Richmond, Staten Island, NY, CEQR 97DEP26. Addendum, March 1998.
- 2003 NYC DEP, South Richmond Drainage, Lemon Creek Watershed, Phase 1B Archaeological Field, Testing of BMP-LC-7B, Lemon Creek, Staten Island, New York.

Miller, George with contributions from P. Samford, E. Shlasko and A. Madsen

2000 Telling Time for Archaeologists. Northeast Historical Archaeology 29: 1-22.

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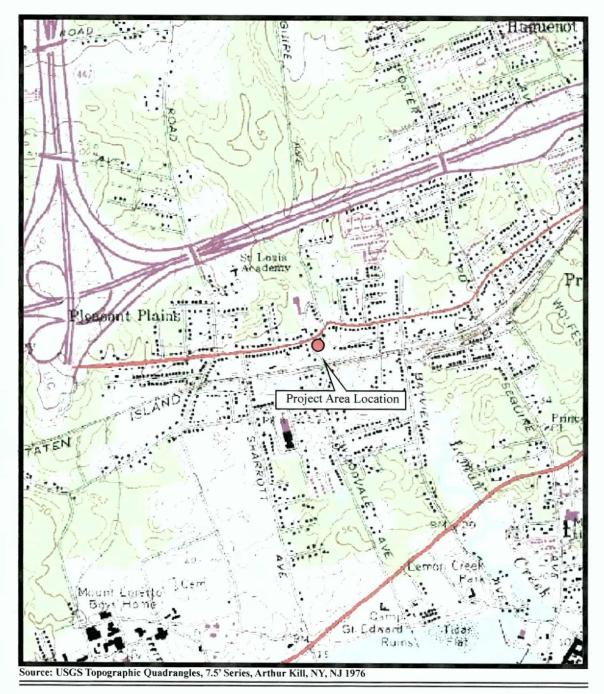


New York City Department of Environmental Protection South Richmond Drainage Storm Water and Sanitary Drainage Plan Lemon Creek Drainage Area Phase 1B Archaeological Field Testing and Photo documentation of BMP LC-3B: Kramer Avenue, BMP LC-12: Woodvale Avenue and BMP SP-5: Islington Pond, Staten Island, New York

Figure 1. Project Area Location, BMP LC-3B: Kramer Avenue

100 0 100 200 300 400 500 METERS 500 0 500 1000 1500 2000 FEET



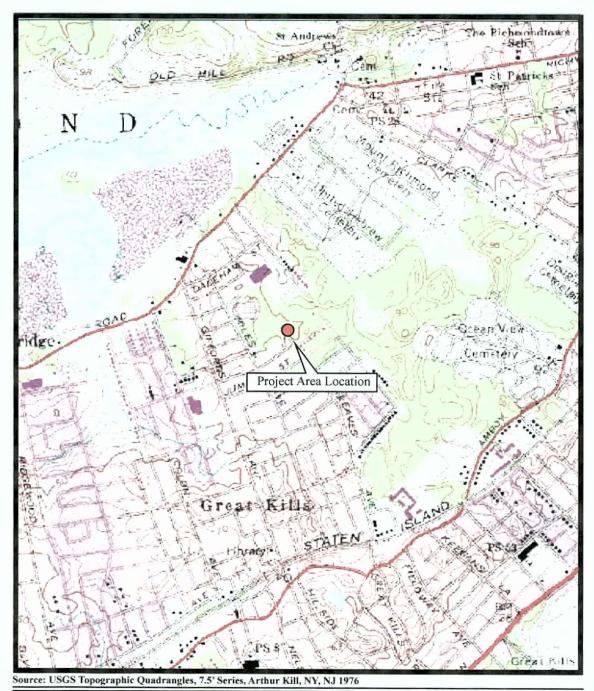


New York City Department of Environmental Protection South Richmond Drainage Storm Water and Sanitary Drainage Plan Lemon Creek Drainage Area Phase 1B Archaeological Field Testing and Photo documentation of BMP LC-3B: Kramer Avenue, BMP LC-12: Woodvale Avenue and BMP SP-5: Islington Pond, Staten Island, New York

Figure 2. Project Area Location, BMP LC-12: Woodvale Avenue







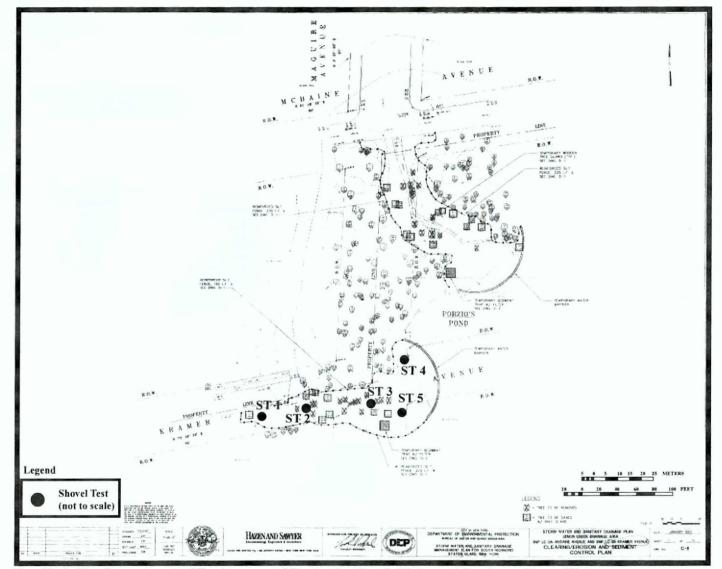
New York City Department of Environmental Protection South Richmond Drainage Storm Water and Sanitary Drainage Plan Lemon Creek Drainage Area Phase 1B Archaeological Field Testing and Photo documentation of BMP LC-3B: Kramer Avenue, BMP LC-12: Woodvale Avenue and BMP SP-5:

Islington Pond, Staten Island, New York

Figure 3. Project Area Location, BMP SP-5: Islington Pond

100 0 100 200 300 400 500 METERS 500 0 500 1000 1500 2000 FEET



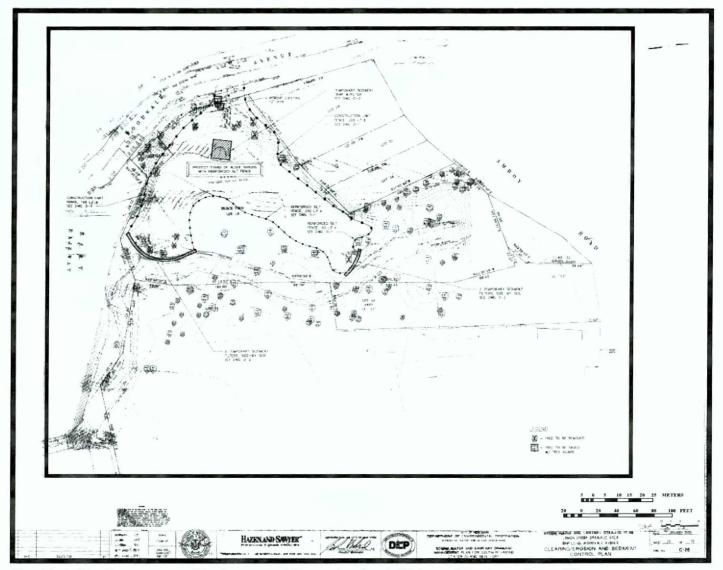


New York City Department of Environmental Protection South Richmond Drainage Storm Water and Sanitary Drainage Plan - Lemon Creek Drainage Area Phase 1B Archaeological Field Testing and Photo documentation of BMP LC-3B: Kramer Avenue, BMP LC-12:

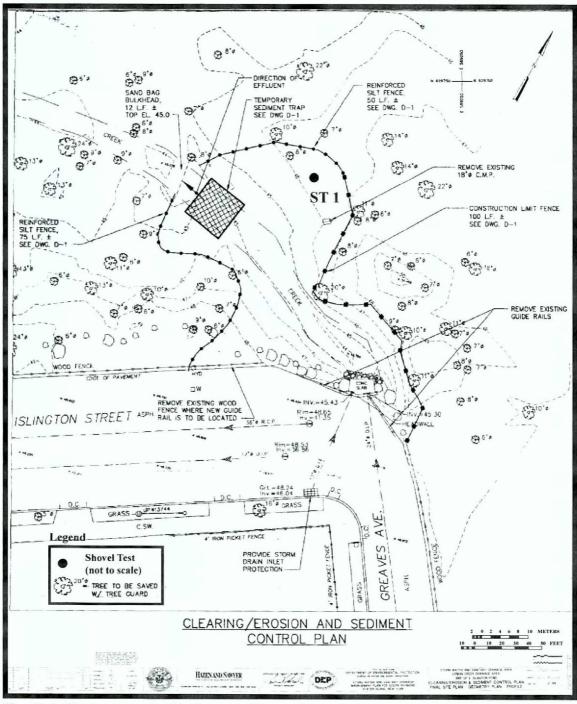
Woodvale Avenue and BMP SP-5: Islington Pond, Staten Island, New York



Figure 4. Site Plan, BMP LC-3B: Kramer Avenue showing location of Shovel Test Pits



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Figure 6. Site Plan, BMP SP-5: Islington Pond showing location of Shovel Test Pits





Photo 1. BMP LC-3B: Kramer Avenue looking northeast, February 18, 2006. Photographer: James Cox.



Photo 2. BMP LC-3B:Kramer Avenue looking west, February 18, 2006. Photographer: James Cox.



Photo 3. BMP LC-3B: Kramer Avenue looking northwest toward Kramer Avenue, February 18, 2006. Photographer: James Cox.



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Photo 4. BMP LC-3B: Kramer Avenue looking southeast along western bank of Porzio's Pond, February 18, 2006. Photographer: James Cox.



Photo 5. BMP LC-12: Woodvale Avenue looking northeast, February 18, 2006. Photographer: James Cox.



Photo 6. BMP LC-12: Woodvale Avenue looking northeast, February 18, 2006. Photographer: James Cox.



Photo 7. BMP SP-5: Islington Pond looking northwest along creek, February 18, 2006. Photographer: James Cox.



Photo 8. BMP SP-5: Islington Pond looking southwest toward Islington Street, February 18, 2006. Photographer: James Cox.



Photo 9. BMP LC-3B: Kramer Avenue, Shovel Test Pit 3 looking northeast, February 18, 2006. Note standing water in test pit. Photographer: James Cox.

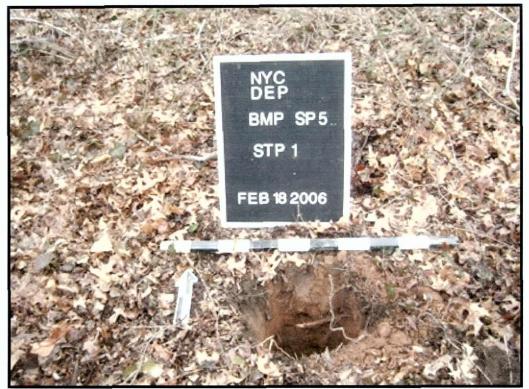


Photo 10. BMP SP-5: Islington Pond, Shovel Test Pit 1 looking north, February 18, 2006. Photographer: James Cox.

	TABLE 1 BMP LC-3B; Kramer Avenue				
STP#	Level/Horizon	Depth cm (in)	Soil Description	Artifact Summary/Comments	
1	1/A	0-25cm (0-9.8in)	10YR 3/2 (very dark grayish brown) silty sand	No Cultrual Materials	
1	2/В	25-40 (9.8- 15.7in)	7.5YR 4/6 (strong brown) with 7.5YR 5/1 (gray) mottled wet silty clay	No Cultrual Materials/Water @ 25cm (9.8in)	
1	3/B	40-60 (15.7- 23.6in)	7.5YR 3/3 (dark brown) wet medium sand	No Cultrual Materials	
2	1/A		10YR 2/1 (black) silty sand	No Cultrual Materials	
2	2/B	12-24cm (4.7- 9.4in)	10YR 3/3 (dark brown) fine sandy silty	No Cultrual Materials	
2	3/В	24-43cm (9.4- 16.9in)	10YR 3/4 (dark yellowish brown) with 10YR 5/6 (yellowish brown)	No Cultrual Materials/Water @ 35cm (13.8in)	
3	1/A		10YR 2/1 (black) fine silty sand	No Cultrual Materials	
3	2/B	14-38cm (5.5- 15in)	10YR 5/1 (gray) fine sand	No Cultrual Materials/Water @ 34cm (13.4in)	
3	3/В	38-55cm (15- 21.7in)	10YR 5/3 (brown) fine Sand	No Cultrual Materials	
4	1/A		10YR 2/1 (black) fine sandy silt	No Cultrual Materials	
4	2/B	18-30cm (7.1- 11.8in)	10YR 5/1 (gray) fine sand	No Cultrual Materials	
4	3/В	30-50cm (11.8- 19.7in)	10YR 5/3 (brown) with 10YR 5/6 (yellowish brown) mottled dense fine sand	No Cultrual Materials/Water @ 39cm	
STP#	Level/Horizon	Depth cm (in)	Soil Description	Artifact Summary/Comments	

HPI/SoRichmon/LCBMP/1B

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5	1/A	0-17cm (0-6.7in)	10YR 2/1 (black) fine sand	Buff bodied earthernware
5	2/B	17-50cm (6.7- 19.7in)	10YR 5/1 (gray) dense fine sand	No Cultrual Materials/Water @ 39cm
5	3/В		10YR 5/3 (brown) with 10YR 5/6 (yellowish brown) mottled dense fine sand	No Cultrual Materials

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	TABLE 2				
	BMP LC-12: Woodvale Avenue Shovel Test Pits				
STP# Level/Horizon Depth cm (in) Soil Description				Artifact Summary/Comments	
1	1/A (Humic)	0-13cm (0- 5.11in)	10YR 2/1 (black) silty sand	No Cultural Materials	
1	2/B	13-50cm (5.11- 19.69in)	2.5YR 4/6 (red) sandy clay	No Cultural Materials	
1	3/В	50-70cm (19.7- 27.6in)	2.5YR 4/6 (red) clay with sand inclusions and gravel	No Cultural Materials	
1	4	70cm (27.6in)	Rock Impasse	No Cultural Materials	