

Appendix B:

Historic Resources

ENVIRONMENTAL REVIEW

HOUSING PRESERVATION AND DEV./LA-CEQR-K

11/20/2007

Project number

Date received

Project: Gateway Estates II

Comments: Archaeological Comments only:

The LPC concurs that a portion of the project area is archaeologically sensitive as shown in Figure 7-2. We believe the area of sensitivity is within B 4446 L 1, B 4447 L 1, B 4448 L 1, B 4449 L 1, B 4452 L 170, and B 4452 L 400- we note though that the Pluto map is imprecise for the project area. In any event, while we concur with the sensitivity assessment, we do not concur that archaeological monitoring is an appropriate strategy to recover potential Native American resources. Instead, we recommend that once all the subsurface work needed for this project has been defined that a testing plan be developed for review and approval by the LPC before any work begins.

11/29/2007

SIGNATURE

DATE

24175_FSO_ALS_11292007.doc

ENVIRONMENTAL REVIEW

HOUSING PRESERVATION AND DEV./07HPD021K

1/22/2009

Project number

Date received

Project: Gateway Estates II

Comments:

The LPC is in receipt of the, "Phase 1B Archaeological Survey Gateway Estates II: Brooklyn, New York," prepared by AKRF, Inc and dated January 2009.

The LPC concurs that there are no further archaeological concerns. Please submit another bound copy of the report to the LPC for the City Hall Library and an electronic copy on a CD or DVD.



1/23/2009

SIGNATURE

DATE

24175_FSO_ALS_01232009.doc



Phase 1B Archaeological Survey

Gateway Estates II

Brooklyn, New York

Prepared for:

The Related Companies, LP
60 Columbus Circle
New York, NY 100123

Prepared by:

AKRF, Inc.
440 Park Avenue South
New York, New York 10016

Principal Investigator: A. Michael Pappalardo, RPA

Report Prepared by: A. Michael Pappalardo, RPA
Molly McDonald, RPA

January, 2009

Table of Contents

Chapter 1: Introduction	1-1
Chapter 2: Research Design/Survey Methods.....	2-1
A. Research Design	2-1
B. Survey Methods	2-2
Chapter 3: Environmental Setting	3-1
Chapter 4: Historic Context.....	4-1
Chapter 5: Results of Survey	5-1
A. Results of Fieldwork.....	5-1
B. Results of Laboratory Analysis.....	5-5
Chapter 6: Conclusions and Recommendations	6-1
References.....	References-1
Figures	
Photographs	
Appendix A: Artifact Catalogue	

List of Figures

- 1 Phase 1B Testing Area
- 2 Shovel Test Pit 2.1—Profile of West Wall
- 3 Shovel Test Pit 5.1—Profile of North Wall
- 4 Shovel Test Pit 8.1—Profile of East Wall
- 5 Project Site Photographs

The New York City Department of Housing Preservation and Development (HPD), Gateway Center Properties Phase II, LLC, and Nehemiah Housing Development Fund Co., Inc. propose a series of actions to facilitate the modification and continued development of a previously approved mixed-use plan, including an expansion of an existing retail center in the 227-acre Fresh Creek Urban Renewal Area (FCURA) in the Spring Creek section of Brooklyn. The FCURA is a 227-acre site in the Spring Creek neighborhood of Brooklyn that is bordered by Flatlands Avenue to the north, Fountain Avenue to the east, the Shore Parkway to the south, and Schenck Avenue and Hendrix Creek to the west.

A Phase IA Archaeological Assessment (*Phase IA Archaeological Assessment, Gateway Estates Site, CEQR No. 93-HPD014-K*) was prepared for the Project Site in 1993 by Historical Perspectives, Inc. at the request of the New York City Landmarks Preservation Commission (LPC). The Phase IA identified a portion of the project area as having archaeological potential for deeply buried prehistoric resources. This tongue-shaped area may have originally had a higher elevation than the adjacent marshy land and is approximately bounded by Flatlands Avenue to the north, Elton Street to the east, and to the south by Vandalia Avenue, as indicated on Figure 1. On November 20, 2007, the Landmarks Preservation Commission (LPC) concurred with the Phase IA and recommended completion of an archaeological survey in advance of construction. In December of 2008, AKRF completed Phase 1B archaeological testing within the area of archaeological sensitivity. This report presents the results of this survey.

The goal of a Phase 1B survey is to determine the presence or absence of archaeological resources that may be impacted by proposed development and involves a level of subsurface testing and artifact collection sufficient to draw conclusions regarding the potential for significant resources to be present in a project site. The Phase 1B completes the identification process initiated during a Phase 1A survey, which identifies areas of archaeological potential through background research and a site visit, but does not involve subsurface testing. The Phase 1B survey was conducted in conformance with and the Landmarks Preservation Commission's *Guidelines for Archaeological Work in New York City* (2002)

A. RESEARCH DESIGN

Based on the specific conclusions presented in the Phase 1A report and the recommendations of the LPC, the primary objective of the present Phase 1B survey is to determine the potential for intact features or artifact deposits to provide substantive information concerning the prehistory of the project site.

As described in greater detail below, the Phase IA assessment concluded that the Project Site had the potential to host precontact and historic period archaeological resources beneath a layer of modern fill. No archaeological testing or monitoring was recommended for those areas with historic period sensitivity, given the low probability of finding intact deposits and the questionable potential for the anticipated data to add significantly to the understanding of late 19th century lifeways along Jamaica Bay. However, LPC determined that archaeological testing of the areas of potential pre-contact sensitivity was required prior to construction.

In order for this Phase 1B survey to conclude that archaeological methods have the potential to address the above topics, the following four conditions must be met:

1. Prehistoric archaeological deposits and/or features must be present.
2. These deposits and/or features must be intact and must not have been significantly disturbed by subsequent activities that have taken place on the property, such as the various construction and demolition episodes that have been documented on the property during the 20th century.
3. The deposits and/or features must contain datable artifacts to identify the period of time during which they were deposited, created, or used.
4. If artifacts dating to more than one general period of time are encountered, they must be spatially discrete, either horizontally or vertically, to allow for the meaningful comparison of the assemblages.

B. SURVEY METHODS

FIELD METHODS

Subsurface testing on the project site was conducted within the roughly 500 foot by 1,200 foot area that is considered to be sensitive for prehistoric archaeological resources. Based on the results of soil borings, it was expected that significant quantities of modern fill would be located across the project site. Therefore subsurface testing incorporated the use of a large excavator to remove this fill deposit in a series of trenches, under the supervision of an archaeologist, and expose any underlying potentially sensitive soil layers for hand clearing and testing.

When potentially sensitive soil layers were encountered, the backhoe was used to excavate a wide area of the fill to allow for safe access to this deeply buried layer. These layers were tested through the hand excavation of shovel test pits measuring at least 16 inches by 16 inches but were sometimes larger. Test pits were excavated stratigraphically.

All hand excavated soils were screened through standard ¼ inch hardware cloth. Most artifacts were collected and placed in zip-locked plastic bags marked with their provenience information. When very high quantities of brick fragments, glass, or corroded fragments of metal were observed, the field archaeologists only collected a representative sample. Soil observations and artifact descriptions were collected. Soil profiles were photographed and drawn.

At the conclusion of fieldwork, all excavated soils were placed back into the excavated trenches and the ground surface was leveled and returned to the original grade.

LABORATORY METHODS

Recovered artifacts were transported to the AKRF artifact laboratory. Bags of artifacts were logged in and subsequently washed in a solution of warm water and mild detergent. Artifacts deemed too fragile to be submerged were dry brushed (e.g. some bone, shell, mortar, and paper). After drying, the artifacts were repackaged in clean, acid-free, polyethylene bags that were marked with the site, date, and provenience in indelible ink. The bags were also vented to prevent mold.

To the extent possible, recovered artifacts were identified as to material, temporal or cultural/chronological association, function, and style following the standard archaeological references. Detailed analysis included the identification of the *Terminus Post Quem* (TPQ), the date after which the artifact must have been discarded, of artifacts for each context and the generation of mean beginning and end dates for assemblages. This information could be used to establish the contemporaneity of contexts and strata, and to determine which assemblages represent primary or secondary deposits.

A modified form of Stanley South's (1977) approach to organizing historical archaeological data was used for this project. All artifacts were categorized by group: Architectural, Arms, Activities, Clothing, Furniture, Kitchen, Personal, Tobacco and Unidentified. Artifacts were also identified by Class, (e.g. Tile and Floor covering, Nails, Unidentified, Transportation, Recreation, Decorative Furnishings, Window Glass, Container, Dish, Ethnofaunal, etc.). Artifacts were also categorized by material (e.g. glass, slate, Fe, Cu alloy, bone, etc.), although Ware Type (e.g. plain whiteware, grey salt-glazed stoneware) replaced Material for ceramics and by Function (e.g. floor tile, wire nail, mirror, window pane). Beyond these basic groupings,

artifacts were described appropriately (e.g. decorative motifs, color, and manufacturer). The artifact catalogue has been included as Appendix A.

The project site is located in the southwestern portion of Long Island, immediately north of Jamaica Bay. The surficial geology of Long Island evolved dramatically as glaciers advanced and receded over the last million years. Glacial debris was deposited at the margins of the ice sheet, creating terminal moraines, or low hills. The Harbor Hill Moraine, which traverses the length of Long Island, was formed roughly 18,000 years before present. A gently sloping plain extended south of the moraine, which in the project site vicinity took the form of tidal marshes and creeks draining into Jamaica Bay. Most of the project site was originally part of this marshland, with the exception of a sliver of higher ground between Ashford and Elton Streets, south of Flatlands Avenue. Numerous creeks interrupted the marsh in the project site vicinity. Maps dating to the turn of the century indicate that Spring Creek then ran along the present location of Fountain Avenue (bordering the project site on the northeast). Hendrix Creek flowed along the western boundary of the project site. Spring Creek survives in an altered form near the project site.

The Belt Parkway (also known as the Shore Parkway) is located a short distance south of the project site. This heavily trafficked expressway was constructed on reclaimed Jamaica Bay marshland in the 1940s. During the second half of the 20th century, portions of the project site were used as a landfill. Soil borings and test pits conducted in the vicinity in the 1980s, the results of which were summarized in the Phase 1A, noted that the ground surface in the project site was located up to 30 feet above ground water level. The soil investigations noted modern refuse deposits extending up to 35 feet below ground surface. Beneath these fill levels, uniformly gray sand was encountered (HPI 1993).

Vandalia Street, which was constructed in 1961, runs east-west through the project site. Elton Street, which runs perpendicular to the Vandalia Street, was constructed more recently. The topography of the project site and its vicinity is flat. The project site currently contains no structures, and is largely overgrown with grass and small trees.

The following summary of the history of the four subject lots was extracted from the Phase 1A survey (HPI 1993). The Phase 1A should be referenced for more detail and historic maps of the property.

PRECONTACT PERIOD

Precontact sites are often characterized by their proximity to a water source, fresh game, and exploitable natural resources, such as plants, raw materials for stone tools, and clay veins. There is documented Native American presence in the area surrounding the Project Site. One Native American village site, located about two miles east of the Project Site, was destroyed during the construction of the Belt Parkway. To the west, the closest identified site was the headquarters of the Canarsie Indian tribe which was located north of the Paerdegat Basin, approximately two miles from the Project Site.

The Project Site would have been an attractive area for Native Americans, as it would have been rich in resources such as shellfish, waterfowl, fish, and small mammals as well as reeds and shrubs. As described above, prior to landfilling activities there was a small strip of dry land on the Project Site. This elevated section of the Project Site could have been used as a shellfish processing area.

HISTORIC PERIOD

The Project Site is located in the Spring Creek section of Brooklyn near Jamaica Bay. The site was once part of a marsh and salt meadow that drained into Jamaica Bay via a series of creeks. Extensive landfilling activities in the 20th century raised the site to its current elevation. Prior to landfilling activities, however, there was a small (approximately two-block) strip of dry land on the Project Site, which was near the mapped locations of Ashford and Elton Streets, south of Flatlands Avenue.

The Project Site was located in the town of Flatbush, one of the five original Dutch towns that comprised Brooklyn. Flatbush was settled in 1652 and was given a patent from Peter Stuyvesant in 1656. In 1654 a group of 20 families from the Netherlands, and a few German families, settled in the area of New Lots, which includes the Project Site. New Lots was a farming community and remained mostly agricultural until the mid-19th century.

According to historic maps, the Project Site was first developed between 1893 and 1898. The northern area of the site was part of a 30-acre farm belonging to the Cozine family. The Belcher Hyde map of 1898 indicates that a small frame house and stable were constructed on the Project Site south of Vandalia Avenue, near the corner of Elton Street. It is assumed these structures belonged to the Cozine family.

The Cozine property was broken up by the end of the 19th century. In 1890, Herman G. Bocklage purchased current Blocks 4447, 4448, and 4452. Another portion of the Cozine land was sold to Nathan Kaplan in 1905. The Belcher Hyde map of 1905 depicts a 2½-story frame

Gateway Estates II Phase 1B Archaeological Survey

building with a brick or stone foundation with a large stable and a small frame shed. Near the northeast corner of Vandalia Avenue and Cleveland Street this map also depicts two frame sheds; it is unknown if this is the same group of structures depicted on the 1898 Belcher Hyde map.

The Project Site and surrounding area began to change in the 1930s, when it became part of the Milford Street Landfill. Landfilling activities continued until 1950. The 19th-century buildings on the Project Site remained until 1967, when they were demolished as part of the City's efforts for the newly created FCURA, which encompassed the Project Site. The modern street grid was established shortly thereafter. Currently, there appears to be at least eight to nine feet of 20th century fill on the Project Site, and hills up to 25 feet above the 19th-century ground level are located on Block 4448.

A. RESULTS OF FIELDWORK

During the week of December 15, 2008, a small field crew conducted archaeological fieldwork within the roughly 500 foot by 1,200 foot area identified as having archaeological potential for prehistoric resources during the Phase 1A survey. This area is depicted on Figure 1. Fieldwork consisted of the archaeological monitoring of the excavation of 8 large trenches (numbered 1 through 8), the hand clearing of portions of the trench walls and the trench floors, and the hand excavation of a total of 11 shovel test pits into the floors of the trenches (1 or 2 per trench depending upon the area of the trench bottom).

The rectangular trenches were excavated in a north-south oriented row along the center of the area of sensitivity, beginning at a point 33 feet south of the Flatlands Avenue sidewalk and extending a distance of approximately 500 feet to a point approximately 100 feet north of Vandalia Avenue, along the west side of Elton Street. The eastern side of this row of trenches was located approximately 35 feet east of the west side of Elton Street. The approximate location of this row of trenches is depicted on Figure 1. Each trench measured between 25 and 45 feet along each side and was excavated to from 10 to 12 feet below the current ground surface with a CAT 320 excavator. The machine excavated soils consisted of several thick layers of loose, unconsolidated pale brown sands to 9-12 feet below ground surface, followed by 1-2 feet of denser and darker sands and modern garbage associated with dumping activity that occurred in the area since the 1930s. According the Phase 2 Environmental Assessment (Langan 2007), much of these sands were hydraulically deposited from Jamaica Bay during large scale land reclamation. In several trenches, the remnants of a disturbed original ground surface were encountered below the fill levels, followed by lighter subsoils. This remnant of the original ground surface was from 1 to 12 inches thick and was not present in all of the trenches.

A summary of the fieldwork is presented below, organized by trench. A summary of the small number of recovered artifacts follows.

TRENCH 1

Trench 1 was excavated 33 feet south of Flatlands Avenue and measured approximately 25 feet by 25 feet (Photograph 1). This trench was excavated to approximately 10.5 feet below ground surface and a 10 foot by 10 foot area at the trench bottom was cleared to allow for excavation of a shovel test pit. The 10.5 feet of soil excavated from this trench consisted of:

- 0 – 3 feet below ground surface: 10YR 5/4 yellow brown sand fill,
- 3 – 9 feet below ground surface: 10YR 8/2 very pale brown fine sand, a large piece of concrete sewer pipe was removed from this layer,
- 9 – 10 feet below ground surface: 10YR 3/2 very dark gray brown sandy silt fill with plastic and metal refuse and a strong petroleum odor,

- 10 – 10.5 feet below ground surface: 10YR 4/4 dark yellow brown sand.

Shovel Test Pit 1.1 was excavated at a depth of 10.5 feet, in the center of the floor of Trench 1, and was circular with a diameter of 16 inches (Photograph 2). Two soil layers were encountered: 0 – 16 inches, 7.5YR 5/6 strong brown coarse sand with gravel mixed with 10YR 4/4 silty sand with heavy fine gravel; followed by 16 – 44 inches, 10YR 5/6 yellow brown fine to medium sand. Water began to accumulate at the bottom of this test pit at a depth of 42 inches below the floor of Trench 1, a depth of about 14 feet below ground surface.

No artifacts were recovered from this test pit or trench. It appears that the soils excavated in the test pit are natural subsoils, though the first layer of subsoil appears to have been disturbed. A buried ground surface was absent in this trench.

TRENCH 2

Trench 2 was excavated immediately to the south of Trench 1, at a distance of approximately 60 feet south of Flatlands Avenue. This trench had dimensions of approximately 30 feet by 30 feet and was excavated to a depth of 12 feet below ground surface. A series of fill layers similar to those excavated in the previous trench were encountered in Trench 2. Two test pits were excavated into the floor of this trench: Test Pit 2.1, excavated along the northern side of the trench; and Test pit 2.2, excavated in the center, approximately 5 feet south of Test Pit 2.1.

Test Pit 2.1 was excavated as a 16 inch by 24 inch rectangle and yielded 1.5 feet of mixed fill deposits (Figure 2, Photographs 3 and 4) followed by what appeared to be disturbed subsoil (10YR 5/6 yellow brown fine to medium loose sand), similar to that encountered at the bottom of Test Pit 1.1. Several pieces of modern refuse and shells were observed but not collected from the upper fill layers.

Test Pit 2.2 was circular and had a diameter of 16 inches. It was opened at the center of the floor of Trench 2, 5 feet south of Test Pit 2.1, at a depth of 12 feet below ground surface. The following is a description of the soils:

- 0 – 12 inches: 10YR 6/4 light yellow brown sand fill,
- 12 – 18 inches: 10YR 3/2 very dark gray brown silty coarse sand with well preserved twigs and roots, mixed with lighter soils from above,
- 18 – 36 inches: 10YR 4/4 dark yellow brown medium coarse sand.

Water began to accumulate at the bottom of this test pit at a depth of 32 inches below the floor of Trench 2, a depth of about 15 feet below ground surface. It appears that the 10YR 3/2 silty coarse sand layer is the disturbed remnants of the original ground surface, followed by a lighter sandy subsoil. No artifacts or features were observed.

TRENCH 3

Approximately 8 feet of loose, unconsolidated sandy fill followed by 2 feet of very dark and dense silty sand with modern refuse was excavated from Trench 3, which measured 25 feet by 25 feet. A roughly 6 foot by 6 foot area at the bottom of this trench was hand cleared, exposing a layer of gritty coal ash at the bottom of the refuse layer. Test Pit 3.1 was excavated into this deposit, at a depth of 10 feet below ground surface. This circular pit with a diameter of 16 inches encountered the following soils:

- 0 – 3 inches: 10YR 3/2 very dark gray brown silty coarse sand with coal ash,

- 3 – 12 inches: 10YR 4/4 dark yellow brown medium coarse sand with heavy gravel,
- 12 – 30 inches: 10YR 5/4 yellow brown fine sand.

As in the previous trench, the remnants of the original ground surface were encountered in Trench 3, though at a shallower depth of approximately 10 feet below ground surface. Once again no artifacts or features were observed in this layer.

TRENCH 4

This trench measured approximately 35 feet by 30 feet and was located about 250 feet south of Flatlands Avenue. Once again the remnants of the original ground surface were encountered beneath about 11 feet of 20th century fill (Photographs 5 and 6). A 10 foot by 10 foot area was hand cleared at the bottom of Trench 4 at a depth of 10 feet below ground surface. A test pit measuring 4 feet by 2 feet was excavated in the center of this cleared area, encountering the following soil layers:

- 0 – 8 inches: 10YR 3/2 very dark gray brown silty coarse sand fill with modern refuse,
- 8 – 10 inches: 10YR 3/3 dark brown medium sand partially disturbed with mixed lighter sands,
- 10 – 20 inches: 7.5YR 4/6 strong brown medium coarse sand with heavy gravel,
- 20 – 22 inches: 10YR 5/6 yellow brown medium to fine sand,
- 22 – 37 inches: 7.5YR 4/6 strong brown medium coarse sand with heavy gravel.

Only a very thin layer of the original ground surface was encountered in this trench beneath the modern fill deposits. This layer was generally about 2 inches thick but was mottled with lighter sands and was followed by lighter subsoils. No artifacts or features were observed in this deposit or in the subsoils.

TRENCH 5

Trench 5 measured 30 feet by 30 feet and encountered 10 feet of loose unconsolidated sandy fills. However, unlike in the other trenches, the darker layer of modern refuse was absent in this trench. Below the fills, a thin layer of the original ground surface was encountered (Photographs 7 and 8). A 6 foot by 6 foot portion of this buried ground surface was shovel scraped, and 10 artifacts were recovered: 7 pieces of window or bottle glass, 1 piece of whiteware, and 1 piece of plastic. A single test pit measuring 2 feet by 18 inches was excavated into the floor of Trench 5, at a depth of 12 feet below ground surface; it encountered the following soils (Figure 3):

- 0 – 2 inches: 10YR 3/3 dark brown slightly silty sand, 1 piece of blue-grey glazed ceramic floor tile,
- 2 – 12 inches: 10YR 5/6 yellow brown compact sand with gravel.

Once again only a very thin portion of the buried original ground surface was encountered in this trench. Though the layer yielded a small number of artifacts, they were generally non diagnostic and included a piece of plastic. No features were observed.

TRENCH 6

Trench 6 measured 30 feet by 30 feet and encountered 9 feet of dark loose sand with cobbles and brick followed by 2 feet of loose very pale brown fine sand followed by disturbed remnants of the original ground surface. At a depth of approximately 11 feet below ground surface, a 10 foot by 6 foot area of the trench floor was hand cleared. Remnants of the original ground surface were exposed along the entire area although it was thinner along the southern half. Two test pits were excavated into the floor of the trench, one in the northern half (Test Pit 6.1) and one in the southern half (Test Pit 6.2) (Photographs 9 and 10).

Test Pit 6.1 encountered 11 inches of 10YR 3/2 very dark gray brown sand, the thickest layer of the original ground surface identified during the present survey. This layer yielded 8 artifacts (miscellaneous glass, metal, and brick). A 4 inch sample of the 10YR 4/6 dark yellow brown subsoil was excavated below the buried ground surface; no artifacts were recovered.

Test Pit 6.2 was excavated 2 feet south of Test Pit 6.1, in the center of the trench floor. Disturbed soils were encountered, which turned out to be the builder's trench of a 2-inch diameter iron pipe oriented east west. The pipe was buried in the 10YR 4/6 subsoil at a depth of 13 feet below the ground surface in an 8-inch thick builder's trench that contained mixed 10YR 3/2 very dark gray brown sands. The pipe appeared to be intact and of 20th century construction. No other features were observed in this trench.

TRENCH 7

Trench 7 was excavated to the north of Trench 6, the only two trenches to be excavated out of order. The southern edge of this trench was located a distance of 115 feet north of Vandalia Avenue. A total of 11 feet of loose sandy fills were excavated from this 25 foot by 25 foot trench before remnants of the original buried ground surface were encountered. An 8 foot by 6 foot area of the trench floor was hand cleared and two test pits spaced 3 feet apart were excavated into this cleared area.

Test Pit 7.1 was excavated along the east side of the trench floor. It yielded a 12-inch-thick layer of the 10YR 3/2 very dark gray brown slightly silty sand buried original ground surface followed by 10 inches of 10YR 5/4 yellow brown medium sand subsoil (Photograph 11). Strangely, the interface between the two layers undulated, indicating the possibility that the buried ground surface had in fact been redeposited and was not intact. In addition, the color and texture of this deposit appears different from that encountered in other trenches, further suggesting that it is fill or redeposited.

Test Pit 7.2 was excavated along the west side of the cleared area and yielded similar soils as the first test pit. The interface between the buried ground surface and the subsoil undulated in Test Pit 7.2 as well. A total of 17 artifacts were recovered from the buried ground surface in Test Pit 7.1 (shell, bone, glass, ceramics, metal, and tar paper) and 9 artifacts were recovered from the buried ground surface in Test Pit 7.2 (glass, brick, ceramic, nail). Two modern artifacts, a clay pigeon fragment and a piece of safety glass, were also recovered from Test Pit 7.2. No artifacts were recovered from the subsoil in either test pit, or any features.

TRENCH 8

Trench 8 was the southern most trench excavated during the Phase 1B survey and was excavated immediately south of Trench 6; its southern edge was located approximately 35 feet north of the northern side of Vandalia Avenue. Although the area of sensitivity does extend to the south of

Vandalia Avenue, the area was being used as a construction staging area and was inaccessible during the time period when fieldwork occurred. After removal of 12 feet of modern sandy fills, a darker layer thought to be the disturbed remains of the original ground surface was exposed. A 10 foot by 10 foot portion of the floor of Trench 8 was hand cleared and two test pits were excavated.

Test Pit 8.1 was excavated along the east side of the trench floor (Photograph 12) and encountered the following Stratigraphy (Figure 4):

- 0 – 10 inches: 10YR 3/2 very dark gray brown slightly silty sand mixed with 10YR 2/1 black silty sand organic loam. This layer was mottled and contained lenses of mixed soil and had a petroleum odor,
- 10 – 20 inches: 10YR 4/4 dark yellow brown medium coarse sand.

Test Pit 8.2 was excavated 4 feet west of the other pit and encountered similar Stratigraphy: 0 – 17 inches of redeposited 10YR 3/2 and 10YR 3/3 with petroleum odor; followed by 17 – 24 inches of 10YR 4/4 dark yellow brown sandy subsoil. Though no artifacts were recovered from Test Pit 8.1, 19 were collected from the dark redeposited layer in Test Pit 8.2. These artifacts included glass, ceramic, plastic, and auto safety glass, indicating a disturbed modern provenience.

B. RESULTS OF LABORATORY ANALYSIS

A total of 64 artifacts were collected from 4 of the 8 trenches excavated during the Phase 1B survey (Trenches 5, 6, 7, and 8), although additional artifacts were observed but not collected in the modern fill layers of each of the trenches. All of the artifacts were recovered either through shovel scraping the surface of the remnant of the original ground surface or from the first level of the test pits excavated into this layer. No artifacts were collected from the subsoil. Appendix A contains a description of each artifact.

The artifacts recovered consist of a generic mixture of architectural and domestic refuse such as brick, wood, window and bottle glass, ceramics, metal, shell, and bone. Although several pieces of 19th century ceramics were collected, they were found in association with 20th century artifacts. The assemblage includes a few pieces of plastic, clay pigeon fragments, and auto safety glass, all artifacts with a clear 20th century provenience. The assemblage is reflective of the disturbed or redeposited stratigraphy from which it was collected and has no research value. No prehistoric artifacts were observed.

Archaeological testing of the Gateway Estates II project site involved the excavation of a series of 8 large trenches in a row through the center of the portion of the project site identified as being sensitive for the presence of prehistoric resources. These trenches had a total length of approximately 250 feet and required the removal of over 70,000 cubic feet of modern fill. In most of these trenches, the remnants of the original ground surface and intact subsoils were encountered beneath 10 to 12 feet of modern fill. However, through shovel scraping and the hand excavation of a series of 11 test pits it was determined this buried ground surface has been heavily disturbed and mixed with the overlying fills. A small assemblage of mixed historic and modern artifacts was recovered from this ground surface. No historic or prehistoric features were observed. The area has been determined to possess little to no potential to yield significant archaeological resources.

Therefore, based on the consistent absence of intact artifact deposits and/or features clearly dating to the prehistoric or historic period through the center of the area of sensitivity, it is concluded that additional fieldwork would most likely result in the collection of redundant data and would not contribute to our knowledge of the area's history and no additional testing is recommended.

References

References

Historical Perspectives, Inc.

1993 *Phase IA Archaeological Assessment, Gateway Estates Site, CEQR No. 93-HPD014-K.*
On file at the New York City Landmarks Preservation Commission.

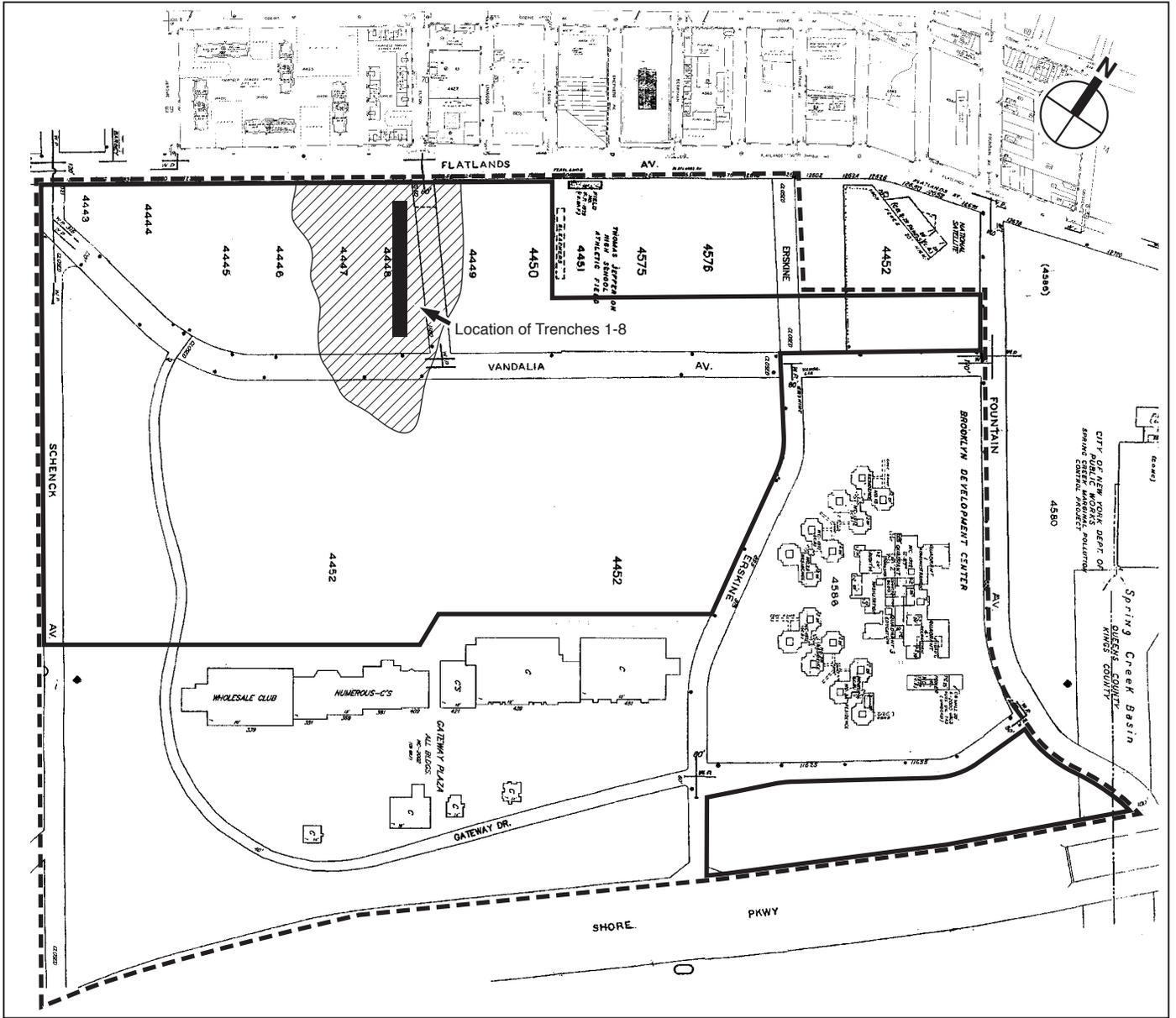
Langan Engineering and Environmental Services

2008 *Phase II Environmental Site Investigation Report for Gateway Estates Phase II, Brooklyn, New York, CEQRA No. 07HPD021K, NYCDEP Tracking No. 07DEPTECH301Q.* Prepared for New York City Department of Environmental Protection.

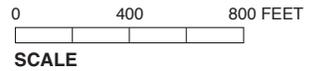
South, Stanley

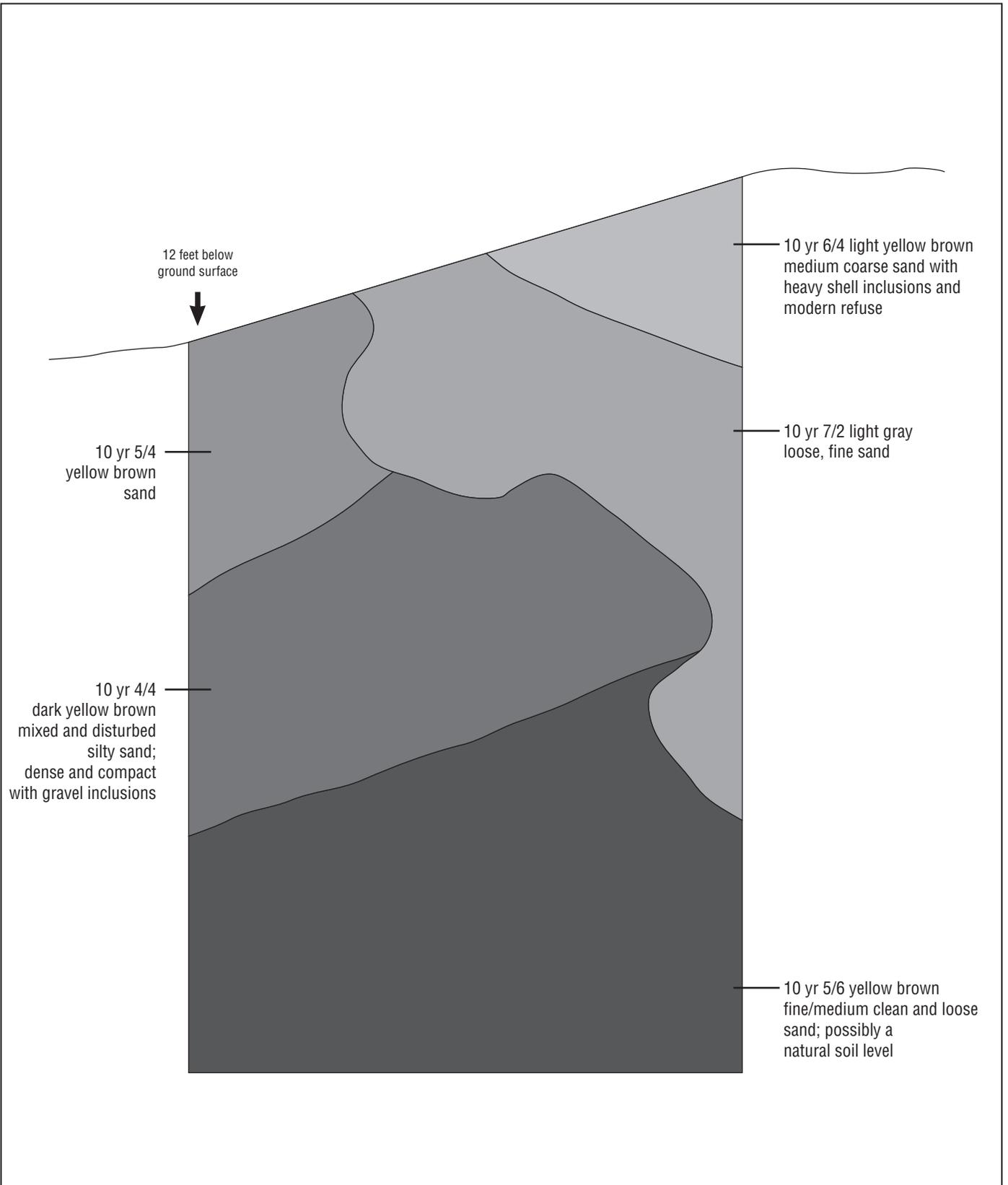
1977 *Method and Theory in Historical Archaeology.* Academic Press, New York. *

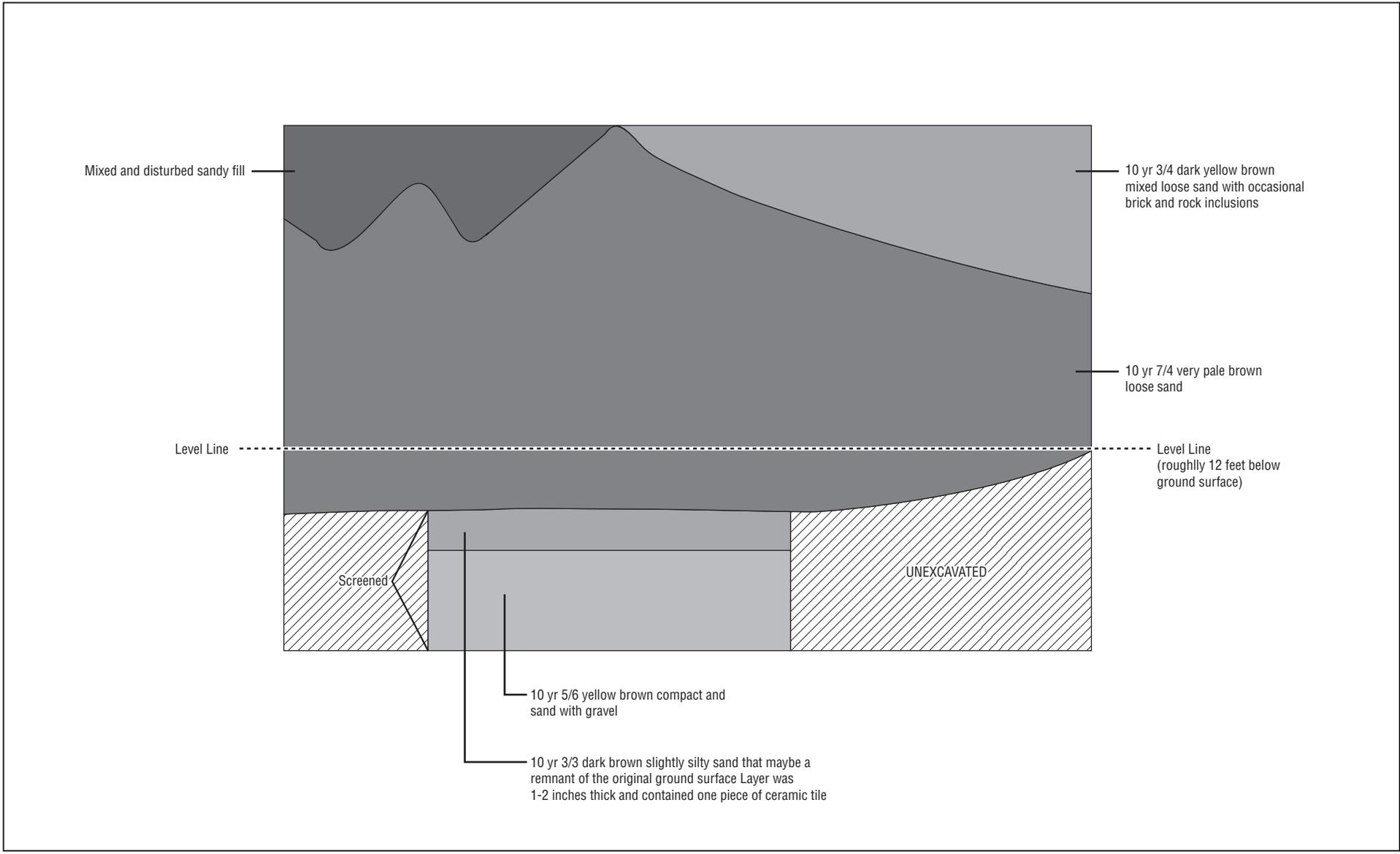
Figures



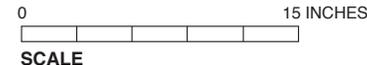
-  Project Site Boundary
-  Fresh Creek Urban Renewal Area Boundary
-  Area of Archaeological Sensitivity

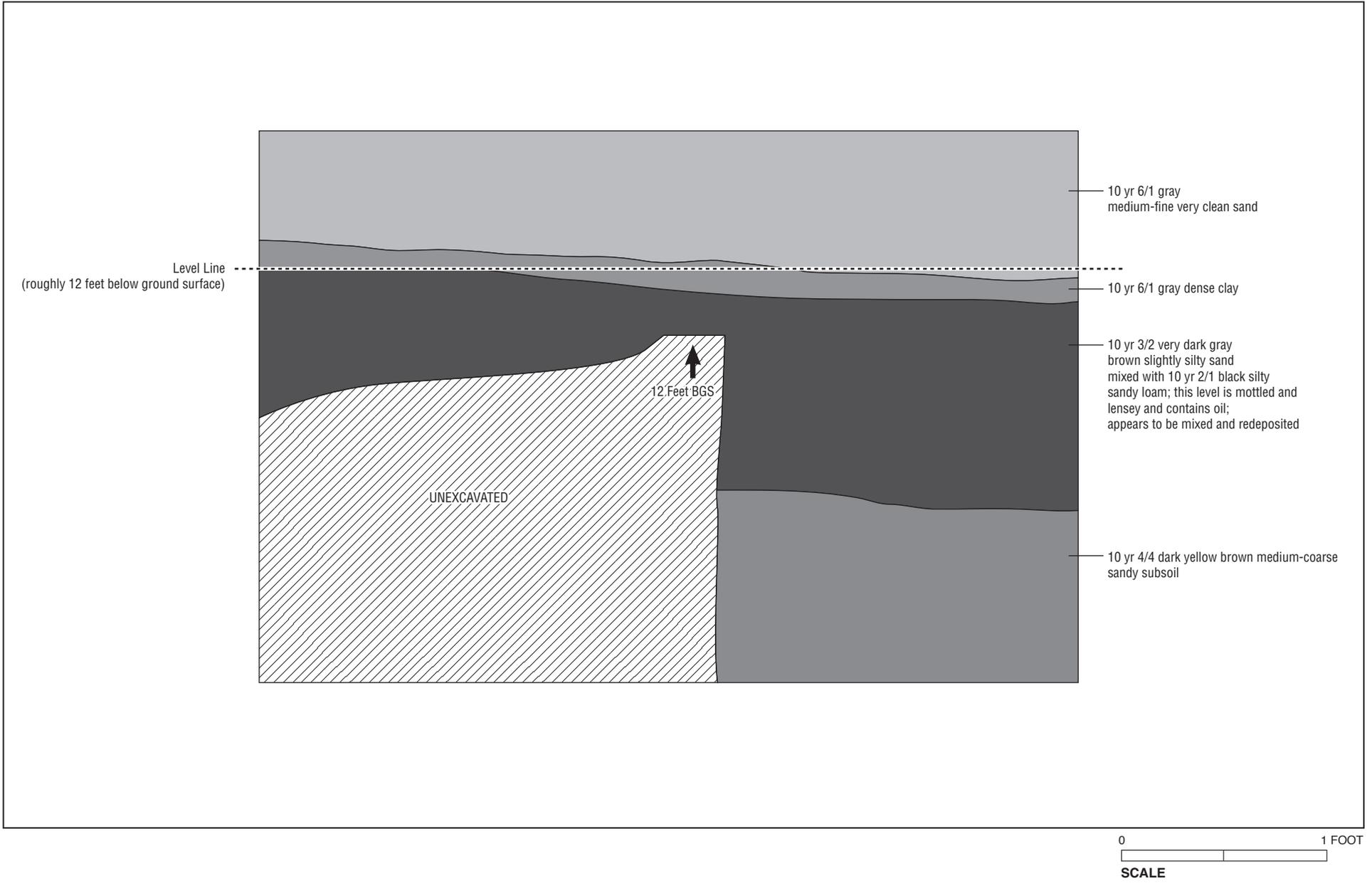






NOTE: STP Contained approximately 10 feet of sandy fill but lacked a layer of dark landfill containing modern refuse.





Photographs



Facing south from south of Flatlands Avenue on the west side of Elton Street showing Trench 1 and excavation of Trench 2 **1**



Facing east showing completed Trench 1 with Test Pit 1.1 located at its bottom and Elton Street in the background. Note 10 feet of loose sandy fill overlying natural subsoils **2**



Facing north showing north wall of Test Pit 2.1 at a depth of 12 feet below ground surface in Trench 2. Note mixed sandy fills overlying subsoils **3**



Facing west showing west wall of Test Pit 2.1 at a depth of 12 feet below ground surface in Trench 2. Note mixed sandy fills overlying subsoils **4**



Facing north showing north wall of Test Pit 4.1 at a depth of 11 feet below ground surface in Trench 4. Note dark modern refuse layer overlying thin dark brown remnant of the original ground surface **5**



Facing north showing north wall of Trench 4 and Test Pit 4.1 at a depth of 11 feet below ground surface on the trench floor. Note dark modern refuse layer overlying natural subsoils **6**



Facing north showing north wall of Test Pit 5.1 at a depth of 10 feet below ground surface in Trench 5. Note loose very pale brown sandy fills overlying thin dark brown remnant of the original ground surface and subsoils

7



Facing north showing north wall of Trench 5 and Test Pit 5.1 at a depth of 10 feet below ground surface on the trench floor. Note thick fill layers on top of thin dark remnant of ground surface and subsoils

8



Facing south showing south wall of Trench 6 and shovel cleared trench floor at a depth of 12 feet below ground surface **9**



Facing east showing east-west oriented iron pipe and builder's trench within light brown subsoils on floor of Trench 6 at a depth of 12 feet below ground surface **10**



Facing east showing east wall of Test Pit 7.1 and shovel cleared floor of Trench 7 at a depth of 11 feet below ground surface. **11**
Note overlying sandy fills, very dark brown possible buried ground surface, and undulating interface with subsoil



Facing east showing east wall of Test Pit 8.1 on the floor of Trench 8 at a depth of 12 feet below ground surface. **12**
Original ground surface has been disturbed and smelled strongly of petroleum



Facing south from south side of Flatlands Avenue showing backfilled trenches on the east side of Elton Street **13**

Appendix A

Artifact Catalogue

Appendix A: Artifact Inventory

Trench	Location	Depth	Group	Artifact TPQ	Class	Ware Type	Material	Function	Parts	Total	Remarks
5	STP 5.1, L.1	0-2"	Architectural		Floor covering	Porcelain		Floor tile	Fragment	1	Blue-grey glaze
5	Shovel scraping of Buried A	0-4"	Architectural		Architectural glass		Glass	Window glass	Fragment	5	Clear and aqua tinted
5	Shovel scraping of Buried A	0-4"	Kitchen		Container		Glass	Bottle?	Fragment	2	Clear
5	Shovel scraping of Buried A	0-4"	Kitchen		Dishes	Whiteware		Dish?	Fragment	1	Hand-painted blue stripe around edge
5	Shovel scraping of Buried A	0-4"	Unident	Ca. 1938-Present	Unident		Plastic	Unident	Fragment	2	Small thin white fragments
Total Artifacts Recovered from Trench 5										11	
6	STP 6.1	11' bgs	Architectural		Architectural glass		Glass	Window glass	Fragment	2	
6	STP 6.1	11' bgs	Kitchen		Container		Glass	Bottle?	Body	1	Clear
6	STP 6.1	11' bgs	Kitchen		Dishes	Porcelain		Dish?	Body	1	Undecorated
6	STP 6.1	11' bgs	Unident		Unident		Glass	Mirror?	Fragment	1	Very thick glass with metallic backing
6	STP 6.1	11' bgs	Architectural		Construction materials		Brick	Brick	Fragment	1	
6	STP 6.1	11' bgs	Unident		Unident		Metal	Unident	Fragment	1	Corroded

Gateway Estates – Phase 1B Archaeological Survey

Trench	Location	Depth	Group	Artifact TPQ	Class	Ware Type	Material	Function	Parts	Total	Remarks
6	STP 6.1	11' bgs	Activities		Transportation		Metal	Misc. Metal Plate	Whole	1	Embossed with: "A.C.S. MOTOR TYPE 1SF/ WESTERN ELECTRIC COMPANY, U.S.A., KS 5949/ 115/90V- SER.NO./FORD INSTRUMENT CO., INC./ LONG ISLAND CITY CO., NY/ DRG. NO. 173166-1."
Total Artifacts Recovered from Trench 6										8	
7	STP 7.1 (Buried A)		Activities		Ethnofaunal zoological			Clam shell	Fragment	1	
7	STP 7.1 (Buried A)		Activities		Ethnofaunal zoological			Bone	Fragment	1	Fragment too small to identify
7	STP 7.1 (Buried A)		Architectural		Architectural glass		Glass	Window glass	Fragment	4	Thin, clear and aqua-tinted
7	STP 7.1 (Buried A)		Activities		Transportation		Glass	Auto safety glass	Fragment	4	Thick, clear, crazed
7	STP 7.1 (Buried A)		Kitchen		Container		Glass	Soda bottle?	body	1	Embossed checkerboard pattern on curving clear glass
7	STP 7.1 (Buried A)		Unident	Ca. 1938-Present	Unident		Plastic	Unident	Fragment	1	Small dark blue curving fragment
7	STP 7.1 (Buried A)		Infrastructure		Pipe	Earthenware		Sewer pipe	Fragment	2	
7	STP 7.1 (Buried A)		Unident		Unident		Metal	Unident	Fragment	1	Corroded
7	STP 7.1 (Buried A)		Kitchen	1840-1880	Dishes	Whiteware	Kitchen	Unident	Fragment	1	Red transfer print floral pattern one on side; clear glaze on other side.
7	STP 7.1 (Buried A)		Architectural	Ca. 1880-present	Tar paper		Felt/tar	Roofing felt?	Fragment	1	

Trench	Location	Depth	Group	Artifact TPQ	Class	Ware Type	Material	Function	Parts	Total	Remarks
7	STP 7.2 (Buried A)		Activities	Ca. 1920-present	Hunting related		(Limestone and pitch?)	Clay pigeon	Body	1	
7	STP 7.2 (Buried A)		Activities	1903-present	Transportation		Glass	Auto safety glass	Fragment	2	Thick clear crazed, possibly vehicle safety glass
7	STP 7.2 (Buried A)		Kitchen		Container		Glass	Wine glass?	Base	1	Half of octagonal base; clear glass
7	STP 7.2 (Buried A)		Unident		Unident		Glass	Unident	Fragment	1	Very small clear glass fragment
7	STP 7.2 (Buried A)		Architectural		Brick		Brick	Brick	Fragment	1	
7	STP 7.2 (Buried A)		Kitchen	1820-present	Dishes	Whiteware		Unident	Fragment	1	
7	STP 7.2 (Buried A)		Architectural	Ca. 1910-present	Construction Materials		Metal	Wire Nail	Fragment	2	
Total Artifacts Recovered from Trench 7										26	
8	STP 8.2	0-4" bgs	Architectural		Architectural glass		Glass	Window glass	Fragment	5	All fragments are thin and clear or aqua tinted
8	STP 8.2	0-4" bgs	Activities	1903-present	Transportation		Glass	Auto safety glass	Fragment	1	Thin, clear, crazed,
8	STP 8.2	0-4" bgs	Kitchen		Container		Glass	Bottle	Fragment	3	Two fragments are brown-tinted, thin, likely beer bottle; One appears to be composed of two layers: one clear, one milk.
8	STP 8.2	0-4" bgs	Unident	Ca. 1938-Present	Unident		Plastic	Unident	Fragment	4	One thick black fragment; one thin clear wrapper
8	STP 8.2	0-4" bgs	Activities	Ca. 1920-present	Hunting related		(Limestone and pitch?)	Clay pigeon	Fragment	2	
8	STP 8.2	0-4" bgs	Kitchen	1820-present	Dishes	Whiteware			Fragment	1	Undecorated
8	STP 8.2	0-4" bgs	Kitchen	1820-present	Dishes	Whiteware			Fragment	2	Blue transfer print

Gateway Estates – Phase 1B Archaeological Survey

Trench	Location	Depth	Group	Artifact TPQ	Class	Ware Type	Material	Function	Parts	Total	Remarks
8	STP 8.2	0-4" bgs	Unident		Unident	Earthenware			Fragment	1	No glaze on fragment
Total Artifacts Recovered from Trench 8										19	
TOTAL Artifacts Recovered from Site										64	



**New York State Office of Parks,
Recreation and Historic Preservation**

Historic Preservation Field Services Bureau • Peebles Island, PO Box 189, Waterford, New York 12188-0189

518-237-8643

www.nysparks.com

September 16, 2008

Patrick B.

David A. Paterson
Governor

Carol Ash
Commissioner

Shampa Chanda
Department of Housing Preservation and Development
100 Gold St., Room 5-G3
New York, New York 10038

Re: HUD, DEC
Gateway Estates II
Bounded by Hendrix Creek, Shore Pkwy.,
Fountain Ave
BROOKLYN, Kings County
07PR01103

Dear Ms. Chanda:

Thank you for requesting the comments of the State Historic Preservation Office (SHPO). We have reviewed the project in accordance with Section 106 of the National Historic Preservation Act of 1966. These comments are those of the SHPO and relate only to Historic/Cultural resources. They do not include potential environmental impacts to New York State Parkland that may be involved in or near your project. Such impacts must be considered as part of the environmental review of the project pursuant to the National Environmental Policy Act and/or the State Environmental Quality Review Act (New York Environmental Conservation Law Article 8).

Based upon this review, it is the SHPO's opinion that your project will have No Effect upon cultural resources in or eligible for inclusion in the National Registers of Historic Places.

If further correspondence is required regarding this project, please be sure to refer to the OPRHP Project Review (PR) number noted above.

Sincerely,

Ruth L. Pierpont
Director