
**Phase I Archaeological Investigation
The Pavilion at Locust Manor
171 - 04 Baisley Blvd
Jamaica, Borough of Queens, New York**

LPC# 30426_FSO_ALS_05282015
OPRHP # 15HPDO76Q

Prepared For:

**The D & F Development Group
100 Schoolhouse Road
Levittown, NY 11756**

Submitted To:

**New York City Landmarks Preservation Commission
Municipal Building
1 Center Street, 9th Floor, North
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And

**New York State Division for Historic Preservation
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June 2015



ARCHAEOLOGY & HISTORIC RESOURCE SERVICES

MANAGEMENT SUMMARY

SHPO Project Review Number: **15HPDO76Q**

Involved State and Federal Agencies: **N/A**

Phase of Survey: **Phase I Archaeological Investigation**

Location Information

Location: **171-04 Baisley Boulevard**
Minor Civil Division: **Neighborhood of Jamaica**
County: **Queens**

Survey Area

Length: **maximum of 150 feet (46 meters) east to west**
Width: **100 feet (30 meters) north to south**
Number of Acres Surveyed: **0.35 acres**

USGS 7.5 Minute Quadrangle Map: **Jamaica**

Archaeological Survey Overview

Number & Interval of Shovel Tests: **10 spaced 33-feet & 1 6-foot by 18-foot trench**
Number & Size of Units: **N/A**
Width of Plowed Strips: **N/A**
Surface Survey Transect Interval: **N/A**

Results of Archaeological Survey

Number & name of precontact sites identified: **N/A**
Number & name of historic, sites identified: **N/A**
Number & name of sites recommended for Phase II/Avoidance: **N/A**

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Date of Report: **June 2015**

ABSTRACT

This report describes the Phase IA/1B Archaeological Survey for the Pavilion at Locust Manor project located at 171-4 Baisley Boulevard, Jamaica, Queens, New York. Archaeology & Historic Resource Services, LLC (AHRs) was retained by D & F Development Group to conduct a Phase IA/IB Archaeological Survey in order to determine the archaeological sensitivity and, if necessary, field testing for the project's Area of Potential Effect (archaeological-APE). D & F Development Group is proposing to construct a new 8-story building with 84 affordable housing units, one superintendent unit, 30 accessory parking spaces, and a 1,200 square foot courtyard area. A site location map and recent aerial photograph are included as Figures 1 and 2 respectively.

The AHRs cultural resource specialists that performed the investigations and prepared the report meet or exceed the criteria outlined in 36 CFR 66.3(b) (2) and 36 CFR 61. Résumés of the key personnel are presented in Appendix A. All work for this project was performed in accordance with the Secretary of the Interior Standards and Guidelines for Archaeology and Historic Preservation 1983; the amended Procedures for the Protection of Historic and Cultural Properties, as set forth in 36 CFR 800; and New York State Historic Preservation Act of 1980, Section 14.09 and New York State Historic Preservation Office (SHPO) guidelines, SHPO Phase I Archaeological Report Format Requirements (2005) and requirements, New York City Landmarks Preservation Commission (LPC) Guidelines for Archaeological Work in New York City (2002) and the CEQR Technical Manual (2014).

AHRs created and submitted a Preliminary Cultural Resource Assessment memorandum to New York City Landmarks Preservation Commission (LPC) on May 21, 2015 and the New York State Office of Parks, Recreation and Historic Preservation (OPRHP) on May 26, 2015. As part of the preliminary assessment, AHRs conducted research for previous cultural resource surveys online at the Cultural Resource Information System (CRIS), the NYC LPC online archaeology reports, reviewed historic maps and aerial photographs, performed a site visit and pedestrian survey, reviewed the soil survey report and the borings logs from a geotechnical report prepared by Soil Mechanics Drilling Company for the APE.

Based upon the results of Preliminary Assessment, the archaeological-APE was assessed to have a moderate to high sensitivity for prehistoric and nineteenth-century resources. AHRs recommended subsurface testing to confirm the absence or presence of buried prehistoric or historic cultural resources and determine if the proposed development would impact any archaeological resources, if present. The preliminary assessment included a proposed Scope of Work for the subsurface testing. LPC concurred with this assessment and approved the proposed Scope of Work in a Final Sign Off memorandum dated May 28, 2015. OPRHP responded with a determination of "no impact to archaeological and/or historic resources listed in or eligible for the New York State and National Registers of Historic Places" on May 29, 2015.

AHRs excavated a total 10 shovel tests for the Phase IB testing to determine if buried prehistoric archaeological materials and nineteenth-century foundations, features (wells, privies and cisterns) or historic artifact concentrations existed within the archaeological-APE. All shovel tests were negative for prehistoric resources. Two shovel tests contained single fragments of

clear bottle glass in the upper soil stratum directly underlying the fill soil. These fragments may have been intrusive from the overlying fill soil layer. In addition AHRS monitored the machine excavation of a 6-foot by 18-foot exploratory trench to determine the presence of nineteenth-century foundations, features (wells, privies and cisterns) or historic artifact concentrations. The exploratory trench was excavated in the approximate location of a late nineteenth-century dwelling and associated structure (stable, shed, or garage) as depicted on the historic maps. The exploratory trench resulted in no evidence of buried artifact deposits, structure foundations, or any other structures (wells, privies, cisterns) that would be expected associated with a historic dwelling.

Based on the absence of prehistoric artifacts and nineteenth-century foundation, features or artifact deposits encountered during the Phase 1B subsurface testing, AHRS conclude that there are no archaeological features or deposits in the archaeological-APE. Therefore, AHRS recommends no further archaeological testing within the archaeological-APE.

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1.0 INTRODUCTION

This report describes the Phase IA/IB Archaeological Survey conducted by Archaeology and Historic Resource Services (AHRS) prepared for D & F Development Group for the Pavilion at Locust Manor, Jamaica, Borough of Queens, New York. The assessment was conducted to support the project environmental assessment under the State Environmental Quality Review Act (SEQR) and the City Environmental Quality Review (CEQR). The New York City Landmarks Preservation Commission requested the Phase IA/IB Archaeological Survey in their letter dated April 30, 2015. A site location map and aerial photograph are included as Figures 1 and 2 respectively.

The AHRS cultural resource specialists that performed the investigations and prepared the report meet or exceed the criteria outlined in 36 CFR 66.3(b) (2) and 36 CFR 61. Résumés of the key personnel are presented in Appendix A. All work for this project was performed in accordance with the *Secretary of the Interior Standards and Guidelines for Archaeology and Historic Preservation 1983*; the *amended Procedures for the Protection of Historic and Cultural Properties*, as set forth in 36 CFR 800; and New York State Historic Preservation Act of 1980, Section 14.09 and New York State Historic Preservation Office (SHPO) guidelines, SHPO *Phase I Archaeological Report Format Requirements* (2005) and requirements, *New York City Landmarks Preservation Commission (LPC) Guidelines for Archaeological Work in New York City* (2002) and the CEQR Technical Manual (2014).

1.1 Site and Project Description

The project site is a fenced vacant lot that has been filled and graded, oriented in an east - west trapezoid shaped area (Figure 2). The current ground surface elevation is approximately 22 feet above sea level. The project site measures approximately 150 feet by 100 feet. Approximately 40% of the site is covered by blacktop, with the remaining area overgrown with grass and weeds.

The project site is bounded to the north by Baisley Boulevard, to the east by 172nd Street, to the west by the high rise Locust Manor Senior Residence, and to the south by a paved parking lot. The Long Island Railroad's Far Rockaway and Long Beach lines run approximately 200 feet to the west of the project site.

D & F Development Group is proposing to construct a new 8-story building with 84 affordable housing units, one superintendent unit, 30 accessory parking spaces, and a 1,200 square foot courtyard area. Currently, D & F Development Group is working to the southwest of the project site on another Locust Manor high rise building project.

1.2 Area of Potential Effect

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

the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking.”

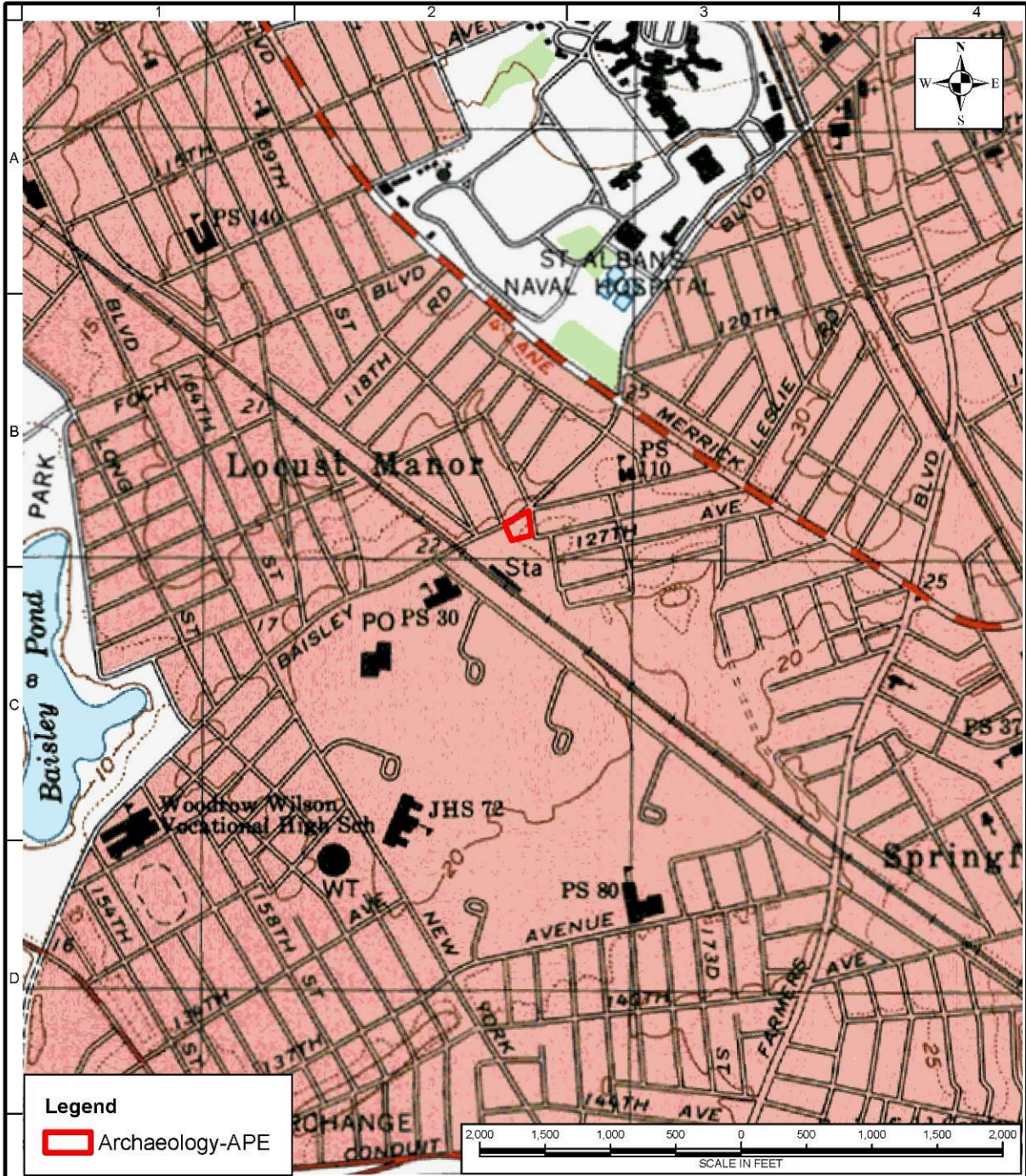
The APE includes locations that may be potentially impacted by the construction or that may experience effects once construction is completed. Included in the APE are all locations where the project may result in ground disturbance, areas that the elements of the project may be visible and where the activity may result in changes to traffic patterns, land use and public access, etc. Project effects on historic resources can include both physical effects and contextual effects. Physical effects could include physical destruction, demolition, damage or alteration of a historic resource. Contextual effects can include isolation of a property from its surrounding environment; the introduction of visual or audible elements that are out of character with the property or that alter its setting and context; or, elimination of publicly accessible views to the resource.

Archaeological

The archaeological APE encompasses any locations where project activities have the potential to disturb soils through activities such as excavation or grading. The archaeological APE was defined where ground disturbing activities are proposed and any associated disturbances (Figure 2). The archaeological-APE consists of the entire existing vacant lot and measures approximately 150 feet (46 meters) in length and 100 feet (30 meters) in width.

Architectural

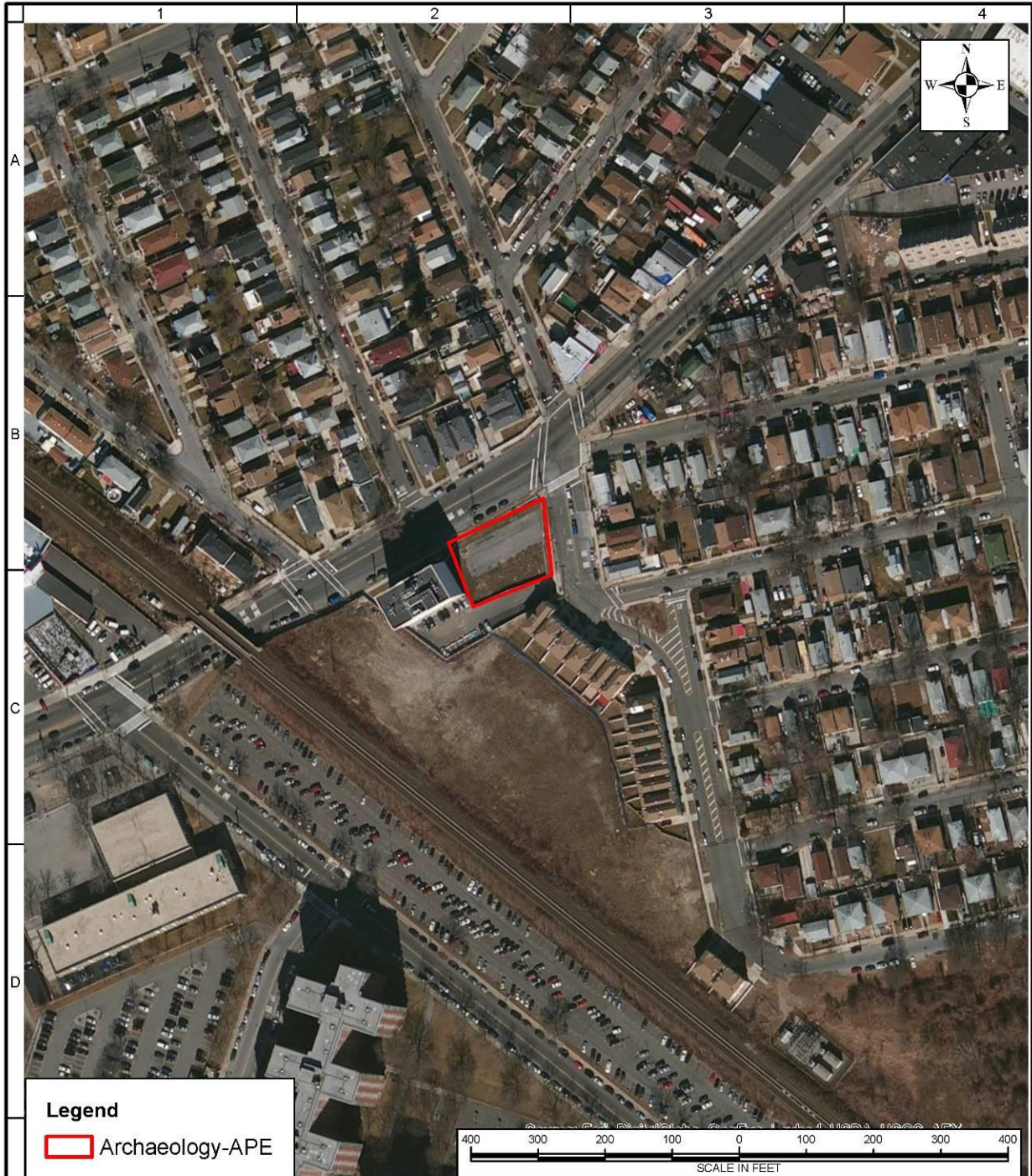
No architectural APE was delineated for the project. However, a 400-foot buffer was delineated around the archaeological-APE for the Phase 1A records search as per LPC guidelines.



Map Reference: USGS Topographic Quadrangles - JAMICA (Created 1954, Revised 1981) NY State Plane NAD 83.

	Project Name	Figure Title	Project No.	Figure
	THE PAVILION AT LOCUST MANOR	USGS SITE LOCATION MAP	201505001	1
	JAMACIA		Date	
	QUEENS COUNTY NEW YORK		5/13/2015	
			Scale	
		See Above		
		Drawn By		
		Submission Date		

Path: Y:\Locust Manor\Maps and MXD\Figure 1 - USGS Site Location Map.mxd



Map Reference: 2012 Aerial Photograph Provided by the USA Works Imagery.

	Project Name	Figure Title	Project No.	Figure
	THE PAVILION AT LOCUST MANOR JAMACIA	2012 AERIAL PHOTOGRAPH	201505001	2
	QUEENS COUNTY NEW YORK		Date	
			5/13/2015	Scale
			See Above	Drawn By
		MDA	Submission Date	

Path: Y:\Locust Manor\Maps and MXD\Figure 2 - 2012 Aerial Photograph.mxd

2.0 RESEARCH GOALS AND DESIGN

This chapter describes the general research goals and design for the assessment of the significance of archaeological and architectural resources to determine potential eligibility for nomination to the National Register of Historic Places.

2.1 Archaeology

The preliminary Phase 1A archaeological survey begins with identifying the areas where project activities have the potential to affect archaeological sites through below-ground disturbance, referred to as the archaeological APE as described in section 1.2. After defining the APE, documentary research is conducted to determine which locations could have been used during prehistoric (Native American) or historic times. The research assists in identifying areas where intact archaeological evidence, foundations, structural remains, Native American artifacts or activity areas might be present. A site visit or reconnaissance is then conducted to observe the existing conditions and determine the extent to which the original topography is still present and the effects that landscape alterations may have had on potential archaeological resources. Archaeologically sensitive areas based on topographic features, vegetation and soils are noted as well as any disturbances that would compromise archaeological resources. The result of the site visit is to determine whether archaeological testing is necessary and, if so, to develop an appropriate testing strategy.

Phase IB subsurface archaeological testing (Phase I level) is then conducted in archaeologically sensitive locations and elsewhere in the archaeological APE to identify whether potentially significant archaeological resources are present. The presence of a potentially significant Native American or historic period site requires a subsequent survey (Phase II level) to evaluate the significance or importance of the identified site, unless the site can be avoided. Usually, an archaeological site has to have the potential to yield important new information in history or prehistory to be considered significant (National Register of Historic Places Criterion D). Evaluations for significance are dependent upon the quality of archaeological data retrieved from the ground, the integrity or intactness of the deposits, prior research activities in the region and the development of historic or prehistoric contexts that identifies gaps in archaeological research that further work at the site might address.

2.2 Historic Architecture

The architectural review usually begins with the definition of the architectural-APE, the area that will experience physical or contextual effects from the project as described in Section 1.2. However, no architectural-APE was delineated for the project.

2.3 National Register of Historic Places Criteria

Determinations of significance are based on the National Register of Historic Places Criteria. Properties listed on or determined eligible for listing on the National Register can be both architectural and archaeological resources. Significant historic properties include districts, structures, objects or sites that are at least 50 years in age and which meet at least one of the

National Register criterion. Criteria used in the evaluation process are specified in 36 CFR Part 63. To be eligible for inclusion in the National Register of Historic Places, a historic property(s) must possess:

the quality of significance in American History, architecture, archeology, engineering, and culture [that] is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association and:

- (A) that are associated with events that have made a significant contribution to the broad patterns of our history, or
- (B) that are associated with the lives of persons significant in our past, or
- (C) that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components lack individual distinction, or
- (D) that have yielded, or may be likely to yield, information important in prehistory or history. (36 CFR 60.4)”

There are several criteria considerations. Ordinarily, cemeteries, birthplaces, or graves of historical figures, properties owned by religious institutions or used for religious purposes, structures that have been moved from their original locations, reconstructed historic buildings, properties primarily commemorative in nature, and properties that have achieved significance within the past 50 years shall not be considered eligible for the National Register. However, such properties will qualify if they are integral parts of districts that do meet the criteria or if they fall within the following categories:

- (A) a religious property deriving primary significance from architectural or artistic distinction or historical importance, or
- (B) a building or structure, removed from its original location but which is significant primarily for architectural value, or which is the surviving structure most importantly associated with a historic person or event, or
- (C) a birthplace or grave of a historical figure of outstanding importance if there is no other appropriate site or building directly associated with his/her productive life, or
- (D) a cemetery which derives its primary significance from graves of persons of transcendent importance, from age, from distinctive design features, or from association with historic events, or

- (E) a reconstructed building when accurately executed in a suitable environment and presented in a dignified manner as part of a restoration master plan, and when no other building or structure with the same association has survived, or
- (F) a property primarily commemorative in intent if design, age, tradition, or symbolic value has invested it with its own historic significance, or
- (G) a property achieving significance within the past 50 years if it is of exceptional importance. (36 CFR 60.4)

The physical characteristics and historic significance of the overall property are examined when conducting National Register evaluations. While a property in its entirety may be considered eligible based on Criteria A, B, C, and/or D, specific data is also required for individual components therein based on date, function, history, physical characteristics, and other information. Resources that do not relate in a significant way to the overall property may contribute if they independently meet the National Register criteria.

A contributing building, site, structure, or object adds to the historic architectural qualities, historic associations, or archeological values for which a property is significant because a) it was present during the period of significance, and possesses historic integrity reflecting its character at that time or is capable of yielding important information about the period, or b) it independently meets the National Register criteria. A noncontributing building, site, structure, or object does not add to the historic architectural qualities, historic associations, or archeological values for which a property is significant because a) it was not present during the period of significance, b) due to alterations, disturbances, additions, or other changes, it no longer possesses historic integrity reflecting its character at that time or is incapable of yielding important information about the period, or c) it does not independently meet the National Register criteria.

2.4 Criteria of Adverse Effect

Whenever a historic property may be affected by a proposed undertaking, Federal agency officials must assess whether the project constitutes an adverse effect on the historic property by applying the criteria of adverse effect. According to the Advisory Council on Historic Preservation, the criteria of adverse effect (36 CFR 800.5), is as follows:

- (1) An adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that would qualify it for inclusion in the National Register, in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Consideration shall be given to all qualifying characteristics of a historic property, including those that may have been identified subsequent to the original evaluation for the property's eligibility for the National Register. Adverse effects may include reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance or cumulative.

- (2) Adverse effects on historic properties include, but are not limited to (36 CFR 800.5(a)(2)):
- (i) Physical destruction of or damage to all or part of the property;
 - (ii) Alteration of a property, including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation and provision of handicapped access, that is not consistent with the Secretary's Standards for the Treatment of Historic Properties (36 CFR part 68) and applicable guidelines;
 - (iii) Removal of the property from its historic location;
 - (iv) Change of the character of the property's use or of physical features within the property's setting that contribute to its historic significance;
 - (v) Introduction of visual, atmospheric or audible elements that diminish the integrity of the property's significant historic features;
 - (vi) Neglect of a property which causes its deterioration, except where such neglect and deterioration are recognized qualities of a property of religious and cultural significance to an Indian tribe or Native Hawaiian organization; and
 - (vii) Transfer, lease, or sale of property out of Federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property's historic significance.

A finding of adverse effect or no adverse effect could occur based on the extent of alteration to a historic property, and the proposed treatment measures to mitigate the effects of a proposed undertaking. According to 36 CFR 800.5(3)(b):

The agency official, in consultation with the SHPO/THPO, may propose a finding of no adverse effect when the undertaking's effects do not meet the criteria of § 800.5(a)(1) or the undertaking is modified or conditions are imposed, such as the subsequent review of plans for rehabilitation by the SHPO/THPO to ensure consistency with the Secretary's Standards for the Treatment of Historic Properties (36 CFR part 68) and applicable guidelines, to avoid adverse effects.

3.0 ENVIRONMENTAL SETTINGS

This chapter briefly describes the ecological characteristics of the archaeological-APE including physiography, geology, and soils of the area. The archaeological-APE is a vacant lot, oriented east – west. The site was used as a parking lot within the last decade, but is currently surrounded by a locked fence and unused. The APE measures approximately 150 feet (46 meters) in length and 100 feet (30 meters) situated on a relatively flat parcel located in Queens County, New York.

3.1 Topography

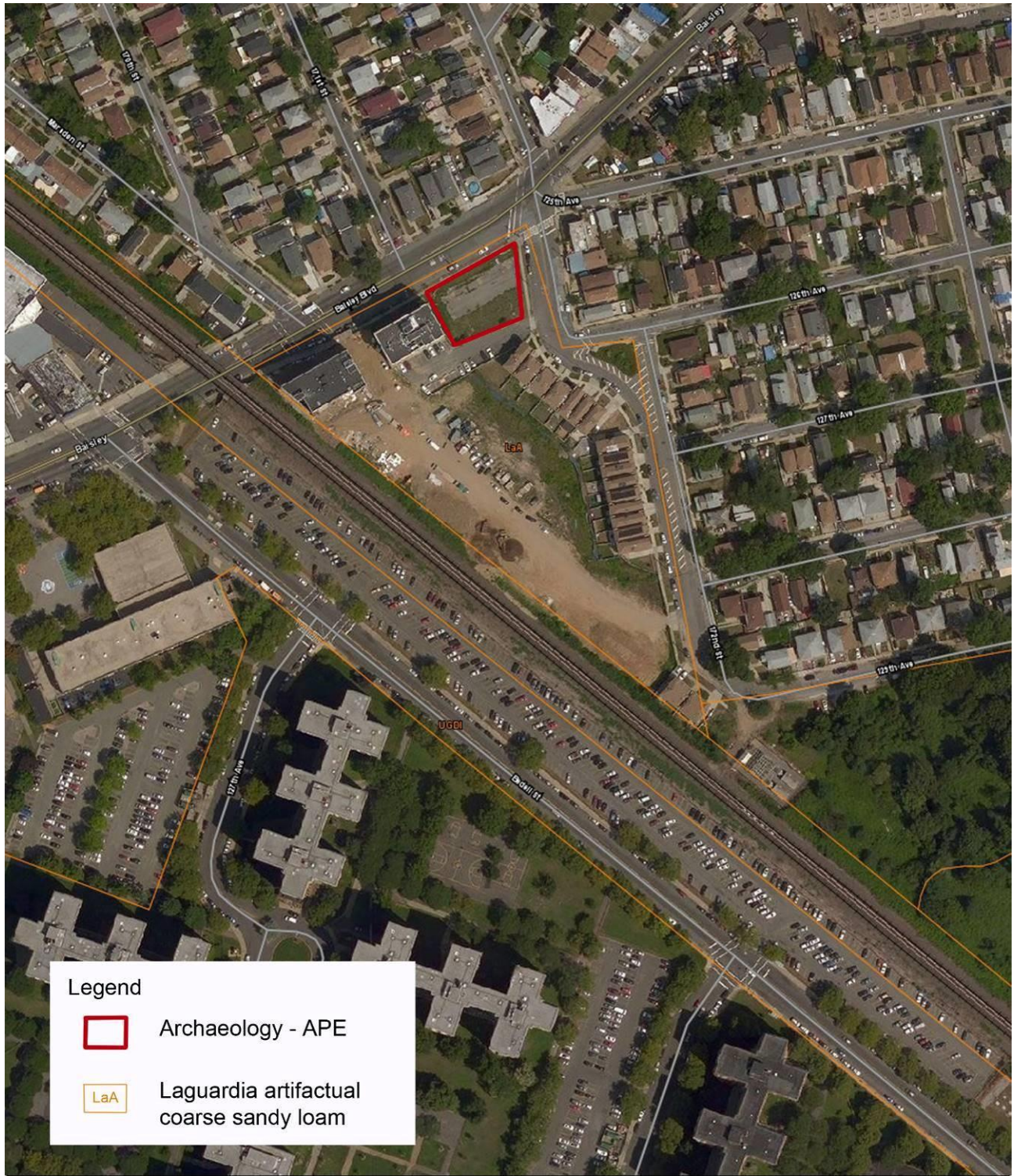
The topography of Queens County ranges widely from relatively flat areas to gently rolling slopes. Elevations range from sea level at the Hudson River to approximately 15.25 meters (50 feet) above sea level.

3.2 Physiography and Geology

The archaeological-APE is an area approximately 40% covered by blacktop and 60% overgrown by grass and weeds. The site has an elevation of approximately 22 feet above mean sea level. While the dominate topographic feature of New Jersey and Southern New York is north-south inclining volcanic rifts, formed during the breakup of the super continent Pangea, 200 million years ago, most of Long Island and much of Staten Island was deposited as glacial detritus (Raymo and Raymo, 2001). Much of the topography of the counties of Nassau and Suffolk was formed by the advancing and retreating pulses of the Wisconsin glaciations some 21,000 years ago. These moraines consist of gravel and loose rock left behind during the two most recent pulses. The northern moraine, which directly abuts the North Shore of Long Island at points, is known as the Harbor Hill moraine. The glaciers melted and receded to the north, resulting in the difference between the North Shore beaches and the South Shore beaches. The North Shore beaches are rocky from the remaining glacial debris, while the South Shore's are crisp, clear, outwash sand. Running along the center of the island like a spine is the moraine left by the glaciers (Gratacap, 1909; Thieme, 2003).

3.3 Soils

The Natural Resources Conservation Service (NRCS) Soil Survey (2005) identified the soil complex for the archaeological-APE as the Laguardia artificial (LaA) coarse sandy loam, 0 to 3 percent slopes. This is a well-drained soil classified as not prime farmland. The parent material is identified as human-transported – Laguardia soils are found on artificially graded landforms, intermixed with construction debris.



Legend

- Archaeology - APE
- LaA Laguardia artifactual coarse sandy loam

Source: NRCS, USDA Web Soil Survey.
Available at <http://websoilsurvey.nrcs.usda.gov>



Archaeology & Historic Resource Services, LLC
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Project Name:

**THE PAVILION AT
LOCUST MANOR**
NEIGHBORHOOD OF JAMAICA

QUEENS COUNTY NEW YORK

Title

**NRCS Soil
Survey Map**

Project No.

Date
5/19/2015

Scale

Created By:
K.French

Figure Number:

3

3.4 Climate

Queens County has a humid subtropical climate with partial shielding from the Appalachian Mountains and moderating influences from the Atlantic Ocean. Queens receives plentiful rainfall all year round with 44.8 inches yearly. Temperature extremes range from 107 degrees to -3 degrees Fahrenheit. Winters are cold and snow is common and blizzards occur about once a decade. Springs are unpredictable and can be chilly to very warm. Summers are hot, humid and wet. Fall is very similar to spring and snowfall begins in November.

3.5 Land Use

There has been continuous human habitation of Long Island for nearly 9000 years (Long Island Express, 2009; Rieth, 2004), as successive waves of Native Americans came across the narrow waterways from the north and west. In about the year 1100 A.D. the Algonkian speaking ancestors of the Matinecocks (Matinne-auka-ut) arrived on Long Island (Harrington, 1992). Matinecock is thought to mean "at the place to look from" or "the place of observation at the hilly land." The Matinecocks, whom the Europeans found living in Halletts Point in the 17th century, became one of what came to be called the Thirteen Tribes of Long Island. In actuality these groups were extended families of the Algonkian Nation. The Matinecocks called this land "Opcathontyche" which meant "wading place creek", although on Long Island it is difficult to distinguish between village names and the name of some of the larger groups (Goddard, 1978; Long Island Express, 2009; Salwen, 1978).

4.0 BACKGROUND RESEARCH

Background research was conducted to locate previously identified cultural resources and to evaluate previously unidentified cultural resources within an appropriate historic context. Research was conducted at using the GIS-based New York State Cultural Resource Information System (CRIS) to identify known architectural and archaeological resources within or adjacent to the archeological-APE that are listed on or eligible for the State or National Register of Historic Places. In addition, a review of previously conducted cultural resources surveys the location of known archaeological sites was also conducted. Primary and secondary research, including surveying maps and local county histories, was conducted utilizing collections held at the New York Public Library in Manhattan, the David Rumsey Online Cartography Collection, and the New York City GIS Clearinghouse system. In addition, a geotechnical survey conducted in the APE in the 2014 was also reviewed.

4.1 Archaeology

A 12 May 2015 search the New York State CRIS identified no recorded archaeological sites or previous archaeological surveys within a half-mile radius of the archaeological-APE. According to the CRIS the project site is not within a known archaeological sensitive area. There are no archaeological survey reports on file with NYC LPC for surveys or sites within a half-mile radius of the archaeological-APE.

4.2 Historic Architecture

Background research was conducted online using the online New York State CRIS system as well as the LPC online report repository to identify properties within the architectural-APE that are listed on or eligible for listing on the State or National Registers of Historic Places. Previous historic site surveys and regulatory surveys on file with LPC were reviewed to identify previously surveyed resources within 400 feet of the APE. Additional research consisted of a review of pertinent secondary and primary resources, including local and county histories, historic maps and atlases. There are no buildings or sites within a 400-foot buffer that have been listed or determined to be eligible for the National Register of Historic Places.

4.3 Brief Land Use History of the APE

A review of historic maps, atlases and aerial photographs helped in determining historic land use of the APE. A number of New York City Atlas and Sanborn Fire Insurance maps were consulted using the New York Public Library's digital collections. Aerial photographs were accessed from the NY State GIS Clearinghouse and NYCityMap (www.nyc.gov/citymap). Historical maps, atlases and Sanborn Fire Insurance maps depicting the APE and its surroundings from 1898, 1909, 1912, and 1926 were reviewed along with aerial photographs from 1924, 1951, 1996, and 2012.

The 1891 Wolverton *Atlas of Queens County, Long Island, New York* (Figure 4) lists the land owner as the Betz Estate. A dwelling is marked in the southwest of the project archaeological-APE. Baisley Blvd (previously Locust Ave) is depicted on the map, but 172nd Street is not

included on the map, although the eastern property boundary is similarly oriented. The railroad tracks are mapped to the west of the project site.

The 1909 Bromley *Atlas of Queens, New York* (Figure 5) lists “B. Bott” as the owner of the land. Two small structures are depicted in the northeastern corner of the archaeological-APE, the northern structure is a dwelling facing Baisley Boulevard (previously Locust Avenue) with a shed or stable structure to the south.

The 1912 *Sanborn Fire Insurance Map* (Figure 6) is entirely consistent with the 1909 Bromley illustration of the site with apparent changes to site use. There are two small structures in the northeastern corner of the site. Baisley Boulevard is still called Locust Avenue. Additionally, 172nd Street is mapped, but is called Homestead Place. The site is located just to the northeast of the Metropolitan Jockey Club and Jamaica Racetrack.

The 1926 *Sanborn Fire Insurance Map* (Figure 7) depicts the same two small structures in the northeast of the site. The northern structure is labeled as a dwelling and the southern structure is labeled as a garage. There is no further development on the site.

The 1924 Aerial Photograph (Figure 8) shows the archaeological-APE with no structures recognizable in the photograph, in spite of the fact there are dwelling and garage structures mapped in the 1926 *Sanborn*. However, the resolution is quite poor in the northeast corner of the site. The remaining lot area is vegetated.

The 1951 Aerial Photograph (Figure 9) shows that archaeological-APE is utilized as a parking lot for the Jamaica Racetrack located southwest of the project site. It is unclear from the photograph whether the lot is paved or whether it is a dirt parking lot.

The 2006 Aerial Photograph (Figure 10) shows a sparsely vegetated empty lot. There is no blacktop and the other Locust Manor developments have not yet been constructed adjacent to the project site.

In the 2012 Aerial (Figure 2), the site appears much as it does today. Blacktop covers 40% of the site. The remaining area is vegetated. Locust Manor Senior Residence building is adjacent to the west of the project site. A paved parking lot is adjacent to the south of the project site.

The historic maps, atlases and aerial photographs reviewed revealed that by 1891 a dwelling with an ancillary stable, shed, and/or garage was constructed in the northeast corner of the site bordering Baisley Boulevard (previously Locust Avenue) and 172nd Street (previously Homestead Place). These structures are no longer standing by the 1951 aerial photograph when the site was used as a parking lot. Otherwise, development and subsurface disturbance in the APE outside of these two areas seems to have been kept to a minimum.



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 ARCHAEOLOGY & HISTORIC RESOURCE SERVICES

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Project Name
**THE PAVILION AT
 LOCUST MANOR
 JAMACIA**

QUEENS COUNTY NEW YORK

Figure Title
**1891 WOLVERTON
 ATLAS**

Project No.
 201505001

Date
 5/13/2015

Scale
 See Above

Drawn By
 MDA

Submission Date

Figure
4

Path: Y:\Locust Manor\Maps and MXD\Figure 4 - 1891 Wolverson Atlas.mxd



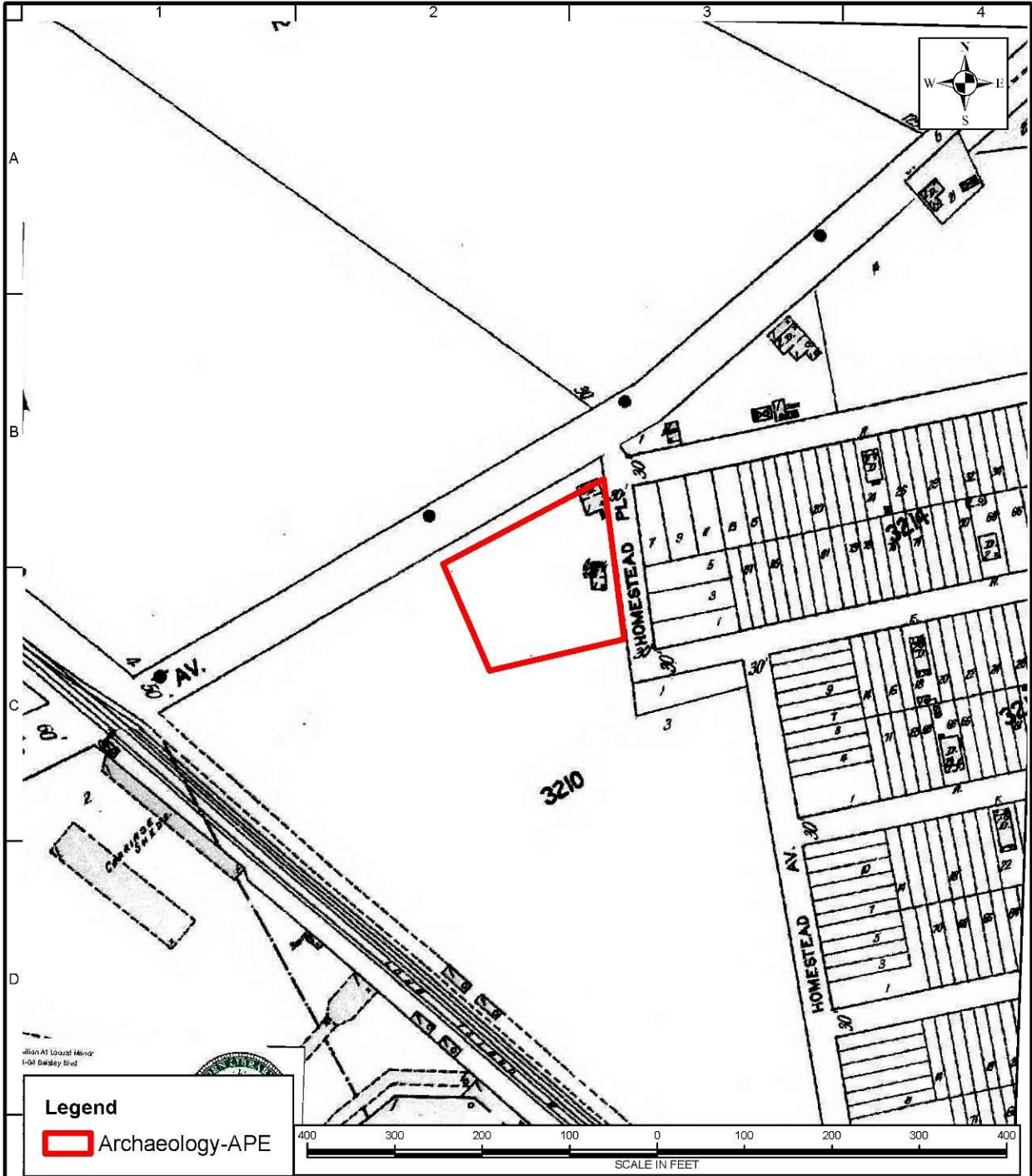
Legend

Archaeology-APE

Map Reference: 1909 W. Bromley Atlas of Queens, Plate 42, Provided by the NYC Public Library.

 <p>ARCHAEOLOGY & HISTORIC RESOURCE SERVICES</p> <p>905 Twin Arch Rd Rock Tavern, NY 12576 845-725-7694 WWW.AHRSERVICES.COM</p>	Project Name	Figure Title	Project No.	Figure	
	THE PAVILION AT LOCUST MANOR JAMACIA	1909 BROMLEY ATLAS	201505001		
	QUEENS COUNTY	NEW YORK	Date		5
			5/13/2015		
		Scale	See Above		
		Drawn By	MDA		
		Submission Date			

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AHRS
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605 Twin Arch Rd
 Rock Tavern, NY 12575
 845-725-7894 WWW.AHRSSERVICES.COM

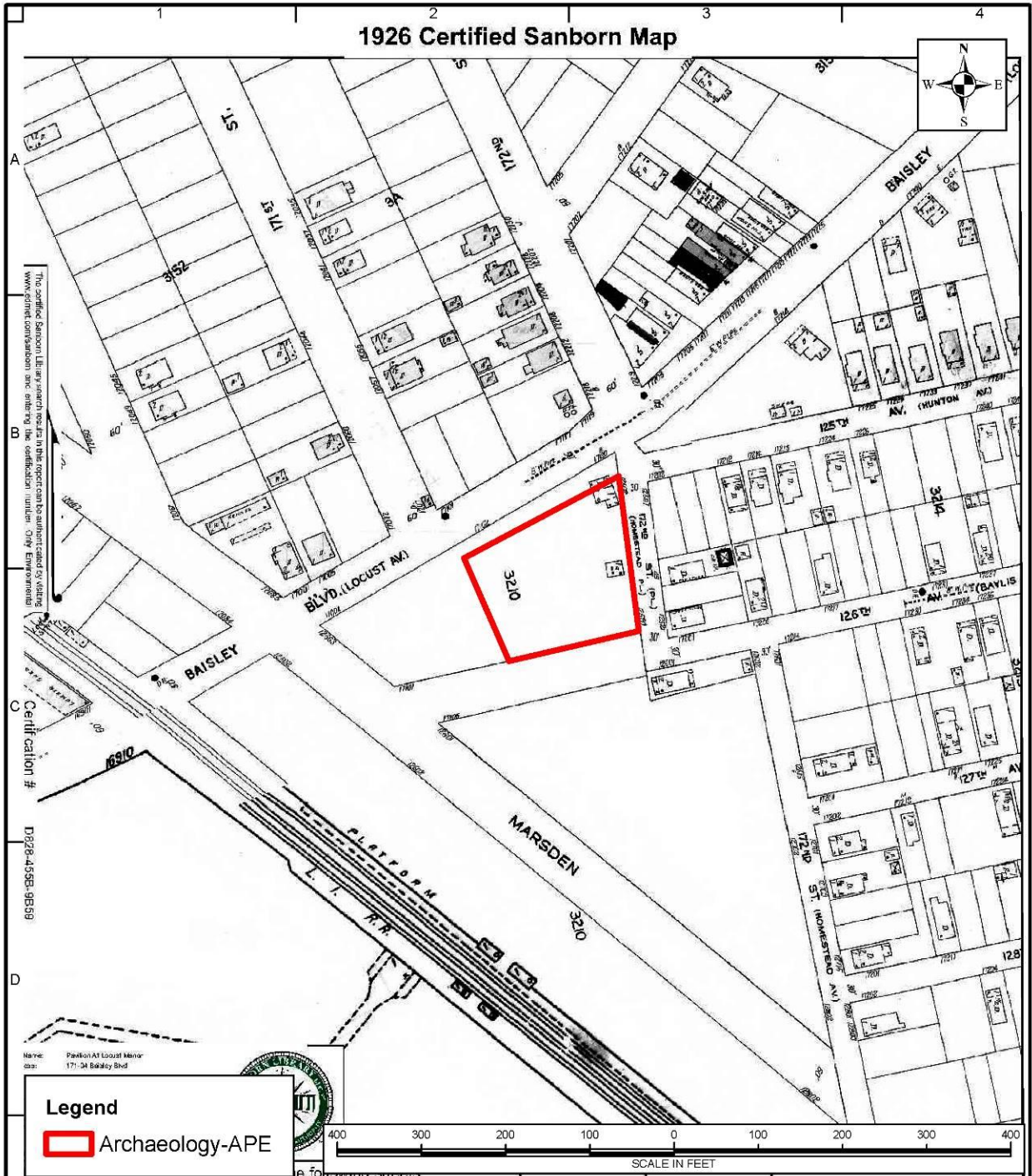
Project Name
**THE PAVILION AT
 LOCUST MANOR**
 JAMACIA
 QUEENS COUNTY NEW YORK

Figure Title
**1912 SANBORN
 FIRE INSURANCE
 MAP**

Project No.
 201505001
 Date
 5/13/2015
 Scale
 See Above
 Drawn By
 MDA
 Submission Date

Figure
 6

Path: Y:\Locust Manor\Maps and MXD\Figure 6 - 1912 Sanborn Map.mxd



The certified Sanborn Library search tool in this report can be authorized by visiting www.environment.com and entering the certification number: 0197-Environmental

Certification #
D828-4-555-9589

Name: Pavilion At Locust Manor
Loc: 171-24 Baisley Blvd

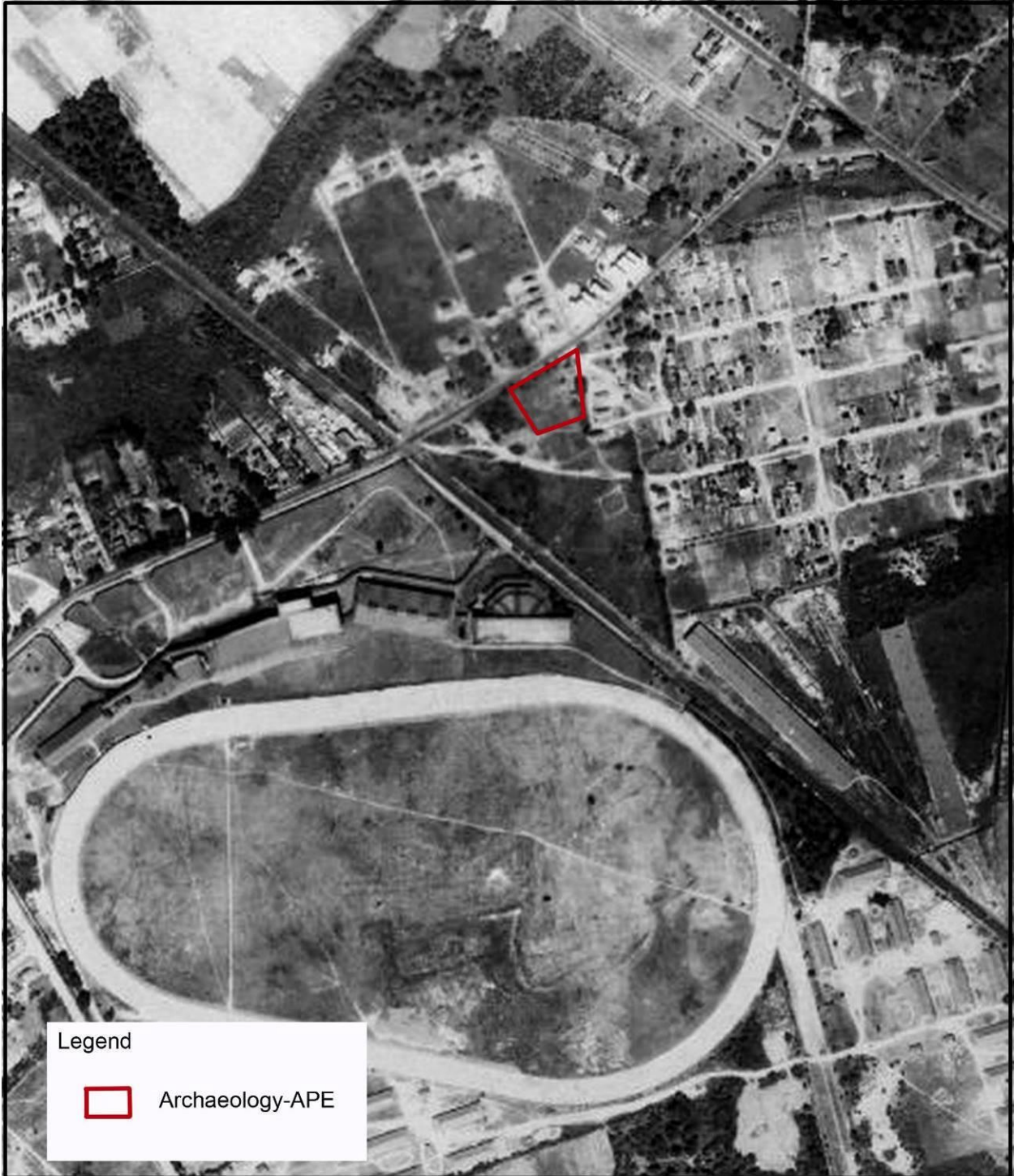
Legend

Archaeology-APE

Map Reference: 1926 Sanborn Fire Insurance Map, Provided by EDR Net.

 <p>ARCHAEOLOGY & HISTORIC RESOURCE SERVICES</p> <p>605 Twin Arch Rd Rock Tavern, NY 12675 845-725-7684 WWW.AHRSERVICES.COM</p>	Project Name	Figure Title	Project No.	Figure	
	<p>THE PAVILION AT LOCUST MANOR JAMACIA</p> <p>QUEENS COUNTY NEW YORK</p>	<p>1926 SANBORN FIRE INSURANCE MAP</p>	201505001	7	
			Date		5/13/2015
			Scale		See Above
Drawn By	MDA	Submission Date			

Path: Y:\Locust Manor\Maps and MXD\Figure 7 - 1926 Sanborn Map.mxd



Legend

 Archaeology-APE

Source: NYCityMap. Available at maps.nyc.gov



Archaeology & Historic Resource Services, LLC
805 Twin Arch Road
Rock Tavern, NY 12575

Project Name:

**THE PAVILION AT
LOCUST MANOR**
NEIGHBORHOOD OF JAMAICA

QUEENS COUNTY NEW YORK

Title

**1924 Aerial
Photograph**

Project No.

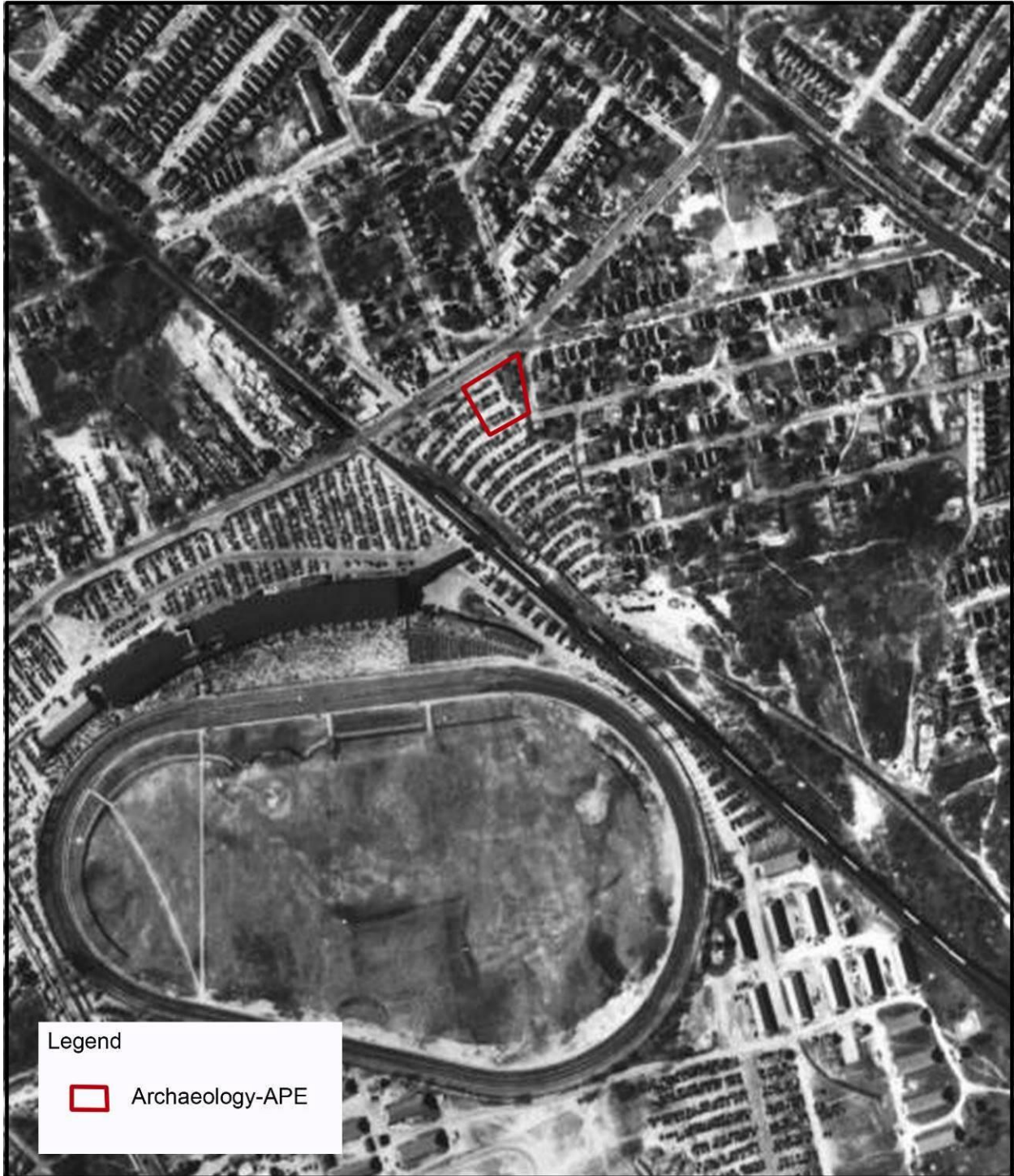
Date
5/19/2015

Scale
See above

Created By:
K.French


Figure Number:

8



Legend

 Archaeology-APE


<p>Source: NYCityMaps. Available at maps.nyc.gov</p>  <p>Archaeology & Historic Resource Services, LLC 805 Twin Arch Road Rock Tavern, NY 12575</p>	<p>Project Name:</p> <p>THE PAVILION AT LOCUST MANOR NEIGHBORHOOD OF JAMAICA</p> <p>QUEENS COUNTY NEW YORK</p>	<p>Title</p> <p>1951 Aerial Photograph</p>	<p>Project No.</p> <p>Date 5/19/2015</p> <p>Scale See above</p> <p>Created By: K.French</p>	<p>Figure Number:</p> <p>9</p>
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Legend

 Archaeology-APE



<p>Map Reference: NAPP-DOQQ Southern Region 19, Jamaica</p>  <p>Archaeology & Historic Resource Services, LLC 605 Twin Arch Road Rock Tavern, NY 12575</p>	<p>Project Name: THE PAVILION AT LOCUST MANOR NEIGHBORHOOD OF JAMAICA</p> <p>QUEENS COUNTY NEW YORK</p>	<p>Title 2006 Aerial Photograph</p>	<p>Project No. Date 5/19/2015 Scale See above Created By: K.French</p>	<p>Figure Number: 10</p>
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4.4 Previous Geotechnical Investigation

The Natural Resources Conservation Service (NRCS) Soil Survey (2005) identified the soil complex for the archaeological-APE as the Laguardia artifactual (LaA) coarse sandy loam, 0 to 3 percent slopes (Figure 3). This is a well-drained soil classified as not prime farmland. The parent material is human-transported. Laguardia soils are found on artificially graded landforms, intermixed with construction debris. This is consistent with observations from the site visit and pedestrian survey.

Soil Mechanics Drilling Company was contracted by D & F Construction to complete a right borings as part of a geotechnical survey in July 2014. The resulting boring logs and report were also reviewed. Appendix B contains the resulting report. A series of eight boring were conducted in the archaeological-APE. The results are consistent with the soil survey data. Approximately 1 to 4 feet of artificial fill caps gravelly sandy soils ranging from fine to coarse. The soil profile consisted of gravelly sand subsoils down to the base of the boring, between 32 and 42 feet below surface. Bedrock was not reached in any of the borings. At the time of drilling, the water table was reached between 10'6" and 12'10" below surface.

Evidence from the soil survey and the geotechnical borings report suggests that site grading was accomplished through the deposition of fill material, rather than the removal or disturbance of historic top soil.

5.0 PHASE 1 ARCHAEOLOGICAL SURVEY

This chapter discusses the methodology and results of the Phase IA survey of the archaeological APE. The final section presents the findings of the prehistoric and historic archaeological sensitivity determination.

5.1 Phase IA Methodology

The following information was gathered in order to determine archaeological sensitivity: prior historic and archaeological surveys, historic maps and aerial photographs, a geotechnical report on the soil conditions (all discussed above in Section 4.0) and the observations from a site visit and pedestrian survey.

5.2 Phase IA Site Visit and Pedestrian Survey

On May 18, 2015, AHRS fieldwork director Katie McCullough French conducted a site visit and pedestrian survey of the project site. The site was photographed to document the current condition of the project site. A pedestrian survey was also conducted to look for surface artifact finds.

The vacant lot is fenced and locked. Access is possible through the parking lot to the south of the project site. The site is relatively flat with a strong slope down to Baisley Boulevard. Modern construction debris – including blacktop, cut stone, and brick – litters the surface. There is also modern trash on the surface, such as glass liquor and beer bottles. No historic or prehistoric artifacts were identified during field walking. The blacktop surface that has been on site at least since 2006 (Figure 10) is in disrepair with weeds growing through large cracks. The remaining project site is covered with weeds and grasses. A few juvenile trees are growing along the southern fence line. There are no clear archaeological features or evidence of previous ground disturbance visible from the surface level. Photographs 1 and 2 depict the current conditions of the archaeological-APE.

5.3 Phase IA Assessment of Archaeological Resource Sensitivity

The assessment of archaeological resource sensitivity is based on:

- The potential for archaeological sites to exist in a given area; and
- The sensitivity of that area to contain intact cultural resources.

In areas where no sites have been documented the potential presence of prehistoric resources is based primarily on environmental setting such as topography, proximity to water and other resources and soil quality. The potential for historic resources is usually determined through the analysis of historic sources especially cartographic materials. The presence of roads, canals or railroads documented on historic maps usually increases the potential for historic sites.



Photo 1: View of the site and the adjacent Locust Manor Senior Residence, facing west. Photograph taken by K. French 5/18/2015.



Photo 2: View of the cracking blacktop taken from the northwest corner of the site, facing southeast. Photograph taken by K. French 5/18/2015.

Previous subsurface disturbance – such as basement construction or prior soil excavation – could not be determined from our review of historic maps, from pedestrian survey of the project site, or from the boring report prepared by Soil Mechanics Drilling Corp. The boring logs suggest that historic fill was used to grade the lot and probably capped the historic well-drained, sandy loam soil surface level. Because the property was filled in to increase its elevation and to level the site the remnants of the historic dwellings, outbuildings, wells and privies might still exist. For the same reason prehistoric archaeological may also still exist.

Prehistoric Archaeological Sensitivity

The prehistoric archaeological sensitivity for the archaeological-APE is generally evaluated by the presence of level areas or slight slopes, proximity to water courses, presence of well-drained soils, and proximity to previously identified prehistoric archaeological sites. The record search confirmed that little to no archaeological work has been conducted within a half-mile radius around the project site. Therefore, the proximity of other archaeological sites cannot help us to establish prehistoric archaeological sensitivity. However, the lack of known archaeological sites in the vicinity or the project site being out of a known archaeologically sensitive area is most likely based on the lack of previous archaeological surveys in the area rather than the potential for archaeological sites.

The project site is located on well-drained soils and proximate to water (a stream is depicted on the 1891 Wolverton Map and the 1909 Bromley Atlas to the north of the APE). Therefore, the archaeological-APE could have been a suitable location for prehistoric occupation, at least for short term occupation. Based on the above and the lack of development requiring excavation on the site, AHRS concludes that there is moderate to high sensitivity for prehistoric cultural resources in the archaeological-APE.

Historic Archaeological Sensitivity

The potential presence of historic cultural resources within an archaeological-APE must also be weighed against ground moving activities that may destroy the contextual integrity of the site. As with prehistoric cultural resources, the sensitivity for historic period cultural resources is derived by ascertaining the probable location of a potentially significant historic site and comparing that with documented ground disturbances. Overall sensitivity to historic sites is a measure of the potential for intact cultural resources to be present within the archaeological-APE.

The historic maps and atlases revealed that one or possibly two different nineteenth-century historic dwellings were on the project site. One in the western portion of the project site, which was more generally mapped, and one with an ancillary stable, shed, or garage structure was mapped in the northeast quadrant of the archaeological-APE on more detailed maps. It is possible that the maps are referring to the same dwelling. Based on the historic maps and the lack of evidence for previous ground disturbances (beyond site filling), AHRS concludes that there is moderate to high sensitivity for nineteenth-century cultural resources in the archaeological-APE.

Research Recommendation

Based on the above conclusions for a moderate to high sensitivity for prehistoric and nineteenth-century cultural resources, AHRs recommended a Phase 1B survey for the archaeological-APE. The purpose of the Phase 1B is to test for the presence of buried prehistoric and historic archaeological resources within the soil layers underlying the fill.

These results of the sensitivity assessment and the consequent Phase 1B recommendation and proposed work plan were submitted in the Preliminary Cultural Resource Assessment memorandum to LPC on May 21, 2015 and OPHRP on May 26, 2015. The submission included a proposed Scope of Work for the subsurface testing. LPC concurred with this assessment and approved the proposed Scope of Work in a Final Sign Off memorandum dated May 28, 2015. OPRHP responded with a determination of “no impact to archaeological and/or historic resources listed in or eligible for the New York State and National Registers of Historic Places” on May 29, 2015.

5.4 Phase 1B Methodology

AHRs fieldwork director Katie French conducted the field testing on May 29, 2015 with the assistance of a machine operator provided by D & F Development. A Caterpillar 330 CR excavator was also provided by D & F Development. All machine excavation was supervised by AHRs. After machine stripping the overlying pavement (where needed) and fill layers, a total of 10 shovel test pits (STPs) were excavated down to an approximate depth of two soil levels (10 cm each) into the sterile subsoil. The Phase 1B subsurface testing occurred in two stages: the hand excavation of shovel tests after the fill removal and the machine assisted excavation of an exploratory trench in the approximate location of the mapped historic structures in the northeast quadrant of the project APE. The locations of the shovel tests and the exploratory trench are shown in Figure 11.

Shovel Testing

Machine excavation was utilized to remove blacktop and fill soils to the depth of the natural soils under the direction and supervision of AHRs. Machine excavation stopped at the interface between the fill level and the underlying natural soil. The machine excavated trench for each shovel test was excavated wide enough to allow for safe excavation of a shovel test through to the sterile subsoil level.

STPs were excavated to determine the existence of archaeological sites through spatial distribution of artifacts and/or evidence of subsurface deposits. The following procedures were followed during the excavation of STPs:

- STPs were approximately 40 cm in diameter.
- Hand excavation preceded in 10 cm increments within the natural stratum until the sterile soil was encountered and then after two successive 10 cm levels failed to produce artifacts (approximately 40-60 cm into natural soils). The 10 cm levels allowed for better control of

artifact distribution within the stratum. All soil matrix was screened through a ¼ inch hardwire mesh. All STP levels were recorded on a standard shovel test forms and profiles sketched.

- Profile information, including the fill depths, was recorded on standardized forms and layers identified by texture and coloration using the Munsell scale.
- A field journal was kept to record all field activities.


The test pits were machine backfilled and restored to their original contours upon completion of hand excavations.

Exploratory Trench Excavation

The Preliminary Cultural Resource Assessment resulted in evidence for two structures in the northeast of the project site dated to the late nineteenth/early twentieth century. An exploratory trench was machine excavated under AHRS' supervision in order to test for buried structural remains or artifact deposits associated with this historic occupation. The backhoe excavated a rectangular 6-foot (east-west) by 18-foot (north-south) trench through the blacktop and fill just south of STP 10 (Figure 11).

The trench was machine backfilled and restored to their original contours upon completion of trenching.



Source: Google Earth, Landsat Imagery	Project Name:	Title	Project No.	Figure Number:
	THE PAVILION AT LOCUST MANOR NEIGHBORHOOD OF JAMAICA	Test Location Map	Date 5/29/15	11
			Scale See above	
Archaeology & Historic Resource Services, LLC 805 Twin Arch Road Rock Tavern, NY 12575	QUEENS COUNTY NEW YORK		Created By: K.French	

5.5 Phase IB Testing Results

Soils encountered during the machine and hand excavation were entirely consistent with soil survey and geotechnical boring logs. The stratigraphic profile was relatively consistent throughout the entire site. Photo 3 shows a standard soil profile in STP 2.

Shovel Test Results

The top 5-10 cm of each machine excavation for STPs consisted of either blacktop or a grass root mass. A fill deposit directly underlies the blacktop or root level. This uppermost soil level (Stratum Ia) is a thick (35 cm to 50 cm) fill deposit with cinder and ash deposits, modern trash, construction debris, asphalt chunks, and broken glass mixed within the soil matrix.

Three STP locations contained a secondary level of fill (Stratum Ib). This level is 10 to 30 cm thick and consists of a machine compacted gravelly tan sand layer. Where encountered, Stratum Ib was too compacted to excavate by hand using a pointed shovel and was machine removed.

Two consistent soil strata were encountered underlying the fill deposits in the STPs. The uppermost natural soil level (Stratum II) consisted of a fine to medium coarse dark yellowish brown (10 YR 6/4) sand with 1-2% gravel. This level is between 25 and 60 cm thick.

Underlying Stratum II is a fine to medium yellowish brown (10 YR 5/4) sand with less than 1% gravel (Stratum III). This layer did not contain any cultural material in any of the shovel tests and was the sterile soil stratum. Its overall thickness is unknown, as each test only extended two levels (20cm) into Stratum III.

Exploratory Trench

The exploratory trench was positioned to encounter the western structure walls or possibly any associated structures (wells, privies, cisterns) or artifact deposits. This location was based upon the mapped structures on the historic maps. The trench was machine excavated 6-feet by 18-feet and between 3 and 4 feet deep into Stratum II and III, the natural soil level underlying the fill deposit. The base of the trench was clean sand (Stratum III) with no evidence of structural foundations or artifact deposits (Photo 4).



Photo 3: View of a standard soil profile in STP 2, facing west. The shovel test begins at the interface between the fill deposit and Stratum II. The color change between Stratum II and III is too subtle to be visible in this photograph. Photograph taken by K. French 5/29/15



Photo 4: View of the eastern profile of the exploratory trench, facing west. Trench was excavated through blacktop and approximately 2.5 feet of cinder and asphalt rich fill. The base of the trench was a clean, culturally sterile sand layer (Stratum II). Photograph taken by K. French 5/29/15.

5.6 Phase IB Artifacts and Ecofacts

Fill sediments were not screened or tested for archaeological resources, beyond visual inspection. In general, the fill contained deposits of construction debris (brick, concrete, asphalt, and window glass, PVC pipe, ceramic sewer pipe, etc.), bottle glass, and cinder deposits. The fill overlying shovel test 10 contained a pet dog burial, complete with dog collar. The adult dentition and tooth wear suggests this was an older individual. Photo 5 shows the cranium and right mandible. The burial was disturbed through machine excavation. Bones were collected and removed offsite so as not to cause confusion or concern in subsequent excavations where an archaeologist or osteologist may not be present.



Photo 5: Overhead view of dog cranium and right mandible. The adult dentition and toothwear suggests that this was a relatively old adult individual. The associated dog collar suggests that this animal was a pet purposefully buried in a shallow grave within the fill layer.

Shovel tests 6 and 9 each contained a single fragment of clear bottle glass within stratum II near the interface with the fill deposit level. It is possible that the glass fragments are intrusive from the overlying fill. No further artifacts or ecofacts were identified in strata underlying the fill level in any of the shovel tests as well as in the exploratory trench.

6.0 CONCLUSIONS AND RECOMMENDATIONS

The project consists of the construct a new 8-story building with 84 affordable housing units, one superintendent unit, 30 accessory parking spaces, and a 1,200 square foot courtyard area. As part of the background research for the Phase I Archaeological Survey various primary and secondary resources were reviewed, including historic maps and atlases, aerial photographs, the NRCS soil survey and a geotechnical investigation for the project site. Field work consisted of a pedestrian survey and a combination of machine and shovel testing in the archaeological-APE. The combined information was analyzed to reach the following conclusions.

Based upon the background research the archaeological-APE was assessed to have a moderate to high sensitivity for prehistoric and nineteenth-century cultural resources at the Pavilion at Locust Manor project site. Only limited subsurface disturbance could be determined from our review of the evidence and none from basement construction or prior soil excavation. The boring logs suggest that historic fill was used to build up and grade the lot. This filling of the project site most likely capped the historic well-drained, sandy loam soil surface level. Because the property was filled in to increase its elevation and to level the site, the remnants of prehistoric occupation, historic dwellings, outbuildings, wells and/or privies may have still existed. AHRS recommended and performed a subsurface Phase 1B survey to test for the presence of buried prehistoric and historic archaeological resources within the soil layers underlying the fill.

AHRS excavated a total 10 shovel tests for the Phase 1B testing to determine if buried prehistoric archaeological materials and nineteenth-century foundations, features (wells, privies and cisterns) or historic artifact concentrations existed within the archaeological-APE. All shovel tests were negative for prehistoric resources. All shovel tests were negative for prehistoric resources. Two shovel tests contained single fragments of clear bottle glass in the upper soil stratum directly underlying the fill soil. These fragments may have been intrusive from the overlying fill soil layer. In addition AHRS monitored the machine excavation of a 6-foot by 18-foot exploratory trench to determine the presence of nineteenth-century foundations, features (wells, privies and cisterns) or historic artifact concentrations. The exploratory trench was excavated in the approximate location of a late nineteenth-century dwelling and associated structure (stable, shed, or garage) as depicted on the historic maps. The exploratory trench resulted in no evidence of buried artifact deposits, structure foundations, or any other structures (wells, privies, cisterns) that would be expected associated with a historic dwelling.

Based on the absence of prehistoric artifacts and nineteenth-century foundation, features or artifact deposits encountered during the Phase 1B subsurface testing, AHRS conclude that there are no archaeological features or deposits in the archaeological-APE. Therefore, AHRS recommends no further archaeological testing within the archaeological-APE.

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1924 Aerial Photograph

1951 Aerial Photograph

1996 Aerial Photograph

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1912 Sanborn Fire Insurance Map

1926 Sanborn Fire Insurance Map

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APPENDIX A

Qualifications of Preparers

MICHAEL D. AUDIN, RPA.

Phase I, II & III Investigation
Human Remains Burial Excavation
Regulatory Compliance
Urban Archaeology
Prehistoric Archaeology
Historic Archaeology Field
Crew Management
Site Survey and Identification
Laboratory Analysis
Report Writing and Editing

SUMMARY QUALIFICATIONS

Mr. Audin is a Registered Professional Archaeologist (RPA) who meets the Secretary of the Interiors Professional standards as an archaeologist and has been reviewed by several State Historic Preservation Offices as a Principal Investigator. Mr. Audin has over 12 years of professional experience in cultural resource management. Skills include extensive problem solving, management, analytical, evaluating, and creative resolutions. Management experience includes extensive customer relations, employee development, training, scheduling and mentoring staffs up to 115 members in size.

Work experience includes coordination and implementation of environmental and cultural resource assessments include NEPA Documentation, Environmental Assessments, Environmental Impact Statements, Section 106 Assessments, Phase I, II and III Historic and Archaeological Assessments and Historic American Building Survey (HABS) photography and documentation. Created and implemented Archaeological Monitoring Plans, Scopes of Work, Research and Field Testing Plans, Programmatic Agreements, Memorandums of Agreement (MOA), Memorandums of Understanding (MOU) and Best Practices.

EDUCATION:

Hunter College, City University of New York (CUNY), New York, **M.A. Anthropology, 2008**

William Paterson University, Wayne, New Jersey, **B.A. Anthropology, 2005.**

Archaeological Field School, Somerset County Parks Commission, New Jersey

RELEVANT EXPERIENCE:

2014-15 Princeton Pike Roadway Project, Phase I & II Archaeological Survey, Lawrence, NJ

Principal Investigator for prehistoric/historic site investigation for NJDEP Freshwater Wetlands Permit. Conducted research, assessed prehistoric/historic archaeological potential, conducted field testing, artifact analysis, writing and preparation of report, edited and produced report for submission.

2014 Prasville Mill Restroom Project, Archaeological Monitoring, New Jersey

Principal Investigator for historic site investigation for NJ State Park improvements. Conducted research, assessed prehistoric/historic archaeological potential, conducted field monitoring, artifact analysis, writing and preparation of report, edited and produced report for submission.

2013-14 St. Marks AME Church Cemetery Project, Queens, New York

Principal Investigator for former African American cemetery on residential development site. Designed archaeological monitoring plan and scope of work, conducted archaeological monitoring and human remains excavation for mid-19th- to mid-20th-century cemetery in Queens.

2013-14 Gloucester Premium Outlets, Phase I Cultural Resource Survey, Gloucester Twshp, NJ

Principal Investigator for prehistoric/historic site investigation for NJDEP Freshwater Wetlands Permit for 65 acre property (36 acres shovel tested). Conducted research, assessed prehistoric/historic archaeological potential, conducted field testing, directed artifact analysis, writing and preparation of report, edited and produced report for submission.

2013-14 Old St. Patrick's Cathedral Mausoleum Project, Archaeological Monitoring, New York

Principal Investigator for and archeological monitor for human remains during excavation for new mausoleum in southern part of a historic cemetery in New York City. Designed Monitoring plan, conducted monitoring for human remains during backhoe excavation, supervision of two archaeological assistants, determined method of avoidance or removal of human remains encountered and eventual reburial of disinterred remains, report writing and preparation

2013 Washington Crossing Historic Park, Phase IB, Washington Crossing, Pennsylvania

Principal Investigator for prehistoric/historic site investigation for PHMC historic site drainage improvements. Conducted research, subsurface field testing, artifact analysis, writing and preparation of report, edited and produced report for submission.

2013 Hallets Court Senior Housing Project, Phase I Archaeological Investigation, Queens, NY

Principal Investigator for prehistoric/historic site investigation for city housing development. Conducted research, subsurface field testing, writing and preparation of report, edited and produced report for submission.

2013 Johnson Veterans Hospital Parking Garage Project, Phase IB Cultural Resource Investigation, Clarksburg, West Virginia

Principal Investigator for prehistoric/historic site investigation for Section 106 Compliance and NEPA checklist. Conducted field testing of APE for prehistoric/historic archaeological sites, writing and preparation of report, edited and produced report for submission

2013 Gowanus Canal Historic Bulkhead Documentation, Brooklyn, NY

Principal Investigator for documentation of a historic bulkhead at two sites on the Gowanus Canal. Conducted field testing, photographic documentation, measured drawing, writing and preparation of report for submission.

2012-2014 Amtrak, High Speed Rail Improvements Project, Trenton to New Brunswick, NJ

Principal Investigator produced an archaeological sensitivity assessment and monitoring for Section 106 review of rail improvements for 23 mile section of the Northeast Corridor. Conducted research, site visits, writing and preparation of report.

2012-14 Verizon Wireless Cell Tower Upgrades, Various Sites in NJ

Researcher/site reviewer for Section 106 reviews to upgrade cell tower antennas. Conducted research, site reconnaissance, writing and preparation of report.

2012 Gowanus Canal Bulkhead Stabilization Project, Brooklyn, NY

Principal Investigator for preliminary bulkhead documentation on the Gowanus Canal. Conducted research and monitored for archaeological materials and bulkhead features during a geotechnical investigation in order to design a thorough documentation plan and investigation.

2012 NJ Transit, Phase IA Investigation, Train Station Upgrades, Elizabeth, NJ

Principal Investigator for Phase IA Investigation. Evaluation of handicap and other facility upgrades for NJ

TRANIT train station. Conducted research, site reconnaissance, writing and preparation of report, edited and produced letter report for submission NJ SHPO.

2012 NJ Transit, Phase IA Investigation, Train Station Upgrades, Perth Amboy, NJ

Principal Investigator for Phase IA Investigation. Evaluation of handicap and other facility upgrades for NJ TRANIT train station. Conducted research, site reconnaissance, writing and preparation of report, edited and produced letter report for submission NJ SHPO.

2011 St. Marks AME Church Cemetery Project, Queens, New York

Field director for unanticipated discovery of human remains during construction activities in former African American cemetery. Conducted archaeological monitoring and human remains excavation for mid-19th- to mid-20th-century cemetery in Queens..

2011 Old St. Patrick's Cathedral Stabilization Project, Archaeological Monitoring, New York

Principal Investigator for and archeological monitor for Landmarks Preservation Commission permit for brick wall stabilization around the north part of a historic cemetery in New York City. Conducted research, monitoring for human remains during backhoe excavation for new concrete supports, supervision of two archaeological assistants, determined method of avoidance or removal of human remains encountered and eventual reburial of disinterred remains, report writing and preparation.

2011 Johnson Veterans Hospital Parking Garage Project, Phase IA Cultural Resource Investigation, Clarksburg, West Virginia

Principal Investigator for prehistoric/historic site investigation for Section 106 Compliance and NEPA checklist. Conducted research, assessed prehistoric/historic archaeological potential, conducted site visit, writing and preparation of report, edited and produced report for submission.

2011 SCCC, Archaeological Monitoring, Kearny, New Jersey

Principal Investigator for archaeological monitoring during construction of a 7,000 foot slurry wall as part of the Interim Action Work Plan for NJDEP and USEPA Superfund site. Conducted monitoring during backhoe trenching and screened samples for prehistoric lithic materials, writing and preparation of report, edited and produced report for submission.

2011 Renaissance Plaza Project, Phase I, Egg Harbor City, New Jersey

Principal Investigator for prehistoric/historic site investigation for NJ Pinelands Commission. Conducted research, conducted subsurface field testing for historic features, writing and preparation of report, edited and produced report for submission.

2011 Alpha Water Works Upgrades Project, Phase II, Alpha, New Jersey

Principal Investigator for prehistoric/historic site investigation for NJDEP Environmental Infrastructure Trust funding program. Conducted research, excavation of shovel test pits and units, laboratory analysis of artifacts, writing, preparation, editing and producing report for submission.

2010 State University of New York, Ulster Campus, Phase I, Marbletown, New York

Principal Investigator for prehistoric/historic site investigation for NYS SEQR reviewed project. Conducted research, assessed prehistoric/historic archaeological potential, field testing, writing and preparation of report, edited and produced report for submission.

2010 NJ Transit, Unanticipated Discovery Investigation, Market Street Garage, Paterson, NJ

Principal Investigator for unanticipated historic structure uncovered during excavation for a drainage

pipe. Field work consisted of the excavation and documentation of a historic industrial feature partially exposed during excavation work. Recommended preservation in place with appropriate fill materials and submitted a technical memo to NJDEP SHPO.

2010 & 2011 EZ Automotive Services, Phase IA & IB, Robbinsville, New Jersey

Principal Investigator for prehistoric/historic site investigation for NJDEP. Conducted research, assessed prehistoric/historic archaeological potential, conducted field testing, writing and preparation of reports, edited and produced report for submission.

2010 Old St. Patrick's Cathedral Stabilization Project, Archaeological Monitoring, New York

Principal Investigator for and archeological monitor for Landmarks Preservation Commission permit for brick wall stabilization around the south part of a historic cemetery in New York City. Conducted limited research, monitoring for human remains during backhoe excavation for new concrete supports, supervision of one archaeological assistant, determined method of avoidance or removal of human remains encountered and eventual reburial, report writing and preparation.

2010 Former Koppers Superfund Site, Additional Phase IB, Newport, Delaware

Co-Author of Memorandum of Agreement between all interested parties for the property.

2010 Pennsauken Country Club Water Reuse Project, Phase I, Pennsauken, New Jersey

Principal Investigator for prehistoric/historic site investigation for NJDEP Environmental Infrastructure Trust funding program. Conducted research, preparation of site, excavation of shovel test pits, laboratory analysis of artifacts, writing, preparation, editing and producing report for submission.

2010 NYS Route 440 Pole Relocation Project, Phase IA, Staten Island, New York

Principal Investigator for prehistoric/historic site investigation for Department of Transportation and Federal Highway Administration NEPA documentation and Section 106 reviewed project. Conducted research, assessed prehistoric/historic archaeological potential, writing and preparation of report, edited and produced report for submission.

2010 World Trade Center, Phase III, Potential Human Remains, Staten Island, New York

Field crew for recovery of potential human remains for the New York City Office of the Chief Medical Examiner. Conducted materials screening for human remains and artifacts relating to the 2001 attacks on the World Trade Center.

2010 SCCC, Phase IB Cultural Resource Investigation, Kearny, New Jersey

Principal Investigator for historic investigations for NJDEP and USEPA Superfund site. Conducted additional research to prove the Jersey City Water Works was located outside of the project area and conducted backhoe trenching for historic drainage features related to the Hackensack Meadowlands, writing and preparation of report, edited and produced report for submission.

2010 Lanning Square Elementary School, Level III HABS, Camden, New Jersey

Complier/Photographer for EO215 compliance for NJ Schools Development Authority. Conducted level III Historic American Building Survey (HABS) including photographic documentation of the Broadway Episcopal Methodist Church Parsonage to mitigate the proposed demolition of this building. The HABS was requested by the NJ HPO to satisfy the EO215 review.

2009 Jersey City Walkway and DMAVA Park, Phase IA, Jersey City, New Jersey

Principal Investigator for prehistoric/historic site investigation for NJDEP and US Army Corps of Engineers Section 106. Conducted research, assessed prehistoric/historic archaeological potential, monitored

geotechnical sub surface investigation for archaeological remains, writing and preparation of report, edited and produced report for submission.

2009 Route 33 Interchange Improvements, Phase I, Palmer Township, Pennsylvania

Principal Investigator for prehistoric/historic site investigation for Pennsylvania Department of Transportation and FHWA Section 106 reviewed project. Conducted research, site excavation of shovel test pits, laboratory analysis of artifacts, writing and preparation of report, and editing report for submission.

2009 USDA, Health-Based Plant Genomics Facility, Phase IB, Cornell University, Ithaca, New York

Co-Principal Investigator for prehistoric/historic site investigation as part of a USDA Section 106 Assessment for the addition to the Plant Genomics Laboratory Building site. Conducted research, excavation of shovel test pits, laboratory analysis of artifacts, writing and preparation of report, edited and produced report for submission.

2009 SCCC, Phase IA Cultural Resource Investigation, Kearny, New Jersey

Principal Investigator for prehistoric/historic site investigation for Section 106 assessment for a EPA Superfund site. Conducted research, assessed prehistoric/historic archaeological potential, writing, preparation, edited and producing report for submission.

2009 GAC Adsorption Plant, Phase I, Pennsauken, New Jersey

Principal Investigator for prehistoric/historic site investigation for NJDEP Environmental Infrastructure Trust funding program. Conducted research, preparation of site, excavation of shovel test pits, laboratory analysis of artifacts, writing, preparation, editing and producing report for submission.

2009 Penn Regional Business Center III, Phase I, Smithfield, Pennsylvania

Principal Investigator for prehistoric/historic site investigation for Pennsylvania Funding Grant Application. Conducted research, preparation of site, excavation of shovel test pits, laboratory analysis of artifacts, writing, preparation, editing and producing report for submission.

2009 Montauk Theater, Level III HABS and Architectural Salvage Plan, Passaic, New Jersey

Complier/Photographer for EO215 compliance for NJ Schools Development Authority. Conducted level III Historic American Building Survey (HABS) including photographic documentation and an architectural Salvage Plan of the Montauk Theater to mitigate the proposed demolition of this building. The HABS and Salvage Plan were requested by the NJ HPO to satisfy the EO215 review.

2008 Former Koppers Superfund Site, Additional Phase IB, Newport, Delaware

Crew chief and OSHA Site Safety Officer for prehistoric/historic site investigation for EPA compliance for superfund site during three month phase IB auger testing conducted by 13 archaeologists. Teamed with John Milner and Associates. Work included over 1,700 phase IB augers in a tidal marsh. Additional work included field tech training, and safety oversight.

2008 Dredge Stockpile Site, Phase I, Harmony, New Jersey

Field director, research coordinator, lab director and photographer for prehistoric/historic site investigation for Section 106 review of stockpile site for dredge materials from FEMA. Field duties include preparation of site, excavation of 32 shovel test pits and site survey. Post field work included laboratory analysis of artifacts, writing of sections of report and prepared, edited and produced report for submission.

2008 Lowes, Phase I, Mansfield, Pennsylvania

Field director, research coordinator, lab director and photographer for prehistoric site investigation for

review for big box retail store. Field duties include site preparation, excavation 60 shovel test pits of site and survey. Post field work included laboratory analysis of artifacts, writing of sections of report and prepared, edited and produced report for submission.

2008 Former Jacobs Aircraft Engine Factory, HABS, Lower Pottsgrove, Pennsylvania

Complier/Photographer for NPDES permit compliance. Conducted low level Historic American Building Survey (HABS) including photographic documenting of the former Jacobs Aircraft Engine Factory and Administrative Building to mitigate the proposed demolition of these buildings. The photographic documentation was requested by PHMC to satisfy the NPDES permit review.

2007 – 2008 Queensboro Plaza, Phase I, Long Island City, New York

Field director, research coordinator and photographer for historic site investigation for cultural resources FHWA section 106 for a NEPA assessment and LPC review for bike path in the Queensboro Plaza. Includes an archaeological assessment, field testing and architectural evaluation of the current property. Field work included site preparation, the excavation of a two meter by two meter test pit and site survey. Post field work included laboratory analysis of artifacts, writing of sections of report and prepared, edited and produced report for submission.

2007 Lowes, Phase IB, Montgomery, New York

Field director, research coordinator, lab director and photographer for prehistoric/historic site investigation for SEQRA review for retail store. Field work included the preparation of site, excavation of 60 shovel test pits and site survey. Post field work included laboratory analysis of artifacts, writing of sections of report, prepared, edited and produced report for submission.

2007 Green Brook Trail, Application for Project Authorization/Preliminary Assessment, Plainfield, Green Brook, and North Plainfield, New Jersey

Co-Principal Investigator for New Jersey Historic Preservation Act and Freshwater Wetland Permit compliance. Completed and submitted an Application for Project Authorization for Green Brook Park and Washington Park Historic District for a multi-use recreational trail. Additionally, completed a preliminary archaeological assessment for the proposed seven-mile trail, including research, analysis, and report writing.

2007 Public School #3, Archaeological Monitoring, West New York, New Jersey

Archaeological Monitor/researcher for NJ Executive Order 215 Compliance for 1 day of archaeological monitoring for human remains and research on school site that found headstone during excavation. Post field activities included report writing for submission to state.

2007 Former Koppers Superfund Site, Phase IB and II, Newport, Delaware

Crew chief and OSHA Site Safety Officer for EPA compliance for superfund site during six month phase IB and II field excavations conducted by 20 archaeologists, teamed with John Milner and Associates. Work included setting of testing grid and field testing of over 3000 phase IB auguring and STP units and over 180 phase II units. Additional work included lab work, field tech training, and safety oversight.

2007 Bronx River Park, Phase IA, Bronx, New York

Research coordinator, researcher and report production for New York City Landmarks Preservation Commission Compliance. Assessed park land for prehistoric and historic archaeological potential.

USDA, Health-Based Plant Genomics Facility, Cornell University, Ithaca, NY.

Research coordinator, researcher and report production for archaeological resources Section 106

Assessment as part of a NEPA Screening on the Plant Genomics Laboratory Building site.

2007 Weeksville Village, Phase IB testing, Brooklyn, New York

Archaeological Monitor for SEQRA review for village cultural center. Performed 1 day of field duties, with Joan Geismar. Work included monitoring of back hoe trenching for foundations and artifact deposits associated with the Huntely Houses.

2006-2007 Edgewater Colony, Phase II, Edgewater, New Jersey

Field director and lab director for or EIT storm water improvements loan consisting of the preparation of a Phase II prehistoric/historic site investigation. Included the direction of two field technicians excavating a total of 8 standard test units, photographer and the coordination of lab work. Other post-field responsibilities include writing sections, preparation and production of the final report for submittal to New Jersey DEP Municipal Finance and Technical Services.

2006 Portion of the Northeast Business Park, Phase IA, Washington Township, New Jersey

Research coordinator, researcher, and report production for New Jersey Wetlands Permit. Assessed site for prehistoric and historic archaeological sensitivity.

2006 Creighton Farm Bridge Crossing, Phase I, Willistown, Pennsylvania

Field director, research coordinator, lab director, photographer and report preparation for Army Corps of Engineers Permit. Post field work included laboratory analysis of artifacts, assisting with the writing, prepared, edited and produced report.

2006 Camp Laughing Water, Phase I, New Hanover and Upper Fredrick, Pennsylvania

Field director, research coordinator, lab director, photographer and report preparation for Army Corps of Engineers Permit. Post field work included laboratory analysis of artifacts, assisting with the writing, prepared, edited and produced report.

2006 Camp Hidden Falls, Phase I, Delaware and Lehman Townships, Pennsylvania

Field director, research coordinator, lab director, photographer and report preparation for Army Corps of Engineers Permit. Post field work included laboratory analysis of artifacts, assisting with the writing, prepared, edited and produced report.

2006 Select Sires, Phase I, Eaton, Pennsylvania

Field director, research coordinator, lab director, photographer and report preparation for Pennsylvania section 105 Permit. Post field work included laboratory analysis of artifacts, assisting with the writing, prepared, edited and produced report.

2005 Tournament World, Phase IB, Montgomery, New York

Field director, research coordinator, and photographer for SEQRA review. Field assessment for prehistoric and historic archaeological sites. Post-field work included laboratory analysis of artifacts, assisting with the writing, prepared, edited and produced report.

2005 Former Old First Presbyterian Church Cemetery, Phase III Data Recovery, Newark, New Jersey

Project Manager/Field Director

Responsibilities included:

- Over sight of all field activities for 2.2 acre cemetery excavation
- Preparation and implementation of a comprehensive field plan for the locating human remains and associated artifacts
- Hiring and managing a field staff of 35
- Directing and coordinating sub-contractor with field staff of 30

- Directing and coordinating 4 backhoes on site to move overburden and back fill site
- Over sight of cataloging all burials and artifacts
- Laboratory analysis of artifacts
- Writing, coordinating and editing of final report

2005-2006 Circulations Improvement Project, Phase IA and IB, Newark, New Jersey

Field director, research coordinator, photographer and lab director for NJ Executive Order 215 Compliance. Phase I background investigation and Phase IB field testing. Work included coordinating conducting research, conducting photographic pedestrian survey site, and conducting field testing. Post field work included laboratory analysis of artifacts and preparation of the final reports. Report preparation included writing sections of the report, preparation and production of final report for submittal.

2005 Edgewater Colony, Phase IB, Edgewater, New Jersey

Field director, research coordinator, and photographer for Environmental Infrastructure Trust Financing Program (EIT). Preparation of a Phase IB prehistoric/historic site investigation. Included the direction of three field technicians digging a total of 139 standard test pits, project coordination with the principal investigator, photographer and the coordination of lab work. Other post-field responsibilities include assisting with the writing, preparation and production of the final report.

2005 Former Central Railroad Terminal, Archaeological Monitoring, Newark, New Jersey

Crew Chief/Project Coordinator Application for project authorization compliance of 6 week archaeological monitoring during demolition of former railroad terminal for SHPO resolution on application for project authorization. Monitor for human remains associated with the Old First Presbyterian Church cemetery, identifying, excavating, cataloging and turn over to mortician for reburial. Post field work included lab analysis of artifacts.

2005 Regional Biocontainment Laboratory – Newark Center, University of Medicine and Dentistry of New Jersey, Newark, New Jersey – Researcher and report writer for cultural resources section of Environmental Assessment in accordance with the requirements of NEPA for the construction of a new Regional Biocontainment Laboratory under a grant form the National Institutes of Health.

2005 USDA, Health-Based Plant Genomics Facility, Cornell University, Ithaca, New York

Researcher and site inspector for cultural resources section of a Section 106 Assessment as part of a NEPA Screening on the Plant Genomics Laboratory Building site. Includes an archaeological assessment and architectural evaluation of the current facility and property.

2004-2006 Newark Downtown Core Redevelopment and Circulations Improvement Plan, Newark, New Jersey

Responsibilities included:

- Preparing a multi-phased strategy for investigating, testing and mitigating the project area
- Conducting preliminary research regarding various aspects of the project area, including possible intact remains within the former First Presbyterian Church cemetery
- Supervising research
- Conducting field photo reconnaissance and preliminary visual assessment of all properties potentially eligible for listing on the State and National Register of Historic Places that may be impacted by the proposed project
- Contributing to the Application for Project Authorization regarding the proposed demolition of five historic structures located within the Four Corners Historic District

2003-2005 NJSCC School Development Program, New Jersey

Crew Chief, researcher, photographer and report writing and production for NJ Executive Order 215 Compliance and NJSCC Guidelines. Participated in the development and redevelopment of 20 new and existing school sites located throughout New Jersey. Responsibilities included:

- Conducting and overseeing background research at the New Jersey Historic Preservation Office, the New Jersey State Museum and local archives
- Conducting field photo reconnaissance and preliminary visual assessment of all properties potentially eligible for listing on the State and National Register of Historic Places that may be impacted by the proposed project
- Preparation and assistance in writing of the Cultural and Historical Resource Assessment section of Environmental Assessment and Environmental Impact Statement Reports and Phase IA background investigations
- Overseeing report production and preparing maps and figures
- Producing for internal departments/clients memos, letters and other documentation outlining potential issues and possible recommendations.

2003 Pen Del Development, Phase IB and II, Pemberton, New Jersey

Field/Laboratory Technician of a Phase I & II prehistoric site investigation/excavation. Field responsibilities also included photographer and mapping excavation locations using GPS equipment. Laboratory Technician responsibilities included; cleaning, cataloging and photographing all artifacts. Other post-field responsibilities included assisting with the preparation and production of the final cultural resource report for submittal to New Jersey HPO.

2003 Field School, Lenape Meadows, Phase II, Basking Ridge, New Jersey

Field and Laboratory Technician for phase II prehistoric excavation. Field work (2 weeks) included daily preparation of site, field excavations, documentation of artifact finds, field crew management and the closing up the site for the winter. Laboratory work (1 week) included cleaning, identifying, cataloging and photographic documentation of all artifacts.

2003 Lithics Identification Project, William Paterson University, New Jersey

Volunteer. Conducted laboratory analysis (1 month), identification and cataloging, of over 5,000 stone fragments from the Wallkill River basin in Northern New Jersey, submitted to Dr. Janet Pollak. Research included identifying and cataloging human produced stone flakes and tools vs. naturally altered stone.

PUBLICATIONS

Selected Technical Cultural Resource Reports

Phase IA Cultural Resource Investigation for Jersey City Walkway and DMAVA Park, Jersey City, Hudson County, New Jersey. Michael Audin, 2009. Manuscript on file at NJSHPO, Trenton NJ.

Phase I Archaeological Assessment Route 33 Interchange Improvements, Palmer Township, Pennsylvania. Michael Audin, 2009. Manuscript on file at PHMC, Harrisburg, Pa.

Phase IA Cultural Resource Survey for the Standard Chlorine Chemical Company Site, Interim Response Action Workplan, Town of Kearny, Hudson County, New Jersey. Michael Audin, 2009. Manuscript on file at NJSHPO, Trenton NJ.

Phase III Cemetery Excavation, Old First Presbyterian Church, Newark Downtown Core Redevelopment, Newark, Essex County, New Jersey. Michael Audin, Erol Kavountzis, and Sarah Hlubik, 2005. Manuscript

on file at NJSHPO, Trenton NJ.

Phase I Archaeological Investigation Montgomery Towne Square, Montgomery, Orange County, New York. Ludomir Lozny Principle Investigator, Michael Audin, and Sarah Hlubik, 2007. MS on file at OPRHP, Pebbles Island, NY.

Phase II Archaeological Investigation of the Edgewater Colony, Edgewater, Bergen County, New Jersey. Ludomir Lozny PI, Michael Audin, and Sarah Hlubik, 2007. MS on file at NJSHPO, Trenton, NJ.

Phase IA Archaeological Investigation Bronx River Park, Bronx, Bronx County, New York. Ludomir Lozny PI, Michael Audin, and Sarah Hlubik, 2007. MS on file NYC LPC, New York, NY.

Phase I Archaeological Investigation Creighton Farm, Willistown, Chester County, Pennsylvania. Ludomir Lozny PI, Michael Audin, and Sarah Hlubik, 2006. MS on file at PHMC, Harrisburg, Pa.

Phase II Archaeological Investigation Eaton, Wyoming County, Pennsylvania. Ludomir Lozny PI, Michael Audin, and Erol Kavountzis, 2006. Ms on file at PHMC, Harrisburg, Pa.

Phase IA Archaeological Assessment, Newark Circulation Improvements Project, Newark, Essex County, New Jersey. Ludomir Lozny PI, Ulana Zakalak PI, Michael Audin, Hugh Goodman, and Erol Kavountzis, 2005. MS on file at NJSHPO, Trenton, NJ.

Archaeological Monitoring for the Central Railroad of New Jersey, Newark, Essex County, New Jersey. Ludomir Lozny PI, Michael Audin, Nils Conway, and Erol Kavountzis, 2005. MS on file NJSHPO, Trenton, NJ.

AWARDS

NJ Historic Preservation Award, Innovative Techniques in Archaeology, May 2013

PRESENTATIONS

2011 “New Jersey’s Iron Coffins” presented at the Archaeological Society of New Jersey Meeting.

2009 “The Montauk Theater: Last of the Seven Passaic Theaters” presented to a William Paterson University, Class on Material Culture.

2007 “Excavations at the Old First Presbyterian Cemetery in Newark, NJ” presented to William Paterson University’s Anthropology Club.

SUMMARY OF PROFESSIONAL ACTIVITIES

Mr. Audin has conducted field work in New Jersey, New York, Pennsylvania, Connecticut, Delaware and West Virginia. He is the author or co-author of over one hundred (100) cultural resource reports in New Jersey, New York, Pennsylvania and West Virginia. Also contributed to over 30 Environmental Impact Statements and Environmental Assessments.

PROFESSIONAL DEVELOPMENT

Historic Preservation Research Course, Drew University, February 2005

OSHA 40 Hour Certified HAZWOPER Training (December, 2005) and refreshers

OSHA Site Supervisor Certified (June, 2007) and refreshers

OSHA 10-Hour Construction Certified for New York City, 2012

NJSHPO Cultural Resources Best Practices Workshop, October 2006

Preservation Planning in the Highlands, Drew University, March 2007

Section 106 Essentials Class with ACHP, July 2007

Pennsylvania Department of Transportation, Cultural Resource Handbook Class, April 2010

Federal Communications Training, Washington D.C. June 2011

Cultural Resource Essentials Series, Pennsylvania Historical & Museum Commission, July 2013

PROFESSIONAL AFFILIATIONS

Archaeological Society of New Jersey

Council for Northeast Historical Archaeology

Eastern States Archaeological Federation

Lambda Alpha National Collegiate Honors Society for Anthropology

Middle Atlantic Archaeological Conference

National Trust for Historic Preservation

New York State Archaeological Association (Lifetime Member)

Register of Professional Archaeologists

Society of American Archaeology

Society for Historical Archaeology

Society for Industrial Archaeology

The Society for Pennsylvania Archaeology

KATHERINE McCULLOUGH FRENCH, M.PHIL, M.A., R.P.A.

Zooarchaeology
Human Remains Burial
Excavation NAGPRA Compliance
Urban Archaeology Field
Crew Management Site
Survey and Identification
Laboratory Analysis
Report Writing and Editing

SUMMARY OF QUALIFICATIONS

Ms. French is a Secretary of Interior qualified Registered Professional Archaeologist with field, laboratory, museum, and forensic experience. Work experience includes NHPA Section 106 and 110 compliance; Phase I, II, and III Archaeological Assessments; Environmental Assessments; ASMIS site visits and documentation; and faunal, human remains, and artifact analysis. Beyond her significant field experience in the United States and Northern Europe, Ms. French also has zooarchaeology and bioarchaeology research experience with a specialty in human/non-human differentiation. She is currently writing her dissertation and has completed all other requirements for a doctorate in Anthropology from New York University.

EDUCATION

Ph.D. Expected 2016	New York University Anthropology
M.A. 2011	New York University Anthropology
M.Phil 2008	University of Oxford, St. Cross College European Archaeology
B.A. 2006	Georgetown University Medieval Studies, Classical Archaeology Minor

RELEVANT EXPERIENCE

March 2014-Present, Fieldwork Director, Archaeology and Historic Resource Services, Rock Tavern, NY
Assistant to Principal Investigator Michael Audin in all project stages for a small cultural resource management firm serving the New York City Area, including site assessments, fieldwork, artifact analysis, mapping support, and report writing. Primary responsibility is to supervise all fieldwork activities and archaeology technicians. Project management includes all project stages, such as site assessments, fieldwork, artifact analysis, mapping, and report writing. Often subcontracted to larger historic preservation and engineering firms, including Langan Engineering & Environmental Services and Arch2, Inc., a historic preservation firm. Duties also include conducting research at New York and New Jersey State Historic Preservation Offices as well as NHPA Section 106 compliance report writing in close consultation with the Principal Archeologist. Strong emphasis on building trusting client relationships and communicating archeological findings to non-specialists. Projects include:

Riverside Building 5, New York City (with Langan Engineering), April 2014 to Present Supervised up to seven field technicians responsible for archaeological monitoring, Phase 1B shovel testing areas of prehistoric sensitivity, and post-excavation laboratory work for a multimillion dollar development in Midtown Manhattan. Drafted memoranda and final reports for compliance with the New York City Landmark Preservation Commission's restrictive declaration.

Archaeology and Historic Resource Services * 605 Twin Arch Road * Rock Tavern, NY 12575
katie.french@ahrservices.com * cell (815) 321-9625

Princeton Pike Phase 1B, Lawrence Township, NJ (with Langan Engineering), September 2014

Conducted subsurface testing for prehistoric cultural resources in advance of proposed road widening work alongside Princeton Pike.

Corona Ave, Queens, NY, August-September 2014

Supervised testing for human remains in a historic cemetery site in Queens, New York City.

Amtrak New Jersey High Speed Rail Improvement Project (NJHSRIP), Middlesex and Mercer Counties, NJ (with Arch2), April & August 2014

Monitored excavation in areas of high prehistoric sensitivity for new catenary pole installation on the Northeast Corridor, the rail line connecting New York City and Trenton, NJ.

Prallsville Mill Complex, Stockton, NJ (with Langan Engineering), August 2014

Monitored excavation for sewer, water, and electrical lines for new bathroom facility in Historic District along the Delaware and Raritan Canal.

The Basilica of St. Patrick's Old Cathedral, New York City, February 2014

Monitored excavation for mausoleum foundation in historic cemetery included on National Register. Identified both human and animal skeletal remains during the course of excavation as well as high density of nineteenth century artifacts.

Jan 2011-Dec 2012, Visiting Researcher, Office of the Chief Medical Examiner, New York, NY Training and research in histological analysis of human bone, focusing on the preparation of bone thin-section slides and human/non-human osseous tissue differentiation.

July 2011, Field Archaeologist, Ecology of Crusading Project, Multiple Sites, Poland

Teutonic Order crusader sites with an international team with particularly attention paid to environmental evidence.

May 2011-Aug 2011, NAGPRA Intern, Denver Museum of Nature and Science, Denver, CO Conducted archival research and physical analyses of the human skeletal collection with no contextual information.

July 2006-July 2010, Staff, Vale & Ridgeway Project & Training Excavation, Marcham/Frilford, UK

Trench Supervisor 2010; Assistant Trench Supervisor 2006-2007. Responsible for teaching basic excavation principles to Undergraduate and Continuing Education students from the University of Oxford and other international university programs during the summer field season.

April 2010-June 2010, Criminalist, Office of the Chief Medical Examiner, New York, NY

Phase III World Trade Center PHR (Potential Human Remains) Recovery Project. Member of sifting team on mobile sifting platform. Experience working in human remains recovery in HazMat gear with half-face respirator.

Jan 2009-June 2010, Project Researcher, University of Nevada – Reno, Multiple Locations

Contracted as an educational partner stationed at multiple National Park properties to survey and report archaeological and cultural resources in prescribed burn units. Coordinated with Tribal Representatives and fire personnel to ensure all resources could be protected or damage mitigated during fire events. Author and co-author of fieldwork reports prepared for the National Park Service, listed below under Publications and Research Projects. Projects included:

Fieldwork Director, Whiskeytown National Recreation Area. Assumed responsibility for an ongoing, significantly delayed contract. Worked closely with Klamath Network Fire Archaeologist Joe Svinarich to finish fieldwork and to get the project back on an acceptable timeline. Supervised one NPS Intern who assisted with site visits and mapping support. In total, crew pedestrian surveyed over 3600 acres and recorded 18 new archaeological sites, all historic. Prepared and presented compliance report to the Park's cultural resource specialists and fire management personnel.

Fieldwork Director, Crater Lake National Park. Led field crew consisting of NPS Intern and Tribal Monitor from the Klamath Confederated Tribes. Crew pedestrian surveyed just under 5000 acres over a two month field season and recorded ten new archaeological sites, both prehistoric and historic. Prepared and presented compliance report to the Park's cultural resource specialists and fire management personnel.

Sept 2008-Dec 2008, Intern, Fire Archaeology, National Park Service, Whiskeytown, CA

Internship with National Park Service, funded by the National Council for Preservation Education, Cornell University. Duties include surveying in rough terrain, GPS, photography, archiving, and report preparation in Whiskeytown National Recreation Area.

July 2005, Student, Oxford University Archaeology Training Excavation, Marcham/Frilford, UK

Participated in a two-week field school excavating a site outside a Roman temple complex.

July 2004, Student, Bamburgh Research Project and Field School, Bamburgh, UK

Served as a volunteer excavator at an Anglo-Saxon excavation site in Northumbria. Gained experience excavating human remains at a seventh and eighth century cemetery.

OTHER TRAINING

OSHA 10 Hour Construction Training, completed March 2014

Amtrak Contractor Orientation Safety Course, completed March 2014

Trained READ (Federal Inter-Agency Resource Advisor)

In May 2009 completed US Federal Interagency training at Yosemite National Park in Cultural Resource Advising within the Incident Command System during emergency incidents

Comparative Osteology

Experience in fragmentary human skeletal identification and interpretation of skeletal remains. Experience in faunal identification and analysis

Computer Skills

Fluent in Windows and Macintosh Operating systems, Microsoft Office Suite, Adobe Acrobat, Adobe Photoshop, and SPSS statistical analysis software. Coursework and professional experience with Adobe Illustrator, ArcGIS 10, R open source statistical software, Trimble and Garmin GPS units

RESEARCH GRANTS AND FUNDING

Sept 2014-May 2015, Lane Cooper Fellow, Graduate School of Arts and Science, New York University

Received \$25,000 research fellowship from the Graduate School of Arts and Science for research on a pre-Renaissance doctoral dissertation topic.

Sept 2009-May 2014, MacCracken Fellow, New York University

Five years of full tuition, health insurance, and living stipend by the NYU Graduate School of Arts and Sciences

Jan 2013-May 2013, Global Research Institute Fellowship, New York University – London

One semester of funding for dissertation research while a researcher in residence at New York University – London's Global Research Institute.

July 2011, Antonina S. Ranieri International Scholars Fund Grant, New York University

Travel grant in support of summer fieldwork in England to participate in the Ecology of Crusading Project's excavations in Poland

July 2010, Goodwin-Salwen Archaeological Fellowship, New York University

Travel grant in support of summer fieldwork in England to participate in the Vale & Ridgeway Project's excavation at Marcham/Frillford

Oct 2006-Jun 2008, Healy Scholar for study at St. Cross College, University of Oxford

Awarded Georgetown University's Healy Fellowship: two years of full tuition and travel/housing stipend to pursue a master's degree

TEACHING EXPERIENCE

Sept 2010-Present, Adjunct Instructor, Anthropology, New York University

Lead instructor for *Archaeology: early societies and culture* undergraduate course, Summer 2012. Laboratory instructor for *Archaeology: early societies and culture*, four semesters. Course assistant for *Interpreting the Human Skeleton* graduate-level course, one semester. Course assistant for *Faunal Analysis* graduate-level course, two semesters

July 2010, Trench Supervisor, Vale and Ridgeway Project and Training Excavation, Marcham, UK

Taught basic excavation principles to Undergraduate and Continuing Education students from the University of Oxford and other international university programs

PROFESSIONAL AFFILIATIONS

Member, International Committee of Archaeozoology (Since 2012) Member, Medieval Academy (since February 2011)
Member, Register of Professional Archaeologists (since July 2010)
Member, Society for American Archaeology (since January 2010)
Member, Phi Beta Kappa (inducted May 2006)
Member, Alpha Sigma Nu (inducted May 2005)

CONFERENCE PRESENTATIONS

French, K.M. 2014. "Graveside Feasting in Anglo-Saxon England: pagan tradition and Christian taboo." *49th International Congress on Medieval Studies May 8-11, 2014, Foodways Session I.*

French, K.M. 2014. "Interspecies Cremations in the Pagan World: local practice or multiregional trend?" 79th Annual Meeting for the Society for American Archaeology April 23-27, 2014, Bioarchaeology Session.

McCullough, K. 2012. "Theorizing Paganism in the Early Medieval Period." Session: Theory in Medieval Archaeology. *Theoretical Archaeology Group (TAG) USA*. Buffalo, NY. Given May 24, 2012

McCullough, K. 2011. "Is there a single Early Anglo-Saxon Culture? Regional Differences in England c.450-600 A.D. *The Culture of Early Anglo-Saxon England*. Anglo-Saxon Studies Colloquium, New York, NY, New York University. Given April 29, 2011.

McCullough K. 2010. "Cattle as Wealth in Anglo-Saxon England. *What is Better than Gold?: Economies and Values in the Middle Ages*. Columbia University Medieval Guild, New York, NY, Columbia University. Given October 22, 2010.

PUBLICATIONS AND RESEARCH PROJECTS

Adams, Bradley and Pam Crabtree. 2011. *Comparative Skeletal Anatomy: a photographic atlas for medical examiners Second Edition*.

- Photo Editor for online supplement, labeling bone landmarks using graphic editing software

Kamesh, Z, Gosden, C. and Lock, G. (with contributions by E. Brophy, R. Coe, R. Glyde, J. Harrison, J. Kinory, P. Levick, K. McCullough, S. Ravin, J. Smallridge, and J. Walford) 2011. *The Vale and Ridgeway Project: Excavations at Marcham/Frilford: 2010 interim report*. Available at <<http://www.arch.ox.ac.uk/VRP1.html>>.

National Park Service Publications (Internal Publications; Redacted Copies Available through FOIA Requests):

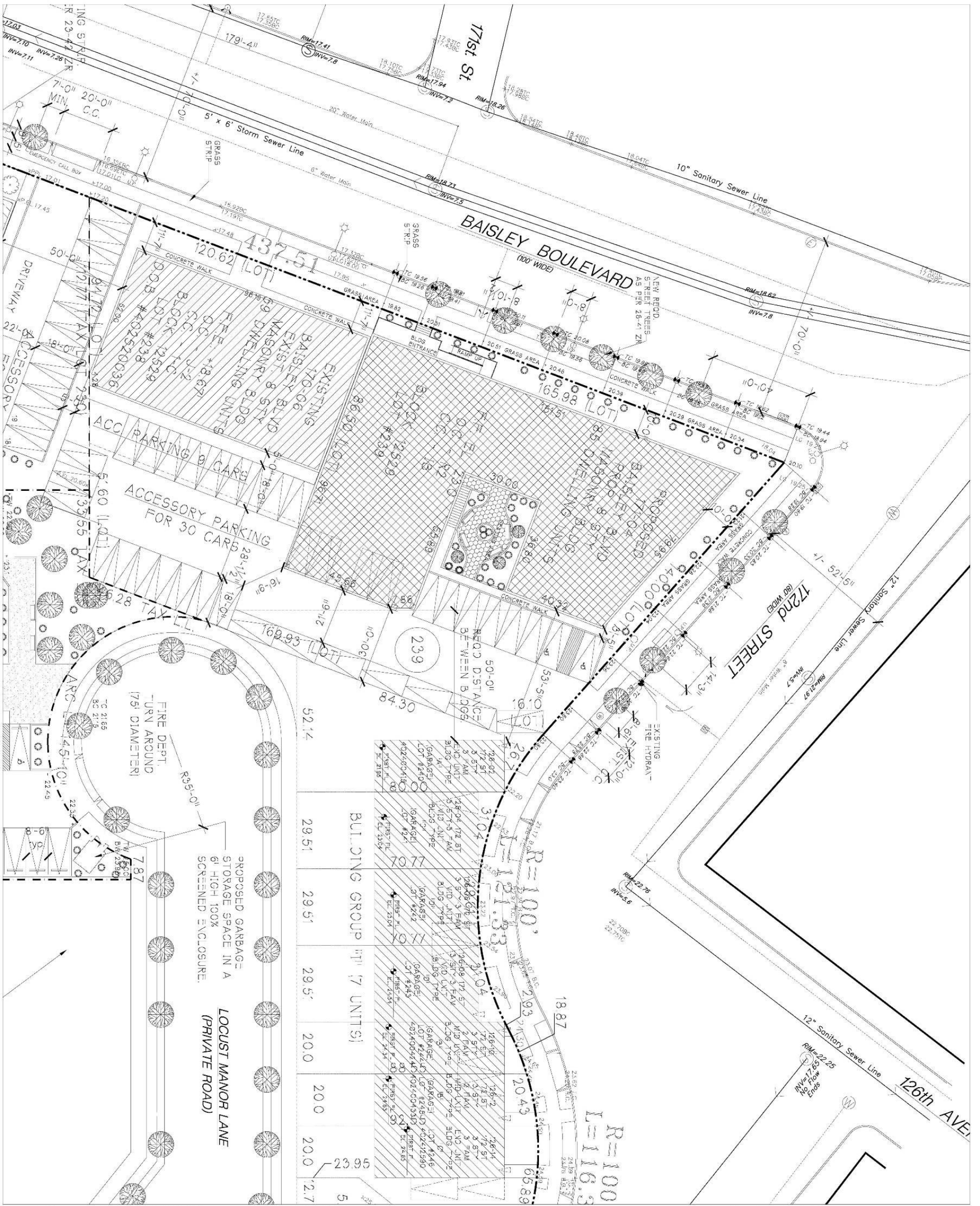
- McCullough, K. 2010. *Cultural Resources Survey of Fuel Treatment Areas at Crater Lake National Park*. Report prepared for Crater Lake National Park.
- McCullough, K. 2009. *Cultural Resources Survey of Fuel Treatment Areas – Whiskeytown National Recreation Area*. Report on file at Whiskeytown N.R.A.
- Ogle, H. and K. McCullough. 2009. *Archeological Inventory of Fuel Treatment Units at Lassen Volcanic National Park*. Report on file at Lassen Volcanic National Park.

McCullough, K. 2008. Food Distribution Systems in Later Anglo-Saxon *Burhs*: the faunal evidence. Unpublished M.Phil Thesis. University of Oxford.

McCullough, K. 2006. The use of stable isotope analysis in studying the impact of the Anglo-Saxon migrations on the population of Post-Roman Britain. Unpublished Bachelor's Honors Thesis. Georgetown University.

APPENDIX B

Plan of the Project Site



DCB: A-006.00 PERMITS: 8 OF 37		NO. DATE REVISION	OWNER: NVM ARCHITECT: GJC	DRAWING TITLE: SUBJECT TAX LOT SITE PLAN	THE ARCHITECT SHALL NOT HAVE CONTROL OR DIRECTION OF AND SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION OF AND SHALL NOT BE RESPONSIBLE FOR THE PERFORMANCE OF ANY CONTRACTORS OR SUBCONTRACTORS OR FOR THE ACTS OR OMISSIONS OF THE CONTRACTOR OR CONTRACTORS OR ANY OTHER PERSONS PERFORMING ANY OF THE WORK OR FOR THE FAILURE OF THEM TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. ALWAYS USE IMMEDIATE OR BROWN DRAWINGS ARE NOT TO BE SCALED. GERALD J. CALIENDO ARCHITECT, P.C. AND ITS PROFESSIONAL EMPLOYEES WILL NOT BE RESPONSIBLE FOR ANY CONSTRUCTION SUPERVISION.
			PROJECT ADDRESS: THE PAVILION @ LOCUST MANOR - A TRITON RESIDENCE 171-04 BAISLEY BLVD. ROCHEDALE VILLAGE, NY	OWNER: DEY GROUP LLC 126 SCHUCHT HOUSE RD. LENTONIA, NY	

APPENDIX C
GEOTECHNICAL REPORT AND BORING LOGS

**SUBSOIL
INVESTIGATIONS**



SOIL MECHANICS DRILLING CORP.

3770 MERRICK ROAD • SEAFORD, L. I., NEW YORK 11783
(516) 221-2333 • FAX (516) 221-0254

July 29, 2014

D&F Construction Group
100 Schoolhouse Road
Levittown, New York 11756
Attention: Robert Cavaliere
Via Federal Express and
Email: robertc@thefdggroup.com

Re: Locust Manor Apartments
171-04 Baisley Blvd.
Springfield Gardens, NY
Our Job No. 14-442

Gentlemen:

Forwarded herewith are three (3) copies of the boring logs, TR-1's and TR-4's Forms for filing with the Building Department, for drilling work performed recently at the above referenced site.

Our investigation consisted of the drilling of eight (8) test borings at locations shown on our boring location plan. The borings were advanced using a truck mounted drill rig and hollow stem auger casing. Sample recovery was obtained using a CME automatic trip hammer and a standard 2 inch split spoon sampler. The number of blows required to advance the sampler each 6 inch increment were recorded and are shown on our boring logs, along with a written description of the recovered soil sample per our geologist's visual identification of same. The CME automatic hammer operates with an efficiency of approximately 90%. The original conventional use of rope, cathad and drop weight, on the other hand, operates with an efficiency of approximately 60%. As a consequence, the standard penetration test results obtained using the CME auto hammer are on the order of two thirds the value that would have been obtained had the original rope and cathad method been used. This is significant if you are using design charts for soil strength parameters based on historical data associated with the rope and cathad method. If so, you should adjust our data accordingly.

Our investigation revealed that the areas drilled are blanketed by from 2 to 6 feet of a loose to moderately dense fill consisting of sand, silt and gravel with inclusions of asphalt, glass, cinders and other miscellaneous materials. The fill was, in turn, underlain by a moderately dense sand formation extending down to the deepest depths drilled.

Ground water was encountered at depths ranging from 10' 6" to 12' 10" below existing grade at the time the work was done.

TEST BORINGS • GROUND WATER DETERMINATIONS • FOUNDATION RECOMMENDATIONS • HOLLOW STEM AUGER BORINGS
LABORATORY ANALYSES • CONTROLLED LANDFILL • DIAMOND CORE DRILLING • SAND & GRAVEL PROSPECTING
BEARING VALUES • WELL POINT INSTALLATIONS • ENGINEERING SUPERVISION • PERCOLATION TESTS
SANITARY INVESTIGATIONS • UNDISTURBED SAMPLING • TEST PITS • TOP SOIL ANALYSES

SOIL MECHANICS DRILLING CORP.

3770 MERRICK ROAD • SEAFORD, L. I., NEW YORK 11783
(516) 221-2333 • FAX (516) 221-0254

D&F Construction Group
Attn: Steven Cavaliere

July 29, 2014
Page Two

The soil profiles generated by this investigation best fits that of Site Class "D" in accordance with Table 1615.1.1 of the New York City Building Code.

Liquefaction is not likely at this site and it, therefore, need not be a design consideration.

All soil below the fill will satisfactorily support foundation loads of 1-1/2 tons per square foot.

Soil samples recovered during drilling operations will be stored in our lab for a period of 30 days after which they will be destroyed. During this period we will deliver these samples to any prescribed location upon request.

If after you examine the enclosed you have any further questions, please feel free to call and discuss them with us.

Billing is enclosed.

Very truly yours,

SOIL MECHANICS DRILLING CORP.



Vincent Nantista, P.E.
Vice President

VN:vjc
Enclosures

2. EXISTING MAINT

- NOTES**
1. SOIL CHARACTERISTICS ARE BY VISUAL CLASSIFICATION OF SOIL SAMPLES AS RECORDED DURING FIELD INVESTIGATION.
 2. SOIL CHARACTERISTICS WERE OBTAINED FROM THE TYPICAL CROSS SECTION SYSTEM.
 3. FOUNDATION TYPE WAS DETERMINED FROM THE FIELD CLASSIFICATION OF EACH MEMBER.
 4. SOIL INVESTIGATION WAS CONSIDERED TO BE VISUAL ONLY.
 5. SOIL SAMPLES WERE OBTAINED FROM A GENERAL SOIL EXPLORATION AND ADVANCED THE NUMBER.
 6. SOIL TEST REPORTS SHOWING EXTENSIVE BROWN ARE REFERENCED TO THE CORNER OF LOT OVER A 1/2 A.C. 1/2 S.P. SYSTEM.
 7. SOIL TEST REPORTS SHOULD BE REFERENCED WITH THE REPORT FOR BUILDING CODES.

SECTION	UNIFIED SOIL CLASSIFICATION			
	DEPTH	SOIL TYPE	WATER CONTENT	LIQUIDITY INDEX
B-1	0 - 12"	SM	23	0.45
B-2	0 - 12"	SM	22	0.45
B-3	0 - 12"	SM	23	0.45
B-4	0 - 12"	SM	23	0.45
B-5	0 - 12"	SM	23	0.45
B-6	0 - 12"	SM	23	0.45
B-7	0 - 12"	SM	23	0.45
B-8	0 - 12"	SM	23	0.45
B-9	0 - 12"	SM	23	0.45

BAISLEY BOULEVARD

172nd STREET

PROPOSED NEW 8 STORY BUILDING

UNIFIED SOIL CLASSIFICATION

DEPTH	SOIL TYPE	WATER CONTENT	LIQUIDITY INDEX
0 - 12"	SM	23	0.45
12 - 24"	SM	23	0.45
24 - 36"	SM	23	0.45
36 - 48"	SM	23	0.45
48 - 60"	SM	23	0.45
60 - 72"	SM	23	0.45
72 - 84"	SM	23	0.45
84 - 96"	SM	23	0.45
96 - 108"	SM	23	0.45
108 - 120"	SM	23	0.45
120 - 132"	SM	23	0.45
132 - 144"	SM	23	0.45
144 - 156"	SM	23	0.45
156 - 168"	SM	23	0.45
168 - 180"	SM	23	0.45
180 - 192"	SM	23	0.45
192 - 204"	SM	23	0.45
204 - 216"	SM	23	0.45
216 - 228"	SM	23	0.45
228 - 240"	SM	23	0.45

ALLOWABLE SOIL BEARING PRESSURES, AT 2.00 FEET

SOIL TYPE	ALLOWABLE SOIL BEARING PRESSURE (PSF)
SM	500
GM	500
GC	500
GM	500
GC	500
GM	500
GC	500

SOIL INVESTIGATION DATA

NO.	DEPTH (FEET)	SOIL TYPE	WATER CONTENT (%)	LIQUIDITY INDEX
1	0 - 12"	SM	23	0.45
2	12 - 24"	SM	23	0.45
3	24 - 36"	SM	23	0.45
4	36 - 48"	SM	23	0.45
5	48 - 60"	SM	23	0.45
6	60 - 72"	SM	23	0.45
7	72 - 84"	SM	23	0.45
8	84 - 96"	SM	23	0.45
9	96 - 108"	SM	23	0.45
10	108 - 120"	SM	23	0.45
11	120 - 132"	SM	23	0.45
12	132 - 144"	SM	23	0.45
13	144 - 156"	SM	23	0.45
14	156 - 168"	SM	23	0.45
15	168 - 180"	SM	23	0.45
16	180 - 192"	SM	23	0.45
17	192 - 204"	SM	23	0.45
18	204 - 216"	SM	23	0.45
19	216 - 228"	SM	23	0.45
20	228 - 240"	SM	23	0.45

SOIL INVESTIGATION REPORT

PROJECT NO. B-001.00

DATE: 10/15/88

SCALE: 1/4" = 1'-0"

PREPARED BY: ENGINEER

CHECKED BY: ENGINEER

APPROVED BY: ENGINEER

APPENDIX D
STP SOIL PROFILE & ARTIFACT LOG

Soil Profile Log						
STP #	DEPTH (cm)	STRATUM	MUNSELL	SOIL TYPE	ARTIFACTS	COMMENTS
1	0 to 50	la		Fill - mixed asphalt, cinder	Broken bottle glass, modern trash, and construction debris	
1	50 to 60	lb		Fill - compacted fine to medium coarse sand	NCM	Machine compacted with 2-5 % gravel
1	60 to 110	II	10 YR 6/4	Fine to medium coarse sand	NCM	1-2% gravel
1	110 to 130	III	10 YR 5/4	Fine to medium coarse sand	NCM	<1% gravel
2	0 to 8	N/A		Asphalt		
2	9 to 50	I		Fill - mixed asphalt, cinder	Broken bottle glass, modern trash, and construction debris	
2	50 to 86	II	10 YR 6/4	Fine to medium coarse sand	NCM	1-2% gravel
2	86 to 120	III	10 YR 5/4	Fine to medium coarse sand	NCM	<1% gravel
3	0 to 60	la		Fill - mixed asphalt, cinder	Broken bottle glass, modern trash, and construction debris	Grass roots in top 5 cm
3	60 to 90	lb		Fill - compacted fine to medium coarse sand	NCM	
3	90 to 115	II	10 YR 6/4	Fine to medium coarse sand	NCM	1-2% gravel
3	115 to 130	III	10 YR 5/4	Fine to medium	NCM	<1% gravel

				coarse sand		
4	0 to 50	la		Fill - mixed asphalt, cinder	Broken bottle glass, modern trash, and construction debris	
4	0 to 80	lb		Fill - compacted fine to medium coarse sand	NCM	
4	80 to 110	II	10 YR 6/4	Fine to medium coarse sand	NCM	1-2% gravel
4	110 to 130	III	10 YR 5/4	Fine to medium coarse sand	NCM	<1% gravel
5	0 to 7	N/A		Asphalt		
5	7 to 38	I		Fill - mixed asphalt, cinder	Broken bottle glass, modern trash, and construction debris	
5	38 to 97	II	10 YR 6/4	Fine to medium coarse sand	NCM	1-2% gravel
5	97 to 110	III	10 YR 5/4	Fine to medium coarse sand	NCM	<1% gravel
6	0 to 50	la		Fill - mixed asphalt, cinder	Broken bottle glass, modern trash, and construction debris	Grass roots in top 5 cm
6	50 to 65	lb		Fill - compacted fine to medium coarse sand	NCM	
6	65 to 75	II	10 YR 6/4	Fine to medium coarse sand	Bottle glass fragment at interface with Stratum I	1-2% gravel
6	75 to 110	III	10 YR 5/4	Fine to medium coarse sand	NCM	<1% gravel
7	0 to 70	I		Fill - mixed asphalt, cinder	Broken bottle glass, modern trash, and construction debris	Grass roots in top 5 cm
7	70 to 102	II	10 YR 6/4	Fine to medium coarse sand	NCM	1-2% gravel
7	102 to 122	III	10 YR 5/4	Fine to medium coarse sand	NCM	<1% gravel

8	0 to 9	N/A		Asphalt		
8	9 to 40	I		Fill - mixed asphalt, cinder	Broken bottle glass, modern trash, and construction debris	
8	40 to 90	II	10 YR 6/4	Fine to medium coarse sand	NCM	1-2% gravel
8	90 to 110	III	10 YR 5/4	Fine to medium coarse sand	NCM	<1% gravel
9	0 to 40	I		Fill - mixed asphalt, cinder	Broken bottle glass, modern trash, and construction debris	Grass roots in top 8 cm
9	40 to 90	II	10 YR 6/4	Fine to medium coarse sand	Bottle glass fragment at interface with Stratum I	1-2% gravel
9	90 to 110	III	10 YR 5/4	Fine to medium coarse sand	NCM	<1% gravel
10	0 to 50	I		Fill - mixed asphalt, cinder	Dog burial with collar, broken bottle glass, modern trash, and construction debris	
10	50 to 70	II	10 YR 6/4	Fine to medium coarse sand	NCM	1-2% gravel
10	70 to 120	III	10 YR 5/4	Fine sand	NCM	<1% gravel

APPENDIX E
OPRHP & LPC Comment Letters



**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

Andrew M. Cuomo
Governor

Rose Harvey
Commissioner

August 29, 2012

Nicole DeFreitas
D & F Consultants
2001 Marcus Ave
Suite 245E
Lake Success, New York 11042

Re: HFA
Locust Manor Apartments
171-04 Baisley Boulevard/QUEENS, Queens
County
12PR03650

Dear Ms. DeFreitas:

Thank you for requesting the comments of the Office of Parks, Recreation and Historic Preservation (OPRHP). We have reviewed the project in accordance with the New York State Historic Preservation Act of 1980 (Section 14.09 of the New York Parks, Recreation and Historic Preservation Law). These comments are those of the Division for Historic Preservation 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 State Environmental Quality Review Act (New York Environmental Conservation Law Article 8) and its implementing regulations (6 NYCRR Part 617).

Based upon this review, it is the OPRHP's opinion that your project will have No Impact upon cultural resources in or eligible for inclusion in the State and National Register 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
Deputy Commissioner for Historic Preservation

ENVIRONMENTAL REVIEW

Project number: HOUSING PRESERVATION AND DEV. / 15HPD076Q
Project: THE PAVILION AT LOCUST MANOR
Address: BAISLEY BOULEVARD, **BBL:** 4125290239
Date Received: 4/27/2015

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

Comments:

LPC review of archaeological sensitivity models and historic maps indicates that there is potential for the recovery of remains from 19th Century and Native American occupation on the project site. Accordingly, the Commission recommends that an archaeological documentary study be performed for this site to clarify these initial findings and provide the threshold for the next level of review, if such review is necessary (see CEQR Technical Manual 2014).

Gina Santucci

4/30/2015

SIGNATURE
Gina Santucci, Environmental Review Coordinator

DATE

File Name: 30426_FSO_DNP_04302015.doc

ARCHAEOLOGY

Final Sign-Off (Single Site)

Project number: HOUSING PRESERVATION AND DEV. / 15HPD076Q
Project: THE PAVILION AT LOCUST MANOR
Address: BAISLEY BOULEVARD, **BBL:** 4125290239
Date Received: 5/22/2015

This document only contains Archaeological review findings. If your request also requires Architecture review, the findings from that review will come in a separate document.

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

Comments: The LPC is in receipt of an archaeological scope of work prepared by AHRs and dated May 21, 2015. We concur with the recommendations and ask to be consulted about the placement of the trenches once the site survey has been completed. We further note that the consultant will produce a Phase I after the fieldwork that will include the documentary research and document the field work and the analysis of what may be found.



5/28/2015

SIGNATURE
Amanda Sutphin, Director of Archaeology

DATE

File Name: 30426_FSO_ALS_05282015.doc



ANDREW M. CUOMO
Governor

Parks, Recreation, and Historic Preservation

ROSE HARVEY
Commissioner

May 29, 2015

Mr. Michael Audin
Principal Archaeologist
Archaeology & Historic Resource Services, LLC
605 Twin Arch Rd
Rock Tavern, NY 12575

Re: HPD
Pavilion at Locust Manor
171-04 Baisley Blvd, Jamaica, NY
15PR02613

Dear Mr. Audin:

Thank you for requesting the comments of the Office of Parks, Recreation and Historic Preservation (OPRHP). We have reviewed the project in accordance with the New York State Historic Preservation Act of 1980 (Section 14.09 of the New York Parks, Recreation and Historic Preservation Law). These comments are those of the OPRHP 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 State Environmental Quality Review Act (New York Environmental Conservation Law Article 8) and its implementing regulations (6 NYCRR Part 617).

Based upon this review, it is the New York State Office of Parks, Recreation and Historic Preservation's opinion that your project will have no impact on archaeological and/or historic resources listed in or eligible for the New York State and 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

Deputy Commissioner for Historic Preservation

Division for Historic Preservation

P.O. Box 189, Waterford, New York 12188-0189 • (518) 237-8643 • www.nysparks.com