# Phase IA Archaeological Investigation Hallets Court 8 - 28 28<sup>th</sup> Avenue Astoria, Borough of Queens, New York

**OPRHP Review #12PR05325** 

**Prepared For:** 

D & F Development Group 2001 Marcus Avenue Lake Success, NY 11042

Submitted To:

The New York State Historic Preservation Office Peebles Island Resource Center P.O. Box 189 Waterford, NY 12188-0189

Prepared By:

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May 2013



#### MANAGEMENT SUMMARY

SHPO Project Review Number): 12PR05325

Involved State and Federal Agencies: N/A

Phase of Survey: Phase IA Archaeological Investigation

Location Information Location: **8 - 28 28<sup>th</sup> Avenue** Minor Civil Division: **Neighborhood of Astoria** County: **Queens** 

Survey Area

Length: 225 feet (3.7 Km) Width: approximately 80 feet to 130 feet (3.05 m) Number of Acres Surveyed: 0

USGS 7.5 Minute Quadrangle Map: Central Park

Archaeological Survey Overview

Number & Interval of Shovel Tests: N/A 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 n/Avoidance: N/A

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Date of Report: May 2013

#### **EXECUTIVE SUMMARY**

This report describes the Phase IA Archaeological Survey conducted by Archaeology Resource Services (ARS) prepared for D & F Development Group in Astoria, Borough of Queens, New York. The assessment was conducted to support the project environmental assessment under the State Environmental Quality Review Act (SEQR). D & F Development Group is proposing to construct a new 6 story building with 48 apartments and 28<sup>th</sup> Avenue will return to its original orientation along the north border of the site, out to 60' feet, while the new building will occupy the remainder of the site. A site location map and 2012 aerial photograph are included as figures 1 and 2 respectively.

ARS 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 and *New York City Landmarks Preservation Commission (LPC) Guidelines for Archaeological Work in New York City* (2002).

Based upon the results of the information analyzed the archaeological APE was assessed to have a moderate to high sensitivity for prehistoric resources in areas that were not previously excavated for basement construction. The historic archaeological resource sensitivity was considered low in the APE.

The development of portions APE, including the excavation of basements, has most likely impacted any archaeological resources within the footprints of those buildings. However, areas where excavation has not occurred still may possess undiscovered archaeological materials. Therefore, archaeological sensitivity will most likely be reduced if not altogether destroyed, in the areas of previous excavation.

Based on our research, historic map, atlas and aerial photograph review and site reconnaissance, we conclude that the project may encounter subsurface cultural resources. Therefore, we recommend archaeological monitoring be conducted during the excavation phase of the project.

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## 1.0 INTRODUCTION

This report describes the Phase IA Archaeological Survey conducted by Archaeology Resource Services (ARS) prepared for D & F Development Group in Astoria, Borough of Queens, New York. The assessment was conducted to support the project environmental assessment under the State Environmental Quality Review Act (SEQR). D & F Development Group is proposing to construct a new 6 story building with 48 apartments and 28<sup>th</sup> Avenue will return to its original orientation along the north border of the site, out to 60' feet, while the new building will occupy the remainder of the site. A site location map and 2012 aerial photograph are included as figures 1 and 2 respectively.

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## 1.1 Site and Project Description

The project site is currently a vacant lot that has been filled and graded, oriented in an east - west polyform shaped area (Figure 2). It is currently being used as an automobile repair and storage site that had once contained residential lots. The former building was demolished and the lot was filled to create the project sites present condition. D & F Development Group is proposing to construct a new 6 story building with 48 apartments, to act as housing for the elderly and 28<sup>th</sup> Avenue will return to its original orientation along the north border of the site, out to 60' feet, while the new building will occupy the remainder of the site.

## **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 were 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.

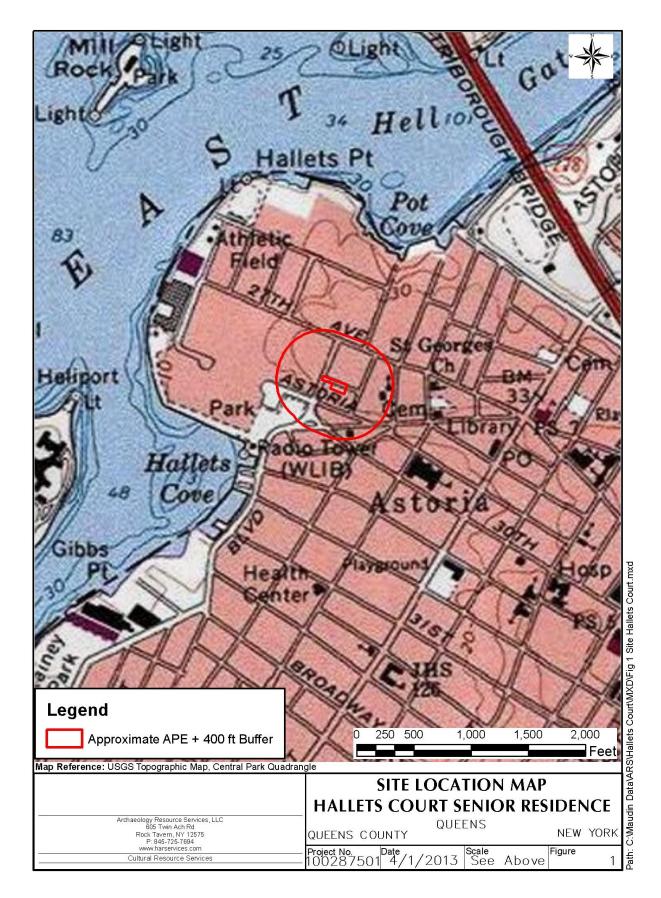
For the project the archaeological APE is the entire east - west polyform shaped lot delineated on Figure 2. No architectural APE was delineated for the report.

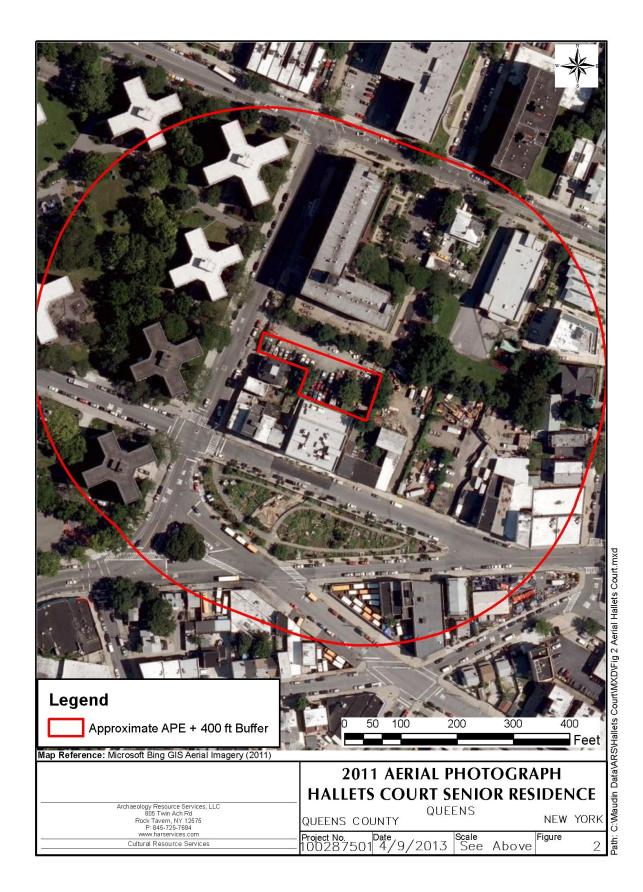
#### **Archaeological**

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 existing vacant lot and measures approximately 73 meters (225 feet) in length and (80 feet to 130 feet)

#### **Architectural**

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





## 2.0 RESEARCH GOALS AND DESIGN

## 2.1 Archaeology

The archaeological survey begins with the identification of the areas where project activities have the potential to effect 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. The research involves using previous cultural resources surveys, published site reports and settlement predictive models to establish an understanding of the prehistory of the region for APE

Predictive models for undiscovered prehistoric site locations are created from the pattern of known archaeological sites and topographic variables in the area. The potential for undiscovered prehistoric cultural resources is then ranked on a scale as low, medium, or high.

The same topographic variables used to model prehistoric site locations are not necessarily useful in predicting the presence of historic sites. Instead, the review of primary and secondary historic sources, including cartographic materials, provides a much more useful method for predicting the presence of historic resources. The use of text and cartographic documents usually allows for a presence-absence evaluation for historic sites.

Recommendations for Phase IB testing can be made based on the overall sensitivity of the archaeological APE to either prehistoric or historic archaeological resources. The combination of background research, site reconnaissance, and the resulting sensitivity assessment usually provides sufficient information to determine whether archaeological testing is recommended, what cultural resources are expected to be found in the archaeological APE and what testing strategy or strategies should be employed to find them.

## 2.2 Historic Architecture

The architectural review 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. Architectural fieldwork consists of photographing any buildings or structures in the architectural APE and to identify any buildings, structures and objects potentially more than 50 years in age.

Background research was conducted at the New York State Office of Parks, Recreation and Historic Preservation (OPRHP), Historic Preservation Office (SHPO) 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 at the SHPO were reviewed to identify previously surveyed resources within the APE. Additional research consisted of a review of pertinent secondary and primary resources, including local and county histories, historic maps and atlases.

#### 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.
- 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 APE including physiography, geology, and soils of the area. The APE is a vacant lot, oriented east - west in a polyform shaped that is currently being used as an automobile repair and storage site. The APE measures approximately 73 meters (225 feet) in length and (80 feet to 130 feet) situated on a relatively flat parcel located in Queens County, New York.

## <u>Topography</u>

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.

## Physiography and Geology

The APE is a cleared area that is being used as an automobile repair and storage site with an elevation of approximately 50 feet above mean sea level (AMSL) north of the terminal moraine of the Wisconsinan Glacier (New York City Soil Survey Staff, 2005). 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).

## <u>Soils</u>

The New York City Reconnaissance Soil Survey (2005) identified the soil complex for the APE as Pavement & buildings-Foresthills-Montauk complex, with 0 to 8 percent slopes. Nearly level to gently sloping urbanized areas of till plains and moraines that have been substantially cut and filled with natural soil materials, mostly for residential use; a mixture of anthropogenic soils and gneissic till soils, with up to 80 percent impervious pavement and buildings covering the surface; located from the terminal moraine northward in Brooklyn and Queens.

## <u>Climate</u>

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. (USDA 1979).

#### Previous Occupation

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 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 Hallets 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 the New York State Office of Parks, Recreation and Historic Preservation (OPRHP) in Cohoes, NY to identify known architectural and archaeological resources within or adjacent to the 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 maps and local county histories, was conducted at the State Library in Albany; the New York Public Library in Manhattan; and at the David Rumsey Online Cartography Collection.

## 4.1 Archaeology

On 18 March 2013 a search of sites inventoried at the OPRHP and the New York State Museum (NYSM) was conducted. The review of the files at the OPRHP and of cultural resource surveys in the immediate vicinity showed that there are two (2) archaeological sites within a one-mile radius on the APE. Furthermore, the OPRHP website's GIS program identified the APE as being archaeologically sensitive areas. Table I presents the research findings for archaeological sites in the vicinity of the APE.

Table I. Archaeological sites wi	thin one-mile of the APE.
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NYSM Sites						
Shell Midden	NYSM 4535	On Site	Early Prehistoric/Modern	A.C. Parker, 1922		
Camp	NYSM 8217	On Site	Prehistoric	A.C. Parker, 1922		

The first of known archaeological site is a large shell midden with associated cultural artifacts, located in and continuing to the west of the APE. Shell middens of this size, with associated cultural artifacts, are invariably found near village sites. And the second site located in and continuing to the east of the APE is most likely either a very large camp or a village. Unfortunately, there is very little information connected with these sites.

## 4.2 Historic Architecture

## Known Historic Resources

Research conducted at the SHPO did not identify any properties either listed on or eligible for the State or National Register of Historic Places on or adjacent to the APE.

## 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. Historical maps, atlases and Sanborn Fire Insurance maps depicting the APE and its surroundings from 1860, 1898, 1891, 1909, 1915, 1936 and 1949 were reviewed along with aerial photographs from 1924, 1951 and 2010.

The HF Walling *Map of NY and It's Environs* (Figure 3) depict the APE as undeveloped land. 8<sup>th</sup> Street (Stevens St) and Astoria Blvd (Fulton Ave.) is depicted on the map, but 28<sup>th</sup> Ave is not on the map. Several buildings are shown along Astoria Blvd.

The 1891 Wolverton *Atlas of Queens County, Long Island, New York* (Figure 5) is similar to the 1860 Walling map. However, the map does depict 28<sup>th</sup> Ave. (Tisdale St.) and shows that the area along Astoria Blvd. has been separated into multiple lots, many with buildings on them.

The 1898 Sanborn Fire Insurance Map (Figure 4) depicts a multi-level dwelling on the lot fronting on 8<sup>th</sup> St. Additional buildings are on the other lots fronting on 18<sup>th</sup> Ave. and consist of one-story bars, sheds or garages.

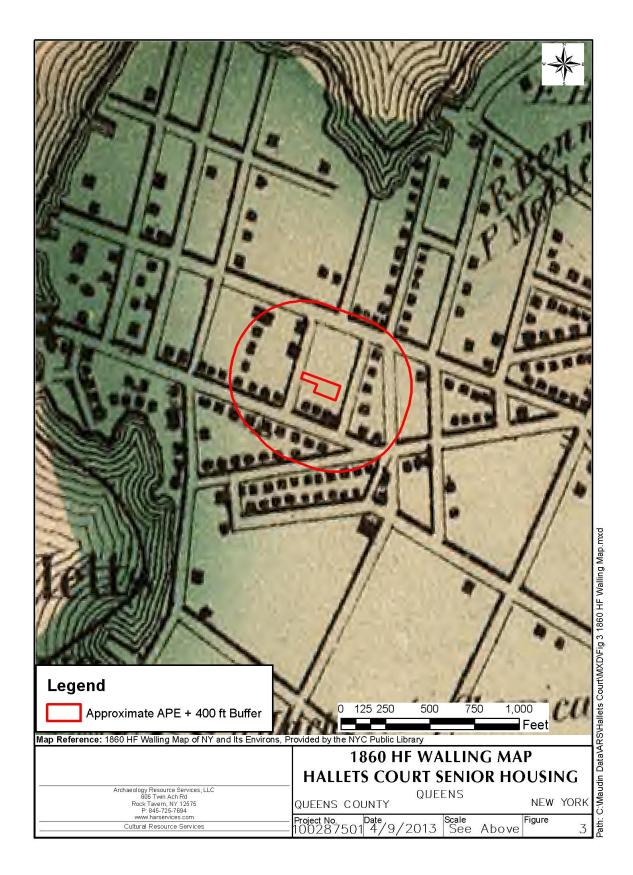
The 1909 Bromley *Atlas of Queens* (Figure 6) depicts the dwelling, but the out buildings depicted on the 1898 Sanborn are no longer extant. Two new buildings, most likely a dwelling and a garage/shed are depicted on the vacant lot that was between the original two outbuildings on the 1898 Sanborn.

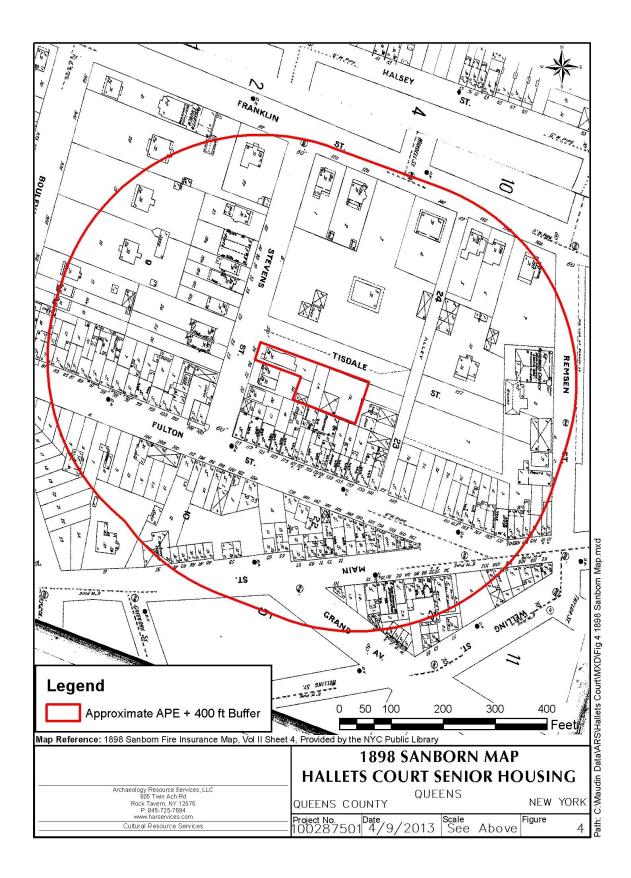
The 1915 *Sanborn Fire Insurance Map* (Figure 7) does not show any changes compared to the 1909 Bromley map. The 1924 Aerial Photograph (Figure 8) is similar to the 1915 Sanborn with the possible exception of some small buildings being seen in the southeast corner of the APE.

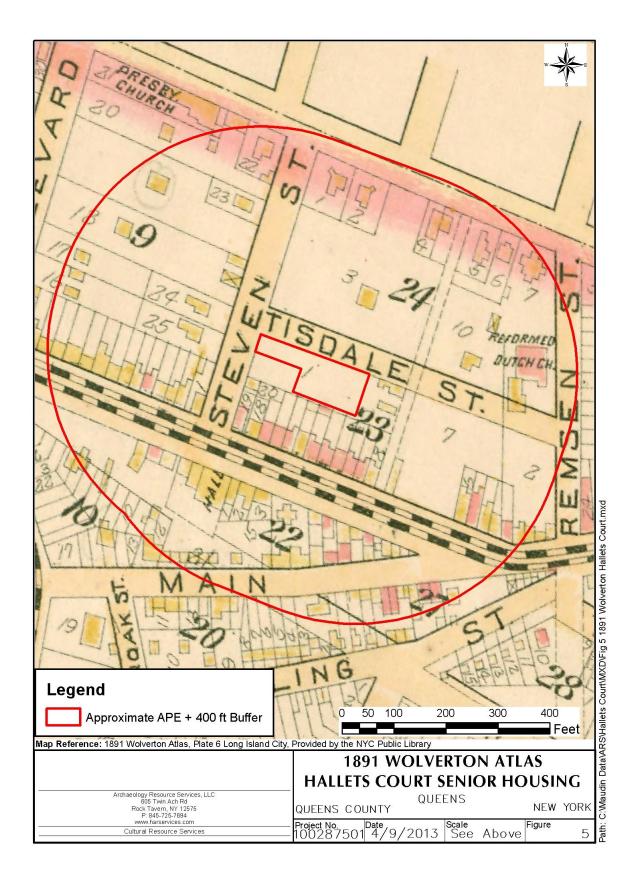
The 1936 Sanborn Fire Insurance Map (Figure 9) depicts the dwelling fronting on 8<sup>th</sup> St. The buildings that were depicted on the eastern side of the APE are no longer extant. However, two new one-story buildings are depicted behind the dwelling. The 1949 Sanborn Fire Insurance Map (Figure 10) is similar to the 1936 Sanborn.

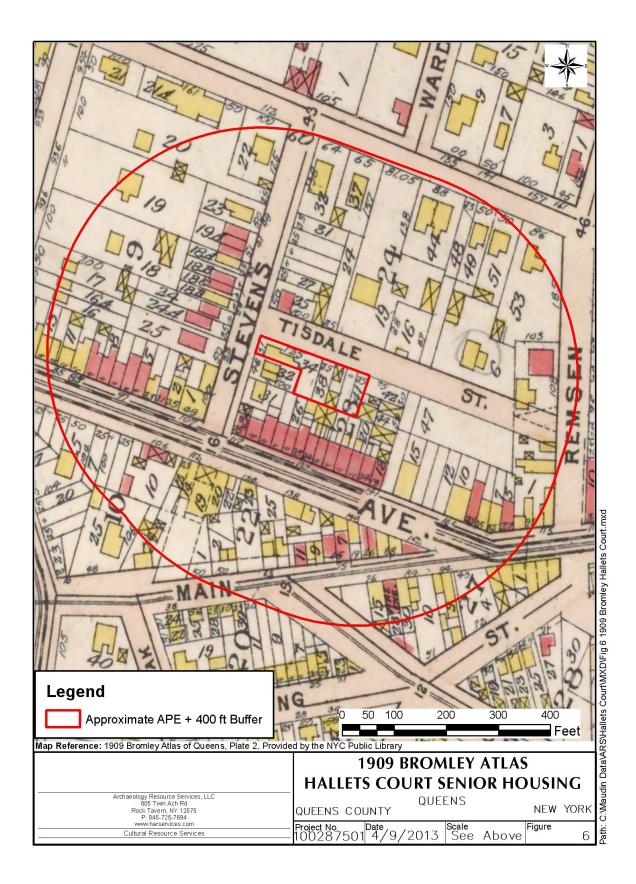
The 1951 Aerial Photograph (Figure 11) is unclear, but the APE seems to have similar configurations to the 1949 Sanborn. The 1996 Aerial Photograph (Figure 12) depicts the majority of the APE as cleared of any development. The majority of the buildings in the APE seem to have been demolished and the area cleared. Only a foundation in the eastern end of the property is any trace of previous development. The 2010 Aerial Photograph (Figure 2) shows the property as it is today, a vacant lot with cars parked on it.

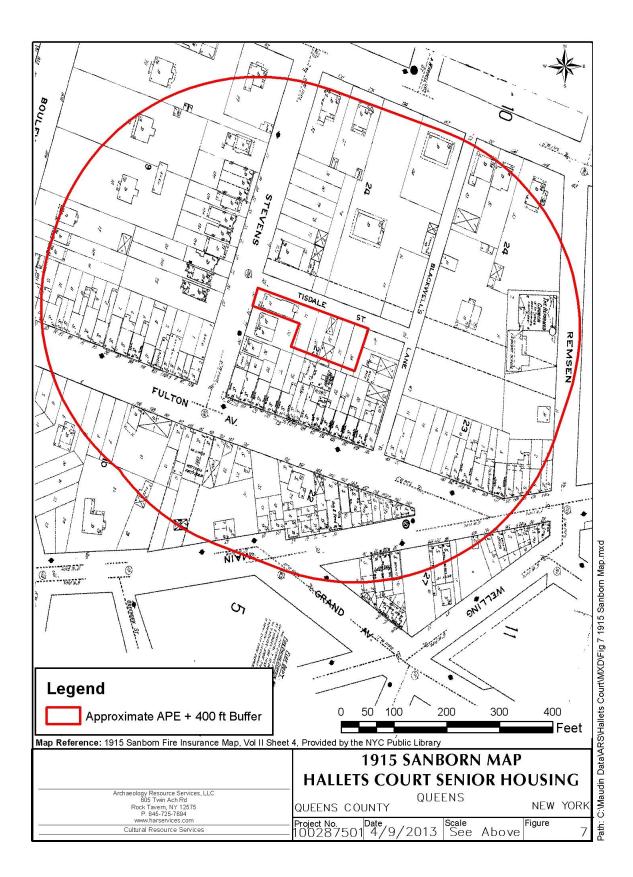
The historic map, atlas and aerial photograph review revealed that the portions of the APE were developed by 1898 with a dwelling on the west side of the APE. Development on the east side of the APE was more sporadic and generally of smaller buildings. Most likely basements were constructed for the dwelling in the east and the later dwelling on the west side that we see the foundation for on Figure 12. Otherwise, subsurface disturbance in the APE outside of these two areas seems to have been kept to a minimum.

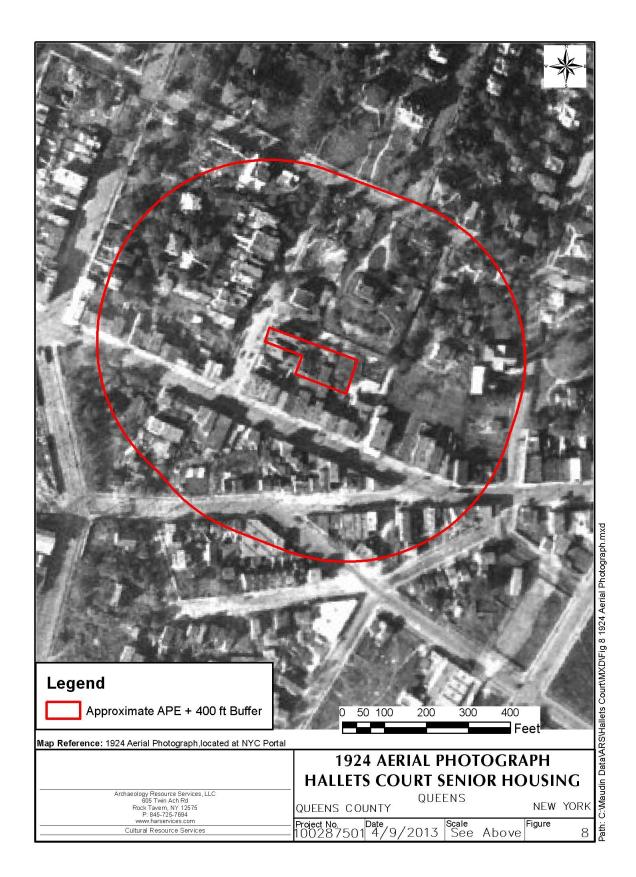


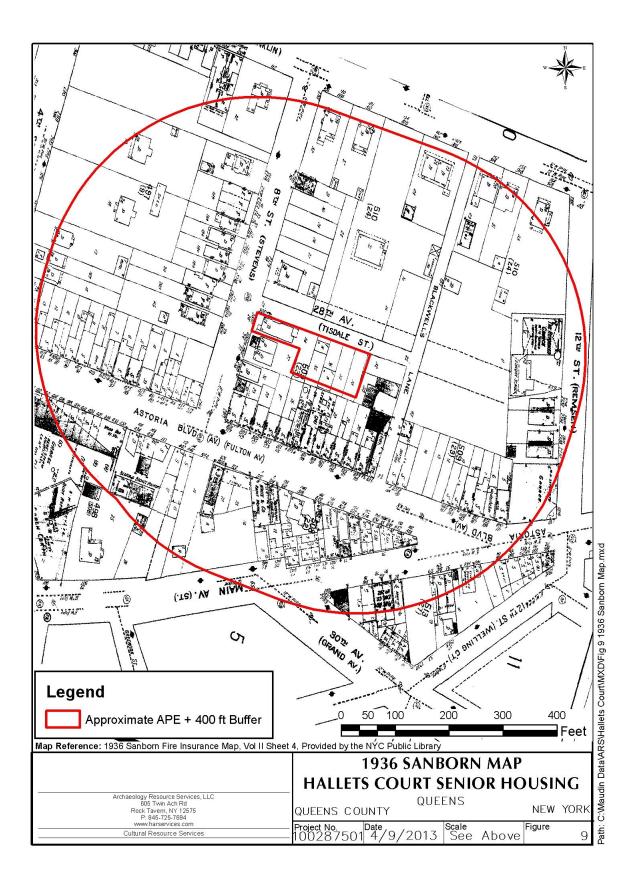


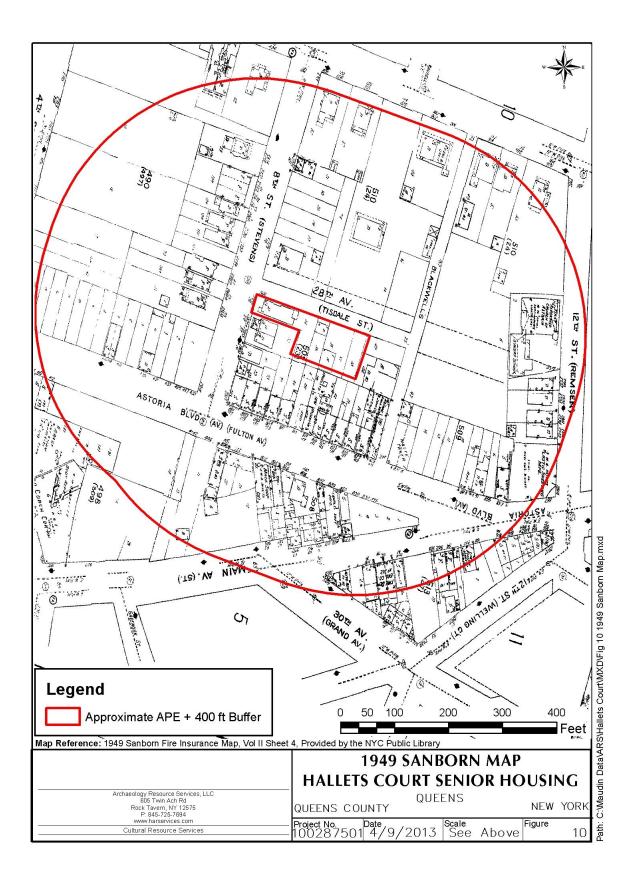


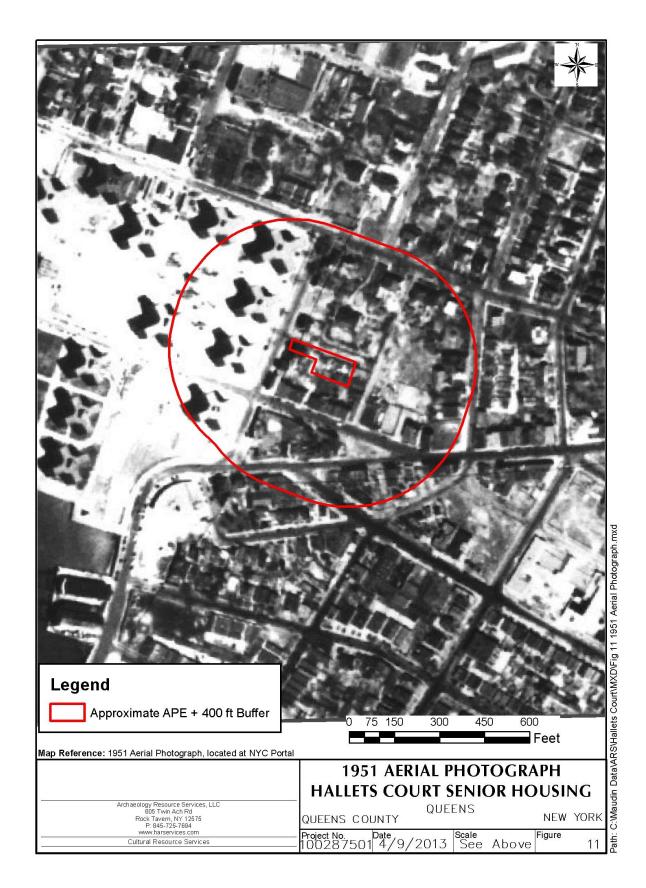


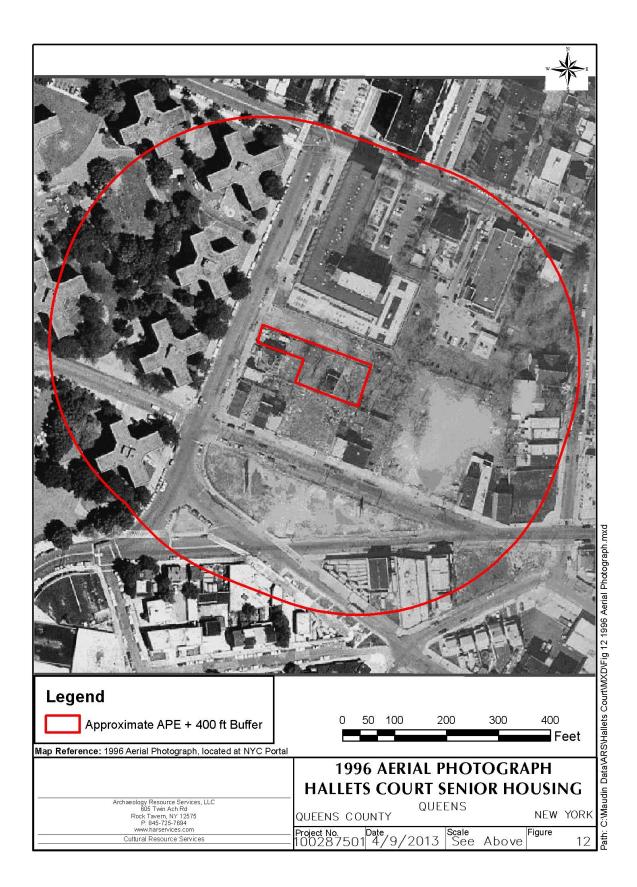












## 5.0 ARCHAEOLOGICAL SURVEY

This section discusses the site walk, archaeological sensitivity, research design, methodology and results of the archaeological survey.

## 5.1 Research Design and Methodology

The research design for the project includes background research and a visual site inspection of the current conditions within the archaeological APE. The background research was conducted before the site inspection to determine the presence of any documented cultural resources and assess the potential to contain undocumented cultural resources in the archaeological APE. The visual site inspection was conducted on 30 March 2013. Photographs 1 through 9 depict the current conditions at the proposed construction site. This assessment combined with the background research was used to determine if archaeological testing should be recommended and, to devise a field-testing strategy to locate cultural resources within the archaeological APE.

## 5.2 Site Reconnaissance

A site reconnaissance was conducted on the 20th of April. Photographs of the APE were taken to document the APE's current conditions. The site reconnaissance coupled with a review of historic aerial photographs revealed that the APE has been developed and redeveloped in the eastern portion at least three times. In the westerns portion of the APE only one dwelling was constructed in the late 19<sup>th</sup>-century and was demolished in the latter part of the 20<sup>th</sup>-century. Currently the APE is undeveloped and used as a car storage area. Photographs 1 through 9 show the current conditions of the APE.

## 5.3 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.

A previous archaeological survey of the area (Parker 1922) identified two archaeological sites with a portion in the APE boundaries. However, because of the lack of previous archaeological work in and adjacent to the APE, archaeological potential must rely primarily on observations made during the site reconnaissance, archival research, known archaeological sites in the vicinity and a review of historic maps, atlases and aerial photographs.



Photo 1: View of 28<sup>th</sup> Avenue from 8<sup>th</sup> Street, looking southwest. The alignment of the Avenue runs under the dumpsters, looking west.



Photo 2: Southern border of the proposed APE showing the slope of the fill and the one story parking garage, looking north.



Photo 3: View of the APE from the west border, looking northwest.



Photo 4: Southern part of the APE, demonstrating the inaccessibility of parts of the APE, looking southwest.



Photo 5: Stone wall across the southwest border of the APE, looking southeast.



Photo 6: Building remains in the northeastern quad of the APE, looking southwest.



Photo 7: View of 28th Avenue demonstrating the undulating fill of the APE, looking northwest.



Photo 8: Northeastern corner of the APE, showing a washout, looking west.



Photo 9: Northwestern corner of the site with view of the neighboring house, looking northwest.

#### Prehistoric Archaeological Sensitivity

The prehistoric archaeological sensitivity for the 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. Because the APE is located within the boundaries of two previously identified prehistoric archaeological sites, the APE could have been utilized by Native Americans for a variety of activities. It is possible that archaeological resources related to those activities, including stone tools and debitage, faunal remains, fire- cracked rocks, and other artifacts associated with these activities may be located in the APE. However, in areas of glacial till, such as is found all along Long Island, Native American archaeological sites are generally found at shallow depths and are therefore highly susceptible to soil disturbance.

The development of portions APE, including the excavation of basements, has most likely impacted any archaeological resources within the footprints of those buildings. However, areas where excavation has not occurred still may possess undiscovered archaeological materials. Therefore, archaeological sensitivity will most likely be reduced if not altogether destroyed in the areas of previous excavation

Based on the available information, as documented above, we conclude that there is a moderate to high sensitivity for prehistoric archaeological materials in the APE where basements have not been excavated for previous development.

#### 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.

Based on the available information, as documented above, we conclude that there is a low historic archaeological sensitivity for historic archaeological materials.

#### 6.0 CONCLUSIONS AND RECOMMENDATIONS

The project consists of the construction of a new 6 story building with 48 apartments, to act as housing for the elderly and 28<sup>th</sup> Avenue will return to its original orientation along the north border of the site, out to 60' feet, while the new building will occupy the remainder of the site. As part of the background research for this Phase 1A Archaeological Study, various primary and secondary resources were analyzed, including historic maps and atlases, and local histories. The information provided by these sources was analyzed to reach the following conclusions.

#### Archaeology

Based upon the results of the information analyzed the archaeological APE was assessed to have a moderate to high sensitivity for prehistoric resources in areas that were not previously excavated for basement construction. The historic archaeological resource sensitivity was considered low in the APE.

The development of portions APE, including the excavation of basements, has most likely impacted any archaeological resources within the footprints of those buildings. However, areas where excavation has not occurred still may possess undiscovered archaeological materials. Therefore, archaeological sensitivity will most likely be reduced if not altogether destroyed, in the areas of previous excavation.

Based on our research, historic map, atlas and aerial photograph review and site reconnaissance, we conclude that the project may encounter subsurface cultural resources. Therefore, we recommend archaeological monitoring be conducted during the excavation phase of the project.

#### 7.0 BIBLIOGRAPHY

Anderson, D. G.

1990 The Paleoindian Colonization of Eastern North America. In Early Paleoindian Economies of Eastern North America, edited by K. B. Tankersley and B. L. Isaac. Research in Economic Anthropology, Supplement No. 5, JAI Press.

Bromley, W.S.

1909 Atlas of Queens New York. New York City Public Library

Eisenstadt, Peter and Laura-Eve Moss (Editors)

2005 The Encyclopedia of New York State. Syracuse University Press, Syracuse, NY

Funk, Robert, E.

1976 *Recent Contributions to Hudson Valley History.* New York State Museum and Science Service Memoir No.22. Albany, N.Y.

#### Goddard, Ives

1978 *Delaware*. In <u>Handbook of North American Indians Volume 15 Northeast.</u> Pp.213-239. General Editor- William C. Sturtevant; Volume Editor- Bruce G. Trigger. The Smithsonian Institution, Washington, D.C.

#### Gratacap, L.P.

1909 Geology of the City of New York With Numerous Illustrations and Maps. Third Edition, Enlarged. American Museum of Natural History. Henry Holt and Company. New York.

#### Harrington, Frank

1992 A *Brief History of the Mott's Cove*. The Bryant Library; Local History Collection. Village of Roslyn Harbor, New York.

#### Kraft, Herbert, C., John T. Kraft, Susan E. Finn

1996 The Lenape or Delaware Indians: The Original people of New Jersey, Southeastern New York State and eastern Pennsylvania. Seaton Hall University Museum

#### Long Island Express

2002-2009 Long Island Exchange – The Guide to Everything Long Island. http://www.longislandexchange.com

#### New York City Soil Survey Staff

2005 *New York City Reconnaissance Soil Survey.* United States Department of Agriculture, Natural Resources Conservation Service, Staten Island, NY. New York City Soil and Water Conservation District, www.nycswcd.net.

#### New York City Map Portal

1924 Aerial Photograph

1951 Aerial Photograph

1996 Aerial Photograph

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

- 2005 New York State Historic Preservation Office, Phase I Archaeological Report Format Requirements.
- 2010 State Registration Listings http://nysparks.state.ny.us/shpo/resources/index.htm

#### Parker, Arthur C.

- 1920 The Archaeological History of New York, Part 1. New York State Museum Bulletin Nos. 235, 236, University of the State of New York, Albany, NY. Facsimile Reprint, 2007, http://www.gustavslibrary.com/
- 1922 The Archaeological History of New York, Part 2. New York State Museum Bulletin Nos. 237, 238, University of the State of New York, Albany, NY. Facsimile Reprint, 2007, http://www.gustavslibrary.com/

#### Raymo, Chet and Maureen E. Raymo

2001 Written In Stone: A Geological History of the Northeastern United States. Black Dome Press Corp. Hensonville, New York.

#### Rieth, Christina B.

2004 Cordage, Fabrics, and Their Use in the Manufacture of Early Late Prehistoric Ceramic Vessels in New York. In <u>Perishable Material Culture in the Northeast.</u> Pp. 129-142. Edited by Penelope B. Drooker. New York State Museum Bulletin 500. University of the State of New York, The State Education Department, Albany, New York.

#### Ritchie, William A.

- 1971 *A Typology and Nomenclature for New York Projectile Points.* Revised edition. New York State Museum Bulletin 384. The University of the State of New York, Albany.
- 1980 The Archaeology of New York State Revised Addition. Harbor Hills Books, Harrison, NY

#### Ritchie, William A. and Robert E. Funk

1973 Aboriginal Settlement Patterns in the Northeast. Memoir 20, New York state Museum and Science Service, The University of the State of New York, The State Education Department, Albany, NY.

#### Ruttenber, E.M.

1872 *Indian Tribes of Hudson's River to 1700.* Reprinted in 1992 by Hope Farm Press & Bookshop.

#### Salwen, Bert

1978 Indians of Southern New England and Long Island: Early Period. In <u>Handbook of North</u> <u>American Indians Volume 15 Northeast.</u> Pp.177-189. General Editor- William C. Sturtevant; Volume Editor- Bruce G. Trigger. The Smithsonian Institution, Washington, D.C.

Sanborn Fire Insurance Company

- 1898 Sanborn Fire Insurance Map
- 1915 Sanborn Fire Insurance Map
- 1936 Sanborn Fire Insurance Map

1949 Sanborn Fire Insurance Map

Thieme, Donald M.

2003 Archaeological Site Formation in Glaciated Settings, New Jersey and Southern New York. In Geoarchaeology of Landscapes in the Glaciated Northeast. Pp. 163-179. Edited by David L. Cremeens and John P. Hart. New York State Museum Bulletin 497. University of the State of New York, The State Education Department, Albany, New York.

Wolverton, Chester

1891 Atlas of Queens County, Long Island, NY. New York City Public Library.

## APPENDIX A

**Qualifications of Preparers** 

## PETA JOY SOSNOWSKI

Archaeologist / Cultural Resource Specialist

Field Crew Management Phase I, II and III Excavation Human Remains/Burial Excavation Site Preparation and Survey Historic Research Photographer Laboratory Analysis Field Illustration Report Writing and Editing

**EDUCATION** 

The George Washington University: M.A. Urban Archaeology; M.A. Early American History Kean University: B.A. American History Archaeological Field School: Shooters Hill, Alexandria, VA

Alexandria City Archaeology, Alexandria, Virginia

## **Summary Qualifications**

Ms. Sosnowski meets the Secretary of the Interiors Professional standards as an archaeologist and has been reviewed by several State Historic Preservation Offices. Ms. Sosnowski has more than 18 years experience of field and research experience in Cultural Resource Management and as a research historian for a variety of clients across the country. Her qualifications exceed all U. S. Department of the Interior criteria for a professional archaeologist working in Cultural Resource Management (36 CFR 61). Responsibilities include coordination and implementation of archaeological and historical investigations associated with projects requiring cultural resource assessments as part of permit and regulatory review. Office tasks include communication with State (Historic Preservation Offices, OPRHP), County (NYC Landmarks Preservation Commission), Municipal and other regulatory offices, proposal writing, field testing strategy and planning, scopes of work, mitigation strategies, hiring and supervision of field technicians, GIS mapping, NEPA documentation, report writing, production and editing. Field tasks include conducting Phase I, II and III archaeological investigations and mitigation, data recovery excavations, field supervision, site assessments, eligibility assessments, impact analysis to archaeological resources, prehistoric and historic artifact analysis, monitoring, site documentation and photography, GPS coordinate collection for GIS mapping, field illustration.

Her research experience includes archaeology, ethnology, archival, history, law and linguistics and writing cultural resource surveys and effects assessments. Ms. Sosnowski has worked on a wide verity of Cultural Resource Management, museum, and University projects in ten states, including New York, New Jersey, Pennsylvania, Delaware, Virginia, Maryland, Wyoming, Ohio, Colorado, and North Dakota; as well as the District of Columbia.

## **PROFESSIONAL DEVELOPMENT**

PADI open water diver OSHA 10 hour Construction **Program [2011 Rev 2]** 

**PROFESSIONAL AFFILIATIONS** 

Archaeological Society of New Jersey Eastern States Archaeological Federation Phi Alpha Theta – Omega Alpha, the National Honor Society in History Lambda Alpha Sigma, the Arts and Sciences Honor Society Disabled American Veterans – Life member

C.V.

## MILITARY SERVICE

## 1985 U.S. Army

Medically retired with a permanent service connected disability to my lower spine and right hip. **Disabled Veteran status** 

## 1977-1978 U.S. Marines

Honorably discharged after an injury to my right knee

## **RELEVANT EXPERIENCE**

## 2013 Hallets Court Senior Housing Project, Phase IA Cultural Resource Investigation, Astoria, Queens County, New York

Senior Archaeologist for prehistoric/historic site investigation for Section 106 Compliance. Conducted research, site reconnaissance of APE for prehistoric/historic archaeological sites, writing and preparation of report, edited and produced report for submission.

#### 2012-2013 Amtrak, High Speed Rail Improvements Project, Trenton to New Brunswick, NJ

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

## 2011-2013 90-15 Corona Avenue Cemetery Project, Queens, New York

Senior Archaeologist/Field director for unanticipated discovery of human remains during construction activities. Conducted archaeological monitoring, **scopes of work**, human remains excavation, GPR survey for mid 19th- to mid 20th-century cemetery in Queens.

## 2007-2013 Wireless Cell Tower Upgrades, Various Sites throughout NJ and NY

Researcher/site reviewer for Section 106 reviews to upgrade cell tower antennas. Conducted research, site reconnaissance, site testing, laboratory analysis of artifacts, writing and preparation of reports.

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

Senior Archaeologist 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

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

Senior Archaeologist 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 archaeological assistants, assisted determining methods of avoidance or removal of human remains encountered and eventual reburial of disinterred remains, laboratory analysis of artifacts, report writing and preparation.

## 2011 Renaissance Plaza Project, Phase IB, Egg Harbor City, New Jersey

Senior Archaeologist 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

Senior Archaeologist 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 NJ Transit, Unanticipated Discovery Investigation, Market Street Garage, Paterson, NJ

Archaeologist 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.

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

Archaeologist 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, and excavation of human remains encountered.

## 2009 Jericho Rise Wind Farm, Phase IB, Chateaugay and Burke, New York

Crew Chief for prehistoric/historic site investigation for Section 106 review of wind farm construction. Conducted field testing of APE for prehistoric/historic archaeological sites.

## 2009 Hardin Wind Farm, Phase IB, Hardin County, Ohio

Archaeologist for prehistoric/historic site investigation for Section 106 review wind farm construction. Conducted field testing of APE for prehistoric/historic archaeological sites.

#### 2009 Patterson Sewer Improvement, Phase III, Patterson, New Jersey Crew Chief

## 2009 The Gully Site, Phase III, Manalapan, New Jersey

Archaeologist

## 2008-2009 Wheatfield Farms, Phase IB, Wheatfield, Virginia

Crew chief for prehistoric/historic site investigation for Section 106 review wind farm construction. Conducted field testing of APE for prehistoric/historic archaeological sites.

## 2008 Nazareth Middle School, Phase III Data Recovery, Upper Nazareth, Pennsylvania

Field director, research coordinator, and photographer for prehistoric/historic site investigation for Section 106 review of Middle School Expansion. Field duties include preparation of site, site survey, preparation of site map, excavation of 62 test units and monitoring for backhoe trenching. Post field work included preparing artifact database, writing of sections of the report and .

#### 2008 Camp Seph Mack, Phase IB, Yellow Creek State Park, Pennsylvania

Field director, research coordinator, and photographer for prehistoric site investigation for Section 106 review of Boy Scouts of America camp renovation. Field duties include site preparation, excavation 125 shovel test pits, site survey, and preparation of site map. Post field work included preparing artifact database, writing of sections of the report and .

## 2008 Ashbach Comfort/Ashbach Landing, Phase IB/II, Delaware Water Gap National Recreation Area, Pennsylvania

Field director, research coordinator, and photographer for prehistoric/historic site investigation for Section 106 review of National Recreation Area expansion. Field duties include site preparation, excavation 25 shovel test pits and two test units, site survey, and preparation of site map. Post field work included preparing artifact database, writing of sections of the report and .

## 2008 Lindley Murray Road Bridge Replacement, Phase IB/II, East Hanover, Pennsylvania

Field director, research coordinator, and photographer for prehistoric/historic site investigation for Section 106 review of the Lindley Murray Road Bridge replacement. Field duties include site preparation, excavation 25 shovel test pits and one 5X5 meter test unit, site survey, and preparation of site map. Post field work included preparing artifact database, writing of sections of the report and .

#### 2008 Bartonsville Rest Stop, Interstate Route 80, Phase IB, Lower Tannersville, Pennsylvania

Field director, research coordinator, and photographer for prehistoric site investigation for Section 106 review of new construction for the Bartonsville Rest Stop. Field duties include site preparation, excavation 75 shovel test pits, site survey, and preparation of site map. Post field work included preparing artifact database, writing of sections of the report and .

## 2007 Crown Cleaners Super Fund Site, Phase IA, Wilna, New York

Research coordinator, and photographer for prehistoric/historic site investigation for USEPA review. Field work included the preparation of site, and site survey. Post field work included writing of the report for submission.

## 2007 U.S. Army Picatinny Arsenal, Phase II, Morris County, New Jersey

Crew Chief and photographer for prehistoric site investigation for Army Corps of Engineers review of new construction for the Picatinny Arsenal. Field duties include site preparation, excavation of 20 shovel test pits and seven test units, site survey, and preparation of site map. Post field work included laboratory analysis of artifacts, preparation of C-14 samples, preparing artifact database, writing of sections of the report.

## 2007 Fort Slocum Historic and Archaeological District, Phase II, Davids Island, New Rochelle, New York

Archaeologist and archaeological Monitor for

## 2007 Alabama Ledge Wind Farm, Phase IB, Batavia and Alabama, New York

Crew Chief, Research coordinator, researcher and report production for prehistoric/historic site investigation for Section 106 review of housing development expansion. Conducted field testing of APE for prehistoric/historic archaeological sites.

## 2007 West Hill Wind Farm, Phase IB, Stockbridge, Smithfield and Lincoln, 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 Huntefly Houses.

## 2007-2013 Wireless Cell Tower Upgrades, Various Sites in NJ and NY

Researcher/site reviewer for Section 106 reviews to upgrade cell tower antennas. Conducted initial research, site reconnaissance, site testing, laboratory analysis of artifacts, writing and preparation of reports.

#### 2006 Alabama Ledge Wind Farm, Phase IA, Batavia and Alabama, New York

Research coordinator, and photographer for prehistoric/historic site investigation for USEPA review. Field work included the preparation of site, and site survey. Post field work included writing of the report for submission.

#### 2006 St. Lawrence Wind Farm, Phase IA, Cape Vincent and Lyme, New York

Research coordinator, and photographer for prehistoric/historic site investigation for USEPA review. Field work included the preparation of site, and site survey. Post field work included writing of the report for submission.

#### 2006 West Hill Wind Farm, Phase IA, Stockbridge, Smithfield and Lincoln, New York

Research coordinator, and photographer for prehistoric/historic site investigation for USEPA review. Field work included the preparation of site, and site survey. Post field work included writing of the report for submission.

#### 2006 Jericho Rise Wind Farm, Phase IA, Chateaugay and Burke, New York

Research coordinator, and photographer for prehistoric/historic site investigation for USEPA review. Field work included the preparation of site, and site survey. Post field work included writing of the report for submission.

#### 2005 Tournament World, Phase IB, Montgomery, New York

Field director for SEQRA review. Field assessment for prehistoric and historic archaeological sites. Post-field work included laboratory analysis of artifacts.

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

Crew chief and archaeological monitor of a Phase III historic cemetery site investigation/excavation. Field responsibilities included, monitoring for human remains during backhoe excavation, Post-field work included Laboratory analysis of artifacts.

## 2005 Feltville/Glenside Village, Field School, Watchung, New Jersey

Volunteer teacher

#### 2003-2004 Potter's Field Cemetery, Phase III Data Recovery, Secaucus, New Jersey

Crew chief and archaeological monitor of a Phase III historic cemetery site investigation/excavation. Field responsibilities included, monitoring for human remains during backhoe excavation, photographer.

#### 2002-2003 Fort Dix, Phase IB, Fort Dix, New Jersey

Crew Chief for prehistoric/historic site investigation for Army Corps of Engineers, Section 106 review of proposed base expansion. Conducted field testing of APE for prehistoric/historic archaeological sites.

## 2002 Chain Lake Flats Pipeline, Phase IB Pedestrian Survey, Central Wyoming

Archaeologist for prehistoric/historic site investigation for Section 106 review of pipeline construction. Conducted field testing of APE for prehistoric/historic archaeological sites.

## 2002 Red Desert Pipeline, Phase IB Pedestrian Survey, Central Wyoming

Archaeologist for prehistoric/historic site investigation for Section 106 review of pipeline construction. Conducted field testing of APE for prehistoric/historic archaeological sites. Discovered and mapped Clovis site.

#### 2002 Pipeline, Phase II, Northeast Colorado

Archaeologist for prehistoric/historic site investigation for Section 106 review of pipeline construction. Conducted field testing of APE for prehistoric/historic archaeological sites.

#### 2001 High Desert Pipeline, Phase II, Northeast to Central Wyoming

Archaeologist for prehistoric/historic site investigation for Section 106 review of pipeline construction. Conducted field testing of APE for prehistoric/historic archaeological sites.

#### 2001 Pipeline, Phase II, Southeast Montana

Archaeologist for prehistoric/historic site investigation for Section 106 review of pipeline construction. Conducted field testing of APE for prehistoric/historic archaeological sites.

#### 2001 Pit House, Phase III, Riverton, Wyoming

Archaeologist for prehistoric site investigation for Section 106 review of pipeline construction. Conducted field testing of APE for prehistoric archaeological sites dated to 10,000 BCE.

## 1999-2001 Handbook of North American Indians Vol.13, Parts 1&2, The Smithsonian Institution, Washington, D.C.

Bibliographic research in archaeology, ethnology, archival, history, law and linguistics. Conducted quote and fact checking for each of the 67 chapters on the Native Americans of the prairie and high plains of the U.S. and Canada.

#### **1999 Abington Mansion Stabilization Project, R.R. National Airport, Arlington, Virginia** Archaeologist

#### 1998 Stone House, Manassas Battlefield Park, Phase IB/II, Manassas, Virginia

Crew Chief, researcher and report production for prehistoric/historic site investigation for National Park Service, Section 106 review of park parking lot expansion. Supervised volunteer metal detectorists, conducted field testing, and used Total Station to record finds of APE for prehistoric/historic archaeological sites.

## 1998 Abingdon Plantation, Phase III, Arlington, Virginia

Archaeologist

#### 1997 U.S. Route 1 Expansion, Phase III Data Recovery, Dumfries, Virginia

Crew Chief and archaeological monitor for prehistoric/historic site investigation for Virginia Department of Transportation, Section 106 review of U.S. Route 1 expansion of a 18<sup>th</sup> Century house, with a large prehistoric component. Conducted field testing, and used Total Station to record finds of APE for prehistoric/historic archaeological sites.

#### 1996 Route 1 Expansion, Phase III, Fairfax, Virginia

Archaeologist and archaeological monitor for prehistoric/historic site investigation for Virginia Department of Transportation, Section 106 review of U.S. Route 1 expansion of a Late Archaic to Early Woodland camp. Conducted field testing, and used Total Station to record finds of APE for prehistoric archaeological sites.

#### 1995-1996 Hickory Bluff Site, Phase IB – III, Dover, Delaware

Archaeologist for prehistoric site investigation for Section 106 review of housing development expansion. Conducted field testing of APE for prehistoric/historic archaeological sites.

#### 1995 Dover Air Force Base, Phase IB, Dover, Delaware

Archaeologist for prehistoric/historic site investigation for Army Corps of Engineers, Section 106 review of proposed base expansion. Conducted field testing of APE for prehistoric/historic archaeological sites.

#### 1995 MCI Center, Phase III, Washington, D.C.

Archaeologist of 4 18<sup>th</sup> Century houses.

#### 1994 Quantico Marine Base, Phase IB, Manassas, Virginia

Archaeologist for prehistoric/historic site investigation for Army Corps of Engineers, Section 106 review of proposed base expansion. Conducted field testing of APE for prehistoric/historic archaeological sites.

#### 1994 Jamison's Bakery, Phase III, Alexandria, Virginia

Archaeologist for Phase III excavation of historic city block.

#### 1994 Field School, Shooter's Hill, Phase III, Alexandria, Virginia

Field and Laboratory Technician for phase III historic/prehistoric excavation. Field work (1 week) 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.

#### 1993 Brandy Station Battlefield, Phase IA, Brandy Station, Virginia

Research coordinator, researcher and report production for archaeological resources Section 106 Assessment of the Battlefield site for the Disney Corporation under the direction of Linda Grant DePauw, Ph.D.

#### PUBLICATIONS

#### Selected Technical Cultural Resource Reports

- 2012 Phase 1A Cultural Resources Investigation, Elizabeth New Jersey Transit Station, City of Elizabeth, Union County, New Jersey. Prepared for Arch2, Metuchen, New Jersey. (Coauthor with Michael Audin)
- 2012 Phase 1A Cultural Resources Investigation, Hackensack Walmart, City of Hackensack, Bergen County, New Jersey. Prepared for Langan Engr. & Environmental by Archaeology Resource Services. (Co-author with Michael Audin)
- 2012 Phase 1A Cultural Resources Investigation, Perth Amboy New Jersey Transit Station, City of Perth Amboy, Middlesex County, New Jersey. Prepared for Arch2, Metuchen, New Jersey. (Co-author with Michael Audin)
- 2012 Phase 1A Cultural Resources Investigation, Warren County Wetlands, Frelinghuysen Township, Warren County, New Jersey. Prepared for Langan Engr. & Environmental by Archaeology Resource Services. (Co-author with Michael Audin)
- 2011 Phase III Cemetery Data Recovery at St. Patrick's Old Cathedral, City of New York, New York (North Side). Prepared for New York City Landmarks Commission. (Co-author with Michael Audin)
- 2011 Phase III Cemetery Data Recovery at 90-15 Corona Ave, Town of Elmhurst, Queens County, New York. Prepared for 90 Queen's Inc. Prepared for Celia Bergoffen. (Co-author with Celia Bergoffen)
- 2011 Phase 1A/B Cultural Resources Investigation, Millwood 2, Village of Ossining, in Westchester County, New York. Prepared for Homeland Towers, LLC. Prepared by G.C. Environmental, INC. Bay Shore, New York.
- 2011 Phase II Archeological Investigation, Alpha Water Works, Borough of Alpha, Warren County, New Jersey. Prepared for Borough of Alpha Water Commission. Prepared by Arch2, Metuchen, New Jersey. (Co-author with Michael Audin)
- 2010 Phase 1A/B Cultural Resources Investigation, Duck Pond Road, in the City of Glen Cove, in Nassau County, Long Island, New York. Prepared for T-Mobile (WFC). Prepared by G.C. Environmental, INC. Bay Shore, New York.
- 2010 Phase 1A Cultural Resources Investigation, Census-designated Place (CDP) of Hamlet of Fort Montgomery within Highlands Township, in Orange County, New York. Prepared for Homeland Towers, LLC. Prepared by G.C. Environmental, INC. Ardsley, New York.
- 2010 Phase 1A Cultural Resources Investigation, West Armonk, Census-designated place (CDP) of Armonk within the Township of North Castle, in Westchester County, New York. Prepared for Verizon Wireless. Prepared by G.C. Environmental, INC. Ardsley, New York.
- 2009 *Phase 1A Cultural Resources Investigation, Village of Nepperhan, City of Yonkers, in Westchester County, New York.* Prepared for Verizon Wireless. Prepared by G.C. Environmental, INC. Ardsley, New York.

2009	Phase 1A Cultural Resources Investigation, Palisades Parking, Hamlet of Palisades, within the Township of Orangetown, in Rockland County, New York. Prepared for Verizon Wireless. Prepared by G.C. Environmental, INC. Ardsley, New York.
2009	Phase 1A Cultural Resources Investigation, Lewisy Fuel, Township of East Huntington, in Suffolk County, New York. Prepared for T-Mobile (WFC). Prepared by G.C. Environmental, INC. Ardsley, New York.
2009	Phase 1A Cultural Resources Investigation, East Bronxville, Township of East Chester, in Westchester County, New York. Prepared for Verizon Wireless. Prepared by G.C. Environmental, INC. Ardsley, New York.
2009	Phase 1A/B Cultural Resources Investigation, Carmel Hills, Township of Carmel, in Putnam County, New York. Prepared for Verizon Wireless. Prepared by G.C. Environmental, INC., Ardsley, New York.
2009	Phase 1A Cultural Resources Investigation, Hopkins Corner, Township of Carmel, in Putnam County, New York. Prepared for Verizon Wireless. Prepared by G.C. Environmental, INC., Ardsley, New York.
2009	Phase 1A Cultural Resources Investigation, Hither Hills State Park, adjacent to the Hamlet of Montauk, within the Town of East Hampton, in Suffolk County, New York. Prepared for T-Mobile (WFC). Prepared by G.C. Environmental, INC. Ardsley, New York.
2009	Phase 1A Cultural Resources Investigation, RVC Water Tower, Village of Rockville Centre, in the Town of East Rockaway in Nassau County, New York. Prepared for T-Mobile (WFC). Prepared by G.C. Environmental, INC. Ardsley, New York.
2009	Phase 1A Cultural Resources Investigation, Horn Building, Alfred E. Smith - Sunken Meadow State Park, within the Town of Huntington, and the Town of Smithtown, in Suffolk County, New York. Prepared for T-Mobile (WFC). Prepared by G.C. Environmental, INC. Ardsley, New York.
2009	Phase 1A Cultural Resources Investigation, New Jersey Parkway, Township of Toms River, in Ocean County, New Jersey. Prepared for MetroPCS and T&H Holdings, Inc. Prepared by G.C. Environmental, INC. Ardsley, New York.
2009	Phase 1A/B Cultural Resources Investigation, Pomona Heights, Hillcrest Fire Company Number 1, The Greg Silkorski Station, in the village of Suffern, within an unincorporated part of the Town of Ramapo, in Rockland County, New York. Prepared for Verizon Wireless. Prepared by G.C. Environmental, INC. Ardsley, New York.

2009	Phase 1A Cultural Resources Investigation, Village Hall, Village of East Rockaway, in Nassau County, New York. Prepared for T-Mobile (WFC). Prepared by G.C. Environmental, INC. Ardsley, New York.
2009	Phase 1A/B Cultural Resources Investigation, Somers – Woods Bridge, Township of Somers, in Westchester County, New York. Prepared for Homeland Towers, LLC. Prepared by G.C. Environmental, INC. Ardsley, New York.
2009	Phase 1A Cultural Resources Investigation, Department of Sanitation New York District 8 Garage, City of South Ozone Park, in Queens County, New York. Prepared for Northrop Grumman Information Technology, INC. Prepared by G.C. Environmental, INC. Ardsley, New York.
2008	Phase 1A Cultural Resources Investigation, Edison 14, Township of Edison, in Middlesex County, New Jersey. Prepared for Dewberry-Goodkind, Inc. and New York SMSA Limited Partnership in conjunction with Verizon Wireless and PSE&G. Prepared by E2 Project Management, Parsippany, NJ.
2008	Phase 1B Archeological Investigation, Kinnelon 3, Borough of Kinnelon, Morris County, New Jersey. Prepared for TSS Wireless Services in conjunction with Verizon Wireless. Prepared by E2 Project Management, Parsippany, NJ.
2007	Phase 1A Cultural Resources Investigation, Newark 24, City of Newark, in Essex County, New Jersey. Prepared for New York SMSA Limited Partnership in conjunction with Verizon Wireless. Prepared by E2 Project Management, Parsippany, NJ.
2007	Phase 1B Archeological Investigation, Freehold 9, Freehold Township, in Monmouth County, New Jersey. (Co-author with Dr. Barry Brady) Prepared for Innovative Engineering in conjunction with Verizon Wireless. Prepared by E2 Project Management, Parsippany, NJ.
2007	Phase 1B Archeological Investigation, Pequannock 3, Morris Township, in Morris County, New Jersey. (Co-author with Dr. Barry Brady) Prepared for Innovative Engineering in conjunction with Verizon Wireless. Prepared by E2 Project Management, Parsippany, NJ.
2007	Phase 1A Cultural Resources Investigation, Crown Cleaners Super Fund Site, Town of Wilna, in Jefferson County, New York. (Senior author with Dr. Stuart A. Reeve) Prepared for the United States Environmental Protection Agency. Prepared by Tetra Tech EC, Inc., Morris Plains, NJ.
2007	Phase 1B Archeological Investigation West Hill Wind Farm, Towns Stockbridge, Smithfield and Lincoln, in Madison County, New York. (Co-author with Dr. Stuart

A. Reeve) Prepared for West Hill Windpower, LLC. Prepared by Tetra Tech EC, Inc., Morris Plains, NJ.

- 2007 Phase 1A Cultural Resources Investigation, St. Lawrence Wind Farm Project, Towns of Cape Vincent and Lyme, in Jefferson County, New York. (Co-author with Dr. Stuart A. Reeve) Prepared for St. Lawrence Windpower, LLC. Prepared by Tetra Tech EC, Inc., Morris Plains, NJ.
- 2007 Phase 1A Cultural Resources Investigation, Alabama Ledge Wind Farm, Town of Alabama, in Genesee County, New York. (Co-author with Dr. Stuart A. Reeve) Prepared for Batavia Wind, LLC. Prepared by Tetra Tech EC, Inc., Morris Plains, NJ.

## SUMMARY OF PROFESSIONAL ACTIVITIES

Ms. Sosnowski has conducted field work in New York, New Jersey, Pennsylvania, Delaware, Virginia, Maryland, Wyoming, Ohio, Colorado, and North Dakota, as well as the District of Columbia. She is the author or co-author of over forty (40) cultural resource reports in New Jersey, New York and Virginia.

Field Crew Management Phase I, II and III Excavation Human Remains/Burial Excavation Site Preparation and Survey Historic Research Photographer Laboratory Analysis Field Illustration Report Writing and Editing Historic American Building Surveys

EDUCATION

Hunter College: M.A. Anthropology William Paterson University: B.A. Anthropology Archaeological Field School: Lenape Meadows, Somerset County Parks Commission, New Jersey

#### **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 10 years of professional experience in Cultural Resource Management. Responsibilities include coordination and implementation of archaeological and historical investigations associated with projects requiring cultural resource assessments as part of permit and regulatory review. Office tasks include communication with Federal (Army Corps, DOT, EPA, FHWA, etc.), State (Historic Preservation Offices, PHMC, NJDEP, OPRHP), County (NYC Landmarks Preservation Commission), Municipal and other regulatory offices, budgeting, proposal writing, field testing strategy and planning, scopes of work, mitigation strategies, hiring and supervision of field technicians, GIS mapping, Section 106 coordination, NEPA documentation, Memorandums of Agreement (MOA), Applications for Project Authorization, State environmental reviews, report writing, production and editing. Field tasks include conducting Phase I, II and III archaeological investigations and mitigation, data recovery excavations, field supervision, site assessments, eligibility assessments, impact analysis to archaeological resources, prehistoric and historic artifact analysis, monitoring, site documentation and photography, GPS coordinate collection for GIS mapping, field illustration, preliminary architectural evaluations and level III and IV Historic American Building Surveys.

In addition, Mr. Audin has 3 years of experience as a land surveyor and 12 years of experience in business management/administration prior to coming to cultural resources.

#### **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 Introduction to ArcGIS I, November 2006 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

## **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

## **RELEVANT EXPERIENCE**

# 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.

## 2012-2013 Amtrak, High Speed Rail Improvements Project, Trenton to New Brunswick, NJ

Principal Investigator produced an archaeological sensitivity assessment 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 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 90-15 Corona Ave Cemetery Project, Queens, New York

Field director for unanticipated discovery of human remains during construction activities. Conducted archaeological monitoring and human remains excavation for mid 19<sup>th</sup>- to mid 20<sup>th</sup>- 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 too 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 photographical 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 Huntefly 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.

## 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.

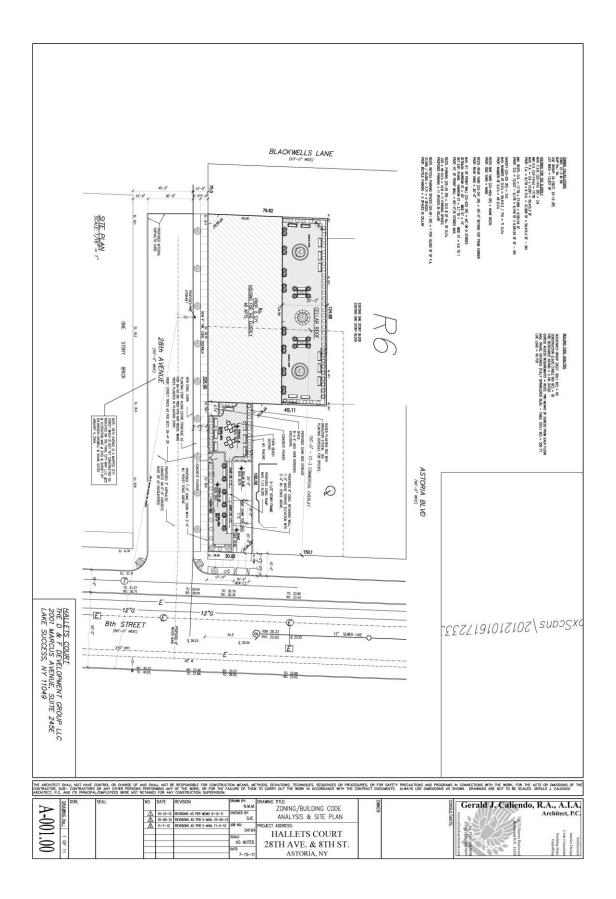
2007 "Excavations at the Old First Presbyterian Cemetery in Newark, NJ" presented to William Paterson University's Anthropology Club.

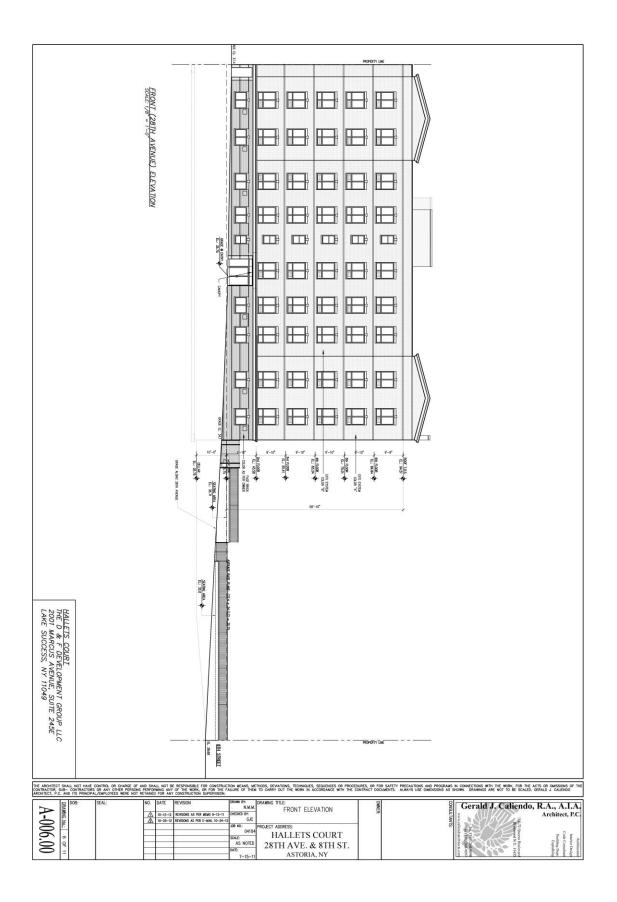
#### SUMMARY OF PROFESSIONAL ACTIVITIES

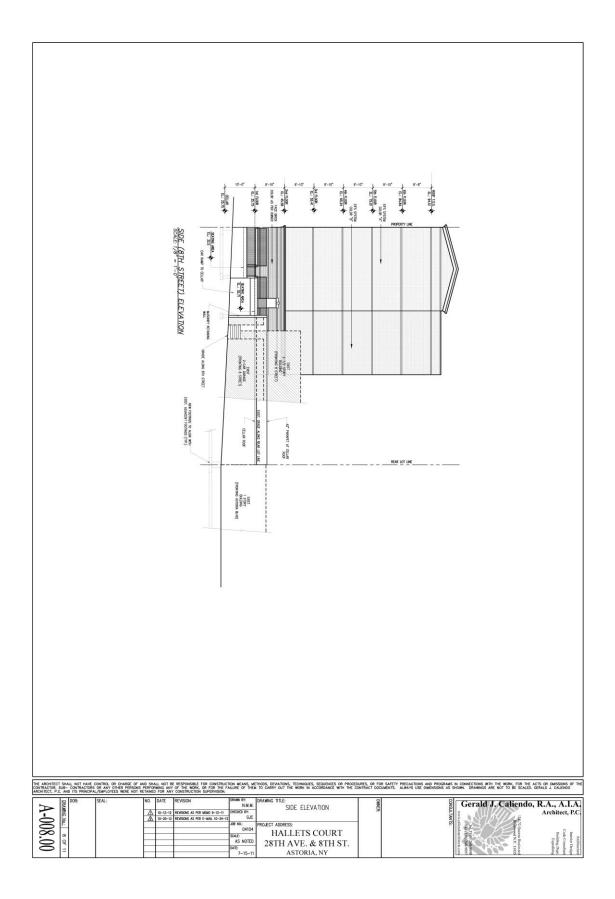
Mr. Audin has conducted field work in New Jersey, New York, Pennsylvania, Connecticut, Delaware and West Virginia. He is the author or co-author of over eighty (80) cultural resource reports in New Jersey, New York, Pennsylvania and West Virginia.

## **APPENDIX B**

Drawing and Plans of the Project Site







APPENDIX C OPRHP Comment Letter



Andrew M. Cuomo Governor

Rose Harvey Commissioner

#### 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

December 20, 2012

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

Re: NYSHCR

Hallets Court 8-28 28th Avenue/QUEENS, Queens County 12PR05325

Dear Ms. DeFreitas:

Thank you for requesting the comments of the Office of Parks, Recreation and Historic Preservation (OPRHP) concerning your project's potential impact/effect upon historic and/or prehistoric cultural resources. Our staff has reviewed the documentation that you provided on your project. Preliminary comments and/or requests for additional information are noted on separate enclosures accompanying this letter. A determination of impact/effect will be provided only after ALL documentation requirements noted on any enclosures have been met. Any questions concerning our preliminary comments and/or requests for additional information should be directed to the appropriate staff person identified on each enclosure.

In cases where a state agency is involved in this undertaking, it is appropriate for that agency to determine whether consultation should take place with OPRHP under Section 14.09 of the New York State Parks, Recreation and Historic Preservation Law. In addition, if there is any federal agency involvement, Advisory Council on Historic Preservation's regulations, "Protection of Historic and Cultural Properties" 36 CFR 800 requires that agency to initiate Section 106 consultation with the State Historic Preservation Officer (SHPO).

When responding, please be sure to refer to the OPRHP Project Review (PR) number noted above.

Sincerel

Daniel A. Bagrow Historic Preservation Specialist Archaeology Unit

Enclosure

An Equal Opportunity/Affirmative Action Agency

printed on recycled paper

#### ARCHEOLOGY COMMENTS

#### NYSHCR Hallets Court 8-28 28th Avenue/QUEENS, Queens County 12PR05325

Based on reported resources, there is an archeological site in or adjacent to your project area. Therefore the Office of Parks, Recreation and Historic Preservation (OPRHP) recommends that a Phase 1A archeological survey is warranted. SHPO is aware that portions of the project have been subjected to substantial ground disturbance in the past. However, recent experience in similar areas throughout the state, has revealed that substantial and significant archeological deposits remain intact between the disturbed areas, often below existing street surfaces and structures. To better assess the level of ground disturbance at this property a detailed **Phase 1A Survey** is required at this time.

A Phase 1 survey is designed to determine the presence or absence of archeological sites or other cultural resources in the project's area of potential effect. The Phase 1 survey is divided into two progressive units of study including a Phase 1A sensitivity assessment and initial project area field inspection, and a Phase 1B subsurface testing program for the project area. The OPRHP can provide standards for conducting cultural resource investigations upon request. Cultural resource surveys and survey reports that meet these standards will be accepted and approved by the OPRHP.

Our office does not conduct cultural resources surveys. A 36 CFR 61 qualified archeologist should be retained to conduct the Phase 1 survey. Many archeological consulting firms advertise their availability in the phone book and online. The services of qualified archeologists can also be obtained by contacting local, regional, or statewide professional archeological organizations. Phase 1 surveys can be expected to vary in cost per mile of right-of-way or by the number of acres impacted. We encourage you to contact a number of consulting firms and compare examples of each firm's work to obtain the best product.

Documentation of ground disturbance should include a description of the disturbance with confirming evidence. Confirmation can include current photographs and/or older photographs of the project area, which illustrate the disturbance (approximately keyed to a project area map), past maps or site plans that accurately record previous disturbances, or current soil borings that verify past disruptions to the land.

If you have any questions concerning archeology, please call/email Dan Bagrow at (518) 237-8643 ext. 3254 or dan.bagrow@parks.ny.gov

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