



HARTGEN

archeological associates inc

PHASE I ARCHEOLOGICAL INVESTIGATION

Westchester Bio Science and Technology Center

Town of Mount Pleasant
Westchester County, New York

HAA # 5418-31
OPRHP 19PR02953

Submitted to:

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MANAGEMENT SUMMARY

SHPO Project Review Number: *19PR02953*

Involved State and Federal Agencies: *United States Army Corps of Engineers*

Phase of Survey: *LA/IB*

LOCATION INFORMATION

Municipality: *Town of Mount Pleasant*

County: *Westchester*

SURVEY AREA

Length: *Approximately 2,150 feet*

Width: *Approximately 2,100 feet*

Acres: *Approximately 57.6 acres*

ARCHEOLOGICAL SURVEY OVERVIEW

Number and Interval of Shovel Tests: *333 total tests; 317 tests at 50-ft (15 m) intervals, 8 tests at 3-ft (1 m) intervals, and 8 tests at 10-ft (3 m) intervals*

Number and Size of Units: *N/A*

Width of Plowed Strips: *N/A*

Surface Survey Transect Interval: *N/A*

RESULTS OF ARCHEOLOGICAL SURVEY

Number and Name of Precontact Sites Identified: *One (1), Saw Mill River Precontact Site*

Number and Name of Historic Sites Identified: *One (1), J. Van Tassel Historic Site*

Number and Name of Sites Recommended for Phase II or Avoidance: *Two (2), Saw Mill River Precontact Site and J. Van Tassel Historic Site*

RECOMMENDATIONS

Two (2) archeological sites were identified during Phase I archeological investigations, the Saw Mill River Precontact Site and the J. Van Tassel Historic Site. Avoidance or Phase II archeological investigations are recommended for these sites.

No significant cultural materials were recovered in the remainder of the Project. Many areas contained steep slope and/or evidence of disturbance. No further archeological investigation is recommended for the remainder of the Project.

Report Authors: *Elizabeth Gregory, Matthew J. Kirk, RPA*

Date of Report: *November 6, 2019*

ABSTRACT

Hartgen Archeological Associates, Inc. conducted a Phase I archeological investigation for the proposed Westchester Bio Science and Technology Center, located in the Town of Mount Pleasant, Westchester County, New York. The Project is generally bounded by Old Saw Mill River Road and West Stevens Avenue to the north, Sprain Brook Parkway to the east, Hospital Road and Peripheral Road to the south, and Nilsson Drive to the west. The proposed Project entails the development of a mixed-use community that incorporates approximately 3 million square feet of biotech/research and development related uses including medical offices, a children's living science education center, neighborhood retail, potential residential uses, and a hotel, as part of a comprehensive master plan. The area of potential effects (APE) encompasses approximately 80 acres.

The precontact archeological sensitivity for the Project is moderate to high, and is particularly high along the ridge overlooking the tributary of the Saw Mill River in the southeastern portion of the Project, and in the southern portion of the Project near the reported precontact sites. Large areas of the Project are sloped in excess of 12%; the precontact archeological sensitivity in these areas are low. Historical maps indicate that there was a structure located within the southeastern portion of the Project between 1851 and 1893, and there is also an extant historic structure, of mid-19th century construction, in the northwestern portion of the Project; historic archeological sensitivity is high in these areas. The remainder of the Project appears to have seen little historic development prior to the late 20th century. As such, historic archeological sensitivity in the remainder of the Project is low. Archeological potential is low in the southwestern corner of the Project where more recent development has occurred, and in the vicinity of the construction parking lot and county dumping area towards the central-southern portion of the Project. The remainder of the Project appears relatively undisturbed. There is a moderate to high archeological potential for the remainder of the Project.

A total of 333 shovel tests were excavated throughout the relatively level areas of the APE, with 317 tests at 50-ft (15 m) intervals, 8 tests at 3-ft (1 m) intervals, and 8 tests at 10-ft (3 m) intervals. Disturbances, including modern dumping, and steeply sloping areas were frequently encountered throughout the APE. Two sites were identified in the southeastern corner of the Project, the J. Van Tassel Historic Site and the Saw Mill River Precontact Site. Avoidance or Phase II Archeological Investigations are recommended for these two sites. No significant cultural materials were recovered throughout the remainder of the Project. No further archeological investigation is recommended for the remainder of the Project.

TABLE of CONTENTS

PHASE I CULTURAL RESOURCES SURVEY	1
1 Introduction.....	1
2 Project Information.....	1
2.1 Project Location.....	1
2.2 Description of the Project.....	1
2.3 Description of the Area of Potential Effects (APE).....	1
3 Environmental Background.....	1
3.1 Present Land Use and Current Conditions	1
3.2 Soils.....	2
3.3 Bedrock Geology.....	3
3.4 Topography and Hydrology.....	3
4 Documentary Research.....	3
4.1 Archeological Sites	3
4.2 Historic Properties	4
4.3 Previous Surveys.....	5
5 Historical Map Review	6
6 Archeological Sensitivity Assessment.....	6
6.1 Precontact Archeological Sensitivity	6
6.2 Historic Archeological Sensitivity.....	7
7 Archeological Potential	7
8 Archeological Survey.....	7
8.1 Methodology	8
8.1.1 Shovel Testing.....	8
8.1.2 Artifacts and Laboratory	8
8.2 Results	8
8.2.1 Saw Mill River Precontact Site	9
8.2.2 J. Van Tassel Historic Site.....	9
9 Recommendations	10
10 Bibliography.....	11

Maps

Photographs

Appendix 1: Shovel Test Records

Appendix 2: Artifact Inventory

Map List

Map 1. Project Location (USGS 2015)

Map 2. Project Map (Esri Inc. 2015)

Map 3. Soil Map (USDA NRCS 2018)

Map 4. (Beers 1867; Bien 1893; Sidney & Neff 1851; USGS 1932; USGS 1957)

Photograph List

Photo 1. The area along the eastern boundary of the APE consisted of built land, disturbed during the construction of the Sprain Brook Parkway, which is slightly visible through the clearing in the center of the photo. View looking east.

Photo 2. The southeastern portion of the APE contained dense vegetation, and was Brush Hogged prior to testing. Here, an archeologists excavates Test 64. View looking north.

Photo 3. Portions of the Project, particularly in the easternmost section, contained dense brush. View looking north near Test 118.

Photo 4. View looking southeast towards Test 99, in the vicinity of the Map-Documented J. Van Tassel house.

Photo 5. View looking north from Test 51, in the vicinity of the Saw Mill River Precontact Site. This small landform overlooks an unnamed tributary of the Saw Mill River, downslope to the right of the photo.

Photo 6. Push piles (right) and gravel/crushed stone on the ground surface indicated disturbance in this vicinity. View looking north.

Photo 7. The County of Westchester has long used this area in the central-southern portion of the Project for dumping. View looking north.

Photo 8. Archeologists excavate shovel tests between Hospital Road (right) and the construction parking lot (left). In the background of the photo, the steep slope along Hospital Road. View looking west.

Photo 9. An archeologist excavates a shovel test in the central-southern portion of the Project, west of the construction parking lot. View looking north.

Photo 10. Archeologists excavate Tests 143 and 147, in the central-western portion of the APE. View looking northwest.

Photo 11. View looking southwest in the southwestern portion of the APE.

Photo 12. View looking southeast towards the house at 46 Saw Mill River Road.

Photo 13. Modern dumping was observed throughout the Project. Here, refuse has been deposited in the wooded area behind the residential structures in the southwestern portion of the APE. View looking north.

Photo 14. View looking northeast towards the house at 44 Saw Mill River Road.

Photo 15. View looking southeast towards the house at 42 Saw Mill River Road.

Photo 16. View looking north within the Nilson Greenhouse complex. The main building is visible to the right in the photo.

Photo 17. View looking west towards Saw Mill River Road within the Nilson Greenhouse complex. Several greenhouses and another small structure are visible in this photo.

Photo 18. View looking northeast towards the house at 48A Saw Mill River Road.

Photo 19. View looking southwest in the western portion of the Project.

Photo 20. Gravel and push piles of soil and other debris were noted along the western boundary of the Project. View looking northeast.

Photo 21. Disturbances, including a great deal of modern dumping, were also noted in the northwestern portion of the Project. View looking northeast.

Photo 22. View looking northeast towards the house at 84 Old Saw Mill River Road (11908.000272).

Photo 23. Temporary shed structures were located behind the house at 84 Old Saw Mill River Road, to the south. View looking south.

Photo 24. Archeologists excavate shovel tests around the house at 84 Old Saw Mill River Road (11908.000272). View looking north.

Photo 25. A transect of shovel tests was excavated along the ridge line south of the house at 84 Old Saw Mill River Road. View looking south.

Table List

Table 1. Soils in Project 2
Table 2. Archeological sites within one mile (1.6 km) of the Project..... 4
Table 3. NR/NRE properties within ½ mile of the Project and inventoried properties within the Project..... 5
Table 4. Relevant previous surveys within or adjacent to the Project..... 5
Table 5. Summary of map-documented and existing structures within the Project/APE 6
Table 6. Summary of Saw Mill River Precontact Site 9
Table 7. Summary of J. Van Tassel Historic Site..... 9

PHASE I CULTURAL RESOURCES SURVEY

1 Introduction

Hartgen Archeological Associates, Inc. (Hartgen) conducted a Phase I archeological investigation for the proposed Westchester Bio Science and Technology Center (Project) located in the Town of Mount Pleasant, Westchester County, New York. The Project requires approvals by the United States Army Corps of Engineers.

This investigation was conducted to comply with Section 106 of the National Historic Preservation Act and will be reviewed by the New York State Office of Parks, Recreation and Historic Preservation (OPRHP). The investigation was conducted according to the New York Archaeological Council's *Standards for Cultural Resource Investigations and the Curation of Archaeological Collections* (1994), which are endorsed by OPRHP. This report has been prepared according to OPRHP's *State Historic Preservation Office (SHPO) Phase I Archeological Report Format Requirements* (2005).

2 Project Information

2.1 Project Location

The Project is located entirely within the Town of Mount Pleasant, and is generally bounded by Old Saw Mill River Road and West Stevens Avenue to the north, Sprain Brook Parkway to the east, Hospital Road and Peripheral Road to the south, and Nilsson Drive to the west (Map 1).

2.2 Description of the Project

The proposed Project entails the development of a mixed-use community that incorporates approximately 3 million square feet of biotech/research and development related uses including medical offices, a children's living science education center, neighborhood retail, potential residential uses, and a hotel, as part of a comprehensive master plan.

2.3 Description of the Area of Potential Effects (APE)

The area of potential effects (APE) includes all portions of the property that will be directly altered by the proposed undertaking. The APE encompasses approximately 57.6 acres.

3 Environmental Background

The environment of an area is significant for determining the sensitivity of the Project for archeological resources. Precontact and historic groups often favored level, well-drained areas near wetlands and waterways. Therefore, topography, proximity to wetlands, and soils are examined to determine if there are landforms in the Project that are more likely to contain archeological resources. In addition, bedrock formations may contain chert or other resources that may have been quarried by precontact groups. Soil conditions can provide a clue to past climatic conditions, as well as changes in local hydrology.

3.1 Present Land Use and Current Conditions

A site visit was conducted concurrent with fieldwork by Elizabeth Gregory on August 12, 2019 to observe and photograph existing conditions within the Project. The majority of the Project is undeveloped, but steeply sloped, in excess of 12%.

Disturbance was noted in the areas adjacent to the Sprain Brook Parkway and Hospital Road, along the eastern/southeastern boundary of the Project, where filling has occurred to build up the land for these roadways (Photo 1). The southeastern/eastern portion of the APE contained dense underbrush, thorns, slope, and fallen

logs, making the area inaccessible. Brush hogging was completed prior to excavation of this area (Photos 3 and 5). Much of the northeastern portion of the APE is steeply sloped.

A section in the central-eastern portion of the APE has been used by the county for dumping for a number of years, particularly within a large area north of an old construction parking lot/staging area (Photos 6 and 7). South of the construction parking lot, buried utilities were marked in the lawn along Hospital Road near the bus stop (Photo 8). These areas are indicated on Maps 2a-c and are based on a review of 20th century aerial imagery and surface inspection.

The portion of the Project immediately west of the construction parking lot is largely wooded with modern dumping, including trash and building debris, concentrated along the construction parking lot fence and in the vicinity of the county's dumping area (Photo 9). To the northwest, the APE was overgrown with dense vines (Photo 10).

There are several residential structures in this the western/southwestern portions of the Project (Photos 12, 14, 15, 18), in addition to a greenhouse facility (Photos 16 and 17). According to historical maps and aerial images, most of these structures were constructed between 1957 and 1991 (Map 4). Extensive modern dumping has occurred behind the residential structures in the southwestern portion of the Project (Photo 13).

Gravel and push piles of soil and other debris were noted near the western boundary of the Project (Photo 20). Extensive modern dumping was also observed in the northwestern portion of the Project, near the intersection of Old Saw Mill River Road and Saw Mill River Road (Photo 21).

In the central-northern portion of the Project, the extant 19th century house at 84 Old Saw Mill River Road (11908.000272) was previously determined to be a contributing structure to Grasslands Medical/Correctional Facility Historic District (Photos 22 and 24). Temporary shed structures were located south of the house at 84 Old Saw Mill River Road (Photo 23). As in many other sections of the APE, the areas of the APE to the east and southeast of these structures are steeply sloped.

3.2 Soils

Soil surveys provide a general characterization of the types and depth of soils that are found in an area. This information is an important factor in determining the appropriate methodology if and when a field study is recommended.

Table 1. Soils in Project

Symbol	Name	Depth	Textures	Slope	Drainage	Landform
PnB	Paxton fine sandy loam	0-20 cm (0-8 in) 20-38 cm (8-15 in) 38-66 cm (15-26 in) 66-165 cm (26-65 in)	Fine sandy loam Fine sandy loam Fine sandy loam Gravelly fine sandy loam	3-8%	Well drained	Hills, drumlins, ground moraines
PnC	Paxton fine sandy loam	0-20 cm (0-8 in) 20-38 cm (8-15 in) 38-66 cm (15-26 in) 66-165 cm (26-65 in)	Fine sandy loam Fine sandy loam Fine sandy loam Gravelly fine sandy loam	8-15%	Well drained	Hills, drumlins, ground moraines
PnD	Paxton fine sandy loam	0-20 cm (0-8 in) 20-38 cm (8-15 in) 38-66 cm (15-26 in) 66-165 cm (26-65 in)	Fine sandy loam Fine sandy loam Fine sandy loam Gravelly fine sandy loam	15-25%	Well drained	Hills, drumlins, ground moraines
RdB	Ridgebury complex	0-3 cm (0-1 in) 3-15 cm (1-6 in) 15-25 cm (6-10 in) 25-48 cm (10-19 in) 48-168 cm (19-66 in)	Moderately decomposed plant material Loam Gravelly fine sandy loam Gravelly fine sandy loam Gravelly loam	3-8%	Poorly drained	Ground moraines, depressions, drumlins, drainageways, hills

Symbol	Name	Depth	Textures	Slope	Drainage	Landform
SuB	Sutton loam	0-23 cm (0-9 in) 23-43 cm (9-17 in) 43-76 cm (17-30 in) 76-99 cm (30-39 in) 99-152 cm (39-60 in)	Loam Fine sandy loam Sandy loam Sandy loam Sandy loam	3-8%	Moderately well drained	Hills, ridges, ground moraines
Ub	Udorthents, smoothed	0-10 cm (0-4 in) 10-178 cm (4-70 in)	Gravelly loam Very gravelly loam	0-8%	Moderately well drained	
WdB	Woodbridge loam	0-15 cm (0-6 in) 15-46 cm (6-18 in) 46-74 cm (18-29 in) 74-165 cm (29-65 in)	Loam Gravelly loam Gravelly loam Gravelly loam	3-8%	Moderately well drained	Drumlins, hills, ground moraines

3.3 Bedrock Geology

There are two types of bedrock within the Project. The first, Inwood Marble (OCi) of the Beekmantown, Wappinger, and Stockbridge Groups and Potsdam Sandstone, Poughquag Quartzite, and Vermont Valley sequence and metamorphic equivalents. It is located in the western two-thirds of the Project

The second type, Fordham Gneiss (f) of the Metamorphic Rocks of Sedimentary and Volcanic Origin, is found in the eastern third of the Project. Neither of these formations are chert bearing.

3.4 Topography and Hydrology

Steeply sloped areas are considered largely unsuitable for human occupation. As such, the standards for archeological fieldwork in New York State generally exclude areas with a slope in excess of 12% from archeological testing (NYAC 1994). Exceptions to this rule include steep areas with bedrock outcrops, overhangs, and large boulders that may have been used by precontact people as quarries or rock-shelters. Such areas may still warrant a systematic field examination. A slope analysis (Map 2a) and topographic maps indicate that large portions of the APE are steeply sloped, and would have a low archeological potential.

There are a couple of water sources within or nearby the APE. The Project is adjacent to the Saw Mill River to the northwest. An unnamed tributary of the Saw Mill River flows from the southeastern corner to the north central portion of the APE. About 600 feet to the west, a second parallel tributary stream was depicted on the Beers (1867) and Bien (1893) maps within the APE (Map 4).

4 Documentary Research

Hartgen conducted research using the New York State Cultural Resource Information System (CRIS), which is maintained by the New York SHPO and the Division for Historic Preservation DHP within OPRHP. CRIS contains a comprehensive inventory of archeological sites, State and National Register (NR) properties, properties determined eligible for the NR (NRE), and previous cultural resource surveys.

4.1 Archeological Sites

An examination of CRIS identified eleven reported archeological sites within one mile (1.6 km) of the Project (Table 2). Previously reported archeological sites provide an overview of both the types of sites that may be present in the Project and relation of sites throughout the surrounding region. The eight precontact sites are generally concentrated along the Saw Mill River to the south west of the APE.

Table 2. Archeological sites within one mile (1.6 km) of the Project

OPRHP Site No.	NYSM Site No.	Site Identifier	Description	Proximity to Project
11904.000171		Landmark at Eastview Area 6 Prehistoric and Historic Site	Precontact site consisting of 227 precontact artifacts which include 1 Lamoka stemmed point, 1 quartz biface, 1 quartz biface fragment, 1 quartz core, 1 chert flake, 26 quartz flakes, 8 body sherds of Precontact pottery, 172 faunal bones	5,100 feet southwest
11908.000019		Site 95- Fieldstone Feature	Historic site consisting of an above ground fieldstone foundation	3,700 feet southwest
11908.000297		Home Depot Locus 1 Prehistoric Site	Late Archaic Precontact camp site consisting of 1 chert Bare Island point, 1 quartz side notched point, 1 broken chert biface, 176 chert and quartz retouch flakes, 55 chert and quartz production flakes, 11 production blocks, 9 production shatter and 1 fire cracked rock	3,400 feet southwest
11908.000298		Home Depot Locus 2 Prehistoric Site	Precontact workshop consisting of 7 chert and quartz retouch flakes, 2 chert and basalt production flakes, 1 production shatter, and 1 hammerstone	3,200 feet southwest
11908.000299		Home Depot Locus 3 Prehistoric Site	Late Woodland precontact workshop consisting of 1 broken quartz Levanna point, 10 chert and quartz retouch flakes, 15 chert and quartz production flakes, 1 tertiary production flake, 4 production shatter, and 1 biface	3,500 feet southwest
11908.000300		Saw Mill River Bluff Site	SUBi- 1680; Precontact site where 2 quartz flakes and 8 chert flakes were found	3,300 feet southwest
11908.000333		DEP Water Treatment Precontact Site	NRE; Middle Archaic to Late Woodland precontact site where 152 quartz flakes, 98 shatter, 4 bifaces, 1 utilized flake, 7 slate flakes, 9 quartzite flakes, 1 knife, 5 chert shatter, 46 chert flakes, and 1 scraper recovered	3,800 feet south
11908.000342	11985	J. Butler Site	Subi- 2928; historic house site constructed prior to 1867	5,000 feet southwest
11908.000399		NAR Pocantico Hills Pond	Subsurface cellar hole with associated artifact scatter; possible 18th century home of Revolutionary War veteran	4,000 feet west
	9252	Unnamed site	Collection of projectile points from surface collection from 1978 site file. Site covers over 500 acres. Specific locations of point finds are not specified.	Intersects with southernmost portion of APE
	9253	Unnamed site	Collection of projectile points from surface collection from 1978 site file	4,300 feet southeast

4.2 Historic Properties

An examination of CRIS identified two NR properties and one NRE district within ½ mile of the project. Five previously surveyed properties have been determined to be ineligible (Table 3). Additionally, there are no sites listed on the Westchester County Inventory of Historic Places within ½ mile of the project (Westchester County Historic Preservation 2018).

Table 3. NR/NRE properties within ½ mile of the Project and inventoried properties within the Project.

USN	Property Name	Status	Description	Location and Proximity to Project
02NR05036	Taconic State Parkway	NRL	Follows a north-south path extending 105.3 miles from the Kensico Dam Plaza to I-90; constructed between 1923 and 1963.	2,200 feet northwest
18PR07074	Rockefeller Pocantico Hills Estate Historic District	NRL	Expansive historic landscape that was developed in the later nineteenth and the first half of the twentieth century	800 feet northwest
11908.000250	Grasslands Medical/Correctional Facility	NRE	400 acres, late 19 th c. through the 1980s; 5 mi N of White Plains; property is bordered on the east by the Sprain Brook Parkway, on the north by Stevens Avenue, on the west by the Old and the New Saw Mill River roads and by privately-owned mixed use properties; and on the south by Route 100C and property owned by the New York City Department of Environmental Protection	Encompasses the Project
11908.000272	Maple Cottage (#22)	Contributing property to the NRE Grassland Medical Correctional Facility	84 Old Saw Mill River Road; mid-19 th century construction	Within the northwestern corner of the Project
11908.000273	Ruth Taylor Psychiatric Institute (#23)	Contributing property to the NRE Grassland Medical Correctional Facility	Constructed in 1935; three-story brick structure with an irregular floor plan and a flat roof	300 feet south of the southern boundary of the Project
11908.000417	48 Saw Mill River Road	Not eligible	Built mid-20 th century	Within the western section of the Project
11908.000418	48A Saw Mill River Road	Not eligible	Built mid-20 th century	Within the western section of the Project
11908.000419	42 Saw Mill River Road	Not eligible	Built mid-20 th century	Within the southwestern section of the Project
11908.000420	44 Saw Mill River Road	Not eligible	Built mid-20 th century	Within the southwestern section of the Project
11908.000421	46 Saw Mill River Road	Not eligible	Built mid-20 th century	Within the southwestern section of the Project

4.3 Previous Surveys

A review of CRIS identified one previous surveys within the immediate vicinity of the Project (Table 4).

Table 4. Relevant previous surveys within or adjacent to the Project

Project/Phase	Summary	Citation
PIN 8106.3 Sprain Brook Parkway	This project reported four historic archeological sites and 44 extant structures potentially impacted by the extension of the Sprain Brook Parkway. This survey identified the Catskill Aqueduct and the Delaware Aqueduct.	(New York State Museum 1977)

The Sprain Brook Parkway runs immediately adjacent to the eastern boundary of the current Project, and may have had an impact on the integrity of the eastern portion of the current Project. The research notes that by the time of the American Revolution, there were only two settlements within the general vicinity of the ROW. One of these was located at the former intersection of Stevens Ave and Bradhurst Ave, east of the northeastern corner of the current Project. This was outside both the current Project and the 1977 New York State Museum survey. The northern terminus of the 1977 survey was Stevens Avenue, which was also the northern terminus of the current Project. However, the majority of cultural resources discussed in the report are located well south of the current Project.

The report also noted that the parkway’s ROW was “not in a location favorable to large prehistoric settlements, although the possibility of small, semi-permanent settlements existing there necessitated field survey.” The survey found that no structures were in the vicinity of the project prior to 1872. The survey also found that “a large portion of the project area has been altered by modern home and road construction and by the construction in the early 20th century of the Catskill Aqueduct,” particularly in the southern section of the project.

5 Historical Map Review

Historic maps dating between 1779 and the present were reviewed during this survey (Sauthier 1779). There are six map-documented structures (MDS) within the APE from 1957 or earlier, as summarized in Table 5.

Table 5. Summary of map-documented and existing structures within the Project/APE

Structure #	(Sidney & Neff 1851)	(Beers 1867)	(Bien 1893)	(USGS 1932)	(USGS 1957)
1	“G.T. Clark”				
2	“Mineral Spring”	“A. Clark”	“Jas. Gibson”	X	[Not shown, but still stands]
3		“J. Van Tassel”			
4				X	
5				X	
6					X

6 Archeological Sensitivity Assessment

The New York Archaeological Council provides the following description of archeological sensitivity:

Archaeologically sensitive areas contain one or more variables that make them likely locations for evidence of past human activities. Sensitive areas can include places near known prehistoric sites that share the same valley or that occupy a similar landform (e.g., terrace above a river), areas where historic maps or photographs show that a building once stood but is now gone as well as the areas within the former yards around such structures, an environmental setting similar to settings that tend to contain cultural resources, and locations where Native Americans and published sources note sacred places, such as cemeteries or spots of spiritual importance (NYAC 1994:9).

6.1 Precontact Archeological Sensitivity

The precontact sensitivity of an area is based on proximity to previously documented precontact archeological sites, known precontact resources (e.g. chert outcrops), and physiographic characteristics such as topography and drainage. Generally, areas in the vicinity of streams and wetlands are considered to have elevated sensitivity for sites associated with Native American use or occupation because they presented potential food and water sources as well as transportation corridors.

There are eight (8) known precontact archeological sites within one mile of the Project. Additionally, portions of the APE overlook an unnamed tributary of the Saw Mill River, which runs through the Project.

The precontact archeological sensitivity for the Project is moderate to high, and is particularly high along the ridge overlooking the tributary of the Saw Mill River in the southeastern portion of the Project, and in the southern portion of the Project near the reported precontact sites.

Large areas of the Project are sloped in excess of 12%; the precontact archeological sensitivity in these areas are low.

6.2 Historic Archeological Sensitivity

The historic sensitivity of an area is based primarily on proximity to previously documented historic archeological sites, map-documented structures, or other documented historical activities (e.g. battlefields).

There are three (3) reported historic archeological sites within one mile of the Project. Additionally, historic maps indicate that there was a structure located within the southeastern portion of the Project between 1851 and 1893. There is also an extant historic structure, of mid-19th century construction, in the northwestern portion of the Project. Historic archeological sensitivity is high in these areas. The remainder of the Project appears to have seen little historic development prior to the late 20th century. As such, historic archeological sensitivity in the remainder of the Project is low.

7 Archeological Potential

Archeological potential is the likelihood of locating intact archeological remains within an area. The consideration of archeological potential takes into account subsequent uses of an area and the impact those uses would likely have on archeological remains.

A large area in the central-southern portion of the Project has been used extensively by the county for dumping, and contains large amounts of disturbance and fill soils. Disturbance has also occurred in the areas adjacent to the Sprain Brook Parkway and Hospital Road, where filling has occurred to build up the land for these roadways. Disturbance has also occurred in the vicinity of a construction parking/staging area in the southern-central portion of the Project. These areas have a low archeological potential.

Construction in the western portion of the Project has occurred mostly between 1957 and the present. There are several residential structures, in addition to a greenhouse facility. Extensive modern dumping has also occurred behind the residential structures in the southwestern portion of the Project. Due to the disturbance associated with these grading, construction, and dumping activities, archeological potential is low in these areas.

The remainder of the Project appears relatively undisturbed. There is a moderate to high archeological potential for the remainder of the Project.

8 Archeological Survey

Correspondence between VHB and OPRHP dated May 1, 2019 indicated that, “based on available information, this project is located in an archeologically sensitive area.” As such, SHPO recommended “that a Phase I archeological survey is warranted for all portions of the project that will involve ground disturbance, unless substantial prior ground disturbance can be documented” (OPRHP 2019). A slope analysis completed during the Phase IA archeological sensitivity assessment (Map 2a) indicated that large portions of the APE are steeply sloped, in excess of 12%. These areas were not tested. Additionally, ground disturbance was evident in several areas, including a large area used for dumping by the county, and sections of the APE in the vicinity of the recently constructed residences and greenhouse complex in the southwestern portion of the APE. The remainder of the APE was subject to Phase IB archeological investigations.

8.1 Methodology

8.1.1 Shovel Testing

Shovel tests were excavated at a standard interval of 15 meters (50 ft). Confirmation shovel tests were excavated at reduced intervals in the vicinity of archeological finds to assess their significance.

Each shovel test was 40 centimeters (16 in) in diameter. All excavated soil was passed through 0.25-inch hardware mesh and examined for both precontact (Native American) and historic artifacts. The stratigraphy of each test was recorded including the depth, Munsell color, soil description, and artifact content (Munsell Color 2000). The location of each shovel test was plotted on the project map. Test excavation was photographed.

8.1.2 Artifacts and Laboratory

As general procedure, all precontact (Native American) cultural material identified during the fieldwork are collected. Significant historic artifacts such as glass, ceramics, food remains, hardware, and miscellaneous items are collected. Coal, ash, cinder, brick, and modern materials are noted. Any artifacts collected are placed in paper or plastic bags labeled by provenience and inventoried in a bag list. Bags are numbered in the field and transported to the Hartgen laboratory in the Town of North Greenbush, Rensselaer County, New York, for processing.

Shovel test records and other provenience information were entered into a Microsoft *Access* database (Appendix 1). Artifacts were cleaned and cataloged. Cataloging entailed entering artifact provenience information, counts, weights, and descriptive information into the database (Appendix 2).

8.2 Results

The Phase IB archeological field reconnaissance was conducted between August 12 and August 16, 2019, with an additional day of fieldwork on September 23, 2019. The field crew consisted of Amy Wilson, Jamie Penk, Adam Gersten, Dave Wendell, John Ham, and Ben Heckman. Elizabeth Gregory served as Field Director. Matthew J. Kirk, RPA, was Principal Investigator. The weather was generally pleasant, clear, and warm, and did not have any adverse effects on visibility or artifact recovery.

A total of 333 shovel tests were excavated throughout the relatively level portions of the APE, with 317 tests at 50-foot (15 meter) intervals, 8 tests at 3-foot (1 meter) intervals, and 8 tests at 10-foot (3 meter) intervals. Radial tests were excavated at 1- and 3-meter intervals in the cardinal directions around precontact finds in Test 99 and Test 54 (Maps 2b and 2c).

The majority of the APE was steeply sloped, in excess of 12%, particularly in the northern portion of the Project. Disturbances, including a great deal of modern dumping, were observed throughout the APE. Artifacts recovered from Tests 359, 368, and 369, in the northwestern portion of the APE, were recovered amongst large quantities of modern plastics, bottle glass, and other debris, and soil disturbance was also observed in shovel tests in this vicinity (Photo 21). Similarly Test 352, which contained a fragment of Japanese porcelain, was located adjacent to gravel and soil push piles, and soil disturbance was noted in adjacent tests as well (Photo 20). Whiteware and green bottle glass were recovered from Test 250, along Saw Mill River Road, which also contained gravel and fragments of asphalt.

Two archeological sites were identified in the southeastern portion of the APE (Photos 2-5; Map 2).

The Saw Mill River Precontact Site (Table 6) was located along a small ridge overlooking the unnamed tributary of the Saw Mill River, which flows from the southeastern corner to the north central portion of the APE. This site is located between the tributary and the construction access road, and likely extended further to the west prior to disturbances due to dumping and the installation of the access road and construction parking lot. The Saw Mill River Precontact Site consists of five pieces of debitage (1 chert, 1 quartz, 1 quartzite, and 2 siliceous shale) and one bifurcated corner notched projectile point made of siliceous shale. These materials were recovered from Tests 31, 49, and 54, and from radial Test 54 3m S. One additional chert flake was recovered

from Test 99, to the east across the tributary, but radial testing around Test 99 did not recover any additional artifacts. The typical soil profile in the vicinity of the Saw Mill River Precontact Site consisted of an average of 23 centimeters (with a range between 10 and 34 centimeters) of light olive brown to brown sandy loam A Horizon, underlain by a light yellowish brown to yellowish brown sand or silt sand subsoil.

The J. Van Tassel Historic Site (Table 7) was identified to the east of the Saw Mill River Precontact Site, across the tributary. This site was identified in the vicinity of the Map Documented Structure labeled J. Van Tassel on the 1867 Beers map. The house was no longer depicted on the 1893 Bien map (Map 4). The J. Van Tassel Historic Site consisted of an assemblage of domestic artifacts, including fragments of redware (17 glazed, 2 unglazed), pearlware (n=2), red-bodied stoneware (n=1), black transfer printed whiteware (n=3), aqua and pale aqua vessel glass (n=2), bottle glass (n=1), clam and oyster shells, (n=2), sawn faunal bone (n=1), and building materials including window glass (n=1) and slate (n=1). These materials were collected from four adjacent tests (Tests 77-80) along the ridge overlooking the tributary to the west. The stratigraphy in the vicinity of the J. Van Tassel Historic Site was somewhat more complex. Some of the tests in this vicinity contained a typical brown to very dark grayish brown silty sand A Horizon underlain by a yellowish brown silty sand subsoil. Two other shovel tests in this vicinity, along the ridge line, contained brown sandy loam to depths of at least 42 centimeters and 78 centimeters, respectively, before excavations were stopped due to rock and root impasses. Additionally, although no artifacts were collected from Test 81, it appeared to contain a Buried A Horizon at 62 centimeters below the ground surface. Tests adjacent to the J. Van Tassel Historic Site contained shallow A Horizons consisting of 10 to 22 centimeters of grayish brown to yellowish brown silty loam, underlain by a light yellowish brown or brownish yellow silty sand subsoil.

Avoidance is recommended for both the Saw Mill River Precontact Site and the J. Van Tassel Historic Site. If avoidance is not feasible, Phase II archeological investigations are recommended.

8.2.1 Saw Mill River Precontact Site

Table 6. Summary of Saw Mill River Precontact Site

Characteristic	Site information
Site Name	Saw Mill River Precontact Site
Description	Small deposit of five flakes (1 chert, 1 quartz, 1 quartzite, and 2 siliceous shale), one fragment of FCR, and one untyped projectile point made of siliceous shale with a bifurcated base.
Date	Unknown
Function	Small camp site
Size	Approximately 500 feet x 60 feet

8.2.2 J. Van Tassel Historic Site

Table 7. Summary of J. Van Tassel Historic Site

Characteristic	Site information
Site Name	J. Van Tassel Historic Site
Description	Small historic deposit consisting of redware, pearlware, red bodied stoneware, black transfer printed whiteware, vessel glass, window glass, shell, and faunal bone. Likely associated with the MDS Van Tassel house, which was constructed between 1851 and 1897, and was removed between 1891 and 1893.
Date	c. mid- to late- 19 th century
Function	Domestic deposit
Size	Approximately 150 feet x 100 feet

9 Recommendations

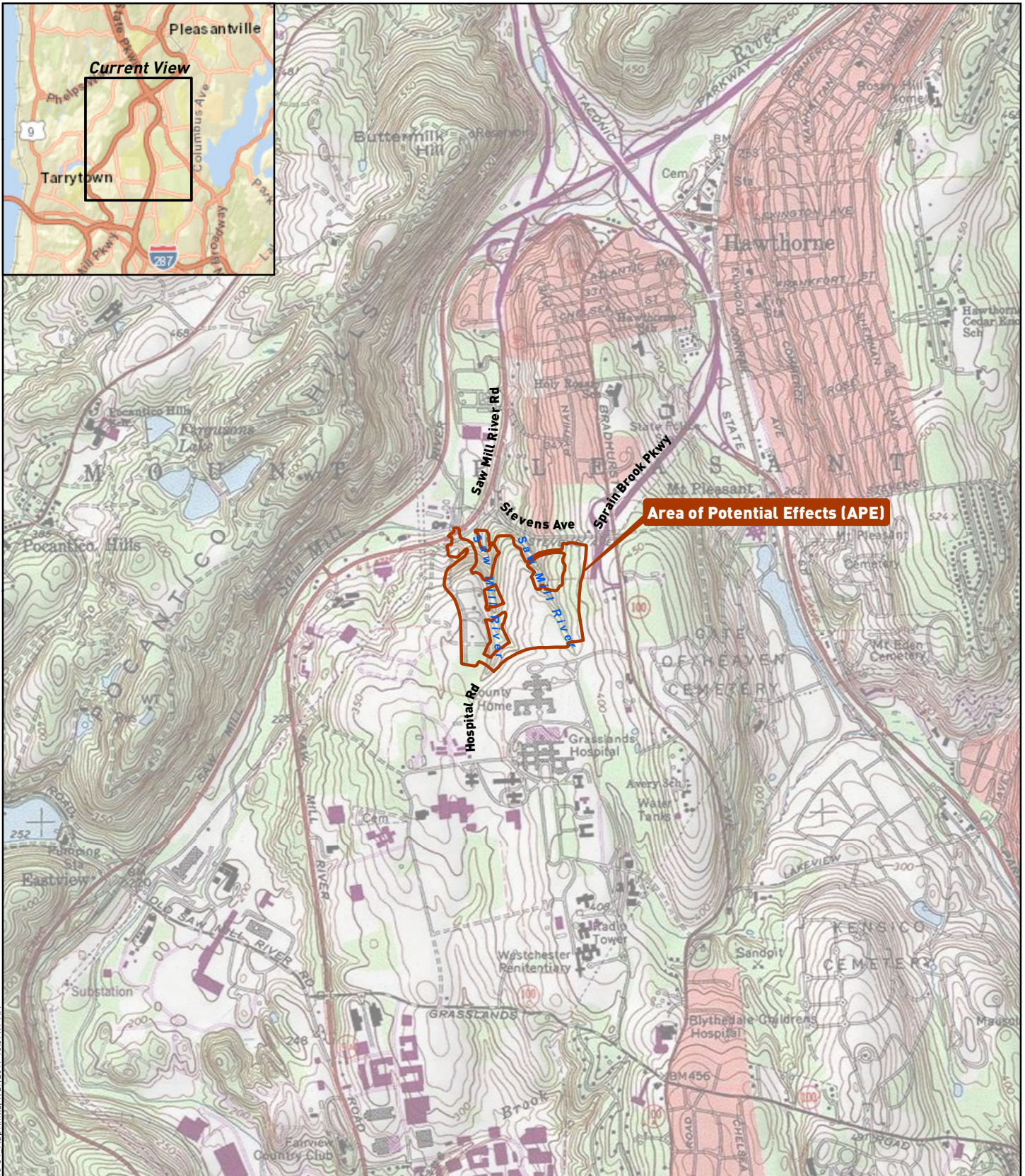
Two (2) archeological sites were identified during Phase I archeological investigations, the Saw Mill River Precontact Site and the J. Van Tassel Historic Site. Avoidance or Phase II archeological investigations are recommended for these sites.

No significant cultural materials were recovered in the remainder of the Project. Many areas contained steep slope and/or evidence of disturbance. No further archeological investigation is recommended for the remainder of the Project.

10 Bibliography

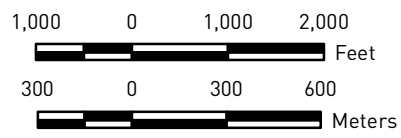
- Beers, F. W.
1867 *County Atlas of Westchester, New York*. F. W. Beers, D. Ellis and G. G. Soule, New York.
- Bien, Joseph R.
1893 *Atlas of Westchester County, New York*. Julius Bien & Co., New York.
- Esri Inc.
2015 World Imagery. Esri, Inc., Redlands, California,
http://services.arcgisonline.com/ArcGIS/rest/services/World_Topo_Map/MapServer.
- Munsell Color
2000 *Munsell Soil Color Charts*. GretagMacbeth, New Windsor, New York.
- New York Archaeological Council (NYAC)
1994 *Standards for Cultural Resource Investigations and the Curation of Archaeological Collections in New York State*. NYAC, n.p.
- New York State Museum
1977 *Report on the Archeological Survey of NYSDOT PIN 8106.03, Sprain Brook Parkway*. Submitted to The New York State Department of Transportation. On file at OPRHP, Waterford, New York.
- Office of Parks, Recreation and Historic Preservation (OPRHP)
2005 *New York State Historic Preservation Office (SHPO) Phase I Archeological Report Requirements*. OPRHP, Waterford, New York.
- Sauthier, Joseph
1779 *A Chronographical Map of the Province of New York in North America*. William Faden, London.
- Sidney & Neff
1851 *Map of Westchester County New York, From actual Surveys*. Newell S. Brown, Philadelphia.
- United States Department of Agriculture Natural Resources Conservation Service (USDA NRCS)
2018 Soil Survey Geographic (SSURGO) Database. USDA NRCS. Electronic document,
<https://websoilsurvey.sc.egov.usda.gov/>.
- United States Geological Survey (USGS)
1932 *White Plains, New York Topographic Quadrangle Map, 1:24,000 scale*. USGS Historical Topographic Map Explorer, Reston, Virginia, <http://historicalmaps.arcgis.com/usgs>.
1957 *White Plains, New York Topographic Quadrangle Map, 1:24,000 scale*. USGS Historical Topographic Map Explorer, Reston, Virginia, <http://historicalmaps.arcgis.com/usgs>.
2015 USGS The National Map Topo Base Map - Large Scale. USGSTopo (MapServer), The National Map Seamless Server, USGS, Sioux Falls, South Dakota,
<http://services.nationalmap.gov/arcgis/rest/services/USGSTopoLarge/MapServer>.
- Westchester County Historic Preservation
2018 Sites Listed on the Westchester County Inventory of Historic Places, The New York State Register of Historic Places, and the National Register of Historic Places.

Maps



Area of Potential Effects (APE)

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Note: Contour interval is 10 feet.

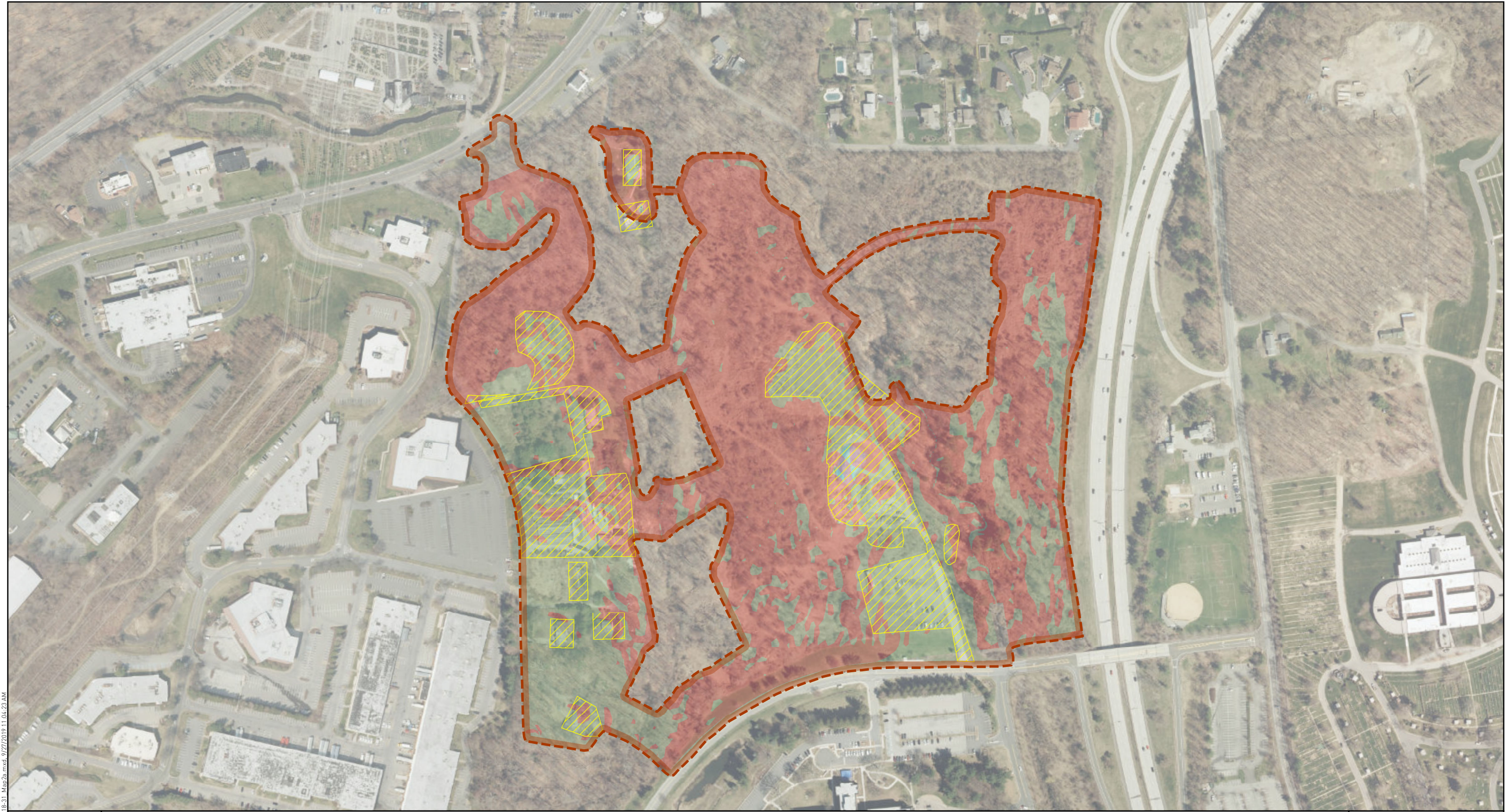
Project Location

GIS Services Accessed 9/27/2019:
 Environmental Systems Research
 Institute, Inc., World Street Map; National
 Geographic Society USA Topo Maps Layer

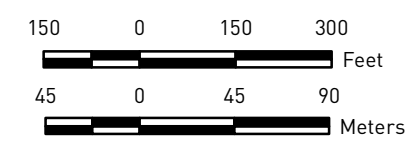


HARTGEN
 archeological associates inc





Map 1



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Legend

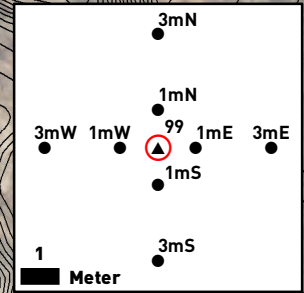
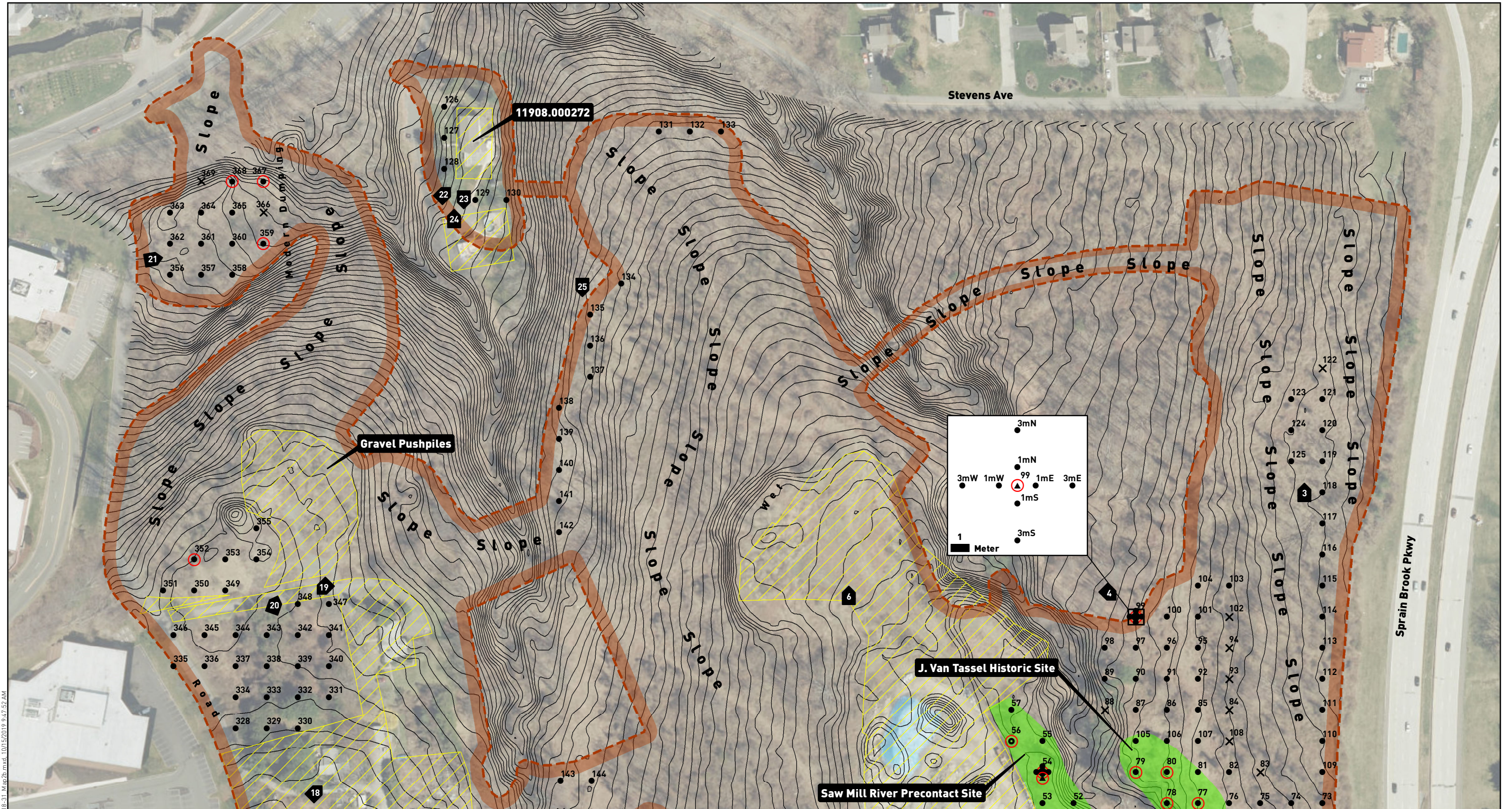
-  Area of Potential Effects (APE)
-  Disturbed
-  ≤ 12% Slope
-  >12% Slope

Project Map
Environmental Systems Research Institute, Inc.,
World Imagery Accessed 10/14/2019

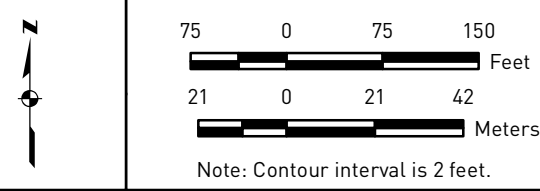


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archeological associates inc

Map 2a



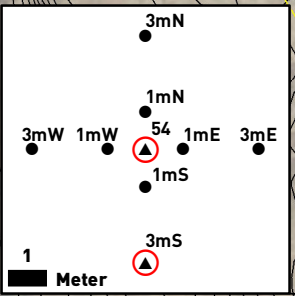
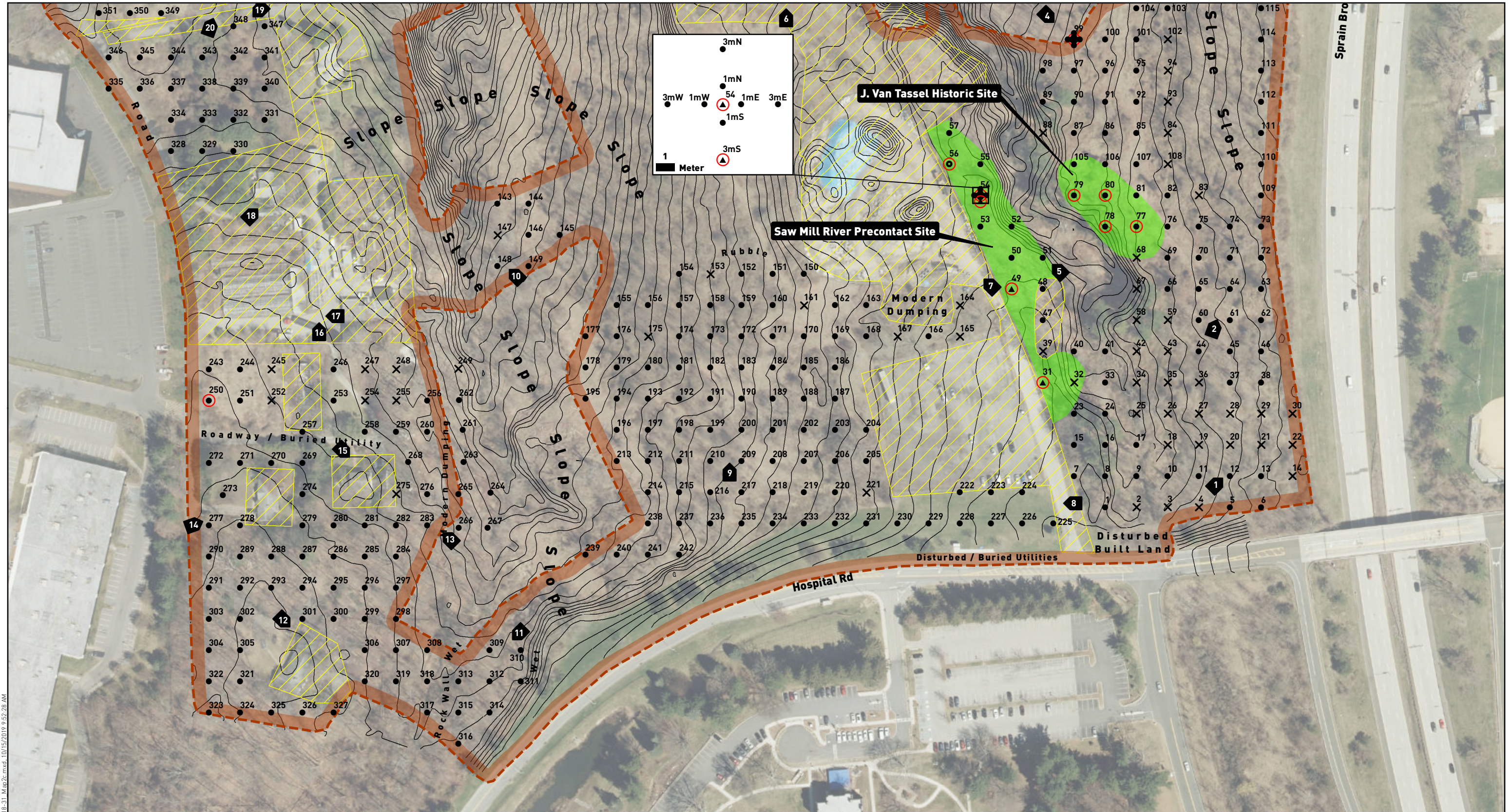
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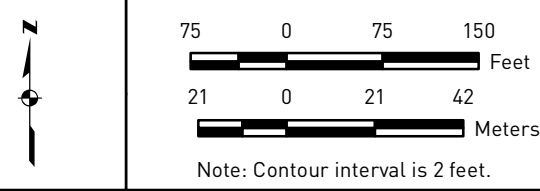
Legend	
●	Shovel Test (ST)
×	ST not excavated
⊙	Positive ST (historic)
⊙	Positive ST (precontact)
⊙	Positive ST (other)
⬛	Photo Angle
■	Site
⬜	Area of Potential Effects (APE)
▨	Disturbed

Project Map - North
Environmental Systems Research Institute, Inc.,
World Imagery Accessed 10/15/2019

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archeological associates inc.
Map 2b



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Legend	
●	Shovel Test (ST)
×	ST not excavated
⊙	Positive ST (historic)
⊙	Positive ST (precontact)
⊙	Positive ST (other)
⬛	Photo Angle
■	Site
⬜	Area of Potential Effects (APE)
▨	Disturbed

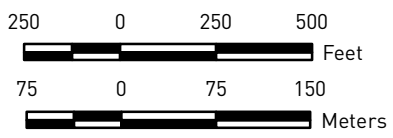
Project Map - South
 Environmental Systems Research Institute, Inc.,
 World Imagery Accessed 10/15/2019

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 archeological associates inc.
Map 2c



Area of Potential Effects (APE)

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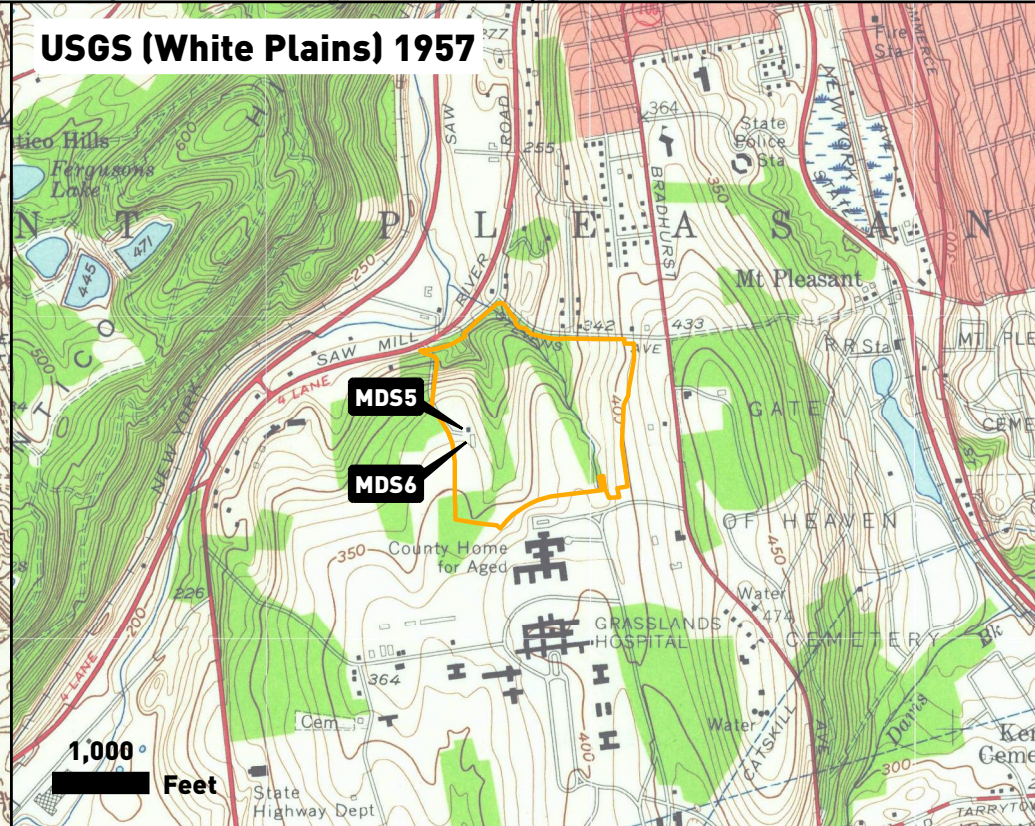
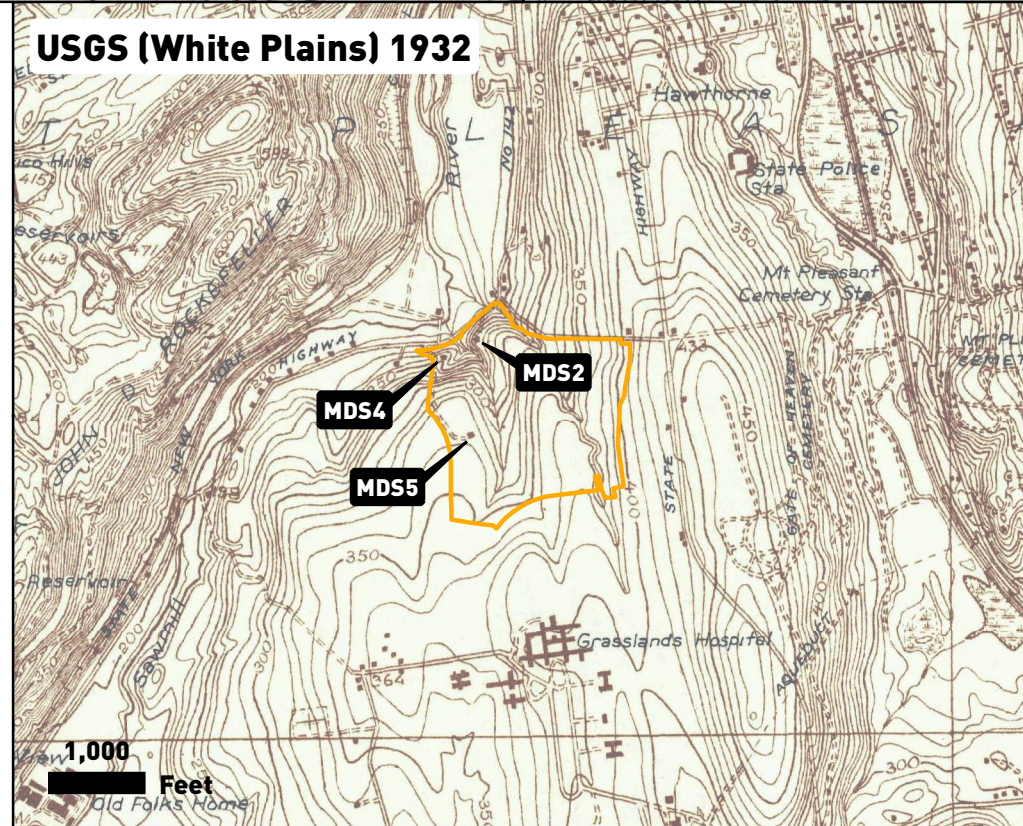
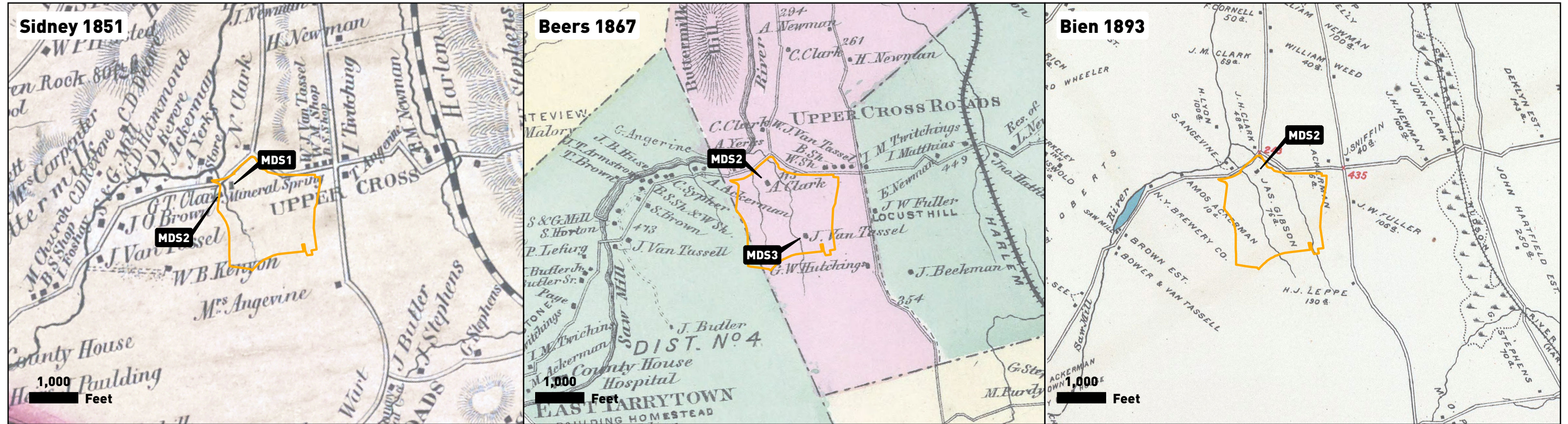
Soil Map

Environmental Systems Research Institute, Inc.,
 World Imagery Accessed 8/29/2019; U.S. Department
 of Agriculture, Natural Resources Conservation
 Service Soil Survey Geographic Database 2017



HARTGEN
 archeological associates inc

Map 3



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Legend

Project Area

Note: MDS = Map-Documented Structure



Photographs



Photo 1. The area along the eastern boundary of the APE consisted of built land, disturbed during the construction of the Sprain Brook Parkway, which is slightly visible through the clearing in the center of the photo. View looking east.



Photo 2. The southeastern portion of the APE contained dense vegetation, and was Brush Hogged prior to testing. Here, an archeologist excavates Test 64. View looking north.



Photo 3. Portions of the Project, particularly in the easternmost section, contained dense brush. View looking north near Test 118.



Photo 4. View looking southeast towards Test 99, in the vicinity of the Map-Documented J. Van Tassel house.



Photo 5. View looking north from Test 51, in the vicinity of the Saw Mill River Precontact Site. This small landform overlooks an unnamed tributary of the Saw Mill River, downslope to the right of the photo.



Photo 6. Push piles (right) and gravel/crushed stone on the ground surface indicated disturbance in this vicinity. View looking north.



Photo 7. The County of Westchester has long used this area in the central-southern portion of the Project for dumping. View looking north.



Photo 8. Archeologists excavate shovel tests between Hospital Road (right) and the construction parking lot (left). In the background of the photo, the steep slope along Hospital Road. View looking west.



Photo 9. An archeologist excavates a shovel test in the central-southern portion of the Project, west of the construction parking lot. View looking north.



Photo 10. Archeologists excavate Tests 143 and 147, in the central-western portion of the APE. View looking northwest.



Photo 11. View looking southwest in the southwestern portion of the APE.



Photo 12. View looking southeast towards the house at 46 Saw Mill River Road.



Photo 13. Modern dumping was observed throughout the Project. Here, refuse has been deposited in the wooded area behind the residential structures in the southwestern portion of the APE. View looking north.



Photo 14. View looking northeast towards the house at 44 Saw Mill River Road.



Photo 15. View looking southeast towards the house at 42 Saw Mill River Road.



Photo 16. View looking north within the Nilson Greenhouse complex. The main building is visible to the right in the photo.



Photo 17. View looking west towards Saw Mill River Road within the Nilson Greenhouse complex. Several greenhouses and another small structure are visible in this photo.



Photo 18. View looking northeast towards the house at 48A Saw Mill River Road.



Photo 19. View looking southwest in the western portion of the Project.



Photo 20. Gravel and push piles of soil and other debris were noted along the western boundary of the Project. View looking northeast.



Photo 21. Disturbances, including a great deal of modern dumping, were also noted in the northwestern portion of the Project. View looking northeast.



Photo 22. View looking northeast towards the house at 84 Old Saw Mill River Road (11908.000272).



Photo 23. Temporary shed structures were located behind the house at 84 Old Saw Mill River Road, to the south. View looking south.



Photo 24. Archeologists excavate shovel tests around the house at 84 Old Saw Mill River Road (11908.000272). View looking north.



Photo 25. A transect of shovel tests was excavated along the ridge line south of the house at 84 Old Saw Mill River Road. View looking south.

Appendix 1: Shovel Test Records

541831: Phase I Archeological Investigation, Westchester Bio Science and Technology Center

Shovel Test Records

	<u>Ending Depth (cm)</u>	<u>Level</u>	<u>Soil Type</u>	<u>Soil Inclusions</u>		<u>Munsell Color</u>	<u>Termination Reason</u>
1	26	1	loam	gravel, cobbles, crushed stone	10yr 3/2	very dark grayish brown	
	40	2	sand	gravel	10yr 4/3	brown	
	58	3	sand	gravel	2.5y 5/4	light olive brown	subsoil
2	0	1					not excavated (delineated wetland)
3	0	1					not excavated (delineated wetland)
4	0	1					not excavated (water)
5	20	1	silt sand		10yr 4/3	brown	
	38	2	silt sand		10yr 5/4	yellowish brown	impasse (rocks)
6	37	1	silt sand loam		10yr 4/3	brown	
	50	2	silt sand	exfoliating bedrock	10yr 5/4	yellowish brown	impasse (rocks)
7	33	1	silt sand	angular rocks	10yr 4/2	dark grayish brown	impasse (rocks)
8	12	1	silt sand		10yr 4/3	brown	
	28	2	silt sand		10yr 5/4	yellowish brown	impasse (rocks)
9	14	1	silt sand	roots	10yr 4/3	brown	
	35	2	silt sand	roots	10yr 5/4	yellowish brown	impasse (rocks, roots)
10	50	1	silt sand	gravel, cobbles, crushed stone, roots	10yr 4/3	brown	
	70	2	sand	gravel	10yr 5/2 10yr 5/4	grayish brown yellowish brown	subsoil
11	24	1	sand loam	roots	10yr 4/3	brown	impasse (roots)

541831: Phase I Archeological Investigation, Westchester Bio Science and Technology Center

Shovel Test Records

	<u>Ending Depth (cm)</u>	<u>Level</u>	<u>Soil Type</u>	<u>Soil Inclusions</u>		<u>Munsell Color</u>	<u>Termination Reason</u>
12	24	1	sand loam	gravel, cobbles, roots	10yr 4/3	brown	impasse (rocks, roots)
13	28	1	sand loam	gravel, cobbles, roots	10yr 4/3	brown	impasse (rocks, roots)
14	0	1					not excavated (slope)
15	21	1	sand loam	exfoliating bedrock, roots	10yr 4/2	dark grayish brown	bedrock
16	17	1	sand loam	exfoliating bedrock, roots	10yr 4/2	dark grayish brown	
	35	2	sand		10yr 5/4	yellowish brown	subsoil
17	27	1	sand loam	crushed stone, roots	10yr 4/2	dark grayish brown	impasse (roots)
18	0	1					not excavated (other)
19	0	1					not excavated (other)
20	0	1					not excavated (other)
21	0	1					not excavated (other)
22	0	1					not excavated (other)
23	41	1	sand	gravel, roots	2.5y 5/3	light olive brown	
	49	2	sand	gravel, cobbles	2.5y 6/4	light yellowish brown	impasse (rocks)
24	11	1	sand	gravel, roots	2.5y 5/3	light olive brown	
	27	2	sand	gravel, cobbles	2.5y 6/4	light yellowish brown	subsoil

541831: Phase I Archeological Investigation, Westchester Bio Science and Technology Center

Shovel Test Records

	<u>Ending Depth (cm)</u>	<u>Level</u>	<u>Soil Type</u>	<u>Soil Inclusions</u>		<u>Munsell Color</u>	<u>Termination Reason</u>
25	0	1					not excavated (slope)
26	0	1					not excavated (other)
27	0	1					not excavated (other)
28	0	1					not excavated (other)
29	0	1					not excavated (other)
30	0	1					not excavated (other)
31	29	1	sand loam	gravel, cobbles, roots	10yr 4/3	brown	
	44	2	sand	gravel	10yr 5/4	yellowish brown	subsoil
32	0	1					not excavated (slope)
33	25	1	silt sand loam	cobbles, roots	10yr 2/2	very dark brown	impasse (rocks)
34	0	1					not excavated (slope)
35	0	1					not excavated (slope)
36	0	1					not excavated (slope)
37	25	1	silt sand	cobbles, roots	10yr 4/1	dark gray	
	40	2	silt sand		10yr 5/3	brown	subsoil

541831: Phase I Archeological Investigation, Westchester Bio Science and Technology Center

Shovel Test Records

	<u>Ending Depth (cm)</u>	<u>Level</u>	<u>Soil Type</u>	<u>Soil Inclusions</u>		<u>Munsell Color</u>	<u>Termination Reason</u>
38	25	1	silt loam	roots		10yr 5/3 brown	
	43	2	silt	gravel		10yr 6/4 light yellowish brown	subsoil
39	0	1					not excavated (disturbed)
40	12	1	silt sand			10yr 4/3 brown	
	28	2	silt sand			10yr 5/4 yellowish brown	impasse (rocks, roots)
41	40	1	silt sand			10yr 4/2 dark grayish brown	
	58	2	loam			10yr 2/1 black	
	70	3	silt sand			10yr 3/6 dark yellowish brown	impasse (rocks)
42	0	1					not excavated (slope)
43	0	1					not excavated (slope)
44	13	1	silt sand	roots		10yr 4/1 dark gray	
	34	2	sand			10yr 6/4 light yellowish brown	subsoil
45	29	1	silt			10yr 5/4 yellowish brown	
	47	2	silt			2.5y 6/4 light yellowish brown	subsoil
46	36	1	sand loam	cobbles, roots		10yr 4/2 dark grayish brown	
	46	2	sand loam	cobbles		10yr 5/4 yellowish brown	subsoil
47	19	1	sand loam	crushed stone, roots		10yr 4/2 dark grayish brown	impasse (made surface)
48	33	1	sand loam	roots		10yr 4/3 brown	impasse (roots)
49	30	1	sand loam	gravel, roots		10yr 3/3 dark brown	
	45	2	silt sand	gravel, roots		2.5y 5/4 light olive brown	subsoil
						10yr 5/3 brown	

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Shovel Test Records

		<u>Ending Depth (cm)</u>	<u>Level</u>	<u>Soil Type</u>	<u>Soil Inclusions</u>		<u>Munsell Color</u>	<u>Termination Reason</u>
50		30	1	sand loam	roots	10yr 4/3	brown	impasse (roots)
51		10	1	silt sand	roots	10yr 4/2	dark grayish brown	
		40	2	silt sand	roots	10yr 5/4	yellowish brown	subsoil
52		34	1	sand loam	roots	10yr 4/3	brown	
		58	2	sand	gravel	10yr 6/4	light yellowish brown	subsoil
53		31	1	sand	gravel, roots	2.5y 5/3	light olive brown	
		39	2	sand	gravel	2.5y 6/4	light yellowish brown	subsoil
54		22	1	sand	gravel, roots	2.5y 4/3	olive brown	
		52	2	sand	gravel, roots	10yr 5/4	yellowish brown	subsoil
54	1ME	25	1	sand loam	roots	10yr 4/3	brown	
		47	2	sand	roots	10yr 6/4	light yellowish brown	subsoil
54	1MN	25	1	sand loam	gravel, roots	10yr 4/3	brown	
		48	2	sand		10yr 5/4	yellowish brown	subsoil
54	1MS	15	1	sand	gravel, cobbles, roots	2.5y 5/3	light olive brown	
		38	2	sand	gravel, roots	2.5y 6/4	light yellowish brown	subsoil
54	1MW	22	1	silt sand		10yr 5/3	brown	
		47	2	silt sand		10yr 5/4	yellowish brown	subsoil
54	3ME	20	1	sand loam	roots	10yr 4/3	brown	
		42	2	sand	roots	10yr 6/4	light yellowish brown	subsoil
54	3MN	22	1	sand loam	roots	10yr 4/3	brown	
		50	2	sand		10yr 5/6	yellowish brown	subsoil
54	3MS	18	1	sand	gravel, cobbles, roots	2.5y 5/3	light olive brown	
		35	2	sand	gravel, roots	10yr 6/4	light yellowish brown	subsoil

541831: Phase I Archeological Investigation, Westchester Bio Science and Technology Center

Shovel Test Records

	<u>Ending Depth (cm)</u>	<u>Level</u>	<u>Soil Type</u>	<u>Soil Inclusions</u>		<u>Munsell Color</u>	<u>Termination Reason</u>
54	3MW	23	1	silt sand		10yr 5/3	brown
		53	2	silt sand		10yr 5/6	yellowish brown subsoil
55		26	1	sand loam	roots	10yr 4/3	brown
		56	2	sand		10yr 6/4	light yellowish brown subsoil
56		19	1	silt sand		10yr 4/3	brown
		40	2	silt sand		10yr 5/6	yellowish brown subsoil
57		26	1	sand loam	roots	10yr 4/3	brown
		49	2	sand		2.5y 5/4	light olive brown subsoil
58	0	1					not excavated (slope)
59	0	1					not excavated (slope)
60	40	1	silt	gravel		10yr 6/3	pale brown impasse (compact soil)
61		27	1	silt		10yr 5/4	yellowish brown
		40	2	silt		2.5y 6/6	olive yellow subsoil
62		28	1	silt sand	roots	10yr 4/1	dark gray
		43	2	silt sand		10yr 5/3	brown subsoil
63		24	1	silt loam	roots	10yr 5/3	brown
		39	2	silt		10yr 6/4	light yellowish brown subsoil
64		27	1	silt		10yr 5/4	yellowish brown
		40	2	silt		2.5y 6/6	olive yellow subsoil
65		16	1	silt loam	gravel, roots	10yr 5/4	yellowish brown
		37	2	silt loam	gravel, cobbles	10yr 6/4	light yellowish brown subsoil

541831: Phase I Archeological Investigation, Westchester Bio Science and Technology Center

Shovel Test Records

	<u>Ending Depth (cm)</u>	<u>Level</u>	<u>Soil Type</u>	<u>Soil Inclusions</u>		<u>Munsell Color</u>	<u>Termination Reason</u>
66	24	1	silt loam	roots	10yr 5/3	brown	
	34	2	silt	cobbles	10yr 6/4	light yellowish brown	impasse (rocks)
67	0	1					not excavated (slope)
68	0	1					not excavated (slope)
69	15	1	silt		10yr 4/3	brown	
	40	2	silt		2.5y 6/6	olive yellow	subsoil
70	5	1	silt		10yr 3/2	very dark grayish brown	
	17	2	silt		10yr 4/2	dark grayish brown	
	47	3	silt		2.5y 6/6	olive yellow	subsoil
71	15	1	silt loam	roots	10yr 4/2	dark grayish brown	
	33	2	sand loam		10yr 5/4	yellowish brown	subsoil
72	20	1	silt loam	gravel, roots	10yr 5/4	yellowish brown	
	38	2	silt	gravel	10yr 6/4	light yellowish brown	subsoil
73	10	1	silt loam	gravel, roots	10yr 5/2	grayish brown	
	24	2	silt loam	roots	10yr 6/4	light yellowish brown	subsoil
74	10	1	silt loam	gravel, roots	10yr 5/2	grayish brown	
	31	2	silt loam	gravel	10yr 6/4	light yellowish brown	subsoil
75	22	1	silt loam		10yr 5/4	yellowish brown	
					10yr 3/2	very dark grayish brown	
	40	2	silt		10yr 6/6	brownish yellow	subsoil
76	12	1	silt sand	roots	10yr 4/1	dark gray	
	32	2	sand		10yr 6/4	light yellowish brown	subsoil

541831: Phase I Archeological Investigation, Westchester Bio Science and Technology Center

Shovel Test Records

	<u>Ending Depth (cm)</u>	<u>Level</u>	<u>Soil Type</u>	<u>Soil Inclusions</u>		<u>Munsell Color</u>	<u>Termination Reason</u>
77	10	1	silt sand		10yr 3/2	very dark grayish brown	
	45	2	silt sand		10yr 5/4	yellowish brown	subsoil
78	73	1	silt sand		10yr 4/3	brown	impasse (rocks)
79	42	1	sand loam	gravel, roots	10yr 4/3	brown	impasse (roots)
80	30	1	silt sand	gravel, roots	10yr 4/3	brown	
	50	2	sand		10yr 5/4	yellowish brown	subsoil
81	23	1	silt loam		10yr 3/2	very dark grayish brown	
	43	2	silt		10yr 4/4	dark yellowish brown	
	62	3	silt		10yr 3/3	dark brown	
	81	4	silt		2.5y 6/6	olive yellow	subsoil
82	10	1	silt loam	roots	10yr 5/2	grayish brown	
	27	2	silt loam	roots	10yr 6/4	light yellowish brown	subsoil
83	0	1					not excavated (slope)
84	0	1					not excavated (slope)
85	18	1	silt loam	roots	10yr 5/4	yellowish brown	
	34	2	silt		10yr 6/4	light yellowish brown	subsoil
86	16	1	silt sand	roots	10yr 4/1	dark gray	
	32	2	sand		10yr 6/6	brownish yellow	subsoil
87	24	1	silt sand	roots	10yr 4/1	dark gray	
	42	2	sand		10yr 6/6	brownish yellow	subsoil
88	0	1					not excavated (other)

541831: Phase I Archeological Investigation, Westchester Bio Science and Technology Center

Shovel Test Records

	<u>Ending Depth (cm)</u>	<u>Level</u>	<u>Soil Type</u>	<u>Soil Inclusions</u>		<u>Munsell Color</u>	<u>Termination Reason</u>
89	23	1	sand loam	roots	10yr 4/3	brown	impasse (roots)
90	20	1	sand loam	roots	10yr 4/3	brown	
	35	2	sand		10yr 5/4	yellowish brown	subsoil
91	22	1	silt sand	gravel, roots	2.5y 4/3	olive brown	
	45	2	sand	gravel	2.5y 5/4	light olive brown	subsoil
92	17	1	silt sand	roots	10yr 4/1	dark gray	
	35	2	sand		10yr 6/6	brownish yellow	subsoil
93	0	1					not excavated (slope)
94	0	1					not excavated (slope)
95	17	1	silt loam	roots	10yr 4/2	dark grayish brown	
	33	2	silt	gravel, roots	10yr 6/4	light yellowish brown	subsoil
96	10	1	silt sand loam		10yr 3/2	very dark grayish brown	
	77	2	silt		10yr 4/4	dark yellowish brown	impasse (rocks)
97	14	1	sand loam	roots	10yr 4/3	brown	
	35	2	sand		10yr 5/6	yellowish brown	subsoil
98	9	1	silt sand		2.5y 3/2	very dark grayish brown	
	27	2	silt		2.5y 6/4	light yellowish brown	subsoil
99	25	1	sand	gravel, roots	10yr 4/2	dark grayish brown	
	39	2	silt sand	gravel	2.5y 6/4	light yellowish brown	subsoil
99	1ME 19	1	sand loam	roots	10yr 4/2	dark grayish brown	
	34	2	sand	roots	10yr 5/6	yellowish brown	subsoil

541831: Phase I Archeological Investigation, Westchester Bio Science and Technology Center

Shovel Test Records

	<u>Ending Depth (cm)</u>	<u>Level</u>	<u>Soil Type</u>	<u>Soil Inclusions</u>	<u>Munsell Color</u>	<u>Termination Reason</u>
99	1MN	27	1	silt sand	gravel, roots	10yr 4/3 brown impasse (roots)
99	1MS	26	1	sand	gravel, roots	10yr 4/3 brown
		40	2	silt sand	gravel	2.5y 6/4 light yellowish brown subsoil
99	1MW	15	1	silt sand	roots	10yr 4/3 brown
		40	2	silt sand	roots	10yr 5/4 yellowish brown subsoil
99	3ME	21	1	sand loam	roots	10yr 4/3 brown
		39	2	sand		10yr 5/6 yellowish brown subsoil
99	3MN	26	1	sand loam	roots	10yr 4/3 brown subsoil
99	3MS	31	1	sand	gravel, cobbles, roots	10yr 4/3 brown
		46	2	silt sand	gravel, cobbles	2.5y 6/4 light yellowish brown subsoil
99	3MW	17	1	silt sand	roots	10yr 4/3 brown
		37	2	silt sand	roots	10yr 5/4 yellowish brown subsoil
100		12	1	silt loam	roots	10yr 4/3 brown
		30	2	silt loam		10yr 5/4 yellowish brown subsoil
101		21	1	silt sand	gravel, roots	10yr 3/1 very dark gray
		40	2	sand		10yr 6/4 light yellowish brown subsoil
102		0	1			not excavated (slope)
103		39	1	sand	gravel, cobbles, roots	2.5y 5/3 light olive brown
		54	2	sand	gravel	2.5y 6/4 light yellowish brown subsoil
104		26	1	silt loam	gravel, roots	2.5y 4/2 dark grayish brown
		39	2	silt sand	gravel, cobbles	2.5y 5/3 light olive brown 2.5y 6/2 light brownish gray subsoil
105		16	1	sand loam	cobbles, roots	10yr 4/2 dark grayish brown impasse (rocks)

541831: Phase I Archeological Investigation, Westchester Bio Science and Technology Center

Shovel Test Records

	<u>Ending Depth (cm)</u>	<u>Level</u>	<u>Soil Type</u>	<u>Soil Inclusions</u>		<u>Munsell Color</u>	<u>Termination Reason</u>
106	14	1	silt sand	roots	10yr 4/1	dark gray	
	32	2	sand		10yr 6/4	light yellowish brown	subsoil
107	21	1	silt loam	roots	10yr 5/4	yellowish brown	
	38	2	silt	cobbles	10yr 6/4	light yellowish brown	subsoil
108	0	1					not excavated (slope)
109	13	1	silt loam	roots	10yr 5/4	yellowish brown	
	31	2	silt	gravel	10yr 6/4	light yellowish brown	subsoil
110	26	1	silt		10yr 5/4	yellowish brown	
	51	2	silt		2.5y 6/6	olive yellow	subsoil
111	14	1	silt sand	gravel, roots	10yr 4/1	dark gray	
	29	2	sand		10yr 6/4	light yellowish brown	subsoil
112	13	1	sand loam	gravel, cobbles, roots	10yr 5/2	grayish brown	
	35	2	sand	gravel, cobbles	10yr 6/6	brownish yellow	subsoil
113	47	1	silt		10yr 5/4	yellowish brown	
	57	2	silt		2.5y 6/4	light yellowish brown	subsoil
114	21	1	sand	roots	10yr 4/1	dark gray	impasse (roots)
115	30	1	silt loam	roots	10yr 5/3	brown	
	44	2	silt		10yr 6/6	brownish yellow	subsoil
116	38	1	silt loam	gravel, cobbles, roots	10yr 5/3	brown	impasse (rocks)
117	20	1	silt		10yr 5/4	yellowish brown	
	36	2	silt	roots	2.5y 6/6	olive yellow	subsoil

541831: Phase I Archeological Investigation, Westchester Bio Science and Technology Center

Shovel Test Records

	<u>Ending Depth (cm)</u>	<u>Level</u>	<u>Soil Type</u>	<u>Soil Inclusions</u>		<u>Munsell Color</u>	<u>Termination Reason</u>
118	8	1	silt		10yr 3/2	very dark grayish brown	
	37	2	silt		2.5y 6/6	olive yellow	subsoil
119	20	1	silt loam	roots	10yr 5/4	yellowish brown	
	36	2	silt	roots	10yr 6/4	light yellowish brown	subsoil
120	18	1	silt loam	gravel, roots	10yr 5/4	yellowish brown	
	38	2	silt	roots	10yr 6/4	light yellowish brown	subsoil
121	12	1	silt loam	gravel, cobbles, roots	10yr 5/2	grayish brown	
	33	2	silt loam	gravel, cobbles	10yr 6/4	light yellowish brown	subsoil
122	0	1					not excavated (slope)
123	13	1	sand	gravel, roots	10yr 4/2	dark grayish brown	
	20	2	sand	roots	10yr 6/6	brownish yellow	impasse (roots)
124	25	1	sand loam	gravel, cobbles, roots	10yr 5/2	grayish brown	
	45	2	sand	gravel, cobbles	10yr 6/4	light yellowish brown	subsoil
125	10	1	silt		10yr 3/2	very dark grayish brown	
	30	2	silt		10yr 5/6	yellowish brown	subsoil
126	24	1	sand loam	roots	10yr 4/2	dark grayish brown	
	41	2	silt sand		10yr 5/3	brown	subsoil
127	63	1	sand loam	gravel	10yr 5/3	brown	impasse (rocks)
128	19	1	sand loam		10yr 4/2	dark grayish brown	
	34	2	sand		10yr 5/1	gray	impasse (made surface)

541831: Phase I Archeological Investigation, Westchester Bio Science and Technology Center

Shovel Test Records

	<u>Ending Depth (cm)</u>	<u>Level</u>	<u>Soil Type</u>	<u>Soil Inclusions</u>		<u>Munsell Color</u>	<u>Termination Reason</u>
129	21	1	sand loam	gravel	7.5yr	4/1	dark gray
	36	2	silt sand	gravel	2.5y	4/2	dark grayish brown subsoil
130	27	1	sand loam		10yr	4/2	dark grayish brown
	46	2	silt sand		10yr	5/4	yellowish brown subsoil
131	22	1	silt sand	gravel, roots	2.5y	4/4	olive brown
	50	2	sand	gravel	2.5y	5/4	light olive brown subsoil
132	21	1	sand loam	gravel, roots	10yr	4/2	dark grayish brown
	41	2	silt sand		10yr	5/4	yellowish brown subsoil
133	22	1	sand loam	roots	10yr	4/2	dark grayish brown
	40	2	silt sand		10yr	5/6	yellowish brown subsoil
134	20	1	silt sand	gravel, roots	10yr	4/3	brown
	42	2	silt sand	roots	10yr	5/4	yellowish brown subsoil
135	20	1	silt sand	gravel, roots	10yr	4/3	brown
	44	2	silt sand	roots	10yr	5/4	yellowish brown subsoil
136	19	1	silt sand	gravel, roots	10yr	4/2	dark grayish brown
	45	2	sand	gravel, roots	10yr	5/4	yellowish brown subsoil
137	18	1	silt sand	gravel, roots	10yr	4/3	brown
	42	2	silt sand	gravel, roots	10yr	5/4	yellowish brown subsoil
138	18	1	silt sand	gravel, roots	10yr	4/2	dark grayish brown
	45	2	silt sand	gravel	10yr	5/4	yellowish brown subsoil
139	16	1	silt sand	gravel, roots	10yr	4/2	dark grayish brown
	46	2	silt sand	gravel	10yr	5/4	yellowish brown subsoil
140	32	1	sand loam	gravel, cobbles, roots	10yr	4/3	brown
	47	2	silt sand	gravel	10yr	5/4	yellowish brown subsoil
141	35	1	sand loam	roots	10yr	4/2	dark grayish brown
	51	2	sand		10yr	5/6	yellowish brown subsoil

541831: Phase I Archeological Investigation, Westchester Bio Science and Technology Center

Shovel Test Records

	<u>Ending Depth (cm)</u>	<u>Level</u>	<u>Soil Type</u>	<u>Soil Inclusions</u>		<u>Munsell Color</u>	<u>Termination Reason</u>
142	36	1	sand loam	roots	10yr 4/2	dark grayish brown	
	53	2	silt sand		10yr 5/6	yellowish brown	subsoil
143	31	1	sand loam	roots	10yr 4/2	dark grayish brown	
	49	2	silt sand		10yr 5/4	yellowish brown	subsoil
144	50	1	silt sand	gravel, cobbles, crushed stone, roots	10yr 4/3	brown	impasse (rocks)
145	10	1	silt sand		10yr 4/2	dark grayish brown	
	34	2	silt sand		10yr 4/3	brown	
	50	3	silt sand		10yr 5/6	yellowish brown	subsoil
146	30	1	silt sand		10yr 4/3	brown	
	47	2	silt sand		10yr 5/6	yellowish brown	subsoil
147	0	1					not excavated (other)
148	19	1	sand loam	cobbles, roots	10yr 4/2	dark grayish brown	impasse (rocks)
149	30	1	sand loam	roots	10yr 4/2	dark grayish brown	
	49	2	silt sand		10yr 5/4	yellowish brown	subsoil
150	30	1	sand loam	roots	10yr 4/2	dark grayish brown	
	45	2	sand		10yr 5/4	yellowish brown	subsoil
151	40	1	silt sand	gravel, roots	10yr 4/3	brown	
	58	2	silt sand	gravel	10yr 5/3 10yr 5/6	brown yellowish brown	subsoil
152	21	1	sand loam	roots	10yr 4/2	dark grayish brown	
	37	2	silt sand		10yr 5/4	yellowish brown	subsoil
153	0	1					not excavated (other)
154	28	1	silt sand	gravel, cobbles, roots	10yr 4/3	brown	
	50	2	sand loam	gravel, cobbles	10yr 5/4 10yr 5/6	yellowish brown yellowish brown	subsoil

541831: Phase I Archeological Investigation, Westchester Bio Science and Technology Center

Shovel Test Records

	<u>Ending Depth (cm)</u>	<u>Level</u>	<u>Soil Type</u>	<u>Soil Inclusions</u>		<u>Munsell Color</u>	<u>Termination Reason</u>
155	20	1	silt sand	cobbles, roots	2.5y 4/3	olive brown	impasse (rocks)
156	27	1	silt sand		10yr 4/3	brown	impasse (rocks, roots)
157	25	1	sand loam	gravel, roots	10yr 4/3	brown	
	38	2	sand	gravel, cobbles	10yr 5/4	yellowish brown	subsoil
158	29	1	sand loam	gravel, cobbles, roots	10yr 4/2	dark grayish brown	
	43	2	silt sand	gravel, cobbles	10yr 5/3	brown	subsoil
159	26	1	sand loam	gravel, cobbles, roots	10yr 4/2	dark grayish brown	
	38	2	silt sand	gravel	10yr 5/3 10yr 6/2	brown light brownish gray	subsoil
160	21	1	sand loam	gravel, roots	10yr 4/3	brown	
	37	2	silt sand	gravel	10yr 5/6	yellowish brown	subsoil
161	0	1					not excavated (disturbed)
162	49	1	sand	gravel, roots	10yr 5/3	brown	impasse (roots)
163	29	1	sand loam	gravel, cobbles, roots	10yr 4/3	brown	
	42	2	silt sand	gravel	2.5y 5/4	light olive brown	subsoil
164	0	1					not excavated (other)
165	0	1					not excavated (disturbed)
166	30	1	silt sand		10yr 4/3	brown	
	48	2	silt sand		10yr 5/6	yellowish brown	subsoil
167	0	1					not excavated (disturbed)

541831: Phase I Archeological Investigation, Westchester Bio Science and Technology Center

Shovel Test Records

	<u>Ending Depth (cm)</u>	<u>Level</u>	<u>Soil Type</u>	<u>Soil Inclusions</u>		<u>Munsell Color</u>	<u>Termination Reason</u>
168	35	1	silt sand		10yr 4/3	brown	impasse (rocks, roots)
169	16	1	sand loam	roots	10yr 4/2	dark grayish brown	
	34	2	silt sand		10yr 5/4	yellowish brown	subsoil
170	28	1	silt sand		10yr 4/3	brown	
	49	2	silt sand		10yr 5/6	yellowish brown	subsoil
171	21	1	silt sand	gravel, roots	10yr 4/3	brown	impasse (roots)
172	30	1	silt sand	angular rocks	10yr 4/3	brown	
	48	2	silt sand	angular rocks	10yr 5/6	yellowish brown	subsoil
173	32	1	silt sand		10yr 4/3	brown	
	53	2	silt sand		2.5y 6/3	light yellowish brown	subsoil
					2.5y 6/3	light yellowish brown	
174	33	1	silt sand		10yr 4/3	brown	
	50	2	silt sand		10yr 5/6	yellowish brown	subsoil
175	0	1					not excavated (disturbed)
176	13	1	silt sand		10yr 4/3	brown	
	36	2	silt sand		10yr 5/6	yellowish brown	subsoil
177	18	1	silt sand		10yr 4/3	brown	
	40	2	silt sand		10yr 5/6	yellowish brown	subsoil
178	28	1	silt sand	gravel, cobbles, roots	10yr 4/3	brown	
	45	2	silt sand	gravel	10yr 5/6	yellowish brown	subsoil
179	30	1	silt sand	gravel, roots	10yr 4/3	brown	
	48	2	silt sand		10yr 5/6	yellowish brown	subsoil

541831: Phase I Archeological Investigation, Westchester Bio Science and Technology Center

Shovel Test Records

	<u>Ending Depth (cm)</u>	<u>Level</u>	<u>Soil Type</u>	<u>Soil Inclusions</u>		<u>Munsell Color</u>	<u>Termination Reason</u>
180	16	1	silt sand	gravel, cobbles, crushed stone	10yr 4/2	dark grayish brown	
	32	2	silt sand	gravel, cobbles, crushed stone	10yr 5/3	brown	impasse (rocks)
181	20	1	silt sand	gravel, roots	10yr 4/2	dark grayish brown	
	45	2	silt sand	gravel	10yr 5/6	yellowish brown	subsoil
182	30	1	sand loam	gravel, roots	10yr 4/3	brown	
	50	2	silt sand		10yr 4/6	dark yellowish brown	subsoil
183	34	1	silt sand	gravel, roots	10yr 4/2	dark grayish brown	
	50	2	silt sand	gravel	2.5y 5/4	light olive brown	subsoil
184	30	1	silt sand	gravel, roots	2.5y 4/3	olive brown	
	50	2	silt sand	gravel	2.5y 5/4	light olive brown	subsoil
185	40	1	silt sand	gravel, roots	10yr 4/2	dark grayish brown	
	57	2	silt sand	gravel	2.5y 5/3	light olive brown	subsoil
186	40	1	silt sand	gravel, roots	10yr 4/3	brown	
	56	2	silt sand	gravel	10yr 5/4	yellowish brown	subsoil
187	18	1	sand loam	roots	10yr 4/2	dark grayish brown	
	38	2	silt sand		10yr 5/4	yellowish brown	subsoil
188	32	1	sand loam	roots	10yr 4/2	dark grayish brown	
	50	2	sand		10yr 5/6	yellowish brown	subsoil
189	25	1	sand loam	roots	10yr 3/1	very dark gray	impasse (rubble)
190	23	1	sand loam	roots	10yr 4/2	dark grayish brown	
	41	2	silt sand		10yr 5/6	yellowish brown	subsoil
191	16	1	sand loam	roots	10yr 4/2	dark grayish brown	
	35	2	silt sand		10yr 5/4	yellowish brown	subsoil
192	38	1	sand loam	roots	10yr 4/2	dark grayish brown	
	57	2	silt sand		10yr 5/6	yellowish brown	subsoil

541831: Phase I Archeological Investigation, Westchester Bio Science and Technology Center

Shovel Test Records

	<u>Ending Depth (cm)</u>	<u>Level</u>	<u>Soil Type</u>	<u>Soil Inclusions</u>		<u>Munsell Color</u>	<u>Termination Reason</u>
193	28	1	sand loam	roots	10yr 4/2	dark grayish brown	
	50	2	silt sand		10yr 5/4	yellowish brown	subsoil
194	25	1	sand loam	roots	10yr 4/2	dark grayish brown	
	45	2	sand		10yr 5/4	yellowish brown	subsoil
195	16	1	sand loam	roots	10yr 4/2	dark grayish brown	
	34	2	silt sand		10yr 5/6	yellowish brown	subsoil
196	24	1	silt sand	roots	10yr 4/2	dark grayish brown	
	42	2	silt sand		10yr 5/4	yellowish brown	subsoil
197	20	1	silt sand		10yr 4/3	brown	
	30	2	silt sand		10yr 4/3	brown	
	48	3	silt sand		10yr 5/6	yellowish brown	subsoil
198	56	1	silt sand		10yr 4/3	brown	impasse (rocks)
199	14	1	silt sand		10yr 4/3	brown	
	39	2	silt sand		10yr 5/6	yellowish brown	subsoil
200	29	1	silt sand		10yr 4/3	brown	
	43	2	silt sand	exfoliating bedrock	10yr 5/6	yellowish brown	subsoil
201	26	1	silt sand		10yr 4/3	brown	
	48	2	silt sand		10yr 5/6	yellowish brown	subsoil
202	50	1	silt sand	angular rocks	10yr 4/3	brown	
	65	2	silt sand		10yr 5/6	yellowish brown	subsoil
203	26	1	silt sand		10yr 4/3	brown	
	45	2	silt sand		10yr 5/6	yellowish brown	subsoil
204	19	1	silt sand		10yr 4/3	brown	
	40	2	silt sand	exfoliating bedrock	10yr 5/6	yellowish brown	subsoil

541831: Phase I Archeological Investigation, Westchester Bio Science and Technology Center

Shovel Test Records

	<u>Ending Depth (cm)</u>	<u>Level</u>	<u>Soil Type</u>	<u>Soil Inclusions</u>		<u>Munsell Color</u>	<u>Termination Reason</u>
205	16	1	sand loam	gravel, roots		10yr 4/3 brown	
	40	2	silt sand	gravel		10yr 5/4 yellowish brown 10yr 5/2 grayish brown	subsoil
206	30	1	silt sand	gravel, roots		10yr 4/3 brown	
	53	2	sand	gravel		10yr 5/6 yellowish brown	subsoil
207	30	1	sand loam	gravel		2.5y 4/3 olive brown	
	50	2	sand			10yr 5/6 yellowish brown	subsoil
208	30	1	silt sand	gravel, roots		10yr 4/3 brown	
	53	2	sand	gravel		10yr 5/6 yellowish brown	subsoil
209	30	1	silt sand	gravel, roots		2.5y 4/3 olive brown	
	50	2	sand	gravel		2.5y 5/6 light olive brown	subsoil
210	22	1	silt sand	gravel, cobbles, roots		10yr 4/3 brown	
	48	2	sand	gravel		10yr 5/6 yellowish brown	subsoil
211	30	1	silt sand	gravel, cobbles, roots		10yr 4/3 brown	impasse (rocks, roots)
212	25	1	sand	gravel, cobbles, roots		10yr 4/3 brown	
	42	2	sand	gravel		10yr 5/4 yellowish brown	subsoil
213	28	1	silt sand	gravel, roots		10yr 4/2 dark grayish brown	
	47	2	silt sand	gravel		10yr 5/4 yellowish brown	subsoil
214	18	1	sand loam	roots		10yr 4/2 dark grayish brown	
	39	2	silt sand			10yr 5/4 yellowish brown	subsoil
215	25	1	sand loam	roots		10yr 4/3 brown	impasse (roots)
216	18	1	sand loam	roots		10yr 4/2 dark grayish brown	
	34	2	sand			10yr 5/4 yellowish brown	subsoil
217	24	1	sand loam	roots		10yr 4/2 dark grayish brown	
	42	2	silt sand			10yr 5/4 yellowish brown	subsoil

541831: Phase I Archeological Investigation, Westchester Bio Science and Technology Center

Shovel Test Records

	<u>Ending Depth (cm)</u>	<u>Level</u>	<u>Soil Type</u>	<u>Soil Inclusions</u>		<u>Munsell Color</u>	<u>Termination Reason</u>
218	23	1	sand loam	roots	10yr 4/2	dark grayish brown	
	40	2	sand		10yr 5/4	yellowish brown	subsoil
219	26	1	sand loam	roots	10yr 4/2	dark grayish brown	
	51	2	silt sand		10yr 5/4	yellowish brown	subsoil
220	22	1	sand loam	cobbles, roots	10yr 4/2	dark grayish brown	
	41	2	sand		10yr 5/4	yellowish brown	subsoil
221	0	1					not excavated (other)
222	22	1	sand loam	roots	10yr 4/2	dark grayish brown	
	40	2	sand		10yr 5/6	yellowish brown	subsoil
223	16	1	sand loam	gravel	10yr 4/2	dark grayish brown	
	39	2	silt sand		10yr 5/6	yellowish brown	subsoil
224	30	1	sand loam		10yr 4/3	brown	
	50	2	sand		10yr 5/6 10yr 5/4	yellowish brown yellowish brown	subsoil
225	48	1	silt sand	asphalt	10yr 5/4	yellowish brown	
	60	2	silt sand		10yr 5/6	yellowish brown	subsoil
226	26	1	sand loam	gravel, cobbles	10yr 4/3	brown	
	39	2	sand	gravel	10yr 5/4 10yr 5/2	yellowish brown grayish brown	
	49	3	sand	gravel	10yr 5/4	yellowish brown	subsoil
227	30	1	silt sand	gravel, crushed stone	10yr 4/3	brown	
	48	2	sand	gravel	10yr 5/4	yellowish brown	subsoil
228	32	1	silt sand		10yr 5/3	brown	
	53	2	sand	gravel	10yr 6/6	brownish yellow	subsoil
229	20	1	sand loam	gravel	10yr 4/2	dark grayish brown	
	38	2	silt sand		10yr 5/6	yellowish brown	subsoil

541831: Phase I Archeological Investigation, Westchester Bio Science and Technology Center

Shovel Test Records

	<u>Ending Depth (cm)</u>	<u>Level</u>	<u>Soil Type</u>	<u>Soil Inclusions</u>		<u>Munsell Color</u>	<u>Termination Reason</u>
230	26	1	sand loam	gravel, cobbles, roots	10yr 4/3	brown	
	39	2	sand	gravel	10yr 5/4	yellowish brown	subsoil
231	29	1	silt sand		10yr 4/3	brown	
	43	2	silt sand		10yr 5/6	yellowish brown	subsoil
232	30	1	silt sand	gravel, cobbles, crushed stone	10yr 4/3	brown	
	40	2	silt sand	gravel	10yr 5/4	yellowish brown	subsoil
233	26	1	silt sand loam	roots	10yr 3/1	very dark gray	
	41	2	silt sand		10yr 5/4	yellowish brown	subsoil
234	40	1	silt sand		10yr 4/3	brown	impasse (rocks)
235	33	1	sand	gravel, cobbles, roots	10yr 4/3	brown	impasse (roots)
236	31	1	sand	gravel, cobbles, roots	10yr 4/3	brown	impasse (rocks)
237	41	1	sand loam	gravel, cobbles, roots	10yr 4/2	dark grayish brown	
					2.5y 5/3	light olive brown	
	55	2	silt sand	gravel	2.5y 4/1	dark gray	
					10yr 5/8	yellowish brown	
	68	3	sand	gravel	2.5y 4/3	olive brown	subsoil
238	29	1	sand loam	gravel, cobbles	10yr 4/2	dark grayish brown	
	42	2	silt sand	gravel	10yr 5/3	brown	subsoil
				5gy 5/1	greenish gray		
239	27	1	sand	gravel, cobbles, roots	10yr 4/3	brown	impasse (rocks)
240	27	1	sand loam	gravel, cobbles	2.5y 4/1	dark gray	impasse (rocks)
					2.5y 5/3	light olive brown	
241	35	1	sand loam	gravel, cobbles	10yr 4/2	dark grayish brown	
	43	2	silt sand	gravel, cobbles	10yr 5/3	brown	subsoil
				2.5y 5/2	grayish brown		

541831: Phase I Archeological Investigation, Westchester Bio Science and Technology Center

Shovel Test Records

	<u>Ending Depth (cm)</u>	<u>Level</u>	<u>Soil Type</u>	<u>Soil Inclusions</u>		<u>Munsell Color</u>	<u>Termination Reason</u>
242	16	1	sand	gravel, roots	10yr 4/3	brown	
	30	2	sand	gravel	10yr 5/4	yellowish brown	subsoil
243	30	1	silt sand	gravel, cobbles, crushed stone, roots	10yr 4/3	brown	impasse (rocks)
244	25	1	silt sand	gravel, cobbles, crushed stone, roots	10yr 4/3	brown	
	40	2	silt sand	gravel, cobbles	10yr 5/6 10yr 5/3	yellowish brown brown	subsoil
245	0	1					not excavated (disturbed)
246	25	1	silt sand	gravel, crushed stone, roots	10yr 4/3	brown	
	40	2	silt sand	gravel	10yr 5/6	yellowish brown	subsoil
247	0	1					not excavated (disturbed)
248	0	1					not excavated (disturbed)
249	0	1					not excavated (other)
250	24	1	sand	gravel, asphalt, roots	10yr 4/2	dark grayish brown	
	39	2	sand	gravel, cobbles	10yr 5/3	brown	subsoil
251	40	1	sand loam	gravel	10yr 4/3	brown	impasse (compact soil)
					2.5y 6/3	light yellowish brown	
252	0	1					not excavated (disturbed)
253	23	1	sand loam	gravel, cobbles, roots	10yr 4/2	dark grayish brown	
	31	2	silt sand	gravel	10yr 6/4	light yellowish brown	impasse (rocks)

541831: Phase I Archeological Investigation, Westchester Bio Science and Technology Center

Shovel Test Records

	<u>Ending Depth (cm)</u>	<u>Level</u>	<u>Soil Type</u>	<u>Soil Inclusions</u>		<u>Munsell Color</u>	<u>Termination Reason</u>
254	0	1					not excavated (disturbed)
255	0	1					not excavated (disturbed)
256	36	1	sand	gravel, cobbles	10yr 4/3	brown	impasse (rocks)
257	27	1	sand loam	roots	10yr 4/2	dark grayish brown	
	45	2	silt sand		10yr 5/3 10yr 5/4	brown yellowish brown	subsoil
258	14	1	silt sand		10yr 4/3	brown	
	32	2	silt sand		2.5y 5/6	light olive brown	subsoil
259	20	1	silt sand		10yr 4/2	dark grayish brown	
	40	2	silt sand		10yr 5/4	yellowish brown	subsoil
260	25	1	sand loam	roots	10yr 3/3	dark brown	
	34	2	silt sand	cobbles	10yr 5/6	yellowish brown	impasse (rocks)
261	27	1	loam		10yr 3/2	very dark grayish brown	
	49	2	silt		10yr 6/4	light yellowish brown	subsoil
262	20	1	sand loam	roots	10yr 4/2	dark grayish brown	
	41	2	silt sand		10yr 5/4	yellowish brown	subsoil
263	20	1	sand loam	roots	10yr 4/2	dark grayish brown	
	46	2	silt sand		10yr 5/4	yellowish brown	subsoil
264	20	1	loam		2.5y 4/2	dark grayish brown	
	43	2	silt sand		2.5y 5/6	light olive brown	subsoil
265	32	1	sand loam	roots	10yr 4/2	dark grayish brown	
	51	2	silt sand		10yr 5/6	yellowish brown	subsoil

541831: Phase I Archeological Investigation, Westchester Bio Science and Technology Center

Shovel Test Records

	<u>Ending Depth (cm)</u>	<u>Level</u>	<u>Soil Type</u>	<u>Soil Inclusions</u>		<u>Munsell Color</u>	<u>Termination Reason</u>
266	27	1	sand loam	cobbles, roots	10yr 4/2	dark grayish brown	
	36	2	sand		10yr 5/6	yellowish brown	impasse (roots)
267	20	1	loam		2.5y 4/2	dark grayish brown	
	40	2	silt sand		2.5y 5/6	light olive brown	subsoil
268	20	1	silt sand	gravel, cobbles, roots	10yr 4/3	brown	
	35	2	silt sand	gravel, cobbles	10yr 5/4	yellowish brown	subsoil
269	40	1	silt sand	gravel, cobbles, crushed stone, roots	10yr 5/3	brown	impasse (rocks)
270	23	1	sand loam	roots	10yr 4/2	dark grayish brown	impasse (rocks)
271	35	1	silt sand		10yr 4/3	brown	
	54	2	silt sand		10yr 5/6	yellowish brown	subsoil
272	14	1	sand	gravel, cobbles, roots	10yr 4/2	dark grayish brown	
	25	2	sand	gravel, cobbles	10yr 5/3	brown	subsoil
273	22	1	sand loam		10yr 4/2	dark grayish brown	
	36	2	silt sand	gravel	10yr 5/4	yellowish brown	subsoil
274	36	1	silt sand	gravel, cobbles, crushed stone, roots	10yr 4/3	brown	impasse (rocks)
275	0	1					not excavated (disturbed)
276	11	1	silt sand		2.5y 4/2	dark grayish brown	
	40	2	silt sand		2.5y 5/4	light olive brown	subsoil
277	15	1	sand loam	roots	10yr 4/2	dark grayish brown	
	32	2	silt sand		10yr 5/4	yellowish brown	subsoil
278	25	1	silt sand	gravel, roots	10yr 4/3	brown	
	36	2	sand	gravel, roots	2.5y 5/4	light olive brown	subsoil

541831: Phase I Archeological Investigation, Westchester Bio Science and Technology Center

Shovel Test Records

	<u>Ending Depth (cm)</u>	<u>Level</u>	<u>Soil Type</u>	<u>Soil Inclusions</u>		<u>Munsell Color</u>	<u>Termination Reason</u>
279	25	1	sand	gravel, cobbles, roots	2.5y 4/2	dark grayish brown	
	42	2	silt sand	gravel, roots	10yr 5/4	yellowish brown	subsoil
280	33	1	sand	gravel, roots	10yr 4/3	brown	
	50	2	sand	gravel	2.5y 5/4	light olive brown	subsoil
281	25	1	sand	gravel, roots	10yr 4/3	brown	
	43	2	sand	gravel	2.5y 5/4	light olive brown	subsoil
282	30	1	sand	gravel, cobbles, roots	10yr 4/3	brown	
	45	2	sand	gravel, cobbles	10yr 5/4	yellowish brown	subsoil
283	15	1	sand loam	gravel, roots	2.5y 4/3	olive brown	
	35	2	silt sand	gravel	2.5y 5/4	light olive brown	subsoil
284	20	1	sand	gravel, cobbles, roots	2.5y 4/3	olive brown	
	42	2	sand	gravel, roots	2.5y 5/4	light olive brown	subsoil
285	14	1	sand loam	cobbles, roots	10yr 4/2	dark grayish brown	
	35	2	silt sand	cobbles, roots	10yr 5/4	yellowish brown	subsoil
286	16	1	sand loam	roots	10yr 4/2	dark grayish brown	
	35	2	silt sand	cobbles, roots	10yr 5/4	yellowish brown	subsoil
287	10	1	sand loam	roots	10yr 4/3	brown	impasse (rocks)
288	24	1	sand loam	cobbles, roots	10yr 4/3	brown	impasse (rocks)
289	17	1	sand loam	roots	10yr 4/2	dark grayish brown	impasse (rocks)
290	20	1	sand loam	roots	10yr 4/2	dark grayish brown	
	29	2	sand		10yr 5/4	yellowish brown	subsoil
291	22	1	silt sand	roots	10yr 4/3	brown	
	35	2	silt sand	roots	10yr 5/6	yellowish brown	impasse (roots)

541831: Phase I Archeological Investigation, Westchester Bio Science and Technology Center

Shovel Test Records

	<u>Ending Depth (cm)</u>	<u>Level</u>	<u>Soil Type</u>	<u>Soil Inclusions</u>		<u>Munsell Color</u>	<u>Termination Reason</u>
292	31	1	silt sand	roots	10yr 4/3	brown	
	53	2	silt sand	roots	10yr 5/6	yellowish brown	subsoil
293	31	1	silt sand		10yr 4/3	brown	
	45	2	silt sand		10yr 5/6	yellowish brown	subsoil
294	20	1	silt sand		10yr 4/3	brown	
	46	2	silt sand		10yr 5/6	yellowish brown	subsoil
295	11	1	silt sand	roots	10yr 4/3	brown	
	26	2	silt sand	roots	10yr 5/6	yellowish brown	impasse (roots)
296	25	1	sand loam	roots	10yr 4/3	brown	impasse (rocks)
297	28	1	sand	gravel, roots	10yr 4/3	brown	impasse (roots)
298	25	1	silt sand	gravel, roots	10yr 4/3	brown	
	48	2	silt sand		10yr 5/4	yellowish brown	subsoil
299	30	1	sand	gravel, roots	10yr 4/3	brown	
	48	2	sand		2.5y 5/4	light olive brown	subsoil
300	30	1	silt sand		10yr 4/3	brown	
	45	2	silt sand		10yr 5/6	yellowish brown	subsoil
301	20	1	sand	gravel, cobbles, roots	2.5y 4/3	olive brown	
	38	2	sand	gravel	2.5y 5/4	light olive brown	subsoil
302	22	1	sand	gravel, cobbles, roots	10yr 4/3	brown	
	37	2	sand	gravel, cobbles	10yr 6/4	light yellowish brown	subsoil
303	25	1	sand	gravel, cobbles, roots	2.5y 4/3	olive brown	
	28	2	sand	gravel, roots	2.5y 5/4	light olive brown	impasse (roots)

541831: Phase I Archeological Investigation, Westchester Bio Science and Technology Center

Shovel Test Records

	<u>Ending Depth (cm)</u>	<u>Level</u>	<u>Soil Type</u>	<u>Soil Inclusions</u>		<u>Munsell Color</u>	<u>Termination Reason</u>
304	28	1	sand	gravel, cobbles, roots	2.5y 4/3	olive brown	
	43	2	sand	gravel, cobbles, roots	2.5y 5/4	light olive brown	subsoil
305	12	1	silt sand	roots	10yr 4/3	brown	
	33	2	silt sand	roots	10yr 5/6	yellowish brown	subsoil
306	19	1	sand loam	roots	10yr 3/2	very dark grayish brown	
	36	2	silt sand		10yr 5/4	yellowish brown	subsoil
307	19	1	sand loam	roots	10yr 3/2	very dark grayish brown	
	37	2	sand		10yr 5/6	yellowish brown	subsoil
308	21	1	sand loam	roots	10yr 4/2	dark grayish brown	
	42	2	silt sand		10yr 5/4	yellowish brown	subsoil
309	18	1	sand loam	gravel, roots	10yr 3/2	very dark grayish brown	impasse (rocks, roots)
310	17	1	sand loam	roots	10yr 2/2	very dark brown	
	35	2	silt sand		10yr 3/6	dark yellowish brown	subsoil
					10yr 5/2	grayish brown	
311	41	1	sand loam	roots	10yr 2/1	black	impasse (roots)
312	21	1	sand loam	roots	10yr 2/2	very dark brown	
	37	2	silt sand		10yr 5/2	grayish brown	subsoil
313	25	1	silt sand	gravel, roots	10yr 3/2	very dark grayish brown	
	35	2	silt sand	gravel	10yr 5/2	grayish brown	subsoil
314	20	1	silt sand	gravel, roots	10yr 3/2	very dark grayish brown	
	40	2	silt sand	gravel	10yr 5/2	grayish brown	subsoil
315	14	1	silt sand	roots	10yr 3/2	very dark grayish brown	impasse (roots)

541831: Phase I Archeological Investigation, Westchester Bio Science and Technology Center

Shovel Test Records

	<u>Ending Depth (cm)</u>	<u>Level</u>	<u>Soil Type</u>	<u>Soil Inclusions</u>		<u>Munsell Color</u>	<u>Termination Reason</u>
316	17	1	sand loam	roots	10yr 2/2	very dark brown	impasse (roots)
317	20	1	silt loam	gravel, cobbles, roots	10yr 3/2	very dark grayish brown	
	30	2	silt sand	gravel, cobbles	10yr 5/2	grayish brown	impasse (rocks)
318	15	1	sand loam	roots	10yr 3/2	very dark grayish brown	impasse (roots)
319	20	1	sand loam	roots	10yr 3/2	very dark grayish brown	
	37	2	silt sand		10yr 5/4	yellowish brown	subsoil
320	19	1	sand loam	roots	10yr 3/2	very dark grayish brown	
	37	2	silt sand		10yr 5/4	yellowish brown	subsoil
321	8	1	silt sand	roots	10yr 4/3	brown	
	33	2	silt sand	roots	10yr 5/6	yellowish brown	subsoil
322	18	1	sand	gravel, cobbles	2.5y 4/3	olive brown	
	24	2	silt sand	gravel, roots	2.5y 6/4	light yellowish brown	impasse (roots)
323	10	1	silt sand	roots	10yr 4/3	brown	
	36	2	silt sand	roots	10yr 5/6	yellowish brown	subsoil
324	15	1	silt sand	roots	10yr 4/3	brown	
	35	2	silt sand	roots	10yr 5/6	yellowish brown	subsoil
325	14	1	sand	gravel, cobbles, roots	2.5y 4/2	dark grayish brown	
	20	2	sand	gravel, roots	2.5y 5/3	light olive brown	impasse (roots)
326	15	1	silt sand	roots	10yr 4/3	brown	
	35	2	silt sand	roots	10yr 5/6	yellowish brown	subsoil
327	15	1	sand	gravel, cobbles, roots	2.5y 4/2	dark grayish brown	
	27	2	sand	gravel, roots	2.5y 5/3	light olive brown	subsoil

541831: Phase I Archeological Investigation, Westchester Bio Science and Technology Center

Shovel Test Records

	<u>Ending Depth (cm)</u>	<u>Level</u>	<u>Soil Type</u>	<u>Soil Inclusions</u>		<u>Munsell Color</u>	<u>Termination Reason</u>
328	24	1	sand loam	roots	10yr 3/3	dark brown	impasse (roots)
329	30	1	silt sand	gravel, roots	10yr 4/3	brown	
	50	2	sand	gravel	2.5y 5/4	light olive brown	subsoil
330	15	1	sand loam	cobbles, roots	10yr 4/3	brown	
	33	2	silt sand		10yr 5/6	yellowish brown	subsoil
331	28	1	silt sand		10yr 4/3	brown	
	48	2	silt sand		10yr 5/6	yellowish brown	subsoil
332	35	1	silt sand		10yr 5/4	yellowish brown	impasse (rocks)
333	23	1	sand loam	gravel, cobbles, roots	10yr 4/3	brown	
	37	2	silt sand	gravel	10yr 5/4	yellowish brown	subsoil
334	30	1	sand loam	gravel, roots	10yr 4/3	brown	
	45	2	sand	gravel	10yr 5/6	yellowish brown	subsoil
335	28	1	sand	gravel, cobbles, roots	10yr 4/3	brown	
	34	2	silt sand	gravel, cobbles, roots	10yr 6/4	light yellowish brown	impasse (rocks)
336	25	1	sand	gravel, cobbles, roots	10yr 4/3	brown	
	35	2	silt sand	gravel, cobbles	10yr 5/4 10yr 4/3	yellowish brown brown	subsoil
337	27	1	sand	gravel, cobbles, roots	10yr 4/3	brown	
	34	2	silt sand	gravel, cobbles	10yr 5/4	yellowish brown	impasse (rocks)
338	22	1	silt sand		10yr 4/3	brown	
	47	2	silt sand		10yr 5/6	yellowish brown	subsoil
339	24	1	sand loam	roots	10yr 4/2	dark grayish brown	
	44	2	silt sand		10yr 5/6	yellowish brown	subsoil

541831: Phase I Archeological Investigation, Westchester Bio Science and Technology Center

Shovel Test Records

	<u>Ending Depth (cm)</u>	<u>Level</u>	<u>Soil Type</u>	<u>Soil Inclusions</u>		<u>Munsell Color</u>	<u>Termination Reason</u>
340	25	1	silt sand	gravel, roots	10yr 4/3	brown	
	40	2	sand	gravel	2.5y 5/4	light olive brown	subsoil
341	20	1	sand loam	gravel, roots	10yr 4/2	dark grayish brown	
	35	2	sand	gravel	10yr 5/4	yellowish brown	subsoil
342	20	1	sand loam	roots	10yr 4/3	brown	
	39	2	silt sand		10yr 5/4	yellowish brown	subsoil
343	22	1	sand loam	gravel, roots	10yr 4/2	dark grayish brown	
	42	2	silt sand		10yr 5/4	yellowish brown	subsoil
344	24	1	sand loam	roots	10yr 4/2	dark grayish brown	
	41	2	silt sand		10yr 5/4	yellowish brown	subsoil
345	25	1	silt sand	gravel, roots	10yr 4/3	brown	
	43	2	silt sand	gravel, cobbles	10yr 5/4	yellowish brown	subsoil
346	28	1	sand	gravel, cobbles	10yr 4/3	brown	
	48	2	sand	gravel	7.5yr 4/4	brown	subsoil
347	19	1	sand loam	gravel, roots	2.5y 4/3	olive brown	
	38	2	sand	gravel	2.5y 5/6	light olive brown	subsoil
348	19	1	sand loam	roots	10yr 4/3	brown	
	40	2	sand		2.5y 5/6	light olive brown	subsoil
349	25	1	silt sand	gravel, crushed stone, roots	2.5y 4/3	olive brown	
	43	2	silt sand	gravel	2.5y 5/4	light olive brown	subsoil
350	19	1	sand loam	cobbles, roots	10yr 3/3	dark brown	impasse (rocks)
351	20	1	sand loam	roots	10yr 4/3	brown	
	37	2	silt sand		10yr 5/4	yellowish brown	subsoil
352	21	1	silt sand	gravel, cobbles, roots	10yr 4/3	brown	
	35	2	silt sand	gravel	2.5y 5/4	light olive brown	subsoil

541831: Phase I Archeological Investigation, Westchester Bio Science and Technology Center

Shovel Test Records

	<u>Ending Depth (cm)</u>	<u>Level</u>	<u>Soil Type</u>	<u>Soil Inclusions</u>		<u>Munsell Color</u>	<u>Termination Reason</u>
353	30	1	silt sand	gravel, cobbles, crushed stone	10yr 4/3	brown	impasse (rocks)
354	23	1	silt sand	gravel, cobbles, crushed stone	10yr 3/3	dark brown	impasse (rocks)
355	18	1	sand loam	roots	10yr 3/3	dark brown	impasse (rocks)
356	7	1	sand	gravel, roots	10yr 4/2	dark grayish brown	
	15	2	sand	gravel, cobbles	2.5y 5/4	light olive brown	impasse (rocks)
357	15	1	silt sand	gravel, roots	10yr 4/2	dark grayish brown	
	31	2	silt	gravel, cobbles	10yr 5/4	yellowish brown	subsoil
358	20	1	silt sand	gravel, cobbles, roots	10yr 4/2	dark grayish brown	
	40	2	silt sand	gravel, cobbles	10yr 5/3 10yr 5/6	brown yellowish brown	subsoil
359	35	1	silt loam	gravel, cobbles	10yr 3/3	dark brown	impasse (rubble)
360	24	1	sand loam	cobbles, roots	10yr 4/3	brown	impasse (rocks)
361	17	1	sand loam	cobbles, roots	10yr 4/2	dark grayish brown	
	31	2	silt sand	cobbles	10yr 5/4	yellowish brown	subsoil
362	14	1	sand	gravel, cobbles, roots	10yr 4/2	dark grayish brown	
	24	2	sand	gravel, cobbles	2.5y 5/3	light olive brown	subsoil
363	12	1	sand loam	gravel, cobbles, roots	10yr 4/2	dark grayish brown	
	26	2	silt	gravel, cobbles	10yr 5/3	brown	subsoil
364	13	1	sand loam	cobbles, roots	10yr 4/2	dark grayish brown	
	30	2	silt sand	cobbles	10yr 5/3	brown	subsoil
365	20	1	silt sand	gravel, cobbles, roots	10yr 4/3	brown	impasse (rocks, roots)

541831: Phase I Archeological Investigation, Westchester Bio Science and Technology Center

Shovel Test Records

	<u>Ending Depth (cm)</u>	<u>Level</u>	<u>Soil Type</u>	<u>Soil Inclusions</u>		<u>Munsell Color</u>	<u>Termination Reason</u>
366	0	1					not excavated (other)
367	23	1	silt sand	gravel, cobbles, crushed stone, roots	10yr 4/1	dark gray	
	32	2	silt	gravel, asphalt, cobbles	10yr 4/1	dark gray	impasse (rubble)
368	26	1	sand	gravel, cobbles, roots	10yr 4/2	dark grayish brown	impasse (rubble)
369	0	1					not excavated (slope)

Appendix 2: Artifact Inventory

541831: Phase I Archeological Investigation, Westchester Bio Science and Technology Center

Artifact Inventory

<u>Provenience</u>	<u>Level</u>	<u>Feature</u>	<u>Bag</u>	<u>Item</u>	<u>Count</u>	<u>Artifact Description</u>	<u>Material</u>	<u>Weight (g)</u>
STP 31	1		1	1	1	debitage	chert	0.2
				1.1	1	<i>debitage, flake, chert</i>		0.2
STP 49	1		2	1	1	debitage	quartz	0.1
				1.1	1	<i>debitage, flake, quartz</i>		0.1
STP 54	1		3	1	1	projectile point	siliceous shale	5.9
				1.1	1	<i>projectile point, bifurcate, nearly complete, siliceous shale, corner-notched, tip and one barb missing, W 2.4, T 0.5 cm</i>		5.9
STP 543MS	1		4	1	1	debitage	quartzite	1.3
				1.1	1	<i>debitage, flake, quartzite</i>		1.3
STP 543MS	1		4	2	2	debitage	siliceous shale	0.5
				2.1	1	<i>debitage, flake, siliceous shale, patinated</i>		0.4
				2.2	1	<i>debitage, flake, siliceous shale</i>		0.1
STP 543MS	1		4	3	1	fire-cracked rock	quartzite	92.4
STP 543MS	1		4	4	2	mineral sample	quartzite	7.2
STP 543MW	1		5	1	1	mineral sample	siliceous shale	0.8
STP 56	1		6	1	4	faunal bone	bone	12.2
STP 77	1		7	1	1	redware	coarse earthenware	12.1
STP 78	1		8	1	10	redware	coarse earthenware	21.5
STP 78	1		8	2	1	bottle	glass	1.1
STP 78	1		8	3	2	vessel	glass	1.7
STP 78	1		8	4	1	shotgun shell	composite	6.9
STP 78	1		8	5	2	shell	shell	1.0

541831: Phase I Archeological Investigation, Westchester Bio Science and Technology Center

Artifact Inventory

<u>Provenience</u>	<u>Level</u>	<u>Feature</u>	<u>Bag</u>	<u>Item</u>	<u>Count</u>	<u>Artifact Description</u>	<u>Material</u>	<u>Weight (g)</u>
STP 78	1		8	6	1	faunal bone	bone	19.6
STP 79	1		9	1	7	redware	coarse earthenware	10.2
STP 79	1		9	2	3	whiteware	refined earthenware	7.2
STP 80	1		10	1	2	redware	coarse earthenware	5.1
STP 80	1		10	2	2	pearlware	refined earthenware	3.5
STP 80	1		10	3	1	red bodied stoneware	stoneware	3.1
				3.1	1	<i>red bodied stoneware, hollowware, stoneware, transfer printed underglaze, yellow, Portobello-type ware, white slip on interior, dark brown slip on exterior, possible pitcher, TPQ 1805</i>		3.1
STP 80	1		10	4	1	window	glass	0.9
STP 80	1		10	5	1	slate fragment	slate	0.8
STP 99	1		11	1	1	debitage	chert	0.3
				1.1	1	<i>debitage, trim flake, chert</i>		0.3
STP 250	1		12	1	1	whiteware	refined earthenware	0.4
STP 250	1		12	2	1	bottle	glass	2.9
STP 352	1		13	1	1	Japanese	porcelain	0.5
				1.1	1	<i>Japanese, porcelain, transfer printed underglaze, blue, Phoenix Bird pattern, TPQ 1914</i>		0.5
STP 359	1		14	1	1	redware	coarse earthenware	1.1
STP 359	1		14	2	2	tile	ceramic	58.0
STP 359	1		14	3	1	bottle	glass	6.9
STP 359	1		14	4	2	window	glass	1.3
STP 359	1		14	5	1	mineral sample	quartzite	43.2
STP 359	1		14	6	1	mineral sample	quartz	1.5

541831: Phase I Archeological Investigation, Westchester Bio Science and Technology Center

Artifact Inventory

<u>Provenience</u>	<u>Level</u>	<u>Feature</u>	<u>Bag</u>	<u>Item</u>	<u>Count</u>	<u>Artifact Description</u>	<u>Material</u>	<u>Weight (g)</u>
STP 359	1		14	7	2	plastic	plastic	0.7
STP 367	1		15	1	2	redware	coarse earthenware	2.9
STP 367	1		15	2	1	ceramic	coarse earthenware	15.0
STP 367	1		15	3	1	pipe	coarse earthenware	33.9
STP 367	1		15	4	2	unidentified	glass	3.4
STP 368	1		16	1	2	redware	coarse earthenware	16.3
STP 368	1		16	2	3	bottle	glass	13.1
STP 368	1		16	3	2	unidentified	glass	5.8
STP 368	1		16	4	1	slate fragment	slate	6.6