Public Archaeology Facility Report

PHASE 2 SITE EXAMINATION REPORT
TRADITIONS PRECONTACT SITE (SUBi-3070; A00714.000094),
GLEN PRECONTACT SITE (SUBi-3071; A00714.000095),
and
HERITAGE PRECONTACT SITE (SUBi-3072; A00714.000096)
TRADITIONS RESORT AND CASINO DEVELOPMENT PROJECT
TOWN OF UNION (MCD 00714)
BROOME COUNTY, NEW YORK
14PR00263

BY:

MICHAEL E. JACOBSON,
SAMUEL KUDRLE,
and
ANDREA ZLOTUCHA KOZUB

SUBMITTED TO:

ALEXANDER N. URDA, P.E., CPESC
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P.O. BOX 142
WINDSOR, NY 13865

SPONSORED BY:

WALSH & SONS CONSTRUCTION CORP.
250 PLAZA DRIVE
VESTAL, NY 13850

JUNE 9, 2014

Binghamton University, State University of New York
Binghamton, New York 13902-6000

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MANAGEMENT SUMMARY

PROJECT NAME: Traditions Resort and Casino Development Project

OPRHP #: 14PR00263

INVOLVED AGENCY: New York State Department of Environmental Conservation

PHASE OF WORK: Phase 2 Site Examination

PROJECT LOCATION: Town of Union, Broome County, New York (MCD 00714).

USGS 7.5 MINUTE QUADRANGLE: 1968 (Photoinspected 1976) Binghamton West, NY

SITE EXAMINATION RESULTS: TRADITIONS PRECONTACT SITE (SUBi-3070; A00714.000094)

SITE LOCATION: The site is located along the southern portion of the Traditions at the Glen Resort and Conference Center along the east and west sides of the resort's entrance drive in the Town of Union, Broome County, New York.

CONTEXT: The site is situated on a terrace north of the Susquehanna River. The Susquehanna River is located approximately 250 m (820 ft) south of the site. The site is in an area subject to occasional flooding. It was used as a golf course during the 20th century. The approximate elevation of the site is 253 m (830 ft) ASL. The majority of documented precontact sites that lie within 3.2 km (2 mi) are clustered along the Susquehanna River. Rhyolite and yellow jasper flakes and a biface were recovered, suggesting the occupation is associated with the Transitional Period (1500-200 B.C.).

SITE TESTING: The site examination included 17 units. The units represent approximately 0.4% of the site.

INTEGRITY: The site appears to have been plowed, but retains excellent integrity.

RESEARCH POTENTIAL: The site yielded a high diversity and density of artifacts, including six projectile points, one biface, two hammerstones, over 300 pieces of debitage, and over 8.8 kg of FCR. No features were identified, but the amount of FCR suggests features may be present.

POTENTIAL IMPACTS: The site is located within an area slated for a proposed road.

RECOMMENDATIONS: We recommend that the site is eligible for the National Register of Historic Places. We recommend that impacts to the site be avoided. If avoidance is not possible, then we recommend mitigation of adverse impacts with a Phase 3 Data Recovery.

SITE EXAMINATION RESULTS: GLEN PRECONTACT SITE (SUBi-3071; A00714.000095)

SITE LOCATION: The site is located on the east side of Eagle Drive approximately 500 m (1,640 ft) north of the intersection of Eagle Drive and Country Club Road on the property of the Traditions at the Glen Resort and Conference Center in the Town of Union, Broome County, New York.

CONTEXT: The site is in an upland context on a hillside overlooking the Susquehanna River. The Susquehanna River is located approximately 750 m (2,461 ft) south of the site. The approximate elevation of the site is 274 m (900 ft) ASL. The majority of documented precontact sites that lie within 3.2 km (2 mi) are clustered along the Susquehanna River. The presence of numerous fire cracked rock (FCR) with charcoal in STP Y1/3mE suggests that a hearth feature is nearby, which may mean the site was used as a small camp.

SITE TESTING: The site examination included 10 STPs and 10 units. The units represent approximately 4.7% of the site.

INTEGRITY: The site has excellent integrity and does not appear to have been plowed.

RESEARCH POTENTIAL: The site yielded a high diversity and density of artifacts, including three projectile points, five bifaces, 1 hammerstone, and 3 groundstones, eight pieces of pottery, over 800 pieces of

debitage, and over 60 kg of FCR. Three features were identified, and the large amount of FCR suggests more may be present.

POTENTIAL IMPACTS: The site is located within an area slated for a proposed parking lot.

RECOMMENDATIONS: We recommend that the site is eligible for the National Register of Historic Places. We recommend that impacts to the site be avoided. If avoidance is not possible, then we recommend mitigation of adverse impacts with a Phase 3 Data Recovery.

SITE EXAMINATION RESULTS: HERITAGE PRECONTACT SITE (SUBi-3072; A00714.000096)

SITE LOCATION: The site is located approximately 315 m (1033 ft) northwest of the resort's entrance.

CONTEXT: The site is situated on a terrace approximately 525 m (1,722 ft) north of the Susquehanna River. This area is slightly elevated above poorly drained soils to the south and east, suggesting that it was selected as high and dry ground above resource-rich wetlands. There are no deeply buried cultural horizons.

SITE TESTING: The site examination included six STPs and six units. The units represent approximately 0.8% of the site.

INTEGRITY: The site has excellent integrity and does not appear to have been plowed.

RESEARCH POTENTIAL: The site yielded a high diversity and density of artifacts, including eight projectile points, six bifaces, one retouched piece, one pitted stone, 21 pieces of shell and bone, 28 pieces of pottery (including two fragments of a unique transitional Oak Hill vessel), over 300 pieces of debitage, and over 7.6 kg of FCR. One feature was identified, and the large amount of FCR suggests more may be present.

POTENTIAL IMPACTS: The site is located within an area slated for a proposed parking lot.

RECOMMENDATIONS: We recommend that the site is eligible for the National Register of Historic Places. We recommend that impacts to the site be avoided. If avoidance is not possible, then we recommend mitigation of adverse impacts with a Phase 3 Data Recovery.

AUTHOR/INSTITUTION: Michael E. Jacobson, Samuel Kudrle, and Andrea Zlotucha Kozub, Public Archaeology Facility, Binghamton University

DATE OF REPORT: June 9, 2014

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I. INTRODUCTION

This report presents the results of Phase 2 site examinations of the Traditions Precontact (SUBi-3070; A00714.000094), Glen Precontact (SUBi-3071; A00714.000095), and Heritage Precontact (SUBi-3072; A00714.000096) sites in the Town of Union, Broome County (Figures 1.1 and 1.2, p. 2). The site examinations were conducted by the Public Archaeology Facility (PAF) for a proposed casino and resort development project at the current Traditions at the Glen Resort and Hotel located at 4101 Watson Boulevard. Current plans (Figure 1.3, p. 3) call for the construction of a casino and expansion of the current resort, including the construction of a new building attached to the current hotel complex, along with associated parking, utilities, and access roads. The project is approximately 480 m (1,575 ft) wide at its maximum width and 676 m (2,218 ft) long. The total area of the project is approximately 12.7 ha (31.4 ac).

The research summarized in this report was performed under the supervision of Dr. Nina M. Versaggi, Director of the Public Archaeology Facility (PAF). Michael Jacobson served as project director for the Traditions Site, Samuel Kudrle was the project director for the Glen Site, and Andrea Zlotucha Kozub was the project director for the Heritage Site. Dylan Pelton, John Ferri, and Vanessa LoPiccolo served as crew chiefs. The field crew consisted of: Edgar Alarcon, Josh Anderson, Benjamin Brown, Paul Brown, Alex Button, Greg Diute, Rich Kastl, Alex Nevgloski, Gary Pelton, Laura Klingman, Kevin Sheridan, and Rebecca Stollman. The artifacts were catalogued by Sam Kudrle (lithics), Tim Knapp (pottery) and Claire Horn. Laura Knapp performed all data entry. Maria Pezzuti and Annie Pisani performed all administrative duties.

In compliance with the New York State Standards for Cultural Resource Management Surveys (NYAC 1994) and subsequent guidelines of New York's Office of Parks, Recreation, and Historic Preservation (OPRHP 2005), the area within the project limits is considered the area of impact for the purpose of conducting the survey. *The results of the research performed for this report do not apply to any territory outside the project area*.

1.1 Summary of Previous Archaeological Investigations

PAF completed a Phase 1 survey of the proposed project area in early 2014 (Jacobson 2014). Three sites were identified within the project area: Traditions Precontact, Glen Precontact, and Heritage Precontact. The Traditions site included a possible Transitional component based on the presence of exotic rhyolite debitage, and covered much of the southern portion of the project area in the area of a proposed road and parking lot. The Glen site was located in the northwestern portion of the project area in an area slated for a parking lot. A large amount of fire cracked rock suggested the likelihood of features being present within the site and project boundaries. The Heritage Site was located on the western side of the project area between the other two sites, in an area also targeted for parking lot construction. A high density of FCR indicated the probable presence of features, and the recovery of a grit tempered smoothed Oak Hill Corded Lower Collar sherd indicated a Late Woodland component. PAF recommended that all three sites were potentially eligible for the National Register of Historic Places, and recommended site examinations to evaluate this potential.

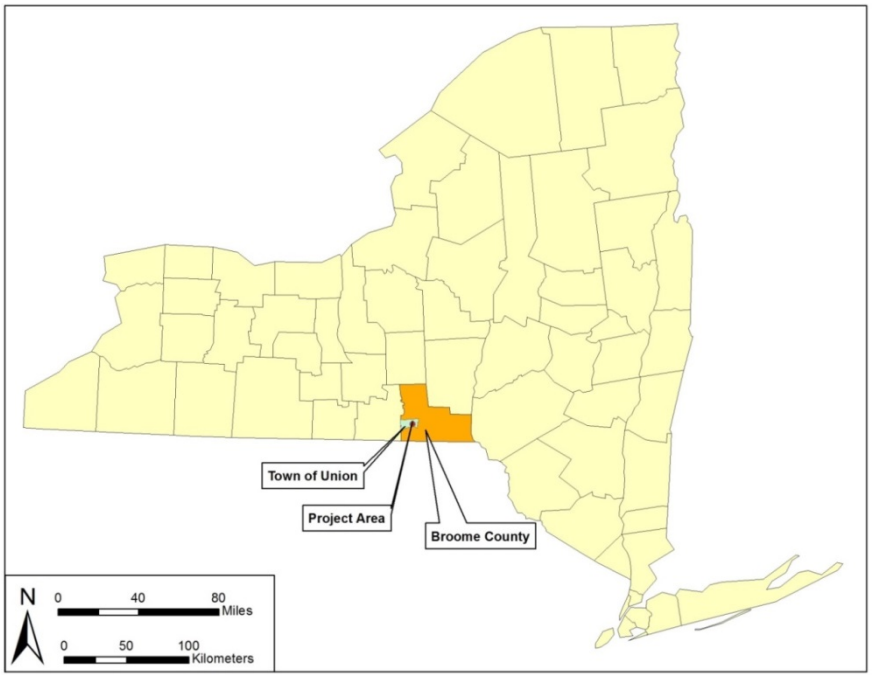

Figure 1.1. Approximate location of the project area in Broome County and New York State.

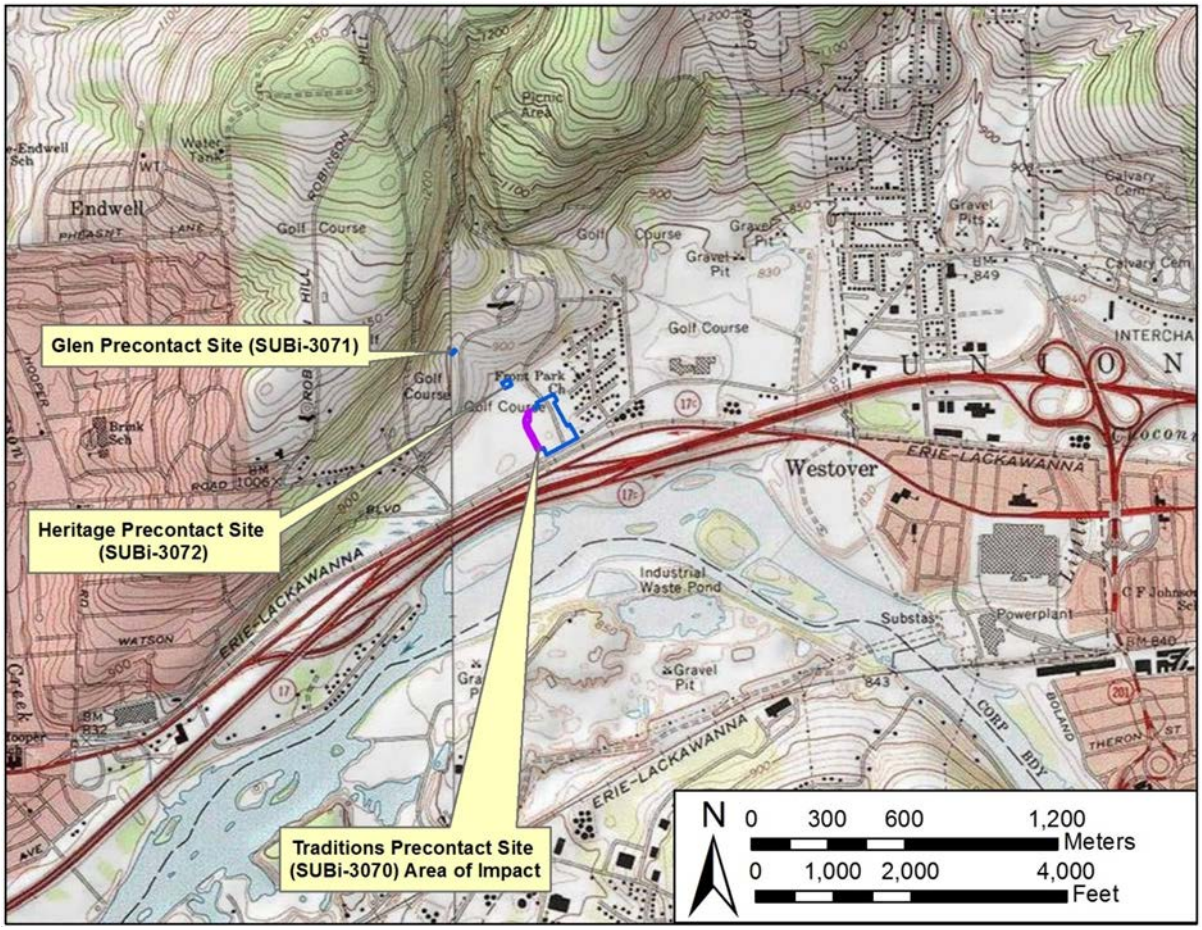

Figure 1.2. Site locations on the combined Binghamton West, Endicott, Castle Creek, and Maine 7.5' Quadrangles.

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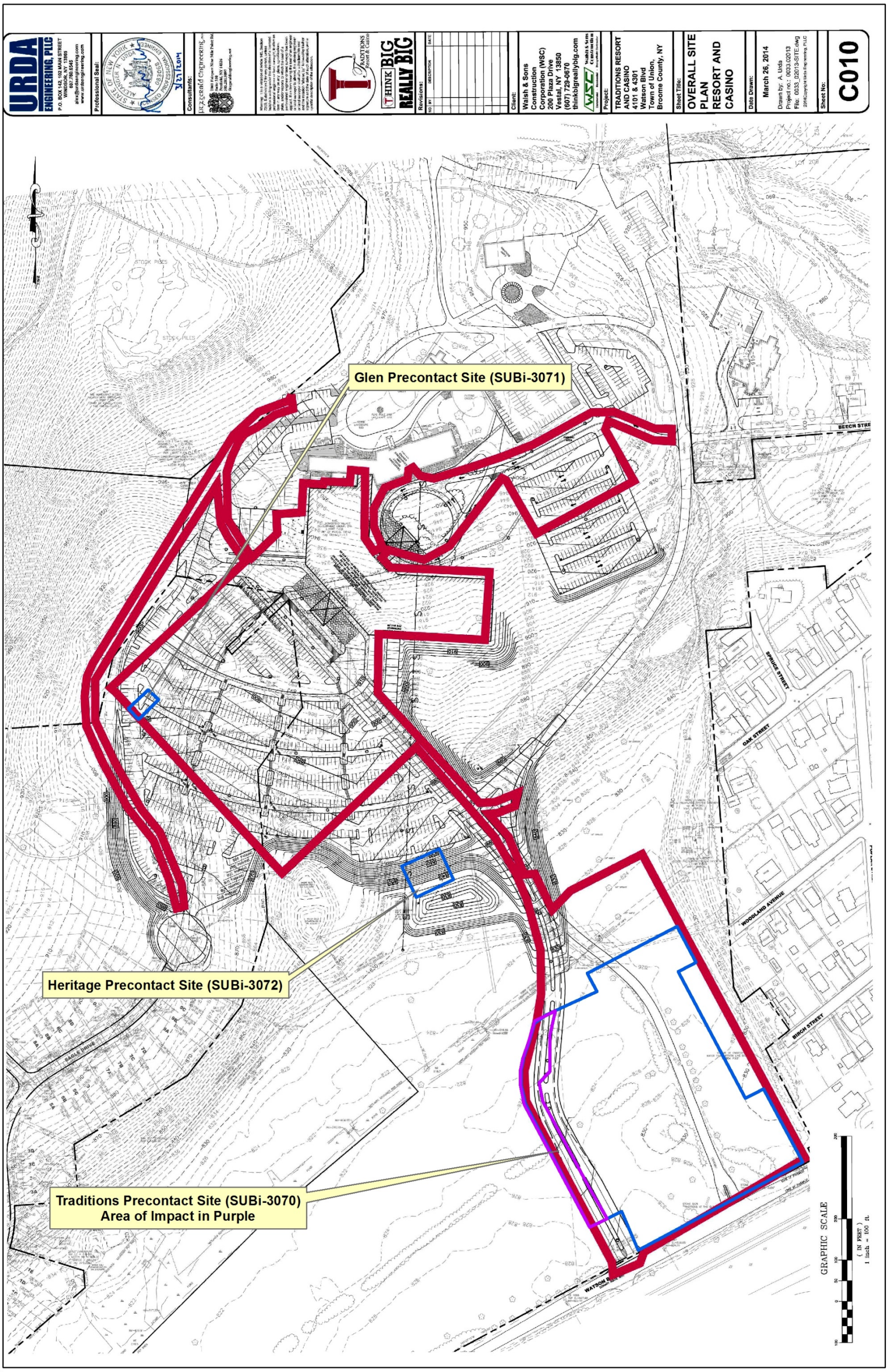

Figure 1.3. Site locations on map of proposed project impacts.

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II. SITE CONTEXTS

2.1 Environmental Setting

Broome County is dominated by the Allegheny Plateau. The elevation of the plateau ranges from 244 to 610 m (800-2,000 ft) ASL and is crossed by various streams and steep river valleys (USDA 1973). Glacial activity has worked to actively shape the region by advancement and retreat by glaciers that eroded and deposited underlying material. The project area extends from a terrace along the north side of the Susquehanna River north to a hillside. The southern portion of the project area associated with the terrace is fairly flat, while the northern section of the project area located on the hillside is marked by steep slopes. The elevation of the project area ranges from approximately 253 m (830 ft) ASL at the southern portion of the project area to approximately 290 m (950 ft) ASL at the northern section of the project area (Figure 2.1, p. 5). The project area has an unnamed stream running from the northwest section of the project into an artificial waterway that crosses the middle section of the project area. This middle section and the remaining land on the floodplain were once part of a nine-hole golf course. The artificial waterway may have been part of the golf course's landscaping. The Susquehanna River is located approximately 244 m (800 ft) south of the project area. It is separated from the project area by the NY17/NY17C corridor.

The Broome County soil survey (http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx) indicates that the project area includes four main soil series (Table 2.1, below; Figure 2.2, p. 6). The Glen and Heritage sites lie on soils associated with glacial ridges, outwash terraces, or lake plains and deeply buried cultural deposits are not expected. Subsurface testing should penetrate 15 cm (6 in) into the B horizon soils to adequately test potential cultural deposits. According to a geomorphological consult (Stiteler, personal communication) conducted prior to Phase 1 testing, the Unadilla B soils in the Traditions site boundaries correspond to an outwash terrace that lacks the potential for deeply buried cultural horizons. The Middlebury series is associated with flood plains, which present the possibility of deeply buried cultural deposits. Due to the shallow vertical impacts (approximately 50 cm [20 in]) in the portion of the project area associated with Middlebury soils, testing should proceed to a depth of 60 cm (24 in) below the surface to adequately test cultural soils within the impact zone.

Table 2.1. Predicted soil types for the sites.

Series Name	Slope %	Drainage	Horizons	Color/Texture	Landforms	Sites
Canaseraga silt loam (CaC)	8-15	Moderately well drained	Ap: 0-20 cm (0-8 in) Bw: 20-46 cm (8-18 in) E: 46-58 cm (18-23 in) 2Bx1: 58-91 cm (23-36 in) 2Bx2: 91-137 cm (36-54 in) 2C: 137-183 cm (54-72 in)	Dark grayish brown silt loam Yellowish brown silt loam Light olive brown very fine sandy loam Olive brown very fine sandy loam Dark grayish brown channery silt Dark grayish brown channery silt loam	Till plains, hills, drumlinoid ridges	Glen (west)
Middlebury silt loam (Ms)	0-3	Moderately well drained	Ap: 0-20 cm (0-8 in) Bw1: 20-33 cm (8-13 in) Bw2: 33-51 cm (13-20 in) Bw3: 51-64 cm (20-25 in) C1: 64-79 cm (25-31 in)	Brown silt loam Brown silt loam Dark yellowish loam Brown fine sandy loam Brown fine sandy loam	Flood plains	Traditions (north), Heritage (south)
Unadilla silt loam (UnB)	0-5	Well drained	Ap: 0-20 cm (0-8 in) Bw1: 20-30 cm (8-12 in) Bw2: 30-46 cm (12-18 in) Bw3: 46-79 cm (18-31 in) BC: 79-107 cm (31-42 in)	Brown silt loam Light yellowish brown silt loam Yellowish brown silt loam Light yellowish silt loam Yellowish brown very fine sandy loam	Lake plains, outwash terraces, high outwash terraces	Traditions (south)
Wallington silt loam (Wa)	0-5	Somewhat poorly drained	Ap: 0-20 cm (0-8 in) Eg: 20-25 cm (8-10 in) Bw: 25-38 cm (10-15 in) Bx: 38-86 cm (15-34 in) C: 86-165 cm (34-65 in)	Very dark grayish brown silt loam Pinkish gray silt loam Brown silt loam Brown silt loam Brown laminated very fine sandy loam and loamy very fine sand	Lake plains	Heritage (north), Glen (east)

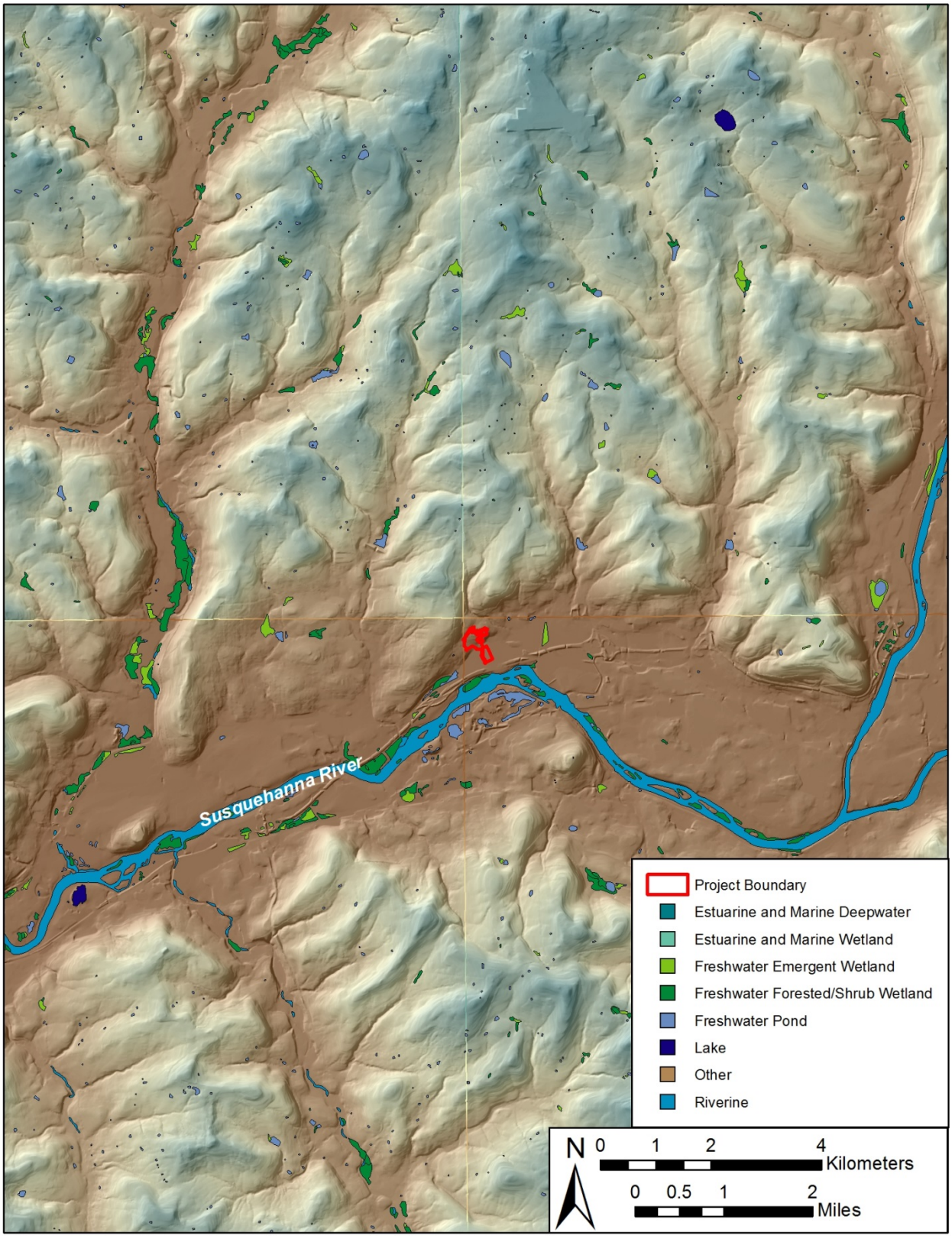

Figure 2.1. Digital elevation map of region surrounding project area.

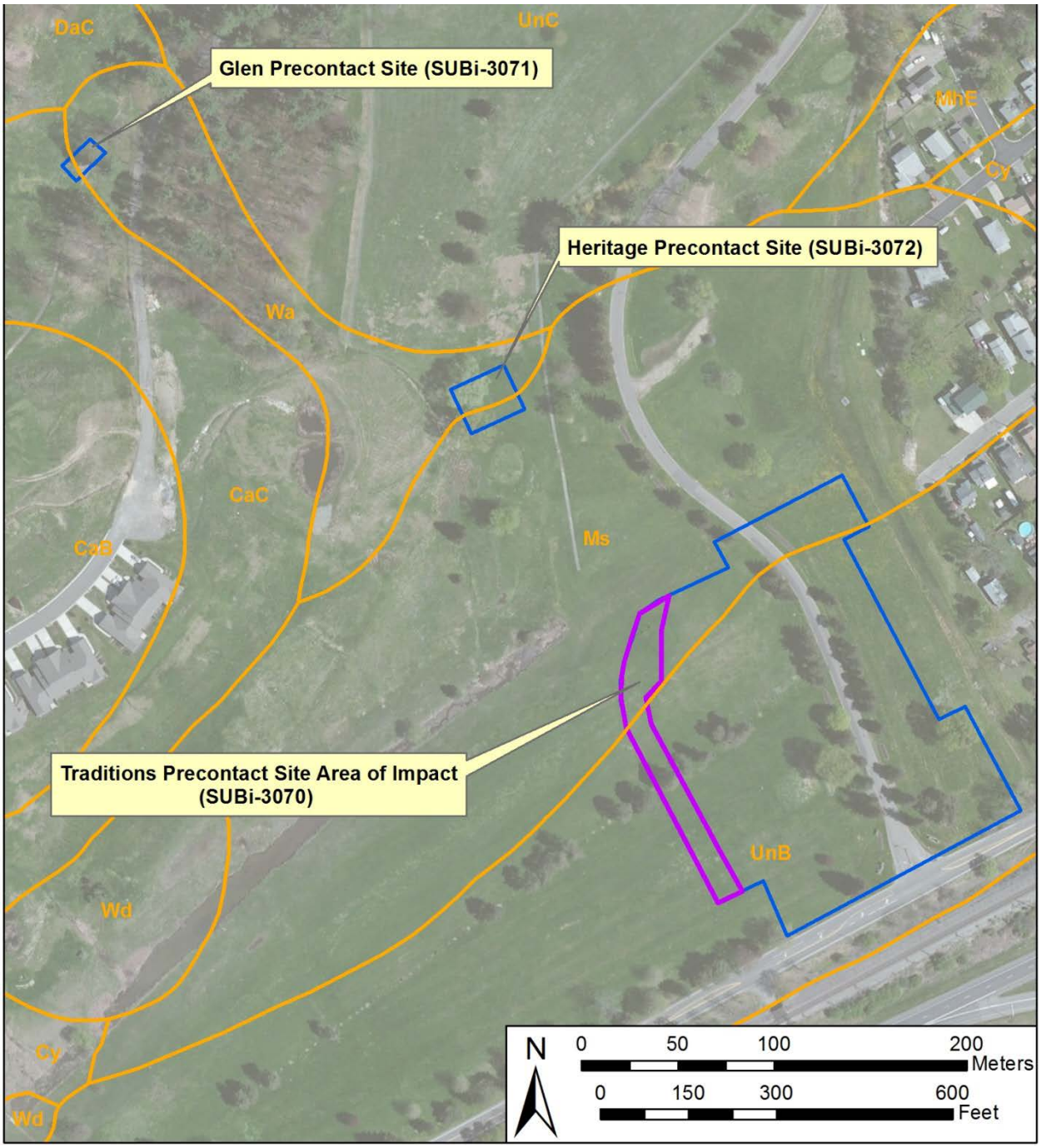

Figure 2.2. Location of project area on USDA soil survey map.
(Key: CaB= Canaseraga silt loam, slope 3-8%; CaC= Canaseraga silt loam, slope 8-15%; DaC= Dalton silt loam, slope 8-15%; Ms= Middlebury silt loam, slope 0-3%; UnB= Unadilla silt loam, slope 0-5%; UnC= Unadilla silt loam, slope 5-15%, Wa= Wallington silt loam, slope 0-5%)

2.2 Precontact Context

The precontact period of New York State and the Northeast was characterized by two broad subsistence patterns, both of which influenced settlement and land use patterns, as well as material culture. The first, designated as the pre-agricultural hunter-gatherer, began with the arrival of highly mobile groups during the Paleo-Indian and Early-Middle Archaic periods around 10,000-4000 BC. Mobility was an important adaptation, as these groups relied on dispersed clusters of plants, game animals, and fish for their subsistence. These groups often followed herds of animals, or migrated from one resource-rich landform (e.g., upland wetlands) to another. Starting in the Late Archaic period and extending through the Middle Woodland (4000 BC to AD 900), hunter-gatherers became seasonally nomadic. Relatively large base camps were positioned in major river or lake valleys, from which daily foragers would radiate outward in search of local resources. During seasons of resource dispersal, the camps would break up into smaller, more mobile units capable of foraging over large distances. Sites associated with earlier hunter-gatherers include small short term camps and resource processing stations. For the later seasonally nomadic groups, site types include larger base camps, smaller camps, and resource processing sites associated with the daily foragers.

There is limited evidence of Paleoindian occupation in Broome County, specifically in the lower Chenango and Susquehanna River Valleys. Ritchie (1980: 4) identified only three Paleoindian sites as of 1980. The site files search produced no Paleoindian sites within 3.2 km (2 mi) of the general project area. The lack of Paleoindian occupation in the vicinity of the general project area is related to the past environment. The present river channels did not become established until the mid-Holocene. Previous to this the Chenango and Susquehanna Rivers were unstable braided streams, hindering settlement along the river (Versaggi et al. 1999).

As glacial activity ceased, Early Archaic populations began to move into areas that had been previously inaccessible to early people. The extinction of mega fauna and other species required a switch to the exploitation of other resources. One Early Archaic component was identified at the Roberson Site at the confluence of the Susquehanna and Chenango Rivers. The limited presence of Early Archaic populations in the Southern Tier is probably related to an unstable environment present during the recession of glaciers. These populations were probably based more to the south and occasionally migrated north to access resources (Ritchie and Funk 1973: 337; Versaggi 2000).

Late Archaic sites (4000-1500 BC) are present in larger numbers than earlier sites in Broome County. Hunter-gatherer land use models (Ritchie and Funk 1973: 337-338; Funk 1993; Versaggi 1996) suggest that from the Late Archaic through the Middle Woodland, groups were organized in a logistical fashion, using the riverine and lake landscapes differently as the seasons changed. A system of group aggregation during abundant resource seasons, and small group foraging during dispersed resource seasons produced different types of sites, ranging from large residential camps to smaller seasonal camps to ephemeral resource procurement/processing areas. Lamoka and Castle Gardens sites (c. 2600-1900 B.C.) were the main representations of this phase in this region.

The Transitional period (1500-200 B.C.) designates a continuum from Late Archaic adaptations to those during the early parts of the Woodland period. The central characteristic of the period is the introduction of steatite vessels, with the production of the first pottery during this period. Other defining traits include the increased use of exotic lithic materials and broad spear points of the Susquehanna Tradition. Small, temporary camps, often oriented toward river or coastal areas, typify settlement patterns during this period (Ritchie and Funk 1973). The Transitional period is poorly understood in central New York, but sites of this period are abundant in the Susquehanna and Chenango Valley. The Broome Tech and John Moore Farm Sites are examples of such sites. Manifestations of the Susquehanna Tradition in the region include the Frost Island and Orient cultures with Frost Island sites being more numerous (Ritchie 1980). A variant of the Orient culture, Dry Brook, dating to 900-200 BC may also be present in the Upper Susquehanna and Upper Delaware River valleys (Versaggi and Knapp 2000; Kinsey 1973).

The Woodland period is defined by the gradual shift towards agriculture as a subsistence base, along with the associated sedentism necessary for agricultural pursuits. While these groups continued to forage for plant and animal resources, they relied heavily on cultigens as a primary food source. Permanent villages developed in the region, along with a matrilineal kin structure. Increased needs for defense later in the period prompted many groups to develop their villages on elevated land forms situated above major waterways. Late Woodland sites near the general project area include the Roundtop Site, Choconut Creek Village Site, Pearl Street Site, and Old Vestal Road Site. The Vestal Nursery Site shows continued occupation from the Late Archaic to the Late Woodland. The Owasco (AD 900-1300) and Iroquois (AD 1300 to contact) were the two main phases related to the Late Woodland period. Owasco sites are located primarily in the lowlands and on defensible ridges within the major river basins and lake inlets and outlets of central New York to gain the most access to fertile soils and local resources. Numerous Owasco sites are recorded throughout the Susquehanna and Chenango Valleys of New York.

III. METHODS

3.1 Field Methods

Excavations proceeded by hand using shovels and trowels. Units were excavated using arbitrary levels within natural layers of soil. All soil removed in this manner was screened through ¼ inch wire mesh to standardize recovery of artifacts, and artifacts were noted and bagged by level. The vital information for each unit was recorded level by level on standardized forms. Excavation of each unit continued until two sterile levels within the B-horizon were encountered. Each unit was photographed after it was fully excavated. Additional photos were taken if significant artifacts or features were discovered in a specific level. A profile was drawn at the end of each unit's excavation. The excavators of each unit characterized the soil layers from standardized categories using a Munsell color chart.

If features were identified during unit excavation, they were systematically excavated using the normal PAF process. First, their boundaries were defined by troweling, then plan views were drawn and the feature was photographed. Soil discolorations, post-holes, etc., were cross-sectioned to obtain a vertical profile. The remaining half was bisected to obtain a perpendicular profile. Standard-sized (approximately 10 liter, where possible) soil samples for flotation were collected. The goal for all feature excavation was to obtain information on feature structure and content, and to obtain carbonized material for radiometric dating.

3.2 Laboratory Methods

Following fieldwork, all artifacts were processed and analyzed in the laboratories of PAF. Processing included washing and re-bagging artifacts and cross-checking the artifact tags. Lithic artifacts were identified as tools or as debitage/cores. Debitage was described by subtype (non-cortical, bifacial edge, bipolar core, blade, etc.), lithic material, presence or absence of utilization, and whether the flake has been subjected to heat. Microflakes were described by subtype, counted, and weighed.

Sherds larger than 2 cm (0.8 in) were catalogued with the following baseline attributes: represented vessel segment (e.g., body, neck, or rim); surface treatment; temper type; and decorative technique (e.g., cord-impressed, incised, or punctated). A typological analysis was also conducted, grouping sherds into categories (types) based on the assumption that types represent shared traits chosen repeatedly by potters of a society. A type is defined as a "cluster of attributes shared by a group of individuals which distinguishes the group, individually and collectively, from other groups and individuals" (Heisey 1971:45). New York State ceramics are mainly typed by their neck and collar decorations (Lenig 1965; MacNeish 1952; Ritchie and MacNeish 1949). Rim shape, lip shape, base shape, temper, and surface treatment are also temporally sensitive. Grit temper was typical during the entire Woodland period in central New York (Prezzano 1992:140). Pottery sherds smaller than 2 cm (0.8 in) were classified as sherdlets, and subject to no additional analysis.

The resulting artifact catalogues were entered into a relational database management program (Paradox) to facilitate subsequent analysis, and are included in Appendix III. All of the artifacts, notes, and other documentation of the site examination are curated according to federal (36 CFR Part 79) and state (NYAC 1994) guidelines in the facilities of the Department of Anthropology at Binghamton University.

IV. SUMMARY OF EXCAVATIONS AT THE TRADITIONS PRECONTACT SITE (SUBi-3070; A00714.000094)

By Michael Jacobson

The Phase 1 survey identified this site within a larger impact area, originally slated for an access road plus parking. The site covered approximately 27,519 m^2 (2.8 ha, 6.8 ac) within the original impact area. The artifacts recovered during survey suggested a possible Transitional period occupation, based solely on the presence of rhyolite materials (in addition to common chert artifacts). Later plans eliminated this parking area (and therefore most of the impacts to the site), but these plans were unable to avoid impacts from a proposed access road. Vertical impact for the access road was expected to be about 12-18 inches (30-46 cm). PAF recommended a Phase 2 site examination within site areas that overlapped proposed impact areas to determine if the sites were eligible for the National and State Registers of Historic Places.

The Traditions Site is located on a lawn in the southern portion of the Traditions at the Glen Resort and Conference Center west of the resort's current entrance drive in the Town of Union, Broome County, New York (Figure 1.1, p. 2; Photo 4.1, below). The site is situated on a terrace approximately 250 m (820 ft) north of the Susquehanna River (Figure 1.2, p. 2). The site is in an area subject to occasional flooding. It was used as a golf course during the 20th century. The approximate elevation of the site is 253 m (830 ft) ASL.

Photo 4.1. Facing south across Traditions Precontact Site (SUBi-3070).

4.1 Site-Specific Field Methods

The Phase 2 site examination included the excavation of 17 1 x 1 m (3.3 x 3.3 ft) units (Figure 4.1, p. 10). Thirteen of these units were placed in proximity to survey STPs that were positive for precontact materials. The rest of the units were placed to add coverage in the northern portion of the site to aid in determining intra-site variations of cultural material. Test units were positioned using a Sokkia total station and based on the grid established during the initial survey with a datum placed at the Phase 1 Shovel Test Pit (STP) A3 with the coordinates of N600 E600 Z100 and a backsight located north along the transect established during the initial survey at coordinates N760.61 E600. Following the removal of the sod, crews excavated an initial arbitrary 25 cm (10 in) level associated with a plow zone. Below the initial 25 cm (10 in) plow zone or when a soil change was identified, crews excavated 5 cm (2 in) arbitrary levels within the soil layer into sterile subsoil. Shovel test pits were excavated at the bottom of unit

excavation to determine if any deeply buried cultural deposits were present. The 17 units sampled approximately 0.4% of the site area.

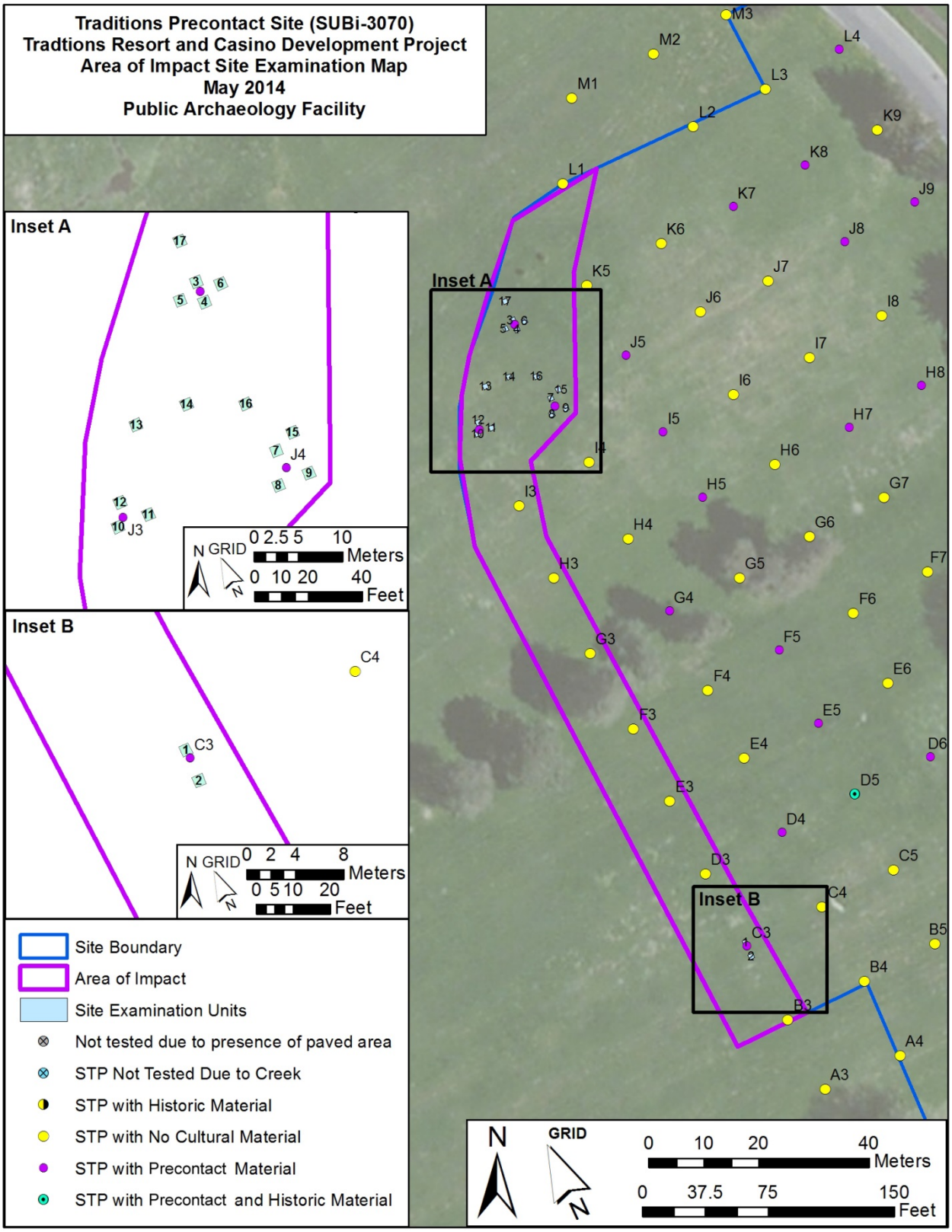

Figure 4.1. Site Examination Map of Traditions Precontact Site (SUBi-3070).

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4.2 Stratigraphy

Deposits for the site were fairly uniform across the area of impact. No areas of disturbance were noted. Site stratigraphy within the access road APE followed two general patterns. The main pattern consisted of an Ap horizon overlaying a sterile B horizon (Figure 4.2, below; Photo 4.2, p. 12). The Ap horizon consisted of a dark brown (10YR3/3) silt loam and ranged in depth from 20 to 35 cm (8 to 14 in) below the surface. The B horizon consisted of a dark yellowish brown (10YR4/6) silt loam. The second stratigraphic pattern was present in the northern section of the site examination in Units 3, 4, 5, 6, and 17 (Figure 4.3, p. 12; Photo 4.3, p. 13). The stratigraphy included the same Ap horizon with a depth from 30 to 35 cm (12 to 14 in) below the surface. The main difference was that the B horizon consisted of a pale brown (10YR6/3) silt clay with mottles of strong brown (7.5YR5/6) silt clay that was suggestive of wetland soils. This may indicate some earlier Holocene ponding area that infilled with Unadilla soils. The units ranged in depth from 40 to 60 cm (16 to 24 in) below the surface with an average depth of 47 cm (19 in) below the surface.

Table 4.1 (below) shows the distribution of artifacts by horizon. The majority of the artifacts (n=525, 83%) came from the Ap horizon. The transition between the Ap and B horizons contained 12% (n=78) of the site's assemblage, while approximately 5% (n=30) of the site's assemblage was recovered from the B horizon. The presence of artifacts in the B horizon is most likely due to bioturbation activity, such as rodent burrows or roots causing movement of cultural materials from the Ap horizon to the sterile subsoil.

Table 4.1. Artifact counts and soil depth at the Traditions Precontact Site (Area of Impact).

Context	Count	Percent
A	525	82.81
A/B	78	12.30
B	30	4.73
Wall Fall	1	0.16
Total	634	100

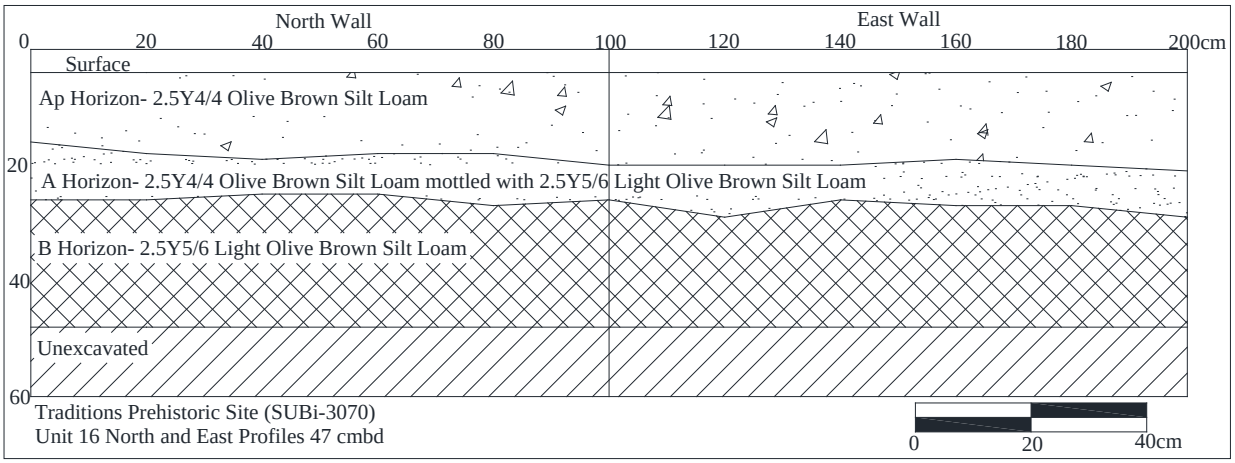

Figure 4.2. Unit 16 profile, north and east walls.

Photo 4.2. North wall, Unit 16.

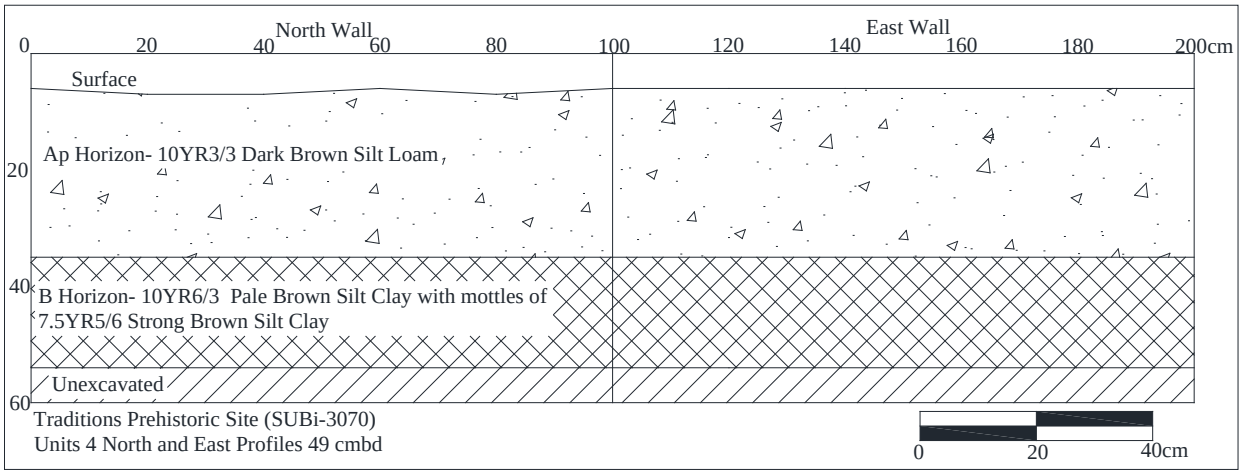

Figure 4.3. Unit 4 profile, north and east walls.

Photo 4.3. North wall, Unit 4.

4.3 Features

No features were identified during the site examination of the area of impact for the Traditions Precontact Site.

4.4 Chronology

The Traditions Precontact Site appears to be a single component site, based on the testing within the area of impact. There is no evidence of vertical stratification as the site has been plowed historically. The projectile point assemblage included an Orient point and a possible Orient point base (Photo 4.4, p. 14). Orient points are diagnostic of the Transitional Period (1500-200 BC), which is consistent with the presence of rhyolite. A serrated side notched and a broad side-notched were also recovered from the site, both unclassified.

4.5 Artifact Summary

The site examination of the Traditions Precontact Site recovered 627 precontact artifacts from the 17 test units. Table 4.2 (p. 14) provides descriptions and counts of these artifacts. The precontact artifacts included 8,773 grams of fire-cracked rock (FCR), 398 pieces of Onondaga chert debitage, 28 pieces of rhyolite debitage, nine pieces of debitage made of unidentified material, one Onondaga chert Orient Fishtail projectile point, one Onondaga chert unclassified side notch projectile point, three Onondaga chert projectile point bases, one Onondaga chert projectile point tip, one Onondaga chert biface fragment, one Onondaga chert retouched unifacial piece, two choppers, 2 hammerstones (Photos 4.5 and 4.6, p. 15), one polished stone, and two pieces of unidentified material. The projectile points included an Orient Fishtail and an unclassified side notched piece; the three projectile bases included a possible Broad Side Notch, a possible Orient Base, and a side notched piece. The lithic raw material consisted of mostly Onondaga chert followed by rhyolite. Rhyolite is a non-local material, originating primarily from the Mid-Atlantic Chesapeake Bay region. It is usually associated with Transitional period groups in the interior Northeast, and central New York. The unidentified materials included a possible quartz, limestone, Normanskill/Mt. Merino chert, light brown/gray chert, light gray/white chert, and white translucent chert. Several of the flakes appear to have been utilized as expedient tools. One of the hammerstones is battered on both ends, while the other is slightly battered on one end.

Table 4.2. Artifact counts and distribution at the Traditions Precontact Site (Area of Impact).

Artifact Type	Count	Weight (grams)
Chopper	2	577
Fire-cracked rock	175	8,773.00
Hammerstone	2	995
Biface	1	3.28
Bipolar Flake	1	4.21
Core chunk	1	12.48
Cortical flake	40	44.21
Non-cortical flake	385	108.09
Core Shatter	8	9.49
Projectile Points	6	25.28
Polished Stone	1	396
Unidentified Stone Material	2	2.78
Unifacial	1	3.3
Unmodified Limestone and Chert Rock	2	109

Photo 4.4. Projectile points and biface: Top row, L to R: Biface fragment, unit 6, level 2; point base, unit 3, level 5; point base, unit 6, level 1; point tip, unit 17, level 1.
Bottom row, L to R: Orient projectile point, unit 3, level 1; Side-noted, serrated, projectile point, unit 3, level 3; Broad side-notched projectile point, unit 16, level 1.

Photo 4.5. Groundstone tools:Left: Chopper, unit 17, level 2. Right: Chopper, unit 3, level 2.

Photo 4.6. Groundstone tools: Left: Hammerstone, unit 17, level 2. Middle: Hammerstone, unit 15, level 1. Right: Polished stone, unit 15, level 1.

The chipped lithic assemblage was made primarily from Onondaga chert (n=406) (Table 4.3, below). Rhyolite (n=28) was also present. Rhyolite was found at the Glen Site (n=8) and Heritage Site (n=1), which suggests a Transitional occupation.

Table 4.3. Lithic raw material types identified at the Traditions site.

Lithic Raw Material Types	Count	Weight (grams)
Onondaga Chert	406	191.85
Rhyolite	28	12.08
Unidentified Material	1	2.17
Quartz	1	0.61
Light Brown/Gray Chert	1	0.07
Light Gray/White Chert	2	1.1
Limestone	3	3.04
Normanskill/Mt. Merino Chert	2	1.95
White Translucent Chert	1	0.25
Total	445	213.12

Figure 4.4 (p. 17) shows the distribution of artifacts across the impact area of the Traditions Precontact Site. Both FCR and lithic artifacts are clustered at the north end of the area of impact. Units 1 and 2 had a very light density of precontact artifacts. FCR appears to be clustered at the northern most part of the area of impact, while lithic artifacts are clustered in the northeast section near Units 7, 8, 9, and 15. All the diagnostic artifacts were recovered from the northern section of the area of impact. The projectile points and point fragments were recovered in a cluster including Units 3, 6, and 17. A projectile point base was found a little south of this cluster in Unit 16.

4.6 Summary and Recommendations

Based on the analysis of the results of the Phase 2 Site Examination of the Traditions Precontact Site, the site appears to be a single component camp site occupied during the Transitional Period (1500-200 B.C.) located on the flood plains north of the Susquehanna River. The site's chronology is based on an Orient Fishtail projectile point, a possible Orient Fishtail projectile point base, and the presence of rhyolite. The Phase 1 cultural resource survey identified the site's boundaries as extending east of the area of impact. The testing presented here only considered that portion of the site within the area of impact. Within the area of impact, cultural materials were clustered to the north. No features were identified during the site examination, but the clustering of artifacts and the presence of fire cracked rock, suggests that there were activities and hearth type features in the northern section of the area of impact. Given the preliminary results (abundant lithic artifacts, formal and expedient tools, and groundstone tools), the site has high data and research potential.

Based on the preliminary site examination results, we recommend that the Traditions Precontact Site is eligible for the National Register of Historic Places under Criterion D, in that it has produced initial information showing the site's research potential. Data potentials for the site include:

- **Diagnostic artifacts** aid in the chronological assessment of when the site was used. The present assemblage includes Transitional Period diagnostic projectile points (1500-200 B.C.).

- **Formal tools (projectile points, bifaces)** can contribute to an interpretation of site function and possibly seasonality through both micro and macro analysis.

- **Lithic debitage**, analyzed in the context of reduction sequences and raw material management, can contribute to ongoing research on the association of lithic reduction strategies with site type and group mobility.

- **Spatial clustering of artifacts** has the potential to contribute to interpretations of site structure and activity differentiation.

If impacts to the site cannot be avoided, we recommend mitigation of these impacts through a Phase 3 data recovery. If impact avoidance is a feasible option, the limits of the Traditions Precontact Site (with an approved buffer distance) should be visibly fenced off during all phases of project area construction/development to protect the area from any accidental encroachment and disturbance.

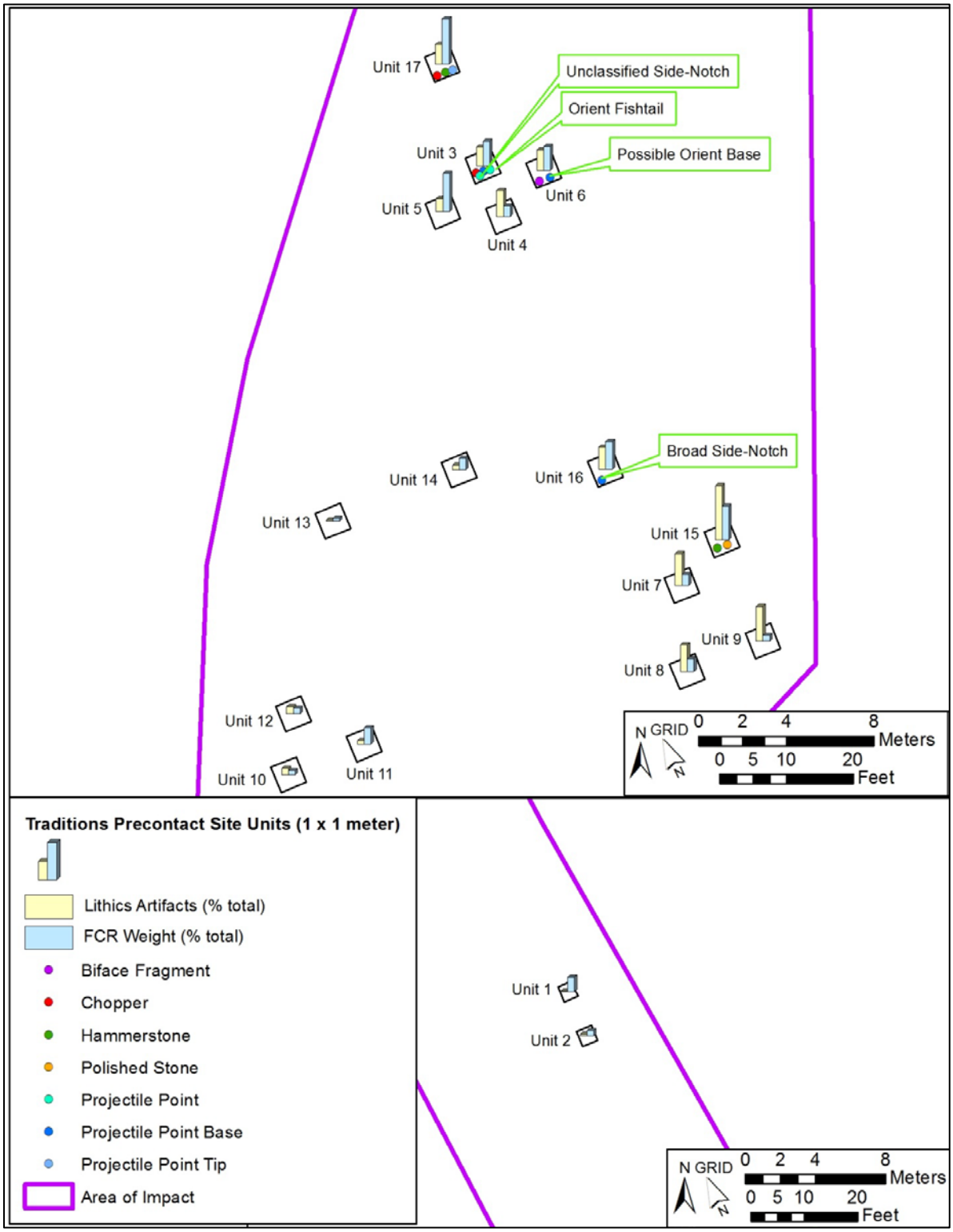

Figure 4.4. Artifact distribution map per test unit for the Traditions Precontact Site area of impact.

V. SUMMARY OF EXCAVATIONS AT THE GLEN PRECONTACT SITE (SUBi-3071; A00714.000095)

By Sam Kudrle

The Public Archaeology Facility (PAF) has completed the Phase 2 site examination for the Glen precontact site (SUBi-3071), identified during a 2014 reconnaissance survey of the proposed Traditions casino and resort development project (Jacobson 2014). Testing during the Phase 1 survey produced information that characterized the site as a lithic scatter (average 2.2 artifacts for positive STPs excluding a high density in STP Y1/3mE) with the potential for features. Six of the nine STPs within the site area produced 51 precontact artifacts, with the majority (n=40) being fire-cracked rock coming from STP Y1/3mE. The site is bounded on the south by a stream and on the north, west, and east by the presence of negative STPs. The site measures approximately 20 x 10.5 m (66 x 34 ft), for a total area of 210 m^2 (2,260 ft^2, 0.02 ha, 0.05 ac) within the project limits. The site is within an area slated for parking near the proposed casino building. Anticipated vertical impacts will involve scraping down 6-12 inches (20-30 cm), and then placing volumes of fill on top of the area. PAF recommended a Phase 2 site examination to determine National Register eligibility.

The Glen site (Photo 5.1, below) is situated at the base of the valley wall overlooking the Susquehanna River. The approximate elevation of the site is 274 m (900 ft) ASL, and current landuse includes both grassy fields and woodlands. Soils within and adjacent to the site include a combination of glacial lacustrine silts and upland tills. The Glen site was identified in the grassy and wooded northwest portion of the project area, on the east side of Eagle Drive approximately 500 meters north of the intersection of Eagle Drive and Country Club Road.

Photo 5.1. View northeast toward the Glen site.

5.1 Site-Specific Field Methods

Fieldwork for the Phase 2 involved the excavation of 10 additional STPs within the site area at 5 meter intervals, and the excavation of 10 test units (1 x 1 meter). Test units were excavated by first removing the sod, and then continuing in 5 cm (2 in) arbitrary levels through the A-horizon and into the sterile subsoil. Since it was not clear if the site had ever been plowed, the 5 cm level methodology was the best approach to the excavation. The 10 test units and 10 STPs sampled approximately 4.7% of the site area. Figure 5.1 (p. 19) shows the placement of the excavation units and STPs within the site area. This figure also provides an overview of feature locations.

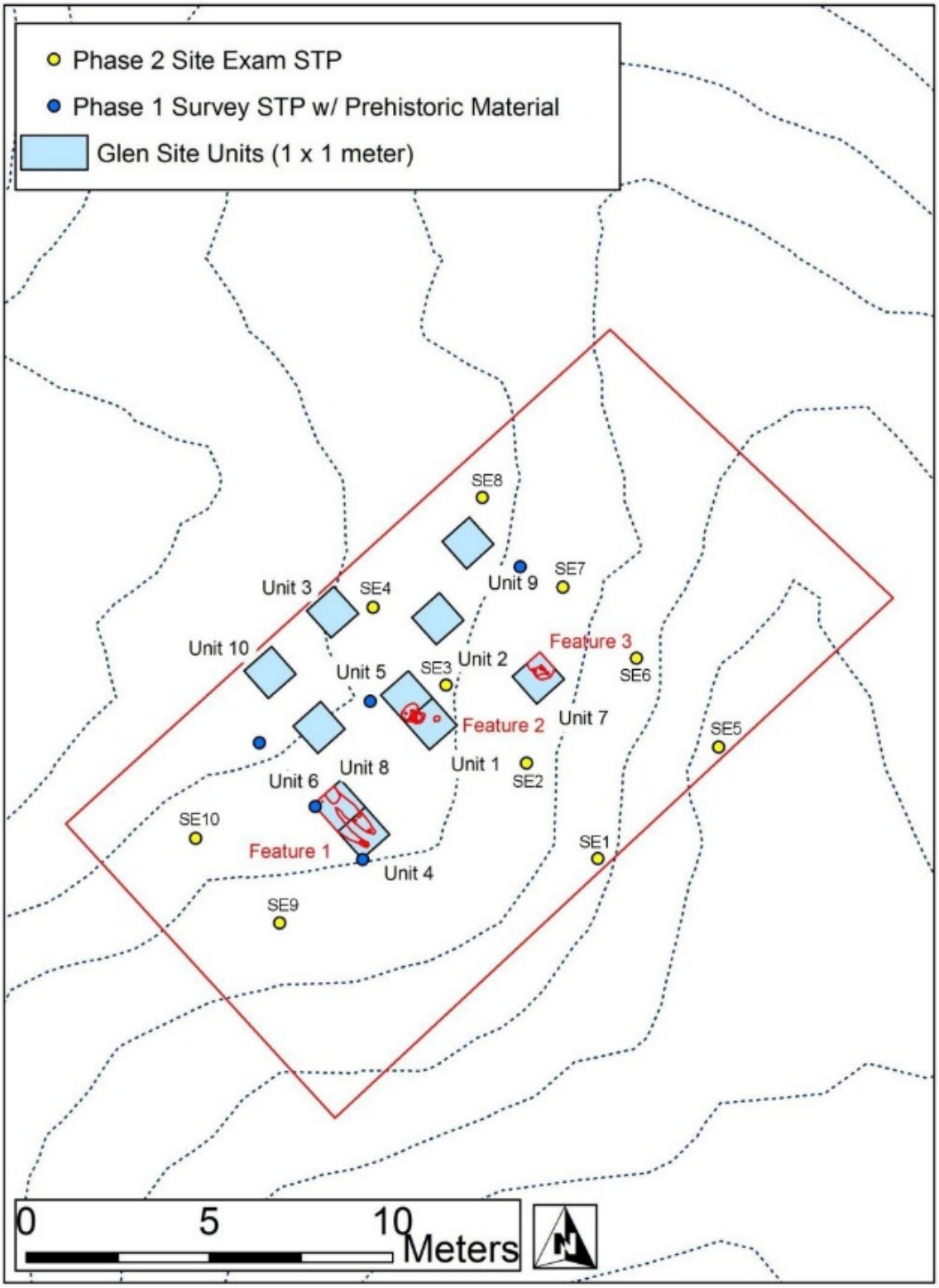

Figure 5.1. Layout of the Glen site at the completion of the Phase 2 Site Examination.

5.2 Stratigraphy

PAF archaeologists recovered over 850 lithic artifacts, several pieces of clay pottery, groundstone tools, and an abundance of fire-cracked rock (FCR) from the site examination excavation at the Glen site. In the course of unit excavation, three precontact features (two likely hearths and one soil stain) were identified and excavated at the base of the A-horizon in units 1/5, 4/6, and 7.

Unit excavation at the Glen site revealed soil profiles typical of both lacustrine silts and upland till deposits. The A-horizon appeared as a dark brown silt loam with occasional cobbles and till rocks with an average depth of approximately 35 cm (14 in). The underlying B-horizon (subsoil) appeared as a lighter reddish-brown silt loam with sporadic cobbles and till rocks; an elevated water table was encountered in all units between 35 and 40 cm below the ground surface.

Almost all precontact materials were located within the A-horizon and the subsoil transition, approximately 0-30 cm (0-10 in) below ground surface (Table 5.1, below). A minimal amount of precontact material was identified within the first few inches into the B-horizon (subsoil). A representation of the typical site soil profile is presented in Photo 5.2 (p. 21) and Figure 5.2 (below).

Table 5.1. Artifact counts and soil depth at the Glen Precontact Site.

Depth (cm)	Soil Horizon	Lithics	FCR	Pottery	Groundstone	Total
<10	A-horizon	11	38			49
10 to 20	A-horizon	493	785	2	2	1282
20 to 30	A/B-horizon	326	179	3	1	509
30 to 40	B-horizon (subsoil)	40	2	3		45
40 to 50	B-horizon (subsoil)					
>50	B-horizon (subsoil)					
Total		870	1004	8	3	1885

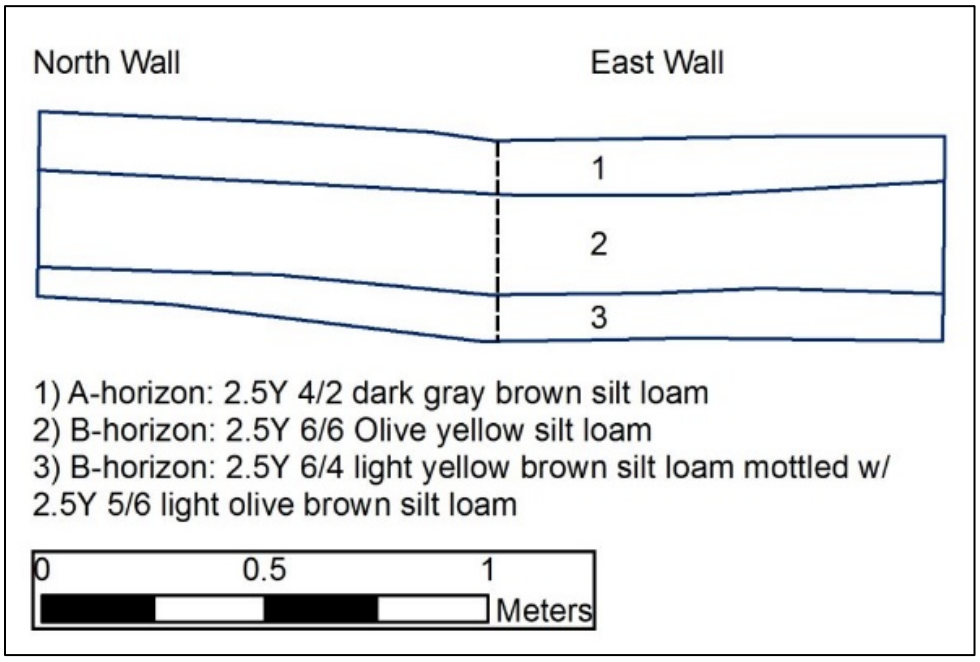

Figure 5.2. Representative soil profile (unit 2) for the Glen site.

Photo 5.2. East wall soil profile fron unit 2 of the Glen site.

5.3 Features

During the Phase 2 Site Examination, PAF archaeologists identified three precontact cultural features at the base of the A-horizons in units 1/5, 4/6, and 7. All three features were drawn in plan-view, photographed in the field, and excavated to recover flotation soil samples. Feature drawings and photographs are provided in Figures 5.3-5.5 (pp. 22-27) and Photos 5.3-5.6 (pp. 22-26). A summary of the three features is provided in Table 5.2 (below) and pages 22-26.

Table 5.2. Summary information for features identified at the Glen site.

Feature	Units	Feature Type	Area	Depth
Feature 1	4 and 6	Hearth	1.06 square meters	< 7 cm thick
Feature 2	1 and 5	Hearth	0.22 square meters	20 cm thick
Feature 3	7	Unknown/Stain	0.32 square meters	<5 cm thick

5.4 Chronology

The Glen precontact site appears to be a small multi-component camp(s) situated on a bluff overlooking the Susquehanna River. Site chronology is linked to both the Transitional Period (one point from unit 9 looks similar to the Susquehanna Broad type), as well as the Middle Woodland phase (AMS date from Feature 2 and possibly the small pottery fragments). Charred nutshell was identified in the soil samples from Feature 2 and submitted to Beta Analytic (Miami, Florida) for AMS dating. The results were returned on May 6, 2014 with a 2 sigma calibrated date of AD 570 - 655 and suggest a Middle Woodland association for Feature 2. This date could be consistent with the pottery recovered from the site.

Feature 1 (Figure 5.3, below; Photo 5.3, below) appeared as smears of charcoal, fire-cracked rock (FCR), and a few carbonized bone fragments at the base of the A-horizon (16 to 18 cm below the surface) in units 4 and 6. Feature soils were shallow (<7 cm thick) and unevenly distributed throughout the two units, but did contain copious amounts of fire-cracked rock, charcoal, and a few flecks of carbonized bone. Five soil flotation samples were recovered from Feature 1.

Photo 5.3. Plan view of Feature 1.

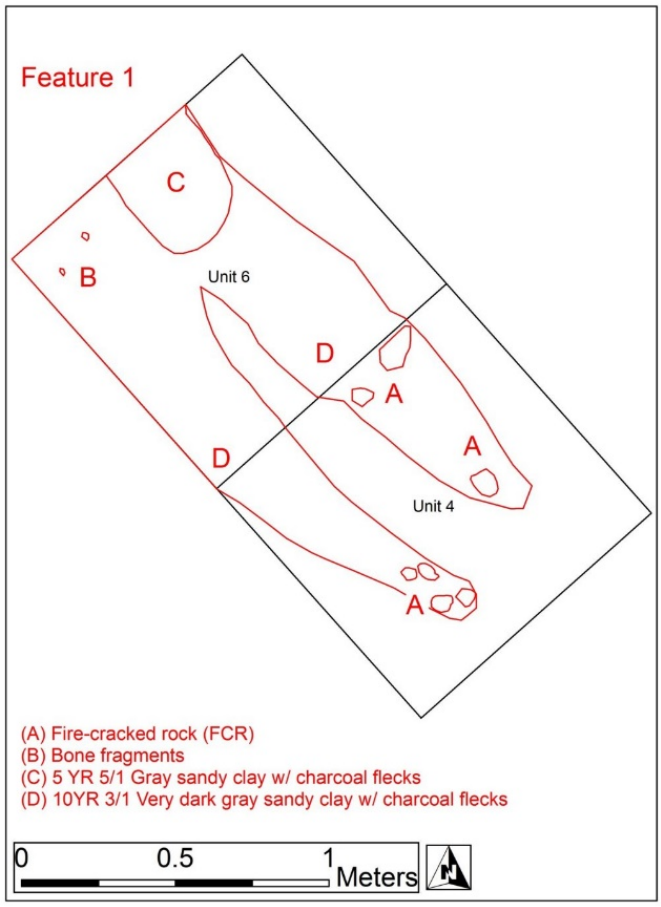

Figure 5.3. Plan-view of Feature 1 (units 4 and 6).

Feature 2 (Figure 5.4, p. 25; Photos 5.4 and 5.5, below- p. 24) was a precontact hearth identified in units 1 and 5 at the base of the A-horizon (20 cm below the surface). The feature appeared roughly basin shaped in profile (east-west) and extended to a depth of 40 cm below the ground surface. Matrix soils included an abundance of fire-cracked rock and charcoal. Four soil flotation samples were recovered from Feature 2. Charred nutshell identified in the soil samples from Feature 2 returned a 2 sigma calibrated date of AD 570 – 655, which suggests a Middle Woodland hearth feature.

Photo 5.4. Plan-view of Feature 2.

Photo 5.5. Profile of Feature 2.

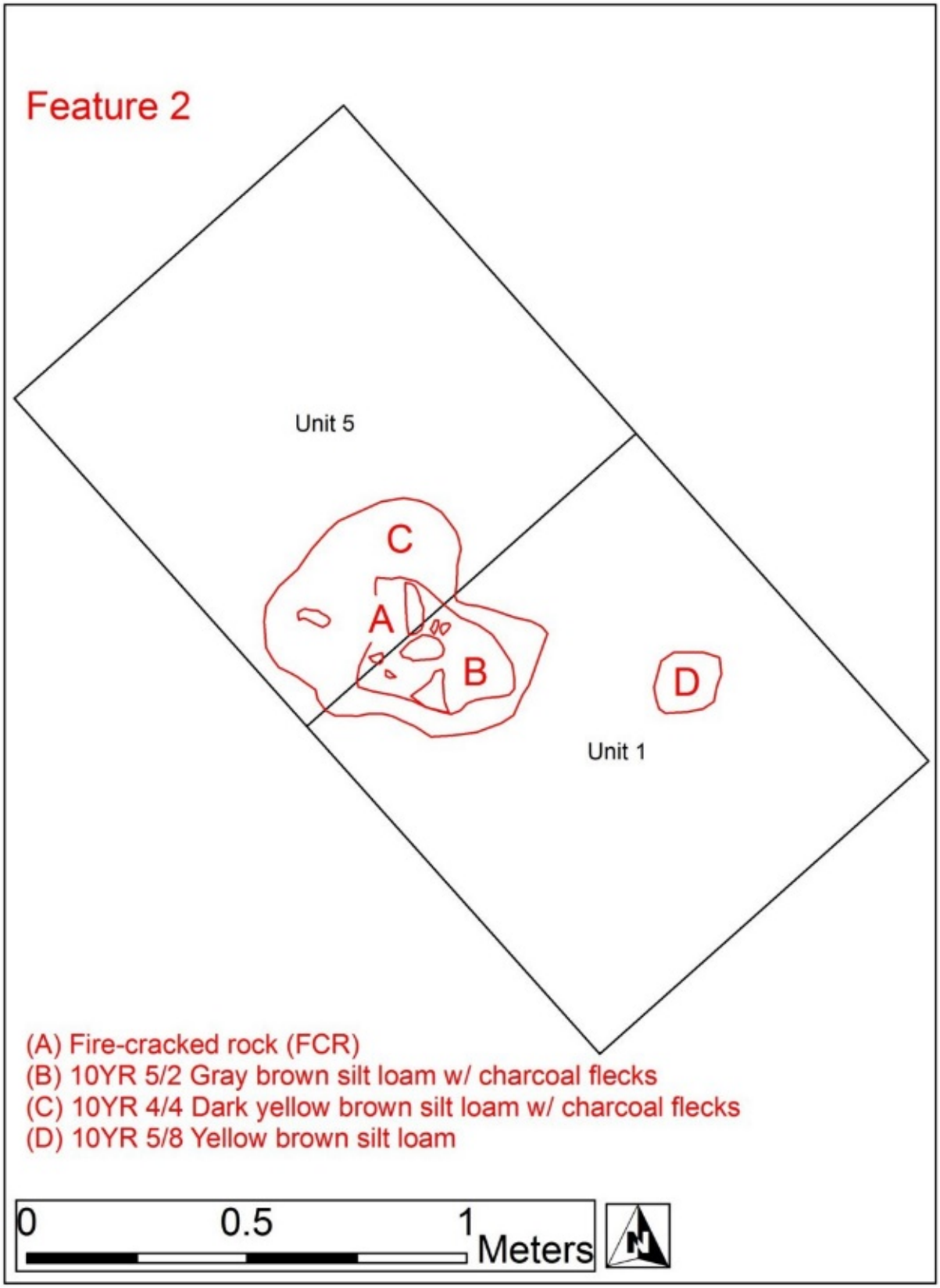

Figure 5.4. Plan-view of Feature 2 (units 1 and 5).

Feature 3 (Figure 5.5, p. 27; Photo 5.6, below**)** appeared as a small dark stain with flecks of charcoal at the base of the A-horizon in the northern half of unit 7. The feature soils were shallow (<5 cm thick) and contained some fire-cracked rock and flecks of charcoal. One soil flotation sample was recovered from Feature 3.

Photo 5.6. Plan view of Feature 3.

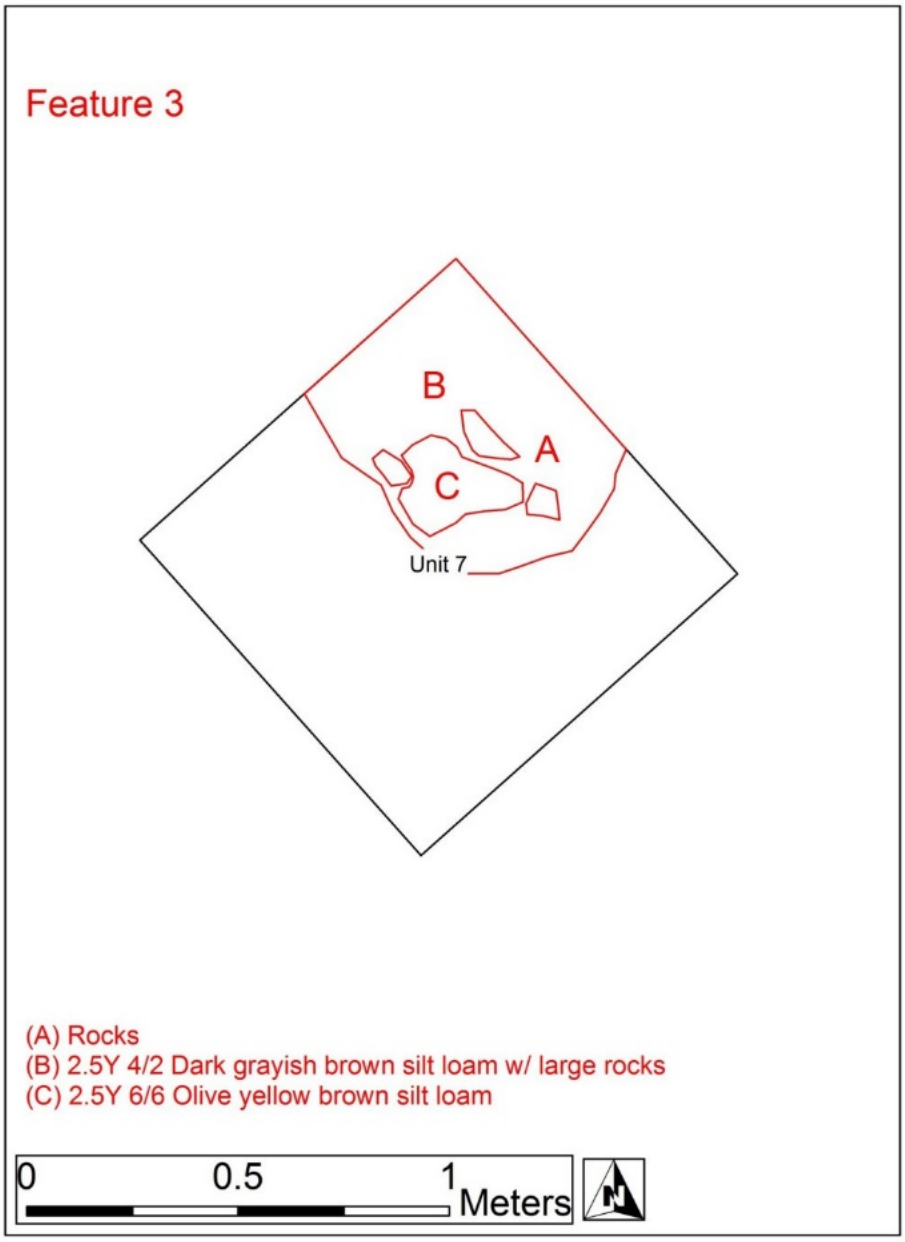

Figure 5.5. Plan view of Feature 3 (Unit 7).

5.5 Artifact Summary

The artifact descriptions and counts are presented in Table 5.3 (p. 28). Precontact artifacts include 61,718 grams of fire-cracked rock (FCR), 8 pieces of pottery, 3 projectile points, 862 pieces of chert debitage, 5 biface fragments, 1 hammerstone, and 2 groundstones. The projectile points include a Transitional Period Susquehanna Broad type (approximately 1700 to 1000 BC), one untyped broad side-notched point, and one very small triangular point. Lithic raw material types include Onondaga chert (most of the site assemblage), rhyolite, jasper, and some unidentified materials (Table 5.4, p. 28). Rhyolite and jasper are non-local materials (formations occur primarily within the Mid-Atlantic) and tend to be associated with Transitional Period groups throughout the Northeast; non-local materials also occurred in somewhat higher frequencies during the Middle Woodland periods (AD 200 to 800). One of the unidentified materials is a light grayish shale-like chert with ferrous staining; others are a few pieces of gray/white chert, white/blue chert, and a brown/gray chert. Debitage types include 805 non-cortical flakes, 52 cortical flakes, 4 pieces of chert shatter, and one core.

The pottery fragments are grit tempered undecorated small sherds, some showing distinct coil breaks. Several of the larger flakes (roughly 12%, n=100) appear to have been utilized as expedient tools; at least 33 (4%) shows signs of burning. The two groundstone pieces consist of an elongated "projectile/drill-like" rock of reddish sandstone or slate; the other piece is a small "flake-like" rock of reddish sandstone or slate. The hammerstone is roughly hand-sized and battered on both ends. Photographs of the projectile points, biface fragments, the larger groundstone, and the pottery fragments are provided in Photos 5.7-9 (pp. 29-30).

Table 5.3. Summary of artifact types identified at the Glen site.

Artifact Type	**Count**	**Weight (grams)**
Bifaces	5	28.0
Cortical flakes	52	72.9
Core	1	28.5
Fire-cracked rock	1004	61718.0
Groundstones	2	14.5
Hammerstone	1	119.0
Non-cortical flakes	805	506.1
Pottery	8	14.1
Projectile Points	3	12.2
Shatter	4	7.1

Table 5.4. Lithic raw material types identified at the Glen site.

Lithic Raw Material Types	**Count**	**Weight (grams)**
Onondaga chert	757	504.68
Light gray shale/chert with iron stains	91	119.66
Rhyolite	8	18.38
Light blue/gray chert	4	2.23
Unidentified material	4	2.44
Jasper	2	1.25
Limestone	2	3.67
Brown/gray chert	1	0.59
Fine-grain white/gray chert	1	1.84
Total	870	654.74

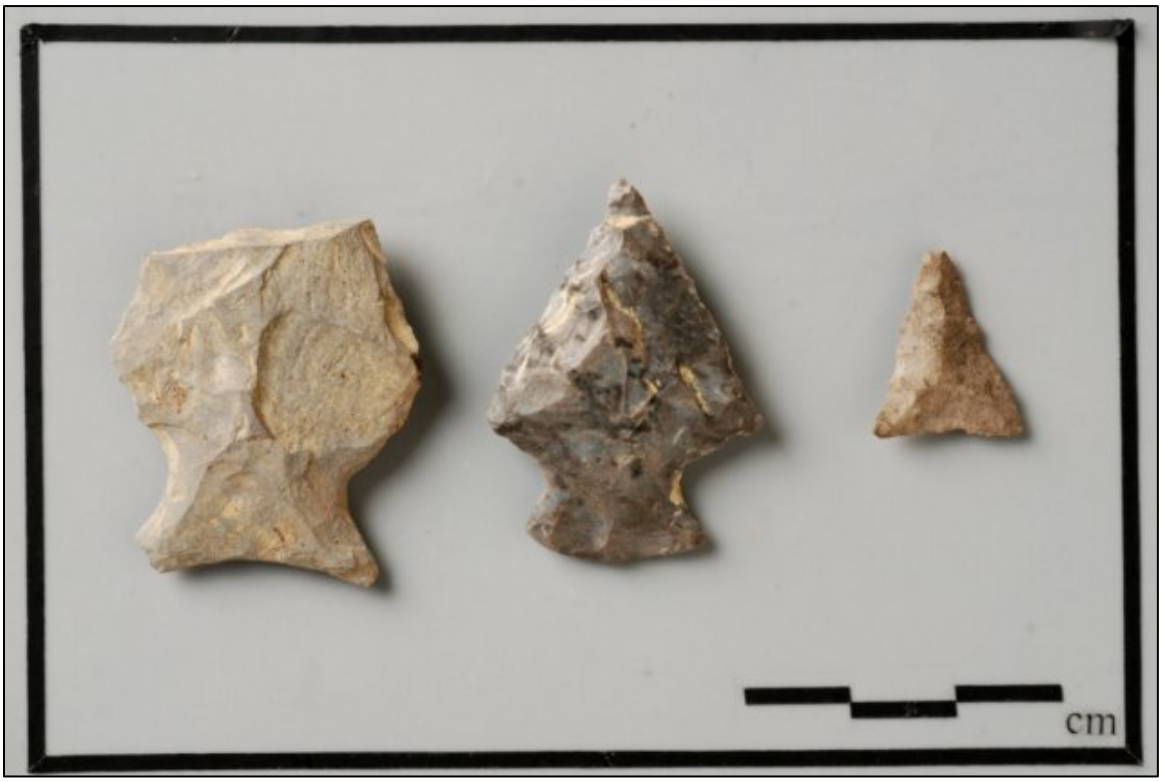

Photo 5.7. Projectile points recovered from the Glen site.
(left-right: Susquehanna point, unit 9; side-notch point, unit 5; triangular point, unit 1)

Photo 5.8. Biface fragments and groundstone recovered from the Glen site.

Photo 5.9. Pottery fragments recovered from the Glen site.

Lithic artifacts appear to cluster primarily through the northern portion of the site at units 2-4 and 9 (Table 5.5, below). Fire-cracked rock (FCR) is concentrated in the southern half of the site around Features 1 and 2. Formal tools (points and biface fragments) were recovered from units 1, 2, 3, 5, 6, and 9, but cluster primarily around Features 1 and 2. Pottery was found units 1, 2, and 5, but similar to the tool distribution, pieces are concentrated around Features 1 and 2. A site artifact distribution map based on counts of artifact types and FCR weight is presented in Figure 5.6 (p. 31). Lithic artifacts per square meter is approximately 84 at the Glen site; the range per square meter is 14 to 343.

Table 5.5. Artifact counts and distribution at the Glen Site.

Location	Total Lithics	FCR Weight	Total Utilized	Points	Bifaces	Pottery	Groundstone
Unit 1	27	3,890	3	1		1	
Unit 2	115	5,047	13		1	2	
Unit 3	87	7,200	13				1
Unit 4	128	19,000	9				
Unit 5	51	6,400	7	1	1	5	1
Unit 6	41	9,800	4		2		1
Unit 7	24	2,031	3				
Unit 8	11	700	2				
Unit 9	343	4,800	40	1	1		
Unit 10	14	1,850	3				
STPs	27	1,000	3				
Total	868	61,718	100	3	5	8	3

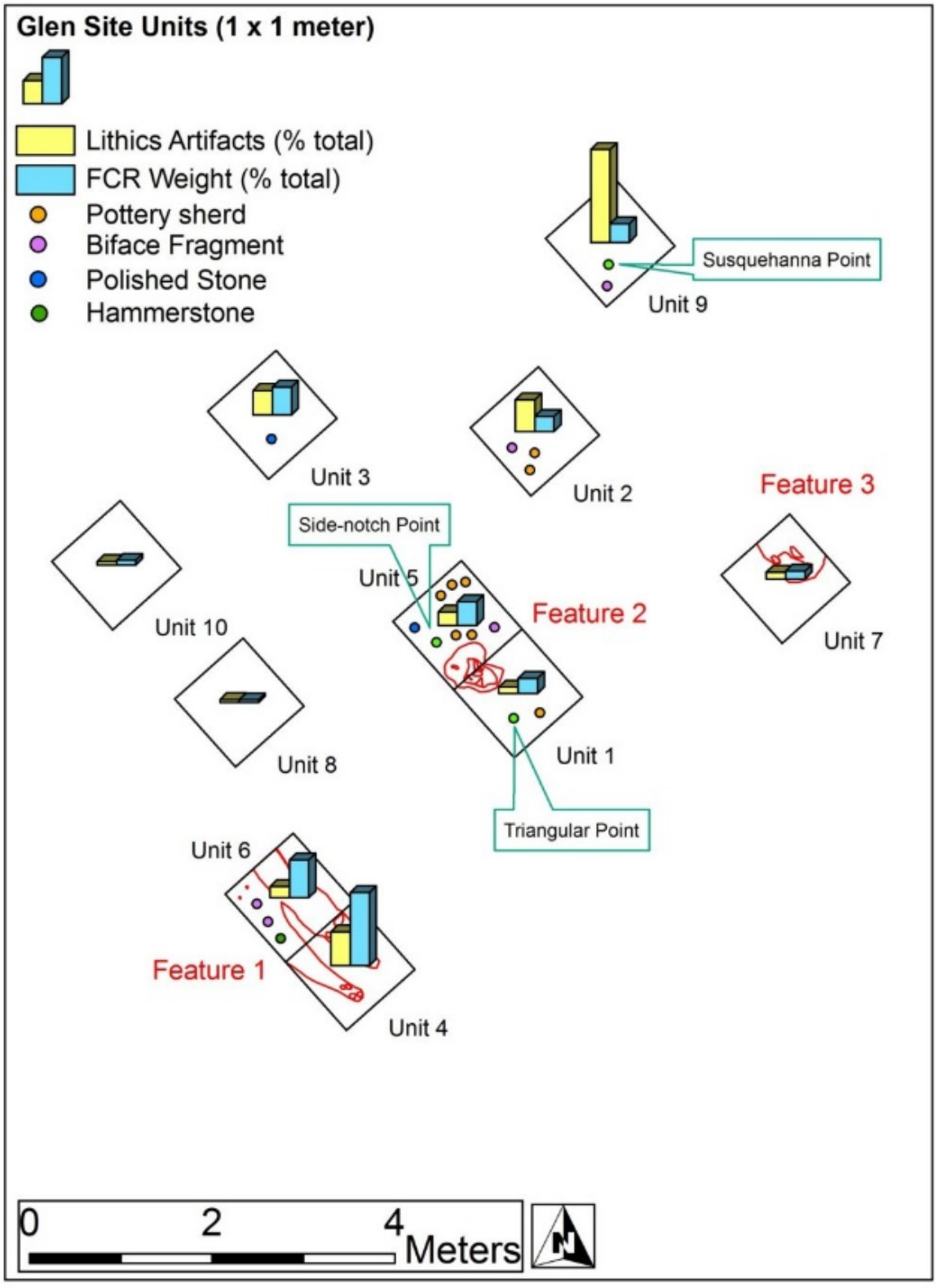

Figure 5.6. Artifact distribution map per test unit for the Glen site.

5.6 Summary

From the data analysis of the Phase 2 Site Examination assemblage, the Glen Precontact Site appears to be a small multi-component camp(s) situated on a bluff overlooking the Susquehanna River. Site chronology is linked to both the Transitional Period (one point from unit 9 looks similar to the Susquehanna Broad type), as well as the Middle Woodland phase (AMS date from Feature 2). The camp was likely organized around at least two hearths (Features 1 and 2), and inferred activities included hunting (or preparation for hunting trips), lithic tool production and the use of some clay pottery and groundstone. Given the preliminary results (abundant lithic artifacts, formal and expedient tools, groundstone tools, and cultural features with carbonized remains), the site has high data and research potential.

Based on the preliminary site examination results, we recommend that the Glen Precontact Site is eligible for the National Register of Historic Places under Criterion D, in that it has produced initial information showing the site's research potential. Data potentials for the site include:

- **Diagnostic artifacts** aid in the chronological assessment of the site. The present assemblage includes diagnostic projectile points (Transitional [1500-200 B.C.]) and potential Middle Woodland (A.D. 200-800) pottery.

- **Formal tools (projectile points and bifaces)** can contribute to an interpretation of site function and possibly seasonality through both micro and macro analysis.

- **Lithic debitage**, analyzed in the context of reduction sequences and raw material management, can contribute to ongoing research on the association of lithic reduction strategies with site type and group mobility.

- **Cultural features** (such as hearths) contain carbon suitable for dating, as well as botanical remains to aid in paleo-environmental reconstruction and determination of diet and seasonality. Charred nutshell from Feature 2 (hearth) has already been dated to the Middle Woodland Period (A.D. 200-800).

- **Spatial clustering of artifacts** has the potential to contribute to interpretations of site structure and activity differentiation.

If impacts to the site cannot be avoided, we recommend mitigation of these impacts through a Phase 3 data recovery. If site avoidance is a feasible option, the limits of the Glen site (with an approved buffer distance) should be visibly fenced off during all phases of project area construction/development to protect the area against any accidental encroachment and disturbance.

VI. SUMMARY OF EXCAVATIONS AT THE HERITAGE PRECONTACT SITE (SUBi-3072; A00714.000096)

By Andrea Zlotucha Kozub

The site is located on the western side of the project area approximately 315 m (1033 ft) northwest of the resort's entrance drive. It is situated on a terrace approximately 525 m (1,722 ft) north of the Susquehanna River. The site is located on a slightly elevated portion of the terrace; Phase 1 STPs excavated in the surrounding area encountered wetlands soils, which suggests that the site is located on a prominence within wetlands. South of the site is an artificial terrace constructed as part of the golf course (Photo 6.1, below).

Photo 6.1. View facing west of the Heritage Site, situated on a slight elevation above former wetlands.

6.1 Site-Specific Field Methods

Fieldwork for the Phase 2 involved the excavation of six additional STPs within the site area at 5 meter intervals, and the excavation of six test units (1 x 1 meter) (Figure 6.1, p. 34). Test units were excavated by first removing the sod, and then continuing in 5 cm (2 in) arbitrary levels through the A-horizon and into the sterile subsoil. Since it was not clear if the site had ever been plowed, the 5 cm level methodology was the best approach to the excavation. Shovel test pits were excavated at the base of two units to verify that no deeply buried horizons were present. The six units sampled approximately 0.8% of the site area.

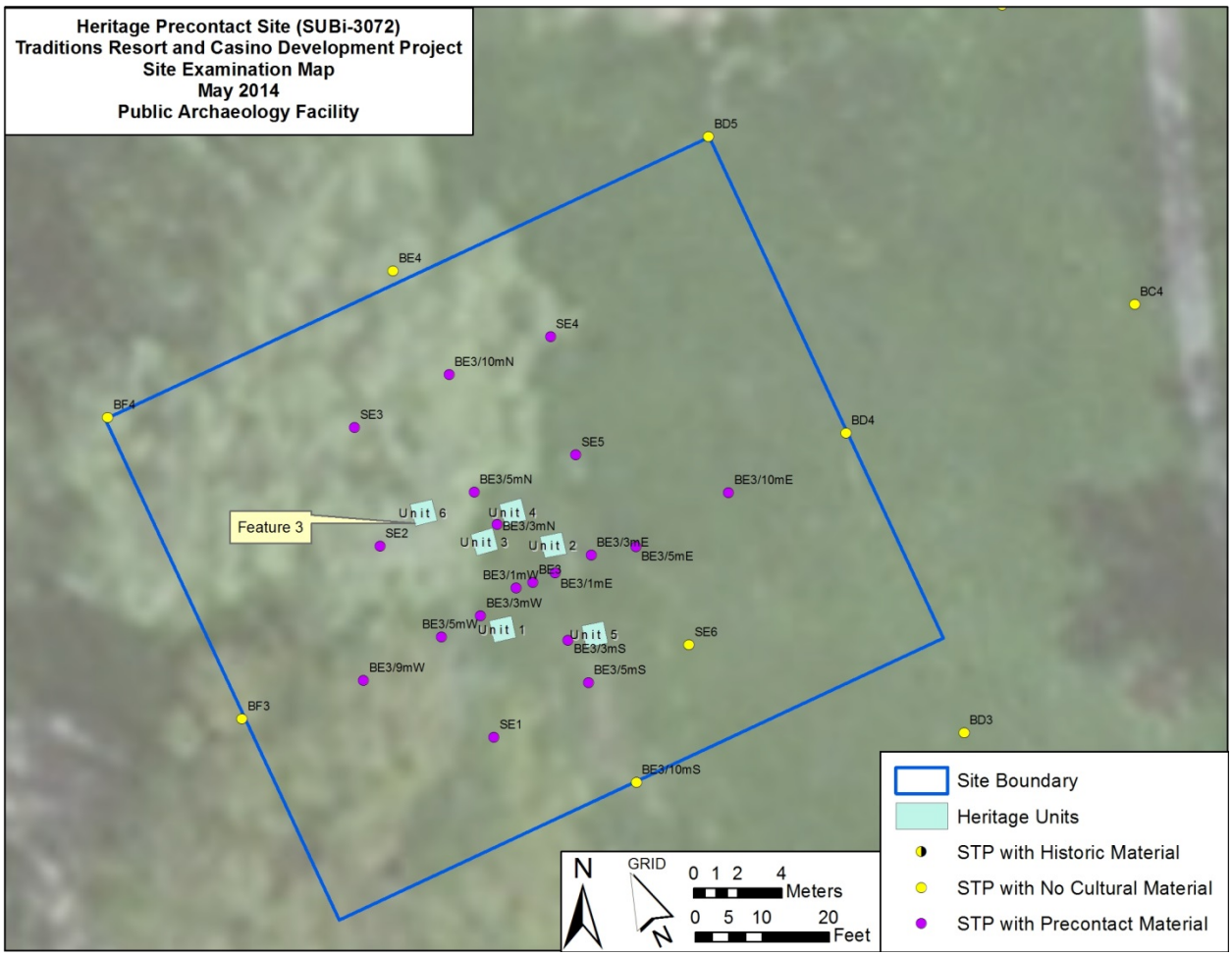

Figure 6.1. Layout of the Heritage Site at the completion of the Phase 2 Site Examination.
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6.2 Stratigraphy

The soil map shows that the Heritage Site straddles the division between two mapped soil series. The southern end of the site lies within a zone of Middlebury silt loam, which is a flood plain soil, and the northern portion lies within a zone of lacustrine Wallington silt loam. The survey noted that STPs on the southern/eastern side of the site and just outside the project boundaries contained what appeared to be wetlands soil, and Wallington is a somewhat poorly drained soil. Rainwater ponding was occurring in this area during the site examination, while the slightly elevated units remained well-drained. The A-horizon appeared as very dark brown silt loam which extended to an average depth of approximately 28 cm (11 in), and was laced with a network of small to moderately sized tree roots. The A horizon does not appear to have been plowed. The underlying B-horizon (subsoil) was yellowish brown silt loam with numerous root casts (Figure 6.2, p. 35; Photo 6.2, p. 35). The majority of rocks encountered were FCR; the soil was otherwise relatively rock-free. The color and drainage capabilities of the soil are inconsistent with the Wallington series, which suggests that the USDA soil mapping may be somewhat inaccurate in this area.

Almost all precontact materials were located within the A horizon, with the majority occurring in the lower half of the A horizon and at the transition to the B horizon. A moderate amount of precontact material was identified within the B horizon, of which the majority was derived from the uppermost 5 cm (2 in) of the subsoil. The low density of this material and the numerous root casts visible in the B horizon suggests that the artifacts from this context were likely shifted downward through bioturbation. Table 6.1 (p. 35) presents field counts of artifacts recovered from the soil horizons.

Photo 6.2. West wall profile of Unit 3 of the Heritage Site.

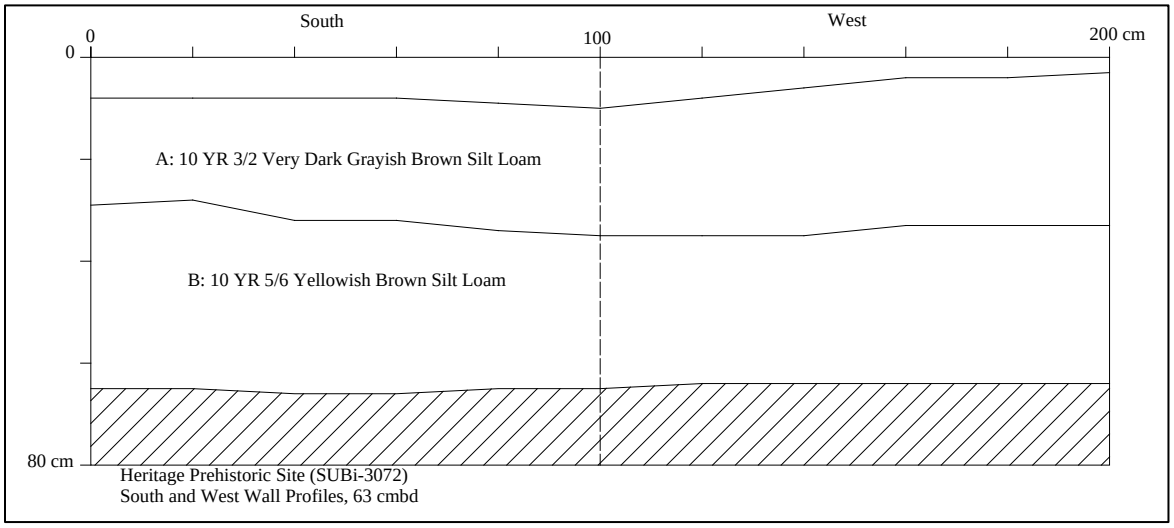

Figure 6.2. South and west wall profiles of Unit 3 of the Heritage Site.

Table 6.1. Artifact counts by horizon at the Heritage Precontact Site.

Horizon	Lithics	FCR	Rough Stone	Pottery	Faunal
A	238	1101	0	19	27
A/B	244	660	1	12	2
B	33	23	0	1	1

6.3 Features

A roughly oval stain at the subsoil transition of Unit 3 was initially recorded and bisected as Feature 1, but was determined to be non-cultural. A similar stain was encountered in Unit 4 and was designated as Feature 2. There was no differentiation between the contents of this potential feature and the surrounding A horizon, as both were rich with FCR and other artifacts with modest amounts of charcoal flecking. It is possible that Feature 2 may be the base of a very shallow hearth feature.

Feature 3 was encountered in the southwestern corner of Unit 6. It was a cluster of FCR and charcoal that extended to the south and west of the unit. Crews bisected it along an east-west axis and recovered 20 FCR and six flakes. The southern portion of the feature was removed as a bulk sample for flotation. Photos and drawings of the feature are included as Photos 6.3-6.4 and Figures 6.3-6.4. The feature yielded 33 fragments of FCR, 2 cortical flakes, and 4 non-cortical flakes. The feature appears to be the base of a shallow hearth.

6.4 Chronology

Heritage is a multi-component site, with artifacts from the Transitional (1000-200 B.C.) and Late Woodland Period (A.D. 800-1500), as well as stemmed points that are similar to Lamoka and others of the Late Archaic (Table 6.2, below). The site does not appear to be vertically stratified, as pottery and a Late Woodland point were found in subsoil transition along with the Orient point from the Transitional period. The cultural deposits appear to be confined to the A horizon, with the only definite feature (Feature 3- Figures 6.3-4, p. 37-38; Photos 6.3-4, p. 37-38) presenting a relatively shallow penetration into the subsoil. The flotation sample derived from Feature 3 has not yet been processed for carbon retrieval and radiometric dating, and as no diagnostic artifacts were recovered from the feature, its cultural affiliation has yet to be established. The artifacts derived from the A, A/B, and B horizons will be combined for analysis, as the site does not appear to be vertically stratified.

Table 6.2. Heritage Site chronology.

Period	**Diagnostic**	**STP or Unit(s)**	**Context(s)**
Possible Late Archaic	Unclassified Stemmed Points	3, 4, 6	A, A/B
Transitional Period	Orient Fishtail point	3	A/B
Late Woodland	Triangular point	1	A/B
	Oak Hill Corded pottery	BE3/3mN, 4	A
Woodland	Undiagnostic pottery	BE3/3mW, SE2, 1, 2, 3, 4, 6	A, A/B, B

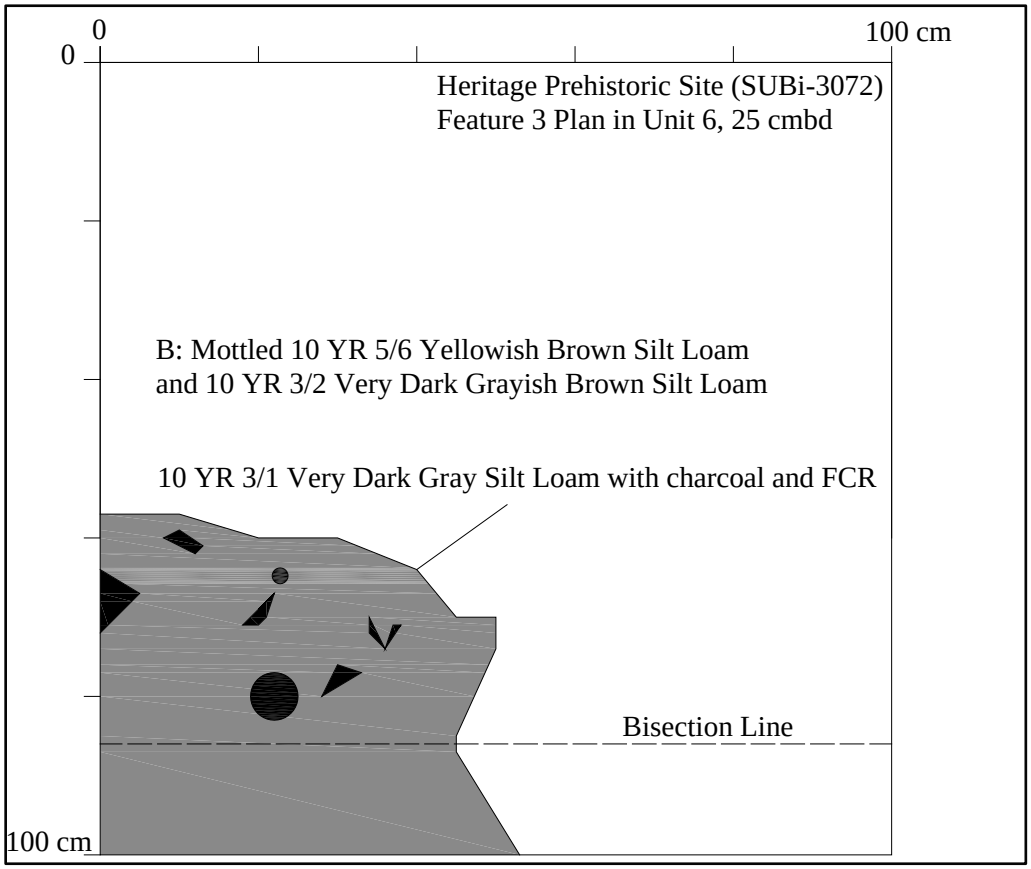

Figure 6.3. Plan view of Feature 3 of the Heritage Site.

Photo 6.3. Plan view of Feature 3 of the Heritage Site.

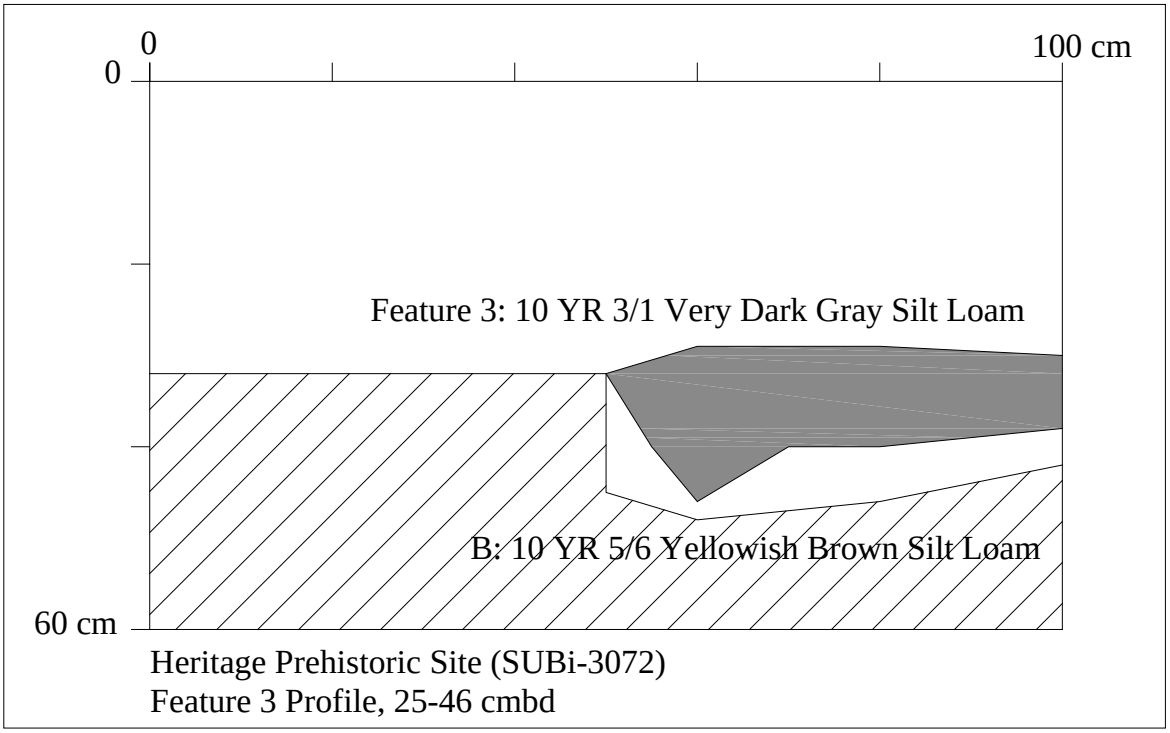

Figure 6.4. Profile of Feature 3 of the Heritage Site.

Photo 6.4. Profile of Feature 3 of the Heritage Site.

6.5 Artifact Summary

Table 6.3 (below) presents the basic artifact types found at the Heritage site during the Phase 1 and Phase 2 fieldwork. The majority of artifacts recovered from the site were fragments of fire cracked rock (FCR), which covered the floor of some units as excavation neared bottom of the A horizon. Despite the large quantities of FCR, only about 5% of the chipped stone assemblage had been burned. Other stone artifacts outside the chipped lithic assemblage included a small pitted stone and a large piece of stone that has been roughly worked into a chopper-like shape.

Faunal preservation was good compared to many precontact sites in the region, though only a few fragments of shell, mammal bone, and teeth were recovered. The teeth were from deer, and the larger pieces of mammal bone were consistent with deer long bone fragments. The smaller pieces and calcined fragments were unidentifiable.

Table 6.3. Summary of artifact types identified at the Heritage site.

Artifact Type	Count	Weight (grams)
Mammal Bone/Teeth	16	18.8
Bifaces	6	36.24
Bipolar Flake	1	0.92
Cortical flakes	51	91.36
Cortical Chunk	7	91.35
Fire-cracked rock	1939	86735.48
Pitted Stone	1	119.0
Non-cortical flakes	432	183.26
Pottery	28	113.8
Projectile Points	8	24.75
Retouched Piece	1	10.37
Rough Stone	1	332.00
Shatter	13	18.34
Shell	14	3.41

At least two of the pottery sherds can be assigned to a single Oak Hill Corded vessel (Photo 6.5, p. 41). This pot has a tall collar that has as the main decorative motif a band of cord-impressed horizontal lines that are interrupted at least once by a series of parallel left oblique cord-impressed lines. Often band interruptions were placed below castellations. Unfortunately the uppermost portion of the collar is missing and the presence of a castellation cannot be confirmed. The collar base has been notched, apparently with some form of smooth stylus. Below the collar, the neck has been decorated with cord-impressed plats of horizontal lines. The neck and collar surfaces were smoothed before the application of the decoration. Based on these attributes, this pot probably dates to the later portion of the Oak Hill Horizon (ca. 1425-1475). The Oak Hill Horizon falls within the late Late Woodland period. Several attributes, most notably the tall collar, the interrupted horizontal bands, and the notched collar base, all anticipate later fifteenth- and sixteenth-century pottery types. The retention of cord-impressing as the primary decorative technique for the neck and collar suggest that the potter who made this vessel had not adopted the soon to dominate incising technique. Together this suite of formal and decorative attributes suggests a somewhat transitional form, which is thus relatively unique.

The chipped lithic assemblage was made primarily from Onondaga chert (Table 6.4, p. 40). Small amounts of other materials were present including rhyolite, quartzite, and a variety of unidentified cherts. Rhyolite was found at the Traditions Site (n=28) and Glen Site (n=8), which suggests a Transitional occupation of the greater project area. The quartzite piece was a biface fragment that was curated from another location. The various cherts were present in very low amounts, but some of these were also found at Traditions and/or Glen.

Table 6.4. Lithic raw material types identified at the Heritage site.

Lithic Raw Material Types	Count	Weight (grams)
Onondaga chert	509	433.87
Quartzite	1	2.69
Rhyolite	1	0.04
Blue/gray chert	1	2.18
Light gray/white chert with iron oxide mottling	3	2.26
Poss. Normanskill/Mt. Merino chert	1	0.29
Tan/gray/red chert	2	2.98

The projectile point assemblage included an Orient point that appears to have been re-worked into a drill. Orient points are diagnostic of the Transitional Period (1500-1000 BC), which suggests that the rhyolite flake mentioned above may not be an isolated find. The Late Woodland period is also represented by a triangular point, which is consistent with the Oak Hill pottery described above. The site also yielded three unclassified straight-stemmed points, one expanding stem point, and two point fragments. One of the straight-stemmed points was similar to a Late Woodland Lamoka point, and was fashioned from limestoney chert. The large percentage of stemmed points suggests a possible Late Archaic component, as well. A sample of projectile points is illustrated in Photo 6.7 (p. 42).

The other chipped lithic tools include a piece of Onondaga chert with unifacial retouch, five biface fragments, and a Stage 1 biface. The latter was a piece of cortical Onondaga chert with minimal bifacial flaking that looked to be abandoned shortly after knapping began.

The debitage consisted of non-cortical flakes (n=432), cortical flakes (n=51), shatter (n=13), chunks (n=7), and a bipolar flake. No cores were recovered. Approximately 13% of the flakes (n=59) were utilized as expedient tools.

Figure 6.5 (p. 43) represents the distribution of artifacts across the site examination units. The survey and site examination STPs, while not depicted in the figure, reflect this general distribution. The most distant STPs included in the site boundaries were also the least productive, with some (BE/9mW and BE/10mE) yielding only a few pieces of FCR. The greatest amount of pottery (including an Oak Hill sherd) was recovered from Unit 4, which was placed directly east of the survey STP (BE/3mN) that yielded the original Oak Hill sherd. Unit 1 also contained seven pieces of pottery, and was placed next to the only other survey STP (BE/3mW) to yield sherds. This suggests that a second vessel may be in this area. FCR was densest in Unit 2, with Units 3 and 4 also yielding substantial amounts. Faunal remains were only recovered from these three units. The core of the site seems to be centered around Units 2, 3, and 4, and probably extends northeast and northwest of these units. For example, pottery was recovered from a site examination STP (SE2) excavated just west of Unit 6. The site seems to be confined to the more elevated portions of the landform, as Units 1 and especially 5 were somewhat lower than the other units. This observation is consistent with the wetlands soils observed in nearby (south and east) STPs during the survey, as site occupants were likely to prefer drier ground.

Photo 6.5. Pottery.
Left: unit 4, level 2. Right: STP BE3/3mN, level 1.

Photo 6.6. Bifaces.
Top row, left to right: Biface fragment, unit 4, level 3; Biface fragment, unit 1, level 4; Quartzite biface fragment, unit 4, level 1.
Bottom row, left to right: Biface fragment, unit 5, level 2; Biface fragment, unit 2, level 9; Retouched Unifacial piece, unit 6, level 4; Biface fragment, unit 6, level 4.

Photo 6.7. Projectile Points.
Top row, left to right: Unclassified straight-stem projectile point, unit 6, level 4; Late Woodland triangular projectile point, unit 1, level 4; Unclassified straight-stem projectile point, unit 4, level 2.
Bottom row, left to right: Orient Fishtail projectile point, unit 3, level 4; Unclassified straight-stem projectile point, unit 3, level 4; Unclassified expanding-stemmed projectile point, unit 3, level 3 and unit 4, level 2.

Photo 6.8. Groundstone.
Left: Worked stone, possible chopper. Right: Pitted stone. Both unit 3, level 4.

6.6 Summary

The Heritage Site appears to be a small, multi-component camp situated on a low bluff overlooking the Susquehanna River. Site chronology is linked to the Late Archaic (based on stemmed points similar to Lamoka), Transitional (based on a re-worked Orient point), and the late Late Woodland (based on the Oak Hill pottery) (A.D. 800-1500).

The high density of FCR found onsite suggests that more than one hearth feature is likely present. The location may have been selected for encampment because it was situated on a slight knob on the edge of wetlands, which would have provided valuable resources. The shallowness of Feature 3, and the possibility that "Feature 2" was the base of a feature, indicates that hearths were not deeply excavated and were likely used for short periods of time. While the site yielded a very large quanitity of FCR there was relatively little charcoal observed, few calcined bones (indicating refuse disposal in the fire), and only 5% of the lithic assemblage was burned. This suggests that the hearths were used for a special purpose, possibly as roasting platforms which might not need deep excavation and would be easily scattered by post-occupation taphonomic events. As 95% of the lithic material was unburned, it is possible that the majority of debitage and/or tools may represent occupation(s) which pre- and/or post-date the hearths.

The preservation of unburned faunal material is unusual in the acidic soils of the region, and often occurs in very well drained gravelly terraces or in shell middens where the acidity is balanced by the presence of alkaline calcium. The deer teeth and the bones (possibly also from deer) recovered from the site are therefore likely to be associated with the most recent occupation, which is approximately dated to AD 1425-1475 based on the transitional Oak Hill pottery vessel.

The density and diversity of artifacts recovered from the site examination, as well as the preservation of faunal material, shows that the site has high data and research potential.

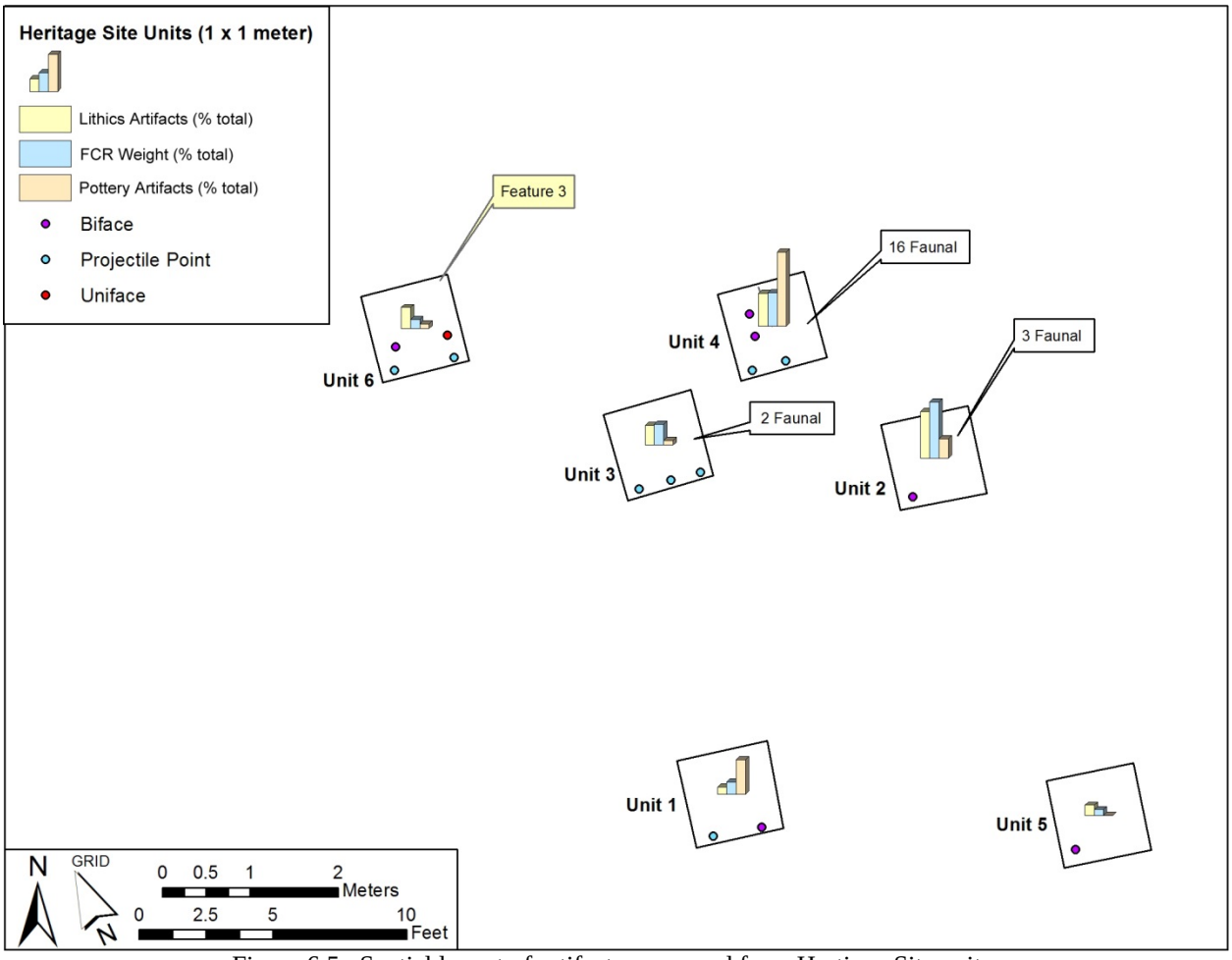

Figure 6.5. Spatial layout of artifacts recovered from Hertiage Site units.

VII. DISCUSSION

This section of the report will focus on highlighting any potential patterns for lithic technologies/strategies likely utilized at the Glen, Traditions, and Heritage Precontact sites. These technologies/strategies can be linked to important research issues of precontact group mobility, site function, and possibly displays of social/cultural identities.

7.1 Raw Material Use at the Traditions Resort and Casino Precontact Sites

Within New York State there are several major geologic formations that are known to contain chert and/or argillaceous shales. Devonian limestones contain the chert-bearing Onondaga, Helderberg, and LeRay formations; Ordovician shales contain the chert-bearing Normanskill shale (Cassedy 1993). The most extensive units in New York State are the Onondaga and Helderburg geologic formations. The Onondaga limestone outcrops in a broad band across central New York from the western edge of the Hudson Valley to Buffalo (Lavin and Prothero 1992; Cassedy 1993). Helderburg outcrops primarily west of the Hudson Valley along the northern edge of Appalachian Plateau throughout the Mohawk Valley (Cassedy 1993).

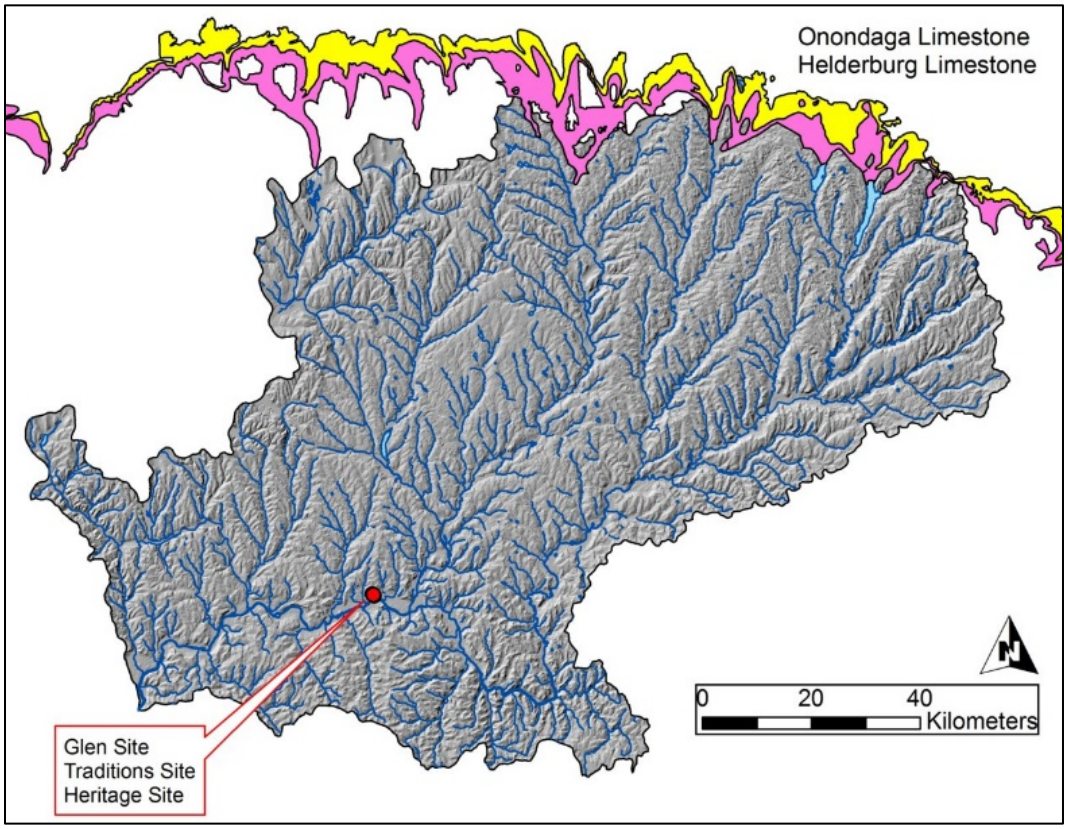

Figure 7.1. Distribution of Onondaga and Helderburg limestones in the Upper Susquehanna Valley.

Lithic types identified at the three precontact sites are highlighted in Table 7.1 (below). Lithic raw material types are overwhelmingly Onondaga chert (87 to 98%), but isolated pieces of non-local rhyolite/jasper (0.2 to 6%), and other unidentified materials are present on all the sites.

Table 7.1. Raw material variation at the Glen, Traditions, and Heritage sites.

Raw Material Variation	Glen Site	Traditions Site	Heritage Site
Percent Onondaga chert	87%	92%	98%
Percent "non-local" types (rhyolite/jasper)	1%	6%	0.2%
Percent unidentified/other	12%	2%	1.8%

Given the overwhelming prevalence of local Onondaga chert within the site assemblages it is reasonable to ask exactly where are these materials coming from within the Susquehanna Valley. As previously noted, Onondaga limestone formations run east-west across the state north of the Finger Lakes. For central New York, the dullish-gray Onondaga chert is the most commonly encountered raw material on precontact sites. Quarry sites are relatively rare, but outcrops have been identified near Buffalo and Syracuse.

Outside these quarry zones, the majority of chert was obtained from secondary sources, such as stratified glacial deposits in stream beds, kames, and outwash terraces. For instance, Fleisher (1993) has documented the extensive glacial modification of the Upper Susquehanna headwaters region south of Cooperstown, New York. His analysis (Fleisher 1993: 331) of glacial retreat within the headwaters region suggested a modified ice-tongue model that "produced ice-tongues 20 km long in all major north-south oriented valleys on the northeastern Appalachian Plateau, while adjacent uplands were virtually ice free… associated environments of deposition produced two different landform assemblages, one representative of active ice retreat in through valleys and another that depicts widespread stagnation in non-through valleys". These through-valleys (marked by low elevation headwater divides overlapping the limestone formations) are significant factors in the distribution of limestone-rich gravels throughout portions of the Upper Susquehanna. Through-valleys (such as the Chenango and Unadilla) are oriented generally parallel to the direction of glacial ice movement and subsequently received copious amounts of late Pleistocene meltwater and outwash debris (including limestone/chert flushed south from the bedrock formations along the Appalachian Escarpment). Non-through valleys (such as Butternut Creek) typically have more rugged and elevated headwater divides and do not overlap the limestone formations. Fleisher's (1993) pebble-count analysis within the Upper Susquehanna headwaters reveals just how significantly different these valley orientations (north/south vs. east/west) are in terms of cobble (outwash) limestone/chert potential. The data suggest that regions designated as "through-valleys" often contain considerably higher percentage of limestone/chert compared to non through-valley locales.

As an outlet of a major through valley (the Chenango River), the Susquehanna River in southern Broome County contains significant pockets of limestone-rich (and possibly chert rich) gravel outwash landforms (see Figure 7.2, p. 46). Particularly dense pockets of limestone-rich outwash appear south/west of the Susquehanna/Chenango confluence in the Town of Vestal; smaller pockets of limestone-rich outwash appear north of the Susquehanna River in the Towns of Union and Endwell. For the three precontact site locales (Glen/Traditions/Heritage), there are at least four pockets of limestone-rich outwash (Chenango/Howard gravelly loam) within 1 km of the Traditions Resort and Casino project area. It is possible that the site occupants from the Glen, Traditions, and Heritage sites obtained at least some of the Onondaga chert raw materials from these or nearby gravel beds. The use of locally available pebble chert would likely be most pronounced for the Late Archaic Lamoka and Vestal components.

One of the more interesting aspects of the lithic assemblages is the inclusion of small amounts of relatively "exotic" raw materials sources of rhyolite and jasper. Both types are known to outcrop in southeastern Pennsylvania within the Lehigh River Valley, at least 200 km directly south of the site locales. The recovery of these non-local materials suggests either very long distance travel to quarry areas or the development of regional trade networks and alliances with groups in southeastern Pennsylvania and the Mid-Atlantic. The second is the more probable scenario, and in fact Funk (1993: 224) notes for Transitional (Broadspear) in Northeast, "broadspear points and their cognates are widely and abundantly distributed throughout New York and New England, as well as southwestern Ontario and the Mid-Atlantic states...their ultimate source may have been the older Savannah River phase from the Caroline Piedmont...given the known distribution of these traits and their temporal priority in the Mid-Atlantic province, it is impossible to maintain that the broadspear tradition originated in the Upper Susquehanna Valley or the Northeast". Similarly, he states "the Lower Susquehanna Valley is generally assumed to have been the homeland of the Susquehanna Tradition...hence affiliated Upper Susquehanna Valley groups may have carried rhyolite with them in their initial northward journey...subsequently, they may have kept in touch with the peoples who remained in the lower valley, thus occasionally acquiring new supplies of rhyolite (as well as steatite from the same general area) through trade or travel...therefore, it is implied that some sort of social maintenance mechanism was at work, based on the ethnic affinities of groups sharing common modes of artifact production as encapsulated in the concept of the Susquehanna Tradition" (Funk 1993: 318).

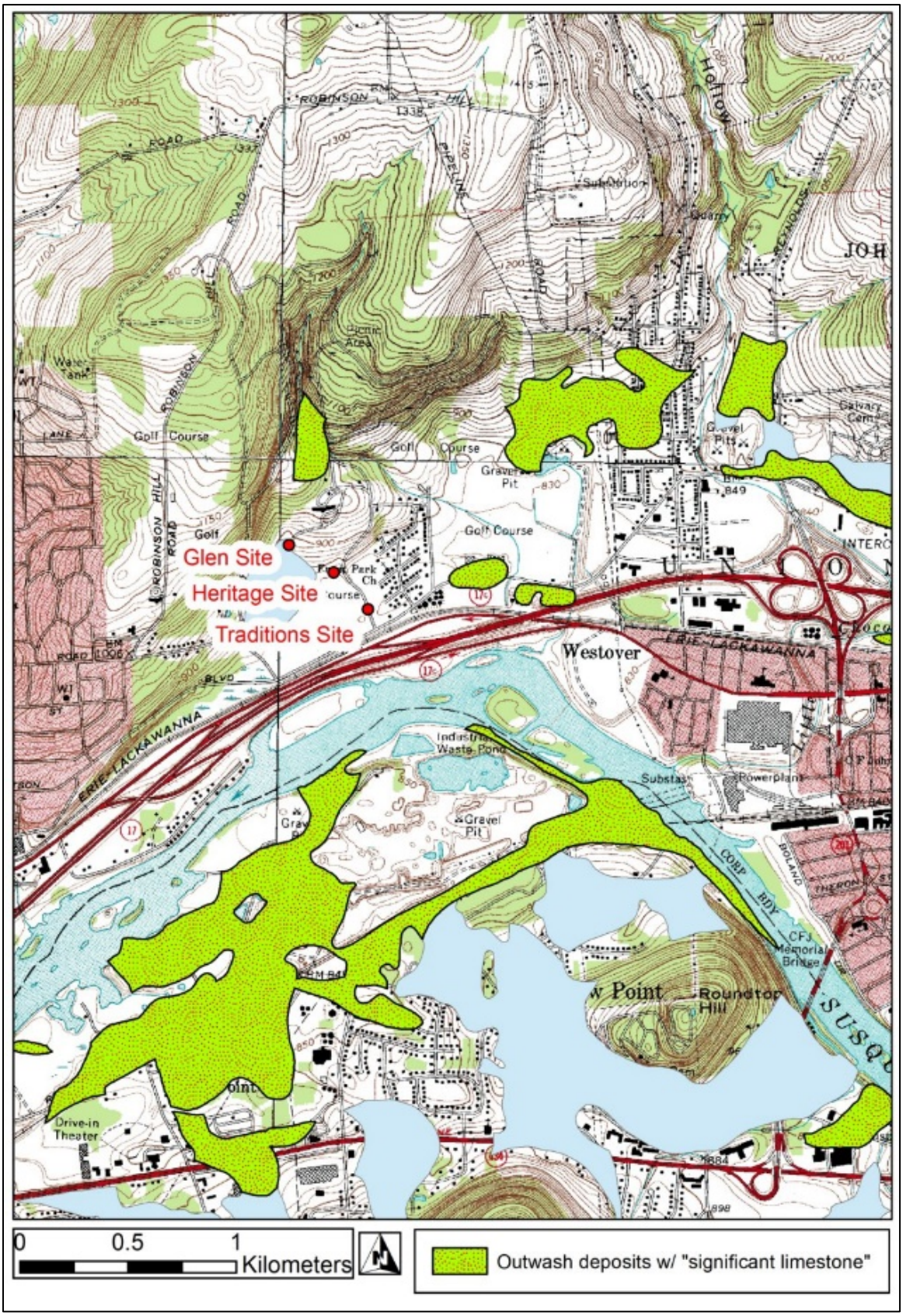

Figure 7.2. Distribution of limestone-rich outwash within the vicinity of the project area.
(Note: limestone-rich is used as a proxy measure for potential cobble sources of Onondaga chert)

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7.2 Tool Production at the Traditions Resort and Casino Precontact Sites

Stone tools were produced from the lithic raw materials in a variety of ways and these production processes have significant implications for interpretations of site function, group mobility, and possibly social/cultural issues. For the present sites, two general production techniques (bifacial and informal/expedient core strategies) were considered as appropriate for the site. Bifacial reduction usually progressed through stages with the desired aim of producing and modifying formal bifacial tools. Typical lithic assemblages from bifacial reduction are often dominated by an abundance of small/light, non-cortical flakes and unfinished/broken bifacial tools (discarded in production). Informal and expedient reduction refers to a more haphazard method, in which an objective piece was flaked for use from an amorphous core to produce usable angular shatter, flakes, and chunks. Associated assemblages often contain a number of larger/heavier cortical flakes, cores, and chunk/shatter with evidence of expedient edge utilization (Andrefsky 1998; Prentiss 1998, Morrow 1997).

As an initial entry point into the patterns of lithic technology at the three sites, the frequency and variety of objective pieces associated with either bifacial tool production (bifaces and projectile points) and/or expedient/core technology (amorphous cores) were summarized for each site. As shown in Table 7.2 (below), at least 29 bifacial tools but only two cores were recovered from the three sites; with ratios of bifaces+points/cores varying from a low of 7-8.0 at the Traditions and Glen sites to a high of 14.0 at the Heritage site (no cores). The groups inhabiting the Glen, Traditions, and Heritage sites appear to have been favoring bifacial tools over the use of amorphous cores. As the next step to investigate patterns of lithic technology, the ratios of debitage to cores, debitage to bifaces+points, and flake types were calculated for each site. High values for the first two ratios would likely suggest a greater "intensity" of lithic production, either for the production of formal tools and/or raw material conservation of existing sources. As previously noted, cores are generally lacking at the three sites (only two recovered), so the ratio of debitage to cores is probably not particularly illuminating but will be reported. It varies from a low of 434.0 and 504.0 at the Traditions and Heritage sites respectively, to a high of 861.0 at the Glen site. The ratio of debitage/bifaces+points is more interesting and relevant for the three sites, ranging from a high value of nearly 108 at the Glen site, to 62.0 at Traditions, and 36.0 at the Heritage site. The high ratio of debitage/bifaces+points for the Glen site suggests a much greater degree ("intensity") of lithic bifacial tool production compared to both the Traditions and Heritage sites. On a similar note, the frequency of non-cortical flakes (typically thought of as later stage reduction; possibly bifacial) to cortical flakes (earlier stage reduction) is much higher at the Glen site (nearly 16:1) compared to Traditions (10:1) and Heritage site (8:1). Lithic shatter (angular pieces usually produced at an early stage of lithic reduction) is more numerous at the Traditions and Heritage site, with ratios of flakes/shatter varying from 53.0 at the Traditions site to 34.0 at the Heritage site. In contrast, lithic shatter was almost non-existent at the Glen site, with flakes out-numbering the handful of shatter pieces by at least 200 to 1. Lithics/square meter and utilized flakes/square meter are approximately similar at the Glen and Heritage sites (84-86 to 1 and 9.8-10 to 1), but much lower at the Traditions site (26 to 1 and 2.53 to 1).

Table 7.2. Lithic reduction ratios calculated for the three precontact sites.

Ratios	Glen Site	Traditions Site	Heritage Site
Bifaces+Points/Cores	8.0	7.0	14 (no cores)
Debitage/Cores	861	434	504 (no cores)
Debitage/Bifaces+Points	107.63	62.0	36.0
Non-cortical/Cortical flakes	15.48	9.62	7.8
Flakes/Shatter	214.3	53.25	34.1
Lithics/unit meter	84.3	26.1	86.3
Utilized/unit meter	10.0	2.53	9.8

Size (specifically average weight) measures for flakes provides the last set of lithic variables to compare and contrast the three sites. Aggregate flake size (or weight) is associated with general reduction type (bifacial vs. core), but is probably more useful for the present study as a proxy measure of the potential size of objective pieces (bifacial tools and projectile points). As projectile point size often varied significantly in geographical and chronological terms within the Upper Susquehanna Valley, flake size provides a snapshot of any differences in the absence of these artifact types. For an example of point size variation, Ritchie (1971) notes, "most specimens (Susquehanna Broad points) are between an inch and a half and four inches long; rare examples are as short as an inch and as long as eight inches". For Susquehanna Broad points from the Fortin, Kurh, and Camelot sites the

average weight varied from 8.00 to 12.00 grams, two to three times heavier/larger than the typical Late Archaic Lamoka/Vestal point (Funk 1993: 233).

Average flake weight per site is presented in Table 7.3 (below). The heaviest flakes were recovered from the Glen site at 0.66 grams. Relatively heavy flakes were also found at the Heritage site (0.58 grams), but at the Traditions site average flake weight drops by nearly half to a low of 0.28 grams. This is an interesting pattern among the sites, with possible links to cultural affiliation (specifically the Transitional Period) and/or site type and function. For instance, the large flakes at the Glen and Heritage sites may be associated with more expansive Transitional Period components (with large source materials) not present at the Traditions site (which may suggest an Early Woodland component). Furthermore, average flake weight seems to be positively associated with the frequency of utilized pieces/square meter, with relatively large and highly utilized flakes at the Glen and Heritage sites and small/less utilized flakes at the Traditions site. The combination of flake size and degree of utilization may be a reflection of differences in function and/or tasks among the three sites.

Table 7.3. Size variation for flakes at the three precontact sites.

Size Measures	Glen Site	Traditions Site	Heritage Site
Average flake weight	0.66 grams	0.28 grams	0.58 grams
Utilized/unit meter	10.0 per meter	2.53 per meter	9.8 meter

Overall, the data from the site examinations at the three sites suggests a reliance on bifacial tool technologies. "Intensity" and stage of bifacial tool production appears to have been much higher at the Glen site compared to the other two sites. Flake size variation likely suggests both chronological and site function differences among the sites. The degree of flake utilization may indicate some functional differences between the sites. In general, the preliminary patterns of tool production and use among the three sites may be linked to differences in site function (how people were using the land they settled on), mobility (how often people moved and the size of the group), cultural affiliation (what time periods and differential cultural groups used these sites), and/or raw material conservation (how far people needed to travel to get raw material for their tools and how they conserved the pieces made of distant or rare materials).

VIII. RECOMMENDATIONS

The three sites in this project – Traditions, Glen, and Heritage – have all demonstrated high data potential and are therefore recommended as eligible for the National Register of Historic Places under Criterion D. We recommend that impacts to the sites be avoided by the proposed casino development project. Avoidance includes fencing off the three sites with an approved buffer zone during all phases of construction to protect the site against any accidental encroachment and disturbance. Any signage attached to the fencing should not include reference to the sites or to cultural resources in order to protect the sites from looting. Physical facilities maps of the resort should note the presence of these sites and note avoidance of ground disturbing activities. Impact avoidance plans require concurrence by SHPO.

If avoidance is not feasible, then we recommend that impacts to the site(s) be mitigated through Phase 3 Data Recovery excavations. A Data Recovery Plan (DRP) will be prepared upon request and must be approved by reviewing agencies prior to the onset of fieldwork.

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APPENDIX II. SOIL CATALOGUES

PA=PALE LT=LIGHT MD=MEDIUM DK=DARK
BR=BROWN GR=GRAY YL=YELLOW OL=OLIVE TN=TAN RD=RED BK=BLACK WH=WHITE
SI=SILT SA=SAND CL=CLAY LO=LOAM GVL=GRAVEL
P=PRECONTACT H=HISTORIC N=NO CULTURAL MATERIAL
DISC.=DISCARDED

2.1 Traditions Precontact Site Soils

Unit	Level	Horizon	Beg.	End	Munsell	Soil	Comments	CM?	Crew	Date
1	1	A	0	25	10YR4/3	BR SI LO		P	AB/LP	4/25/2014
1	2	AB	25	30	10YR5/4	YL BR SI LO		N	AB/LP	4/25/2014
1	3	AB	30	37	10YR5/4	YL BR SI LO		H	AB/LP	4/25/2014
1	4	B	37	44	10YR5/6	YL BR SI LO		N	AB/LP	4/25/2014
1	5	B	44	50	10YR5/6	YL BR SI LO		N	AB/LP	4/25/2014
2	1	A	0	25	10YR3/3	DK BR SI LO	BOTTLE GLASS, SLAG, COAL - DISC.	P	DP/JF	4/25/2014
2	2	AB	25	30	10YR4/4	DK YL BR SI LO		N	DP/JF	4/25/2014
2	3	AB	30	35	10YR4/4	DK YL BR SI LO	LOW DENSITY CHARCOAL & COAL - DISC.	N	DP/JF	4/25/2014
2	4	AB	35	41	10YR4/4	DK YL BR SI LO		P	DP/JF	4/25/2014
2	5	B	41	46	10YR5/6	YL BR SI LO		N	DP/JF	4/25/2014
2	6	B	46	52	10YR5/6	YL BR SI LO		N	DP/JF	4/25/2014
2	STP	B	52	109	10YR5/6	YL BR SI LO		N	DP/JF	4/25/2014
3	1	A	0	25	10YR4/4	DK YL BR SI LO		P	EA/GD	4/25/2014
3	2	A	25	30	10YR5/6	YL BR SI LO		P	EA/GD	4/25/2014
3	3	AB	30	35	10YR4/4, 2.5Y5/2, 7.5YR5/8	DK YL BR SI LO W/MOTTLED GR BR SI LO & STRONG BR SI LO		P	EA/GD	4/25/2014
3	4	AB	35	40	10YR4/4, 7.5YR5/8	DK YL BR SI LO MOTTLED W/STRONG BR SI CL LO		N	EA/GD	4/25/2014
3	5	B	40	45	2.5Y5/2, 7.5YR5/8	LT GR BR CL SI W/MOTTLED STRONG BR CL SI		P	EA/GD	4/25/2014
3	6	B	45	50	2.5Y5/2, 7.5YR5/8	LT GR BR CL SI W/MOTTLED STRONG BR CL SI		P	DP/EA	4/28/2014
3	7	B	50	55	2.5Y5/2, 7.5YR5/8	LT GR BR CL SI W/MOTTLED STRONG BR CL SI		N	DP/EA	4/28/2014
3	8	B	55	60	2.5Y5/2, 7.5YR5/8	LT GR BR CL SI W/MOTTLED STRONG BR CL SI		N	DP/EA	4/28/2014
3	STP	B	60	100	2.5Y5/2, 7.5YR5/8	LT GR BR CL SI W/MOTTLED STRONG BR CL SI		N	DP/EA	4/28/2014
4	1	A	0	22	2.5Y4/3, 2.5Y5/4	OL BR SI LO DOWN TO MOTTLED OL BR & LT OL BR SI LO		P	VL/PB	4/25/2014
4	2	A	22	27	2.5Y4/3, 2.5Y5/4	OL BR SI LO DOWN TO MOTTLED OL BR & LT OL BR SI LO	VERY LOW DENSITY CHARCOAL - DISC.	P	VL/PB	4/25/2014
4	3	AB	27	34	2.5Y4/3, 2.5Y5/4, 2.5Y6/8, 10YR5/1	MOTTLED OL BR W/LT OL BR SI LO DOWN TO TOP OF OL YL MOTTLED W/GR SI LO		P	VL/PB	4/25/2014
4	4	B	34	39	2.5Y6/3, 2.5Y5/6	LT YL BR SI LO W/LT OL BR SI LO	VERY LOW DENSITY CHARCOAL - DISC.	P	VL/PB	4/25/2014
4	5	B	39	44	2.5Y6/3, 2.5Y5/6	LT YL BR SI LO MOTTLED W/LT OL BR SI LO		N	VL/PB	4/25/2014

Unit	Level	Horizon	Beg.	End	Munsell	Soil	Comments	CM?	Crew	Date
4	6	B	44	49	2.5Y6/3, 2.5Y5/6	LT YL BR SI LO MOTTLED W/LT OL BR SI LO		N	VL/PB	4/25/2014
4	STP	B	49	91	2.5Y6/3, 2.5Y5/6	LT YL BR SI LO MOTTLED W/LT OL BR SI LO		N	VL/PB	4/25/2014
5	1	A	0	22	2.5Y4/3, 2.5Y5/4	OL BR SI LO, W/SOME MOTTLES OF LT OL BR SI LO IN FLOOR	VERY LOW DENSITY CHARCOAL - DISC.	P	PB/JA	4/23/2014
5	2	A	22	28	2.5Y4/3, 2.5Y5/4	OL BR SI LO W/MOTTLES OF LT OL BR SI LO W/SOME ROCKS		P	PB/VL	4/24/2014
5	3	AB	28	33	5Y6/3, 10YR6/8, 10YR5/4	PALE OL SI LO W/BR YL & YL BR SI LO	VERY LOW DENSITY CHARCOAL - DISC.	P	PB/VL	4/24/2014
5	4	B	33	38	5Y6/3, 10YR6/8, 10YR5/4	PALE OL SI LO W/BR YL & YL BR SI LO		N	PB/VL	4/24/2014
5	5	B	38	43	10YR6/8, 5Y6/3	BR YL SI LO W/PALE OL SI LO		N	PB/VL	4/24/2014
5	STP	B	43	79	10YR6/8, 5Y6/3	BR YL SI LO W/PALE OL SI LO		N	PB/VL	4/24/2014
5	STP	B	79	104	2.5Y5/6	LT OL BR CL SI		N	PB/VL	4/24/2014
6	1	A	0	25	10YR4/4	DK YL BR SI LO		P	GD/EA	4/24/2014
6	2	AB	25	30	10YR4/4, 2.5Y5/4	DK YL BR SI LO W/MOTTLED LT OL BR SI LO (30%)		P	GD/EA	4/24/2014
6	3	AB	30	35	10YR5/2, 7.5YR5/8	GR BR SI CL LO MOTTLED W/STRONG BR SI LO		N	GD/EA	4/24/2014
6	4	AB	35	40	2.5Y5/2, 7.5YR5/8	GR BR SI LO W/MOTTLED STRONG BR SI LO		P	GD/EA	4/24/2014
6	5	B	40	45	2.5Y6/2, 7.5YR5/8	LT BR GR MOTTLED W/STRONG BR SI CL		P	GD/EA	4/24/2014
6	6	B	45	50	2.5Y6/2, 7.5YR5/8	LT BR GR CL SI W/STRONG BR CL SI		N	GD/EA	4/24/2014
6	7	B	50	55	2.5Y6/2, 7.5YR5/8	LT BR GR CL SI MOTTLED W/STRONG BR CL SI		N	GD/EA	4/24/2014
6	STP	B	55	135	2.5Y6/2, 7.5YR5/8	LT BR GR CL SI W/MOTTLED STRONG BR CL SI		N	GD/EA	4/24/2014
7	1	A	0	25	2.5Y4/4	OL BR SI LO		P	LP/AB	4/24/2014
7	2	B	25	30	10YR6/6	BR YL SI LO		P	LP/AB	4/24/2014
7	3	B	30	35	10YR6/6	BR YL SI LO		N	LP/AB	4/24/2014
7	4	B	35	40	10YR6/6	BR YL SI LO		N	LP/AB	4/24/2014
7	STP	B	40	100	10YR6/6	BR YL SI LO		N	LP/AB	4/24/2014
8	1	A	0	25	10YR3/3	DK BR SI LO	LOW DENSITY CHARCOAL - DISC.	P/H	MJ/AN	4/21/2014
8	2	A	25	30	10YR3/3	DK BR SI LO	LOW DENSITY CHARCOAL FLECKING - DISC.	P	DP/MJ	4/22/2014
8	3	AB	30	35	10YR3/3, 10YR4/6	DK BR SI LO TRANSITIONING TO DK YL BR SI LO; GVL IN SW CORNER	LOW DENSITY CHARCOAL - DISC.	P	DP/MJ	4/22/2014
8	4	B	35	40	10YR4/6	DK YL BR SI LO	LOW DENSITY CHARCOAL FLECKING - DISC.; DK STAIN ALONG N.WALL - POSS.RODENT RUN/TREE BURN	P	DP/MJ	4/22/2014
8	5	B	40	45	10YR4/6	DK YL BR SI LO	REMOVED ROOT DISTURBANCE	P	DP/MJ	4/22/2014
8	6	B	45	51	10YR4/6	DK YL BR SI LO		N	DP/MJ	4/22/2014
9	1	A	0	25	10YR4/6	DK YL BR SI LO	VERY LOW DENSITY CHARCOAL - DISC.	P	MJ/JF	4/24/2014
9	2	A	25	33	10YR3/3	DK BR SI LO	LOW DENSITY CHARCOAL - DISC.	P	MJ/JF	4/24/2014

Unit	Level	Horizon	Beg.	End	Munsell	Soil	Comments	CM?	Crew	Date
9	3	AB	33	36	2.5Y5/6	LT OL BR SI LO	LOW DENSITY CHARCOAL - DISC.; SUBSOIL PRESENT AT BASE OF LEVEL	P	MJ/JF	4/24/2014
9	4	B	36	42	10YR4/6	DK YL BR SI LO	LOW DENSITY CHARCOAL - DISC.	P	MJ/JF	4/24/2014
9	5	B	42	47	10YR4/6	DK YL BR SI LO	VERY LOW DENSITY CHARCOAL - DISC.	N	MJ/JF	4/24/2014
9	6	B	47	52	10YR4/6	DK YL BR SI LO		N	MJ/JF	4/24/2014
9	STP	B	52	112	10YR4/6	DK YL BR SI LO		N	MJ/JF	4/24/2014
10	1	A	0	20	2.5Y5/6	LT OL BR SI LO	VERY LOW DENSITY CHARCOAL - DISC.	P	PB/JA	4/22/2014
10	2	A	20	25	2.5Y5/6	LT OL BR SI LO	LOW DENSITY CHARCOAL - DISC.	P	PB/JA	4/22/2014
10	3	A	25	30	2.5Y5/6	LT OL BR SI LO	VERY LOW DENSITY CHARCOAL - DISC.	P	PB/JA	4/23/2014
10	4	B	30	36	2.5Y5/6	LT OL BR SI LO W/CHARCOAL STAIN IN NW CORNER	CHARCOAL - DISC.	N	PB/JA	4/23/2014
10	5	B	36	41	2.5Y5/6	LT OL BR SI LO	LOW DENSITY CHARCOAL - DISC.	N	PB/JA	4/23/2014
10	STP	B	41	141	2.5Y5/6	LT OL BR SI LO		N	PB/JA	4/23/2014
11	1	A	0	25	10YR3/3, 10YR4/4	DK BR SI LO TRANSITIONING TO DK YL BR SI LO	VERY LOW DENSITY COAL, LOW DENSITY CHARCOAL - DISC.; MAJORITY OF PRECONTACT MATERIAL RECOVERED FROM BOTTOM OF LEVEL	P/H	KS/RK	4/23/2014
11	2	B	25	30	10YR3/6	DK YL BR SI LO	CHARCOAL - DISC.	P	KS/RK	4/23/2014
11	3	B	30	35	10YR3/6	DK YL BR SI LO		P	KS/RK	4/23/2014
11	4	B	35	40	10YR3/6	DK YL BR SI LO		N	KS/RK	4/23/2014
11	STP	B	40	119	10YR4/4	DK YL BR SI LO W/SOME COBBLES AT BOTTOM		N	KS/RK	4/23/2014
12	1	A	0	20	2.5Y4/3, 2.5Y5/6	OL BR SI LO; ENDED AT TRANSITION TO A LT OL BR SI LO MOTTLED W/OL BR SI LO		P	LP/AB	4/22/2014
12	2	AB	20	25	10YR5/6	YL BR SI LO		P	DP/LP	4/23/2014
12	3	AB	25	30	10YR5/6	YL BR SI LO		P	DP/LP	4/23/2014
12	4	B	30	35	2.5Y5/4	LT OL BR SI LO		N	DP/LP	4/23/2014
12	5	B	35	40	2.5Y5/4	LT OL BR SI LO		N	DP/LP	4/23/2014
12	STP	B	50	135	2.5Y5/4	LT OL BR SI LO		N	DP/LP	4/23/2014
12	STP	B	135	150	2.5Y6/4	LT YL BR SA LO		N	DP/LP	4/23/2014
13	1	A	0	25	10YR4/4	DK YL BR SI LO		P	EA/GD	4/23/2014
13	2	A	25	30	10YR4/4	DK YL BR SI LO		P	EA/GD	4/23/2014
13	3	AB	30	35	10YR5/6, 10YR4/4	YL BR SI LO W/MOTTLED DK YL BR SI LO		N	EA/GD	4/23/2014
13	4	B	35	40	10YR5/6	YL BR SI LO		N	EA/GD	4/23/2014
13	STP	B	40	55	10YR5/6	YL BR SI LO		N	EA/GD	4/23/2014
13	STP	B	55	120	10YR5/6, 2.5Y6/6	YL BR SI LO W/MOTTLES OF OL YL SI		N	EA/GD	4/23/2014
14	1	A	0	25	10YR5/4	YL BR SI LO		P	GD/EA	4/22/2014
14	2	B	25	30	10YR5/6	YL BR SI LO		N	GD/EA	4/22/2014
14	3	B	30	35	10YR5/6	YL BR SI LO		P	GD/EA	4/22/2014
14	4	B	35	40	10YR5/6	YL BR SI LO		N	GD/EA	4/22/2014
14	STP	B	40	67	10YR5/6	YL BR SI LO		N	GD/EA	4/22/2014

Unit	Level	Horizon	Beg.	End	Munsell	Soil	Comments	CM?	Crew	Date
14	STP	B	67	84		GR BR VERY COMPACT SA SI		N	GD/EA	4/22/2014
14	STP	B	84	100		MD BR SA SI		N	GD/EA	4/22/2014
15	1	A	0	22	10YR4/3	BR SI LO	CHARCOAL (A FEW FLECKS + SMALL CHUNKS) - DISC.	P	MJ/AK	4/28/2014
15	2	AB	22	27	10YR3/3, 10YR4/6	DK BR SI LO MOTTLED W/DK YL BR SI LO TRANSITIONING TO DK YL BR SI LO	LOW DENSITY CHARCOAL - DISC.	P	MJ/AK	4/28/2014
15	3	B	27	32	10YR4/6	DK YL BR SI LO	VERY LOW DENSITY CHARCOAL FLECKS - DISC.	N	MJ/AK	4/28/2014
15	4	B	32	42	10YR4/6	DK YL BR SI LO	VERY LOW DENSITY CHARCOAL - DISC.; SOIL SLIGHTLY REDDISH IN NE CORNER	N	EA/GP	4/29/2014
16	1	A	0	23	2.5Y5/4, 2.5Y5/6	LT OL BR SI LO MOTTLED W/LT OL BR SI LO	LOW DENSITY CHARCOAL - DISC.	P/H	JA/BB	4/28/2014
16	2	A	23	27	2.5Y5/4, 2.5Y5/6	LT OL BR SI LO MOTTLED W/LT OL BR SI LO (TOP); FULL TRANSITION TO LT OL BR SI LO AT BOTTOM OF LEVEL	LOW DENSITY CHARCOAL FLECKS - DISC.	P	JA/BB	4/28/2014
16	3	B	27	32	2.5Y5/6	LT OL BR SI LO	LOW DENSITY CHARCOAL - DISC.	N	JA/BB	4/28/2014
16	4	B	32	37	2.5Y5/6	LT OL BR SI LO	LOW DENSITY CHARCOAL - DISC.	N	JA/BB	4/28/2014
16	5	B	37	47	2.5Y5/6	LT OL BR SI LO		N	JA/BB	4/28/2014
17	1	A	0	25	10YR4/3	BR SI LO	LOW DENSITY CHARCOAL - DISC.	P	EA/DP	4/28/2014
17	2	A	25	30	10YR4/3, 5Y6/3	BR SI LO W/LIGHT PALE OL SA LO MOTTLING	LOW DENSITY CHARCOAL - DISC.	P	EA/DP	4/28/2014
17	3	AB	30	35	10YR4/2, 5Y6/3	DK GR BR SI LO W/MOTTLED PALE OL SI	VERY LOW DENSITY CHARCOAL - DISC.	P	EA/DP	4/28/2014
17	4	B	35	40	5Y6/3	PALE OL COMPACT SI	B-HORIZON COMPLETELY EXPOSED	P	EA/DP	4/28/2014
17	5	B	40	45	5Y6/3, 7.5YR5/8	PALE OL VERY COMPACT SI W/MOTTLED STRONG BR VERY COMPACT CL SI		N	EA/DP	4/28/2014
17	6	B	45	50	5Y6/3, 7.5YR5/8	PALE OL SI MOTTLED W/STRONG BR SI		N	EA/DP	4/28/2014

2.2 Glen Precontact Site Soils

STP	Unit	Level	Begin	End	Munsell	Soil	Comments	CM?	Crew	Date
	1	1	0	8	10YR4/2, 10YR4/4	DK GR BR WET SI LO W/MOTTLES OF DK YL BR SI LO, W/SOME ROCKS		P	VL/EA	04/14/14
	1	2	8	13	10YR4/2, 10YR5/6	DK GR BR SI LO W/MOTTLED YL BR SA SI; PATCH OF DK GR BR SI LO IN N 1/2		P	VL/EA	04/14/14
	1	3	13	18	2.5Y6/6, 10YR4/4	OL YL SI LO W/MOTTLES OF DK YL BR SI LO, W/MANY ROCKS, FCR, & ROOTS; FEA.2 - DK YL BR SI LO W/DARKER FLECKS	VERY LOW DENSITY CHARCOAL - DISC.	P	VL/EA	04/14/14
	1	4	18	25	2.5Y6/6	OL YL SI LO		P	EA/JF	04/17/14
	1	5	25	30	2.5Y6/6	OL YL SI LO W/SOME ROOTS		P	EA/JF	04/17/14
	1	6	30	35	2.5Y6/6	OL YL SI LO		N	EA/JF	04/17/14
	1	7	35	40	2.5Y6/6	OL YL SI LO		N	EA/JF	04/17/14
	2	1	0	7	2.5Y4/2	DK GR BR SI LO		P	JA/PB	04/16/14
	2	2	7	13	2.5Y6/6, 2.5Y4/2	OL YL SI LO W/DK GR BR SI LO	VERY LOW DENSITY CHARCOAL - DISC.	P	JA/PB	04/16/14
	2	3	13	18	2.5Y6/6, 2.5Y4/2	OL YL SI LO MOTTLED W/DK GR BR SI LO	LOW DENSITY CHARCOAL - DISC.	P	JA/PB	04/16/14
	2	4	18	23	2.5Y6/6	OL YL SI LO	VERY LOW DENSITY CHARCOAL - DISC.	P	JA/PB	04/16/14
	2	5	23	28	2.5Y6/6	OL YL SI LO		P	JA/PB	04/16/14
	2	6	28	33	2.5Y6/4, 7.5YR5/8	LT YL BR W/SOME STRONG BR SI LO	VERY LOW DENSITY CHARCOAL - DISC.	P	JA/PB	04/17/14
	2	7	33	39	2.5Y6/4	LT YL BR SI LO		N	JA/PB	04/17/14
	2	8	39	44	2.5Y6/4, 2.5Y5/6	LT YL BR SI MOTTLED W/LT OL BR SI		N	JA/PB	04/17/14
	3	1	0	5	2.5Y4/2	DK GR BR SI LO		N	PB/DP	04/14/14
	3	2	5	10	10YR3/2, 2.5Y5/6	VERY DK GR BR SI LO W/LT OL BR SI LO	LOW DENSITY CHARCOAL - DISC.; B HORZ.APPEARING IN BOTTOM, SOME ROCKS	P	PB/DP	04/14/14
	3	3	10	15	2.5Y6/6, 2.5Y4/2, 10YR2/1	OL YL SI W/DK GR BR CL SI W/BK SI	VERY LOW DENSITY CHARCOAL (FROM SE CORNER) - DISC.	P	PB/DP	04/14/14
	3	4	15	20	2.5Y5/6	LT OL BR SI LO	MED.DENSITY CHARCOAL - DISC.	P	PB/DP	04/14/14
	3	5	20	25	2.5Y6/6, 10YR3/3	OL YL SI LO W/DK BR SI LO W/ROOTS	VERY LOW DENSITY CHARCOAL - DISC.	P	PB/JA	04/16/14
	3	6	25	32	2.5Y6/6	OL YL SI LO		P	EA/JF	04/18/14
	3	7	32	37	2.5Y6/6	OL YL SA LO	GROUNDWATER ENTERING UNIT	N	EA/JF	04/18/14
	4	1	0	6	10YR3/2	VERY DK GR BR VERY MOIST SI LO		N	GD/DP	04/16/14
	4	2	6	11	10YR3/2, 2.5Y5/6	VERY DK GR BR SI LO W/LT OL BR SI LO IN BOTTOM	LOW DENSITY CHARCOAL - DISC.	P	GD/DP	04/16/14
	4	3	11	16	10YR3/2, 2.5Y5/6	VERY DK GR BR SI LO W/LT OL BR SI LO	VERY LOW DENSITY CHARCOAL - DISC.	P	GD/DP	04/16/14
	4	4	16	18	10YR5/2, 2.5Y5/6	GR BR SI LO W/LT OL BR SI LO IN BOTTOM	AMORPHOUS STAINS W/CHARCOAL & FCR - DESIGNATED FEA.1; MED.DENSITY CHARCOAL - DISC.	P	GD/DP	04/16/14
	4	5	18	23	10YR5/2, 2.5Y5/6	GR BR SI LO W/LT OL BR SI LO	FEA.1 CONTINUES; CHARCOAL FLECKS - DISC.	P	SK/DP	04/17/14
	4	6	23	28	2.5Y5/6	LT OL BR SI LO	REST OF FEA.1 REMOVED	P	SK/DP	04/17/14
	4	7	28	33	2.5Y5/6	LT OL BR SI LO		N	SK/DP	04/17/14
	4	8	33	38	2.5Y5/6	LT OL BR SI LO		N	SK/DP	04/17/14
	5	1	0	5	10YR3/3	DK BR SI LO		N	EA/JF	04/16/14
	5	2	5	10	10YR3/3, 10YR6/6	DK BR SI LO MOTTLED W/BR YL SI LO W/ROCKS	TRANSITIONAL LAYER STARTING TO APPEAR AT BASE OF LEVEL	P	EA/JF	04/16/14

STP	Unit	Level	Begin	End	Munsell	Soil	Comments	CM?	Crew	Date
	5	3	10	15	10YR3/3, 10YR6/6, 10YR4/2	DK BR SI LO MOTTLED W/BR YL SI LO; DK GR BR SI LO STAIN IN N.END	DK GR BR STAIN MAY BE PART OF FEA.2; LOW DENSITY CHARCOAL - DISC.	P	EA/JF	04/16/14
	5	4	15	20	10YR6/6	BR YL SI LO	REMOVED REMAINING A-HORZ.SOIL; FEA.2 (CONTINUATION FROM UNIT 1) PRESENT IN SE CORNER; LOW DENSITY CHARCOAL - DISC.	P	EA/JF	04/16/14
	5	5	20	25	10YR6/6	BR YL SI LO	FEA.2 PEDESTALLED	P	EA/JF	04/16/14
	5	6	25	30	10YR6/6	BR YL SI LO	DK STAIN IS ASSOC.W/FEA.2, AND ARTIFACTS ARE ASSOC.W/THE STAIN	P	EA/JF	04/16/14
	5	7	30	35	2.5Y6/6	OL YL SA LO		N	EA/JF	04/18/14
	5	8	35	40	2.5Y6/6	OL YL SI LO W/ROCKS		N	EA/JF	04/18/14
	6	1	0	6	10YR3/2	VERY DK GR BR SI LO		P	SK/DP	04/17/14
	6	2	6	11	10YR3/2, 2.5Y5/6	VERY DK GR BR SI LO W/LT OL BR SI LO B-HORIZON	B-HORIZON EMERGING IN BOTTOM OF LEVEL; LOW DENSITY CHARCOAL - DISC.	P	SK/DP	04/17/14
	6	3	11	16	10YR3/2, 2.5Y5/6	VERY DK GR BR SI LO W/LT OL BR SI LO	FEA.1 EXPOSED IN FLOOR - SMEAR OF CHARCOAL & FCR W/SOME BONE FLECKS; CHARCOAL - DISC.	P	SK/DP	04/17/14
	6	4	16	21	2.5Y5/6	LT OL BR SI LO W/CHARCOAL & FCR SMEARS	FEA.1 CONTINUES; CHARCOAL - DISC.	P	SK/DP	04/17/14
	6	5	21	26	2.5Y5/6	LT OL BR SI LO	FEA.1 IS REMOVED FROM UNIT; LOW DENSITY CHARCOAL - DISC.	P	SK/DP	04/17/14
	6	6	26	31	2.5Y5/6	LT OL BR SI LO	LOW DENSITY CHARCOAL - DISC.	P	JF/EA	04/18/14
	6	7	31	41	2.5Y5/6, 7.5YR5/8	LT OL BR SI LO W/MOTTLED STRONG BR SI		N	JF/EA	04/18/14
	7	1	0	5	2.5Y4/2	DK GR BR SI LO		P	JA/PB	04/17/14
	7	2	5	10	2.5Y4/2, 2.5Y6/6	DK GR BR W/OL YL SI LO W/ROOTS	VERY LOW DENSITY CHARCOAL - DISC.	P	JA/PB	04/17/14
	7	3	10	15	2.5Y4/2, 2.5Y6/6, 2.5Y6/4, 10YR3/3	N.EDGE - DK GR BR SI LO; REST OF UNIT - OL YL MOTTLED W/LT YL BR SI LO, W/PATCH OF DK BR SI LO W/CHARCOAL	STAIN UNCOVERED IN MIDDLE OF LEVEL ON N 1/2 OF UNIT; MED.DENSITY CHARCOAL - DISC.	P	JA/PB	04/17/14
	7	4	15	20	2.5Y6/6, 2.5Y4/2	NW CORNER - DK GR BR SI LO W/LG.ROCKS; REST OF UNIT - OL YL SI LO		P	PB/AB	04/18/14
	7	5	20	25	2.5Y6/6, 2.5Y4/2	NW CORNER - DK GR BR SI LO W/LG.ROCKS; REST OF UNIT - OL YL SI LO		P	PB/AB	04/18/14
	7	6	25	30	2.5Y6/6, 2.5Y6/4, 2.5Y4/2	NW CORNER - DK GR BR SI LO W/LG.ROCKS & ROOTS; REST OF UNIT - OL YL MOTTLED W/LT YL BR SI LO	VERY LOW DENSITY CHARCOAL - DISC.	P	PB/AB	04/18/14
	7	7	30	35	2.5Y6/4, 7.5YR6/8	LT YL BR SA SI MOTTLED W/RD YL SA SI		N	PB/AB	04/18/14
	8	1	0	5	2.5Y4/3	OL BR SI LO W/ROOTS	LOW DENSITY PLASTIC - DISC.	N	PB/LP	04/21/14
	8	2	5	10	2.5Y4/3, 10YR4/6	OL BR SI LO MOTTLED W/DK YL BR SI LO		P	PB/LP	04/21/14
	8	3	10	15	2.5Y6/8, 2.5Y4/2	OL YL W/DK GR BR SI LO	VERY LOW DENSITY CHARCOAL - DISC.	P	PB/LP	04/21/14
	8	4	15	20	2.5Y6/8, 2.5Y4/2	OL YL W/DK GR BR SI LO		P	PB/LP	04/21/14
	8	5	20	25	2.5Y6/4, 2.5Y4/3	LT YL BR SI LO W/PATCH OF OL BR SI LO IN N 1/2	VERY LOW DENSITY CHARCOAL - DISC.	N	PB/LP	04/21/14
	9	1	0	8	10YR3/3	DK BR SI LO		P	EA/VL	04/21/14
	9	2	8	15	10YR4/2	DK GR BR SI LO W/ROCKS		P	EA/VL	04/21/14
	9	3	15	20	2.5Y5/6, 10YR4/2	LT OL BR SI LO W/MOTTLED DK GR BR SI LO		P	EA/VL	04/21/14

STP	Unit	Level	Begin	End	Munsell	Soil	Comments	CM?	Crew	Date
	9	4	20	27	2.5Y5/6, 10YR4/2	MOTTLED LT OL BR SI LO W/DK GR BR SI LO, W/ROCKS & LG.ROOTS		P	EA/VL	04/21/14
	9	5	27	32	2.5Y5/6	LT OL BR SI LO W/ROOTS		P	EA/VL	04/21/14
	9	6	32	37	2.5Y6/6	OL YL WET SI LO W/ROOTS & SOME ROCKS		P	EA/VL	04/21/14
	9	7	37	42	2.5Y5/6	LT OL BR SI LO		N	EA/VL	04/21/14
	10	1	0	5	10YR3/2	VERY DK GR BR SI LO		N	DP/JF	04/21/14
	10	2	5	10	10YR3/2, 10YR6/6	VERY DK GR BR SI LO MOTTLED W/BR YL SI LO	VERY LOW DENSITY CHARCOAL - DISC.	P	DP/JF	04/21/14
	10	3	10	15	10YR3/3, 2.5Y5/6	DK BR SI LO CHANGING TO LT OL BR SI LO	B-HORIZON EMERGING IN BOTTOM; LOW DENSITY CHARCOAL - DISC.	P	DP/JF	04/21/14
	10	4	15	20	2.5Y5/6	LT OL BR SI LO	FULLY IN B-HORIZON AT BASE OF LEVEL	P	DP/JF	04/21/14
	10	5	20	25	2.5Y5/6	LT OL BR SI LO		P	DP/JF	04/21/14
	10	6	25	30	2.5Y5/6	LT OL BR SI LO		N	DP/JF	04/21/14
SE1		1	0	15		BR SI LO	STP LOCATED 20cm EAST OF WALKWAY	N	PB/DP	04/14/14
SE1		2	15	24		GR BR SI LO		N	PB/DP	04/14/14
SE1		3	24	42		PALE YL BR SI LO		N	PB/DP	04/14/14
SE2		1	0	16		BR SI LO		P	PB/DP	04/14/14
SE2		2	16	32		YL BR SI LO		N	PB/DP	04/14/14
SE3		1	0	11		DK BR SI LO		P	PB/DP	04/14/14
SE3		2	11	31		YL BR SI		N	PB/DP	04/14/14
SE3		3	31	37		PALE YL & STRONG BR SI		N	PB/DP	04/14/14
SE4		1	0	18		BR SI LO		P	PB/DP	04/14/14
SE4		2	18	35		YL BR SI LO		N	PB/DP	04/14/14
SE5		1	0	24		DK GR BR SI LO		N	MJ/JA	04/14/14
SE5		2	24	39		DK YL BR SI CL		N	MJ/JA	04/14/14
SE6		1	0	18		DK GR BR SI LO		N	MJ/JA	04/14/14
SE6		2	18	38		YL BR SI LO		N	MJ/JA	04/14/14
SE7		1	0	20		DK BR SI LO		P	MJ/JA	04/14/14
SE7		2	20	40		YL BR SI LO		N	MJ/JA	04/14/14
SE8		1	0	24		DK BR SI LO		P	VL/EA	04/14/14
SE8		2	24	52		YL BR SA SI		N	VL/EA	04/14/14
SE9		1	0	25		GR BR DAMP SI LO		P	VL/EA	04/14/14
SE9		2	25	40		YL BR/STRONG BR/OL BR MOTTLED & DAMP SI LO (WETLAND SOIL)		N	VL/EA	04/14/14
SE10		1	0	20		DK BR SI LO		P	VL/EA	04/14/14
SE10		2	20	28		STRONG BR SI LO		N	VL/EA	04/14/14
SE10		3	28	48		YL BR WET SI LO		N	VL/EA	04/14/14

2.3 Heritage Precontact Site Soils

STP		Unit	Fea	Lev	Horz.	Beg	End	Munsell	Soil	Comments	CM?	Crew	Date
SE	1			1	A	0	26		DK BR SI LO W/ROCKS & ROOTS	1 BRICK - DISC.	P	DP/VL	5/5/2014
SE	1			2	B	26	45		YL BR SI LO W/ROCKS & ROOTS		N	DP/VL	5/5/2014
SE	2			1	A	0	27		DK BR SI LO		P	DP/VL	5/5/2014
SE	2			2	B	27	45		YL BR SI LO		N	DP/VL	5/5/2014
SE	3			1	A	0	25		DK BR SI LO W/ROOTS & ROCKS		P	DP/VL	5/5/2014
SE	3			2	B	25	42		YL BR SI LO W/ROOTS & ROCKS		N	DP/VL	5/5/2014
SE	4			1	A	0	32		DK BR SI LO		P	DP/VL	5/5/2014
SE	4			2	B	32	56		YL BR SI LO		N	DP/VL	5/5/2014
SE	5			1	A	0	25		DK BR SI LO W/ROCKS		P	DP/VL	5/5/2014
SE	5			2	B	25	40		YL BR SI LO W/ROCKS		N	DP/VL	5/5/2014
SE	6			1	A	0	30		BR SI LO W/ROCK		N	DP/VL	5/5/2014
SE	6			2	B	30	49		DK YL BR SI LO W/ROCK	POSS.FILL; STOPPED BY ROCK	N	DP/VL	5/5/2014
		1		1	A	0	7	10YR3/2	VERY DK GR BR SI LO W/SMALL ROOTS		N	EA/GP	5/2/2014
		1		2	A	7	12	10YR3/3	DK BR SI LO W/ROOTS		P	EA/GP	5/2/2014
		1		3	A	12	17	10YR3/3	DK BR SI LO W/ROOTS & ROCK		P	EA/GP	5/2/2014
		1		4	A/B	17	22	10YR3/3, 10YR6/8	DK BR SI LO W/MOTTLED BR YL SI LO & ROOTS		P	EA/GP	5/2/2014
		1		5	B	22	27	10YR5/4	YL BR SI LO W/ROOTS		P	EA/GP	5/2/2014
		1		6	B	27	32	10YR5/4	YL BR SI LO W/LOW DENSITY ROOTS		P	EA/GP	5/2/2014
		1		7	B	32	38	10YR5/4	YL BR SI LO		N	EA/GP	5/2/2014
		1		8	B	38	43	10YR5/6	YL BR SI LO		P	EA/GP	5/2/2014
		1		9	B	43	48	10YR5/6	YL BR SI LO		N	EA/GP	5/2/2014
		1		STP	B	48	100		MOTTLED GR/STRONG BR COMPACT SA SI		N	EA/GP	5/2/2014
		2		1	A	0	10	10YR3/2	VERY DK GR BR SI LO W/ROOTS		N	AN/KS	5/2/2014
		2		2	A	10	15	10YR3/2	VERY DK GR BR SI LO W/ROOTS		P	AN/KS	5/2/2014
		2		3	A	15	20	10YR3/2	VERY DK GR BR SI LO W/ROOTS		P	AN/KS	5/2/2014
		2		4	A	20	25	10YR3/2, 10YR5/6	VERY DK GR BR SI LO W/ROOTS W/MOTTLES OF YL BR SI LO APPEARING	VERY LOW DENSITY CHARCOAL - DISC.	P	AN/KS	5/2/2014
		2		5	A/B	25	30	10YR3/2, 10YR5/6	VERY DK GR BR SI LO TRANSITIONING TO YL BR SI LO		P	AN/KS	5/2/2014
		2		6	A/B	30	35	10YR5/6, 10YR3/2	YL BR SI LO W/ROOTS, W/SOME REMNANT OF VERY DK GR BR SI LO	LOW DENSITY CHARCOAL - DISC.	P	AN/KS	5/2/2014
		2		7	A/B	35	40	10YR5/6, 10YR3/2	YL BR SI LO W/VERY DK GR BR SI LO MOTTLING		P	AN/KS	5/5/2014
		2		8	B	40	45	10YR5/6	YL BR SI LO		P	PB/LP	5/5/2014
		2		9	B	45	50	10YR5/6	YL BR SI LO		P	PB/LP	5/5/2014
		2		10	B	50	55	10YR5/6	YL BR SI LO		P	PB/LP	5/5/2014
		2		11	B	55	60	2.5Y5/4, 2.5Y5/2, 7.5YR5/8	LT OL BR SI LO W/GR BR & STRONG BR SI LO		N	PB/LP	5/5/2014

STP	Unit	Fea	Lev	Horz.	Beg	End	Munsell	Soil	Comments	CM?	Crew	Date
	2		12	B	60	66	2.5Y5/4, 2.5Y5/2, 7.5YR5/8	LT OL BR SI LO W/GR BR & STRONG BR SI LO		P	PB/LP	5/5/2014
	2		13	B	66	71	2.5Y5/4, 2.5Y5/2, 7.5YR5/8	LT OL BR SI LO W/GR BR & STRONG BR SI LO		N	PB/LP	5/5/2014
	3		1	A	0	10	10YR3/2	VERY DK GR BR SI LO		N	MJ/AK	4/29/2014
	3		2	A	10	15	10YR3/2	VERY DK GR BR SI LO W/ROOTS		P	MJ/AK	4/29/2014
	3		3	A	15	21	10YR3/2	VERY DK GR BR LOOSE SI LO W/ROOTS	LOW-MED.DENSITY CHARCOAL (MORE DENSE IN N.END) - DISC.	P	MJ/AK	5/1/2014
	3		4	A/B	21	27	10YR3/2, 10YR5/6	VERY DK GR BR SI LO W/TRANSITION TO YL BR SI REACHED AT BOTTOM OF LEVEL	SMALL FEA.W/DK BR FILL, CHARCOAL & FCR NOTED IN N 1/2 - DESIGNATED FEA.1; LOW-MED.DENSITY CHARCOAL - DISC.	P	BB/AK	5/1/2014
	3	1	1	A	27	29	10YR3/2	VERY DK GR BR SI LO W/CHARCOAL	EXCAVATED E 1/2 OF FEA.1 - DETERMINED TO BE A LENS/DEPRESSION IN SUBSOIL; POSS.NATURAL OR BASE OF PLOWED FEA. - VERY SHALLOW; LOW DENSITY CHARCOAL - DISC.	P	BB/AK	5/1/2014
	3		5	B	27	32	10YR5/6	YL BR SI		P	BB/AK	5/1/2014
	3		6	B	32	37	10YR5/6	YL BR SI		P	BB/AK	5/1/2014
	3		7	B	37	42	10YR5/6	YL BR SI		P	BB/AK	5/2/2014
	3		8	B	42	48	10YR5/6	YL BR SI LO		P	BB/AK	5/2/2014
	3		9	B	48	53	10YR5/6	YL BR SI LO		N	BB/AK	5/2/2014
	3		10	B	53	63	10YR5/6	YL BR SI LO		N	BB/AK	5/2/2014
	4		1	A	0	13	10YR3/2	VERY DK GR BR SI LO W/HEAVY ROOT DISTURBANCE		P	AK/BB	5/2/2014
	4		2	A	13	19	10YR3/2	VERY DK GR BR SI LO W/ROOTS	LOW DENSITY CHARCOAL - DISC.	P	AK/BB	5/2/2014
	4		3	A	19	24	10YR3/2, 10YR5/6	VERY DK GR BR SI LO W/ROOTS; YL BR SI LO AT BOTTOM OF LEVEL	FEA.NOTED IN S 1/2 OF UNIT AS SUBSOIL TRANSITION OCCURRED - DESIGNATED FEA.2	P	AK/BB	5/5/2014
	4	2	1	A	0	6	10YR3/2	VERY DK GR BR SI LO	FEA.2 BISECTED E-W; STAINING IS SHALLOW; S 1/2 SCREENED ALSO; LOW-MED.DENSITY CHARCOAL - DISC.	P	AK/BB	5/5/2014
	4		4	A/B	24	29	10YR5/6, 10YR3/2	YL BR SI LO MOTTLED W/VERY DK GR BR SI LO		P	AK/BB	5/5/2014
	4		5	B	29	40	10YR5/6	YL BR SI LO		P	AK/BB	5/5/2014
	4		6	B	40	45	10YR5/6	YL BR SI LO		N	AK/VL	5/5/2014
	4		7	B	45	50	10YR5/6	YL BR SI LO		N	AK/BB	5/5/2014

STP	Unit	Fea	Lev	Horz.	Beg	End	Munsell	Soil	Comments	CM?	Crew	Date
	5		1	A	0	13	10YR3/2	VERY DK GR BR SI LO		N	GD/RS	5/2/2014
	5		2	A	13	18	10YR3/2	VERY DK GR BR SI LO W/GVL, ROCKS & ROOTS		P/H	GD/RS	5/2/2014
	5		3	B	18	23	10YR5/6	YL BR SI LO	LOW DENSITY CHARCOAL - DISC.	P	GD/RS	5/2/2014
	5		4	B	23	28	10YR5/6	YL BR SI LO W/GVL & ROCK	LOW DENSITY BRICK & MORTAR - DISC.	P	GD/RS	5/2/2014
	5		5	B	28	33	10YR5/6	YL BR SI LO		P	GD/RS	5/2/2014
	5		6	B	33	38	10YR5/6	YL BR SI LO W/GVL & ROCKS		P	GD/RS	5/2/2014
	5		7	B	38	43	10YR5/6	YL BR SI LO W/SOME ROCKS, GVL & ROOTS		N	VL/DP	5/5/2014
	5		8	B	43	53	10YR5/6	YL BR SI LO W/ROCKS		N	VL/DP	5/5/2014
	5		STP	B	53	75	10YR5/6	YL BR SI LO W/SOME STRONG BR & GR MOTTLES		N	VL/DP	5/5/2014
	5		STP	B	75	100	10YR5/6, 10YR4/1, 7.5YR4/6	YL BR/DK GR/STRONG BR MOTTLED CL SI LO		N	VL/DP	5/5/2014
	6		1	A	0	10	10YR2/2	VERY DK BR SI LO		N	EA/GP	5/5/2014
	6		2	A	10	15	10YR2/2	VERY DK BR SI LO		N	EA/GP	5/5/2014
	6		3	A	15	20	10YR2/2	VERY DK BR SI LO W/LOW DENSITY ROOTS	DK GR SOIL IN SW CORNER	P	EA/GP	5/5/2014
	6		4	A/B	20	22	10YR5/6, 10YR2/2	YL BR SI LO MOTTLED W/VERY DK BR SI LO & CHARCOAL FLECKS	CHARCOAL STAINS NOTED	P	EA/GP	5/5/2014
	6		5	A/B	22	30	10YR5/6, 10YR3/1	YL BR SI LO W/MOTTLED VERY DK GR SI LO; FEA.3 (STAIN IN SW CORNER) - VERY DK GR SI LO W/LOW DENSITY FCR	LOW DENSITY CHARCOAL - DISC.; STAIN IN SW CORNER DESIGNATED FEA.3	P	EA/GP	5/5/2014
	6	3		FEA3	25	46	10YR3/1	VERY DK GR SI LO	FEA.3 BISECTED E-W; HIGH DENSITY CHARCOAL - DISC.	P	EA/GP	5/5/2014
	6		6	A/B	30	35	10YR5/6, 10YR3/1	YL BR SI LO W/MOTTLED VERY DK GR SI LO	LOW DENSITY CHARCOAL - DISC.	P	EA/GP	5/5/2014
	6		7	B	35	41	10YR5/6	YL BR SI LO	LOW DENSITY CHARCOAL - DISC.	P	EA/GP	5/5/2014
	6		8	B	41	47	10YR5/6	YL BR SI LO		P	EA/GP	5/5/2014
	6		9	B	47	52	10YR5/6	YL BR SI LO		N	EA/GP	5/5/2014
	6		10	B	52	57	10YR5/6	YL BR SI LO		N	EA/GP	5/5/2014

APPENDIX III. ARTIFACT CATALOGUES

3.1 Traditions Precontact Site Artifacts

Unit	Level	Artifact	Comments	Util. Ct.	Burn Ct.	Ct.	Wt. (g)
1	1	FIRE CRACKED ROCK				5	430
1	1	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	1	1	0.45
1	3	CREAMWARE UNDIFF. CERAMIC	COMMON CREAMWARE			1	1.6
2	1	FIRE CRACKED ROCK				2	173
2	1	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	2	0.15
2	4	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	1	0.13
3	1	FIRE CRACKED ROCK				5	358
3	1	UNMODIFIED	LIMESTONE & CHERT ROCK			1	78
3	1	ONONDAGA CHERT PROJECTILE POINT ORIENT FISHTAIL		0	0	1	5.53
3	1	RHYOLITE DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	1	0.36
3	1	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	3	0.42
3	1	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		1	0	1	0.27
3	1	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	4	4	0.64
3	2	FIRE CRACKED ROCK				7	264
3	2	CHOPPER				1	324
3	2	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	6	1.02
3	2	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		1	0	1	0.22
3	2	ONONDAGA CHERT DEBITAGE/CORE CORTICAL FLAKE		1	0	1	0.93
3	2	UNIDENTIFIED MATERIAL DEBITAGE/CORE NON-CORTICAL FLAKE	LOOKS LIKE NORMANSKILL/MT.MERINO CHERT	0	0	1	0.22
3	3	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	6	0.77
3	3	ONONDAGA CHERT DEBITAGE/CORE CORTICAL FLAKE		1	1	1	0.24
3	3	ONONDAGA CHERT DEBITAGE/CORE CORTICAL FLAKE		1	0	1	1.13
3	3	ONONDAGA CHERT PROJECTILE POINT UNCLASSIFIED SIDE-NOTCH	SERRATED EDGES (?); ONE TANG BROKEN	0	0	1	4.29
3	3	UNIDENTIFIED MATERIAL				1	2.17
3	5	ONONDAGA CHERT PROJECTILE POINT BASE	SIDE NOTCH; SMALL FRAGMENT	0	0	1	1.43
3	6	FIRE CRACKED ROCK				2	108
4	1	FIRE CRACKED ROCK				6	248
4	1	RHYOLITE DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	1	0.14
4	1	ONONDAGA CHERT DEBITAGE/CORE CORTICAL FLAKE		0	0	2	1.66
4	1	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	4	4	1.01
4	1	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	11	1.37
4	2	FIRE CRACKED ROCK				1	10
4	2	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	11	2.05
4	2	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		1	0	1	0.68

Unit	Level	Artifact	Comments	Util. Ct.	Burn Ct.	Ct.	Wt. (g)
4	2	ONONDAGA CHERT DEBITAGE/CORE SHATTER		0	1	1	0.31
4	2	RHYOLITE DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	1	0.18
4	3	FIRE CRACKED ROCK				2	47
4	3	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	2	0.17
4	3	ONONDAGA CHERT DEBITAGE/CORE CORTICAL FLAKE		0	0	2	0.47
4	4	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	3	0.32
5	1	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	2	0.33
5	1	ONONDAGA CHERT RETOUCHED PIECE UNIFACIAL		0	0	1	3.3
5	1	FIRE CRACKED ROCK				10	305
5	2	FIRE CRACKED ROCK				1	334
5	2	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	9	2.23
5	2	ONONDAGA CHERT DEBITAGE/CORE CORTICAL FLAKE		2	0	2	2.89
5	2	UNIDENTIFIED MATERIAL DEBITAGE/CORE NON-CORTICAL FLAKE	LIMESTONE?	0	0	1	0.23
5	3	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	2	0.23
5	3	UNIDENTIFIED MATERIAL DEBITAGE/CORE NON-CORTICAL FLAKE	LIGHT BROWN/GRAY CHERT	0	0	1	0.07
5	3	UNIDENTIFIED MATERIAL DEBITAGE/CORE NON-CORTICAL FLAKE	WHITE TRANSLUCENT CHERT	0	0	1	0.25
5	3	FIRE CRACKED ROCK				7	500
6	1	FIRE CRACKED ROCK				12	397
6	1	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	18	3.15
6	1	ONONDAGA CHERT DEBITAGE/CORE CORTICAL FLAKE		0	0	2	0.77
6	1	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		1	0	1	1.35
6	1	UNIDENTIFIED MATERIAL DEBITAGE/CORE NON-CORTICAL FLAKE	LIGHT GRAY/WHITE CHERT	0	0	1	0.45
6	1	ONONDAGA CHERT PROJECTILE POINT BASE	POSS.ORIENT BASE?	0	0	1	2.75
6	2	FIRE CRACKED ROCK				5	315
6	2	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	4	0.72
6	2	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	1	1	0.13
6	2	ONONDAGA CHERT BIFACE FRAGMENT		0	1	1	3.28
6	4	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	3	0.82
6	5	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	1	0.6
7	1	FIRE CRACKED ROCK				7	331
7	1	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	28	6.7
7	1	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		4	0	4	4.38
7	1	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	4	4	1.72
7	1	ONONDAGA CHERT DEBITAGE/CORE SHATTER		0	0	3	6.41
7	1	RHYOLITE DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	5	1.82
7	2	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	3	0.47
7	2	ONONDAGA CHERT DEBITAGE/CORE CORTICAL FLAKE		0	0	1	0.67

Unit	Level	Artifact	Comments	Util. Ct.	Burn Ct.	Ct.	Wt. (g)
8	1	FIRE CRACKED ROCK				2	23
8	1	UNIDENTIFIED MATERIAL DEBITAGE/CORE CORTICAL FLAKE	LIMESTONE?	0	0	1	1.66
8	1	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	19	3.33
8	1	ONONDAGA CHERT DEBITAGE/CORE CORTICAL FLAKE		0	0	2	0.06
8	1	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		2	0	2	1.78
8	1	RHYOLITE DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	2	0.28
8	1	FERROUS METAL UNDIAG. NAIL FRAG.				1	2.42
8	1	GLASS WINDOW				1	0.44
8	1	GLASS AQUA UNDIFF. GLASS				1	0.16
8	1	CUPROUS METAL BUTTON				1	1.01
8	2	FIRE CRACKED ROCK				3	250
8	2	RHYOLITE DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	1	0.66
8	2	ONONDAGA CHERT DEBITAGE/CORE CORTICAL FLAKE		1	0	1	1.21
8	2	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	7	2.15
8	3	RHYOLITE DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	1	0.21
8	3	ONONDAGA CHERT DEBITAGE/CORE CORTICAL FLAKE		0	0	1	0.25
8	3	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	1	0.02
8	3	FIRE CRACKED ROCK				2	26
8	4	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	1	0.05
8	4	FIRE CRACKED ROCK				1	83
8	5	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	1	0.06
9	1	FIRE CRACKED ROCK				3	162
9	1	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	7	1.38
9	1	ONONDAGA CHERT DEBITAGE/CORE CORTICAL FLAKE		0	0	1	0.57
9	1	ONONDAGA CHERT DEBITAGE/CORE CORTICAL FLAKE		1	0	1	0.89
9	2	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	14	3.58
9	2	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		1	0	1	0.54
9	2	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	2	2	0.57
9	2	ONONDAGA CHERT DEBITAGE/CORE CORTICAL FLAKE		0	0	3	1.59
9	2	RHYOLITE DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	1	0.07
9	2	UNIDENTIFIED MATERIAL DEBITAGE/CORE NON-CORTICAL FLAKE	LOOKS LIKE NORMANSKILL/MT.MERINO CHERT	1	0	1	1.73
9	3	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	6	2.05
9	3	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	4	4	0.73
9	3	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		2	0	2	3.63
9	3	RHYOLITE DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	1	0.27
9	3	ONONDAGA CHERT DEBITAGE/CORE CORTICAL FLAKE		1	0	1	1.51
9	4	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	4	0.49

Unit	Level	Artifact	Comments	Util. Ct.	Burn Ct.	Ct.	Wt. (g)
9	4	ONONDAGA CHERT DEBITAGE/CORE CORTICAL FLAKE		0	0	2	0.49
9	4	RHYOLITE DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	1	0.7
10	1	FIRE CRACKED ROCK				7	127
10	1	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	2	0.23
10	2	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		1	0	1	0.33
10	2	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	1	0.21
10	2	ONONDAGA CHERT DEBITAGE/CORE CORTICAL FLAKE		1	1	1	0.89
10	2	UNIDENTIFIED MATERIAL	QUARTZ?			1	0.61
10	3	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	2	0.43
10	3	ONONDAGA CHERT DEBITAGE/CORE SHATTER		0	0	1	0.96
10	3	UNIDENTIFIED MATERIAL DEBITAGE/CORE NON-CORTICAL FLAKE	LIMESTONE?	1	0	1	1.15
11	1	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		1	0	1	2.54
11	1	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	3	0.37
11	1	FIRE CRACKED ROCK				15	450
11	1	FERROUS METAL UNDIAG. NAIL FRAG.				1	4.29
11	2	ONONDAGA CHERT DEBITAGE/CORE CORTICAL FLAKE		0	0	1	0.36
11	2	FIRE CRACKED ROCK				2	31
11	3	FIRE CRACKED ROCK				1	6
12	1	FIRE CRACKED ROCK				1	122
12	1	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	6	0.54
12	1	UNIDENTIFIED MATERIAL DEBITAGE/CORE NON-CORTICAL FLAKE	LIGHT GRAY/WHITE CHERT	0	0	1	0.65
12	2	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	3	0.38
12	2	FIRE CRACKED ROCK				1	46
12	3	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	1	0.06
13	1	FIRE CRACKED ROCK				2	23
13	1	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	1	0.07
13	1	ONONDAGA CHERT DEBITAGE/CORE CORTICAL FLAKE		0	0	1	1.44
13	2	FIRE CRACKED ROCK				2	59
14	1	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	6	1.29
14	1	FIRE CRACKED ROCK				8	350
14	3	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	1	0.23
15		ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	1	1	0.1
15	1	FIRE CRACKED ROCK				17	1,000.00
15	1	HAMMERSTONE	BATTERED BOTH ENDS			1	635
15	1	STONE POLISHED	POLISH AROUND EDGES			1	396
15	1	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	54	9.76
15	1	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	6	6	0.76

Unit	Level	Artifact	Comments	Util. Ct.	Burn Ct.	Ct.	Wt. (g)
15	1	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		2	0	2	0.79
15	1	ONONDAGA CHERT DEBITAGE/CORE CORTICAL FLAKE		0	0	4	1.15
15	1	ONONDAGA CHERT DEBITAGE/CORE CORTICAL FLAKE		3	0	3	3.33
15	1	ONONDAGA CHERT DEBITAGE/CORE SHATTER		0	0	1	0.74
15	1	RHYOLITE DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	8	2.95
15	2	ONONDAGA CHERT DEBITAGE/CORE CORTICAL FLAKE		0	0	1	0.78
15	2	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	1	0.33
16	1	FERROUS METAL CUT NAIL FRAG				1	2.5
16	1	FIRE CRACKED ROCK				6	833
16	1	ONONDAGA CHERT PROJECTILE POINT BASE	BROAD SIDE NOTCH POINT	0	0	1	8.93
16	1	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	12	2.65
16	1	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	1	1	0.04
16	1	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		6	0	6	8.97
16	1	ONONDAGA CHERT DEBITAGE/CORE CORTICAL FLAKE		0	0	2	4.27
16	1	ONONDAGA CHERT DEBITAGE/CORE CORTICAL FLAKE		1	0	1	14.07
16	1	RHYOLITE DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	4	3.99
16	2	ONONDAGA CHERT DEBITAGE/CORE CORE FRAGMENT		0	0	1	12.48
16	2	RHYOLITE DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	1	0.45
16	2	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	3	0.34
16	2	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	1	1	0.05
16	2	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		1	0	1	0.73
17	1	FIRE CRACKED ROCK				15	353
17	1	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	11	2.85
17	1	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	4	4	0.91
17	1	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		1	0	1	1.18
17	1	ONONDAGA CHERT DEBITAGE/CORE SHATTER		0	0	2	1.07
17	1	ONONDAGA CHERT PROJECTILE POINT TIP		0	0	1	2.35
17	2	FIRE CRACKED ROCK				5	443
17	2	CHOPPER				1	253
17	2	HAMMERSTONE	SLIGHT BATTER ONE EDGE			1	360
17	2	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	6	1.1
17	2	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		2	0	2	1.09
17	2	ONONDAGA CHERT DEBITAGE/CORE BIPOLAR FLAKE		1	0	1	4.21
17	3	FIRE CRACKED ROCK				6	339
17	3	UNMODIFIED	LIMESTONE & CHERT ROCK			1	31
17	3	ONONDAGA CHERT DEBITAGE/CORE CORTICAL FLAKE		0	1	1	0.93
17	3	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	1	0.07
17	4	FIRE CRACKED ROCK				4	227

3.2 Glen Precontact Site Artifacts

STP	Unit	Level	Artifact	Comments	Util. Ct.	Burn Ct.	Ct.	Wt. (g)
	1	1	FIRE CRACKED ROCK				11	600
	1	1	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	4	0.97
	1	1	UNIDENTIFIED MATERIAL DEBITAGE/CORE NON-CORTICAL FLAKE	LT GRAY SHALE CHERT W/IRON STAINS	0	0	1	0.37
	1	2	BONE INDETERMINATE	CARBONIZED			2	0.42
	1	2	FIRE CRACKED ROCK				45	1,800.00
	1	2	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	12	2.3
	1	2	RHYOLITE DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	3	1.56
	1	2	UNIDENTIFIED MATERIAL DEBITAGE/CORE NON-CORTICAL FLAKE	LT GRAY SHALE CHERT W/IRON STAINS	1	0	1	1.48
	1	3	FIRE CRACKED ROCK				20	1,300.00
	1	3	HAMMERSTONE				1	119
	1	3	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	1	0.07
	1	3	ONONDAGA CHERT DEBITAGE/CORE CORTICAL FLAKE		1	0	1	2.02
	1	3	RHYOLITE DEBITAGE/CORE NON-CORTICAL FLAKE		1	0	1	9.76
	1	4	FIRE CRACKED ROCK				2	145
	1	4	GRIT TEMPERED SMOOTHED UNDECORATED BODY SHERD	APPEARS TO BE A SINGLE COIL FROM A LARGER POT (POSS.VINETTE 1)			1	3.4
	1	4	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	1	1	0.62
	1	5	FIRE CRACKED ROCK				2	45
	1	5	ONONDAGA CHERT PROJECTILE POINT UNCLASSIFIED SIDE-NOTCH		0	0	1	5.2
	1	5	UNIDENTIFIED MATERIAL DEBITAGE/CORE CORTICAL FLAKE	RHYOLITE?	0	0	1	0.5
	2	1	FIRE CRACKED ROCK				13	1,000.00
	2	1	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	1	0.25
	2	1	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		1	0	1	12.18
	2	2	FIRE CRACKED ROCK				34	2,500.00
	2	2	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	16	4.35
	2	2	UNIDENTIFIED MATERIAL DEBITAGE/CORE CORTICAL FLAKE	LT GRAY SHALE CHERT W/IRON STAINS	0	0	1	0.37
	2	2	UNIDENTIFIED MATERIAL DEBITAGE/CORE NON-CORTICAL FLAKE	LT GRAY SHALE CHERT W/IRON STAINS	0	0	6	2.97
	2	2	ONONDAGA CHERT DEBITAGE/CORE CORTICAL FLAKE		1	0	1	0.88
	2	2	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		3	0	3	6.02
	2	3	FIRE CRACKED ROCK				20	1,200.00
	2	3	SHERDLET				2	1.6
	2	3	ONONDAGA CHERT BIFACE FRAGMENT		0	0	1	2.07
	2	3	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	42	26.62
	2	3	UNIDENTIFIED MATERIAL DEBITAGE/CORE CORTICAL FLAKE	LT GRAY SHALE CHERT W/IRON STAINS	0	0	2	6.05
	2	3	UNIDENTIFIED MATERIAL DEBITAGE/CORE NON-CORTICAL FLAKE	LT GRAY SHALE CHERT W/IRON STAINS	0	0	4	3.2
	2	3	UNIDENTIFIED MATERIAL DEBITAGE/CORE CORTICAL FLAKE	LT GRAY SHALE CHERT W/IRON STAINS	0	2	2	2.57
	2	3	UNIDENTIFIED MATERIAL DEBITAGE/CORE NON-CORTICAL FLAKE	LT BLUE/GRAY CHERT	0	2	2	0.39

STP	Unit	Level	Artifact	Comments	Util. Ct.	Burn Ct.	Ct.	Wt. (g)
	2	3	ONONDAGA CHERT DEBITAGE/CORE CORTICAL FLAKE		1	0	1	5.46
	2	3	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		6	0	6	20.25
	2	4	FIRE CRACKED ROCK				3	200
	2	4	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	15	7.58
	2	4	UNIDENTIFIED MATERIAL DEBITAGE/CORE NON-CORTICAL FLAKE	LT GRAY SHALE CHERT W/IRON STAINS	0	0	4	1.68
	2	4	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	1	1	0.23
	2	5	FIRE CRACKED ROCK				1	147
	2	5	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	3	1.38
	2	5	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		1	0	1	3.73
	2	6	ONONDAGA CHERT DEBITAGE/CORE CORTICAL FLAKE		0	0	1	0.55
	2	6	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	3	0.25
	3	2	BONE INDETERMINATE	CARBONIZED			1	0.19
	3	2	FIRE CRACKED ROCK				30	1,900.00
	3	2	ONONDAGA CHERT DEBITAGE/CORE CORTICAL FLAKE		0	0	3	1.88
	3	2	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	15	4.71
	3	2	UNIDENTIFIED MATERIAL DEBITAGE/CORE NON-CORTICAL FLAKE	LT GRAY SHALE CHERT W/IRON STAINS	0	0	5	1.18
	3	2	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	2	2	1.69
	3	2	UNIDENTIFIED MATERIAL DEBITAGE/CORE NON-CORTICAL FLAKE	LT GRAY SHALE CHERT W/IRON STAINS	1	0	1	2.32
	3	2	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		4	0	4	16.8
	3	3	FIRE CRACKED ROCK				66	2,700.00
	3	3	STONE POLISHED				1	11
	3	3	ONONDAGA CHERT DEBITAGE/CORE FLAKE CORE		0	0	1	28.51
	3	3	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	23	5.5
	3	3	UNIDENTIFIED MATERIAL DEBITAGE/CORE CORTICAL FLAKE	LT GRAY SHALE CHERT W/IRON STAINS	0	0	2	4.58
	3	3	UNIDENTIFIED MATERIAL DEBITAGE/CORE NON-CORTICAL FLAKE	LT GRAY SHALE CHERT W/IRON STAINS	0	0	4	4.14
	3	3	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	3	3	1.47
	3	3	UNIDENTIFIED MATERIAL DEBITAGE/CORE NON-CORTICAL FLAKE	LT GRAY SHALE CHERT W/IRON STAINS	1	0	1	4.07
	3	3	ONONDAGA CHERT DEBITAGE/CORE CORTICAL FLAKE		1	1	1	0.8
	3	3	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		2	0	2	4.13
	3	4	FIRE CRACKED ROCK				28	2,600.00
	3	4	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	8	3.77
	3	4	UNIDENTIFIED MATERIAL DEBITAGE/CORE NON-CORTICAL FLAKE	LT GRAY SHALE CHERT W/IRON STAINS	0	0	3	1.37
	3	4	PENNSYLVANIA JASPER DEBITAGE/CORE NON-CORTICAL FLAKE		1	1	1	1.17
	3	4	UNIDENTIFIED MATERIAL DEBITAGE/CORE NON-CORTICAL FLAKE	LT GRAY SHALE CHERT W/IRON STAINS	2	0	2	7.34
	3	5	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	4	1.19
	3	5	UNIDENTIFIED MATERIAL DEBITAGE/CORE CORTICAL FLAKE	LT GRAY SHALE CHERT W/IRON STAINS	0	0	1	0.78

STP	Unit	Level	Artifact	Comments	Util. Ct.	Burn Ct.	Ct.	Wt. (g)
	3	6	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		1	1	1	1.97
	4	2	FIRE CRACKED ROCK				67	4,500.00
	4	2	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	5	1.47
	4	2	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	3	3	1.47
	4	3	FIRE CRACKED ROCK				105	5,400.00
	4	3	ONONDAGA CHERT DEBITAGE/CORE CORTICAL FLAKE		0	0	1	0.34
	4	3	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	44	7.47
	4	3	UNIDENTIFIED MATERIAL DEBITAGE/CORE NON-CORTICAL FLAKE	LIMESTONE	0	0	1	0.41
	4	3	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	6	6	2.24
	4	3	ONONDAGA CHERT DEBITAGE/CORE CORTICAL FLAKE		1	1	1	2
	4	3	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		2	0	2	2.06
	4	4	FIRE CRACKED ROCK				56	5,400.00
	4	4	ONONDAGA CHERT DEBITAGE/CORE CORTICAL FLAKE		0	0	4	2.44
	4	4	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	45	8.75
	4	4	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	1	1	0.55
	4	4	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		3	0	3	3.33
	4	5	FIRE CRACKED ROCK				35	2,900.00
	4	5	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	6	2.25
	4	5	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		3	0	3	2.37
	4	6	FIRE CRACKED ROCK				15	800
	4	6	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	3	1.44
	5	2	FIRE CRACKED ROCK				26	1,400.00
	5	2	ONONDAGA CHERT DEBITAGE/CORE CORTICAL FLAKE		0	0	1	0.65
	5	2	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	11	1.35
	5	2	UNIDENTIFIED MATERIAL DEBITAGE/CORE NON-CORTICAL FLAKE	LT GRAY SHALE CHERT W/IRON STAINS	0	0	1	0.29
	5	2	UNIDENTIFIED MATERIAL PROJECTILE POINT LATE WOODLAND TRIANGULAR	BROWN/GRAY CHERT	0	0	1	0.59
	5	2	UNIDENTIFIED MATERIAL DEBITAGE/CORE SHATTER	LT BLUE/GRAY CHERT	0	1	1	1.6
	5	2	ONONDAGA CHERT DEBITAGE/CORE CORTICAL FLAKE		1	0	1	1.07
	5	2	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		1	0	1	1.17
	5	3	FIRE CRACKED ROCK				10	300
	5	3	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	9	1.34
	5	3	RHYOLITE DEBITAGE/CORE NON-CORTICAL FLAKE	2 PCS.MEND; "SPOKE SHAVE"	1	0	1	6.48
	5	3	UNIDENTIFIED MATERIAL DEBITAGE/CORE NON-CORTICAL FLAKE	LT GRAY SHALE CHERT W/IRON STAINS	1	0	1	0.95
	5	4	FIRE CRACKED ROCK				30	4,700.00
	5	4	GRIT TEMPERED SMOOTHED UNDECORATED BODY SHERD	APPEARS TO BE A SINGLE COIL FROM A LARGER POT (POSS.VINETTE 1)			2	4.4
	5	4	STONE POLISHED				1	3.45

STP	Unit	Level	Artifact	Comments	Util. Ct.	Burn Ct.	Ct.	Wt. (g)
	5	4	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	9	0.94
	5	4	PENNSYLVANIA JASPER DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	1	0.08
	5	4	UNIDENTIFIED MATERIAL DEBITAGE/CORE NON-CORTICAL FLAKE	LT GRAY SHALE CHERT W/IRON STAINS	0	0	3	3.11
	5	4	ONONDAGA CHERT BIFACE FRAGMENT		0	1	1	2.44
	5	4	ONONDAGA CHERT DEBITAGE/CORE CORTICAL FLAKE		1	0	1	0.59
	5	4	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		1	0	1	1.45
	5	4	UNIDENTIFIED MATERIAL DEBITAGE/CORE NON-CORTICAL FLAKE	LT GRAY SHALE CHERT W/IRON STAINS	1	0	1	12.97
	5	5	ONONDAGA CHERT DEBITAGE/CORE CORTICAL FLAKE		0	0	2	0.37
	5	5	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	1	0.08
	5	6	GRIT TEMPERED ERODED SURFACE UNDECORATED BODY SHERD				3	4.7
	5	6	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	3	0.59
	6	1	ONONDAGA CHERT BIFACE FRAGMENT		0	0	1	12.98
	6	1	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	1	0.27
	6	2	FIRE CRACKED ROCK				88	4,500.00
	6	2	ONONDAGA CHERT BIFACE FRAGMENT		0	0	1	3.86
	6	2	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	14	4.08
	6	2	UNIDENTIFIED MATERIAL DEBITAGE/CORE NON-CORTICAL FLAKE	LT GRAY SHALE CHERT W/IRON STAINS	0	0	1	0.05
	6	2	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	1	1	0.19
	6	2	UNIDENTIFIED MATERIAL DEBITAGE/CORE CORTICAL FLAKE	LT GRAY SHALE CHERT W/IRON STAINS	1	0	1	1.74
	6	2	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		2	0	2	2.28
	6	3	FIRE CRACKED ROCK				43	2,300.00
	6	3	ONONDAGA CHERT DEBITAGE/CORE CORTICAL FLAKE		0	0	1	0.05
	6	3	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	7	1.65
	6	3	UNIDENTIFIED MATERIAL DEBITAGE/CORE CORTICAL FLAKE	LT GRAY SHALE CHERT W/IRON STAINS	0	0	1	3.75
	6	3	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	1	1	0.84
	6	3	ONONDAGA CHERT DEBITAGE/CORE CORTICAL FLAKE		1	0	1	4.92
	6	4	FIRE CRACKED ROCK				28	2,500.00
	6	4	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	5	1.91
	6	5	FIRE CRACKED ROCK				7	500
	6	6	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	3	0.45
	7	1	FIRE CRACKED ROCK				9	200
	7	2	FERROUS METAL CUT NAIL FRAG				1	4.09
	7	2	FIRE CRACKED ROCK				51	1,200.00
	7	2	ONONDAGA CHERT DEBITAGE/CORE CORTICAL FLAKE		0	0	1	2.72
	7	2	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	3	2.98
	7	2	UNIDENTIFIED MATERIAL DEBITAGE/CORE NON-CORTICAL FLAKE	LT GRAY SHALE CHERT W/IRON STAINS	0	0	1	0.12

STP	Unit	Level	Artifact	Comments	Util. Ct.	Burn Ct.	Ct.	Wt. (g)
	7	2	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	3	3	1.42
	7	2	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		1	0	1	2.86
	7	3	FIRE CRACKED ROCK				10	600
	7	3	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	4	0.98
	7	3	ONONDAGA CHERT DEBITAGE/CORE CORTICAL FLAKE		0	1	1	2.54
	7	3	ONONDAGA CHERT DEBITAGE/CORE CORTICAL FLAKE		1	0	1	1.67
	7	4	FIRE CRACKED ROCK				1	5
	7	4	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	3	0.86
	7	5	FIRE CRACKED ROCK				1	26
	7	5	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	3	1.93
	7	6	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	2	1.26
	7	6	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		1	0	1	1.69
	8	2	FIRE CRACKED ROCK				5	200
	8	2	UNIDENTIFIED MATERIAL DEBITAGE/CORE NON-CORTICAL FLAKE	LT GRAY SHALE CHERT W/IRON STAINS	1	0	1	2.6
	8	2	UNIDENTIFIED MATERIAL DEBITAGE/CORE SHATTER	FINE-GRAIN WHITE GRAY CHERT	1	0	1	1.84
	8	3	FIRE CRACKED ROCK				11	500
	8	3	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	4	0.35
	8	3	RHYOLITE DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	1	0.26
	8	3	UNIDENTIFIED MATERIAL DEBITAGE/CORE NON-CORTICAL FLAKE	LT GRAY SHALE CHERT W/IRON STAINS	0	0	2	1.4
	8	4	ONONDAGA CHERT DEBITAGE/CORE CORTICAL FLAKE		0	0	1	0.58
	8	4	RHYOLITE DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	1	0.15
	9	1	FIRE CRACKED ROCK				5	160
	9	1	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	1	0.11
	9	1	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE	2 FLAKES MEND	1	0	1	5.18
	9	2	FIRE CRACKED ROCK				51	3,900.00
	9	2	ONONDAGA CHERT BIFACE FRAGMENT		0	0	1	6.6
	9	2	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	7	10.25
	9	2	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	58	18.87
	9	2	UNIDENTIFIED MATERIAL DEBITAGE/CORE NON-CORTICAL FLAKE	LT GRAY SHALE CHERT W/IRON STAINS	0	0	11	9.97
	9	2	ONONDAGA CHERT DEBITAGE/CORE CORTICAL FLAKE		3	0	3	4.94
	9	2	UNIDENTIFIED MATERIAL DEBITAGE/CORE NON-CORTICAL FLAKE	LT GRAY SHALE CHERT W/IRON STAINS	3	0	3	8.49
	9	2	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		4	0	4	11.66
	9	3	FIRE CRACKED ROCK				20	700
	9	3	ONONDAGA CHERT DEBITAGE/CORE CORTICAL FLAKE		0	0	5	7.19
	9	3	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	82	27.76
	9	3	ONONDAGA CHERT DEBITAGE/CORE SHATTER		0	0	2	3.64
	9	3	UNIDENTIFIED MATERIAL DEBITAGE/CORE NON-CORTICAL FLAKE	LT BLUE/GRAY CHERT	0	0	1	0.24

STP	Unit	Level	Artifact	Comments	Util. Ct.	Burn Ct.	Ct.	Wt. (g)
	9	3	UNIDENTIFIED MATERIAL DEBITAGE/CORE NON-CORTICAL FLAKE	LT GRAY SHALE CHERT W/IRON STAINS	0	0	11	11.48
	9	3	UNIDENTIFIED MATERIAL DEBITAGE/CORE NON-CORTICAL FLAKE	RHYOLITE?	0	0	2	1.87
	9	3	UNIDENTIFIED MATERIAL DEBITAGE/CORE NON-CORTICAL FLAKE	LT GRAY SHALE CHERT W/IRON STAINS	2	0	2	3.63
	9	3	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		14	0	14	18.57
	9	4	FIRE CRACKED ROCK				2	40
	9	4	ONONDAGA CHERT DEBITAGE/CORE CORTICAL FLAKE		0	0	4	3.88
	9	4	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	89	36.79
	9	4	ONONDAGA CHERT PROJECTILE POINT SUSQUEHANNA		0	0	1	6.39
	9	4	UNIDENTIFIED MATERIAL DEBITAGE/CORE NON-CORTICAL FLAKE	LIMESTONE	0	0	1	3.26
	9	4	UNIDENTIFIED MATERIAL DEBITAGE/CORE NON-CORTICAL FLAKE	LT GRAY SHALE CHERT W/IRON STAINS	0	0	5	3.85
	9	4	ONONDAGA CHERT DEBITAGE/CORE CORTICAL FLAKE		1	0	1	3.77
	9	4	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		10	0	10	23.94
	9	5	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	14	2.82
	9	5	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		2	0	2	2.03
	9	6	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	2	4.62
	9	6	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	6	2.38
	10	2	FIRE CRACKED ROCK				15	900
	10	2	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	3	3.06
	10	2	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		1	0	1	2.42
	10	2	UNIDENTIFIED MATERIAL DEBITAGE/CORE NON-CORTICAL FLAKE	LT GRAY SHALE CHERT W/IRON STAINS	1	0	1	4.92
	10	3	FIRE CRACKED ROCK				13	600
	10	3	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	3	0.83
	10	3	UNIDENTIFIED MATERIAL DEBITAGE/CORE NON-CORTICAL FLAKE	LT GRAY SHALE CHERT W/IRON STAINS	0	0	2	0.62
	10	4	FIRE CRACKED ROCK				2	350
	10	4	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	2	0.5
	10	4	UNIDENTIFIED MATERIAL DEBITAGE/CORE NON-CORTICAL FLAKE	LT GRAY SHALE CHERT W/IRON STAINS	1	0	1	4.55
	10	5	RHYOLITE DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	1	0.17
SE2		1	FIRE CRACKED ROCK				7	250
SE2		1	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	1	0.27
SE2		1	UNIDENTIFIED MATERIAL DEBITAGE/CORE CORTICAL FLAKE	LT GRAY SHALE CHERT W/IRON STAINS	0	0	1	0.17
SE3		1	FIRE CRACKED ROCK				4	170
SE3		1	ONONDAGA CHERT DEBITAGE/CORE CORTICAL FLAKE		0	0	1	0.27
SE3		1	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	6	1.21
SE3		1	ONONDAGA CHERT DEBITAGE/CORE CORTICAL FLAKE		1	0	1	0.85
SE4		1	FIRE CRACKED ROCK				8	200
SE4		1	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	11	3.89

STP	Unit	Level	Artifact	Comments	Util. Ct.	Burn Ct.	Ct.	Wt. (g)
SE4		1	UNIDENTIFIED MATERIAL DEBITAGE/CORE NON-CORTICAL FLAKE	LT GRAY SHALE CHERT W/IRON STAINS	0	0	1	0.53
SE4		1	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		2	0	2	8.34
SE7		1	FIRE CRACKED ROCK				1	180
SE8		1	FIRE CRACKED ROCK				1	100
SE8		1	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	1	0.6
SE8		1	UNIDENTIFIED MATERIAL DEBITAGE/CORE NON-CORTICAL FLAKE	RHYOLITE?	0	0	1	0.07
SE9		1	FIRE CRACKED ROCK				2	100
SE10		1	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	1	0.11

3.3 Heritage Precontact Site Artifacts

STP	Unit	Lev	Artifact	Comments	Util. Ct.	Burn Ct.	Ct.	Wt (g)
	1	2	FIRE CRACKED ROCK				1	25
	1	3	FIRE CRACKED ROCK				31	1,302.00
	1	3	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	2	0.91
	1	3	ONONDAGA CHERT DEBITAGE/CORE SHATTER		0	0	1	1
	1	3	UNIDENTIFIED MATERIAL DEBITAGE/CORE NON-CORTICAL FLAKE	LT GRAY/WHITE CHERT W/IRON MOTTLES	0	0	1	0.93
	1	3	UNIDENTIFIED MATERIAL DEBITAGE/CORE NON-CORTICAL FLAKE	TAN/RED/GRAY CHERT; MENDS	1	1	1	2.47
	1	4	FIRE CRACKED ROCK				56	5,400.00
	1	4	GRIT TEMPERED SMOOTHED CORD-IMPRESSED - NON DIAGNOSTIC NECK SHERD	HORIZONTAL LINE(S) OVER RIGHT OBLIQUE LINES			1	5.1
	1	4	SHERDLET				5	2.7
	1	4	ONONDAGA CHERT BIFACE FRAGMENT		0	0	1	6.27
	1	4	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	10	2.42
	1	4	ONONDAGA CHERT PROJECTILE POINT LATE WOODLAND TRIANGULAR	POSS.LEVANNA POINT	0	0	1	2.5
	1	4	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		1	0	1	1.16
	1	5	FIRE CRACKED ROCK				4	225
	1	5	SHERDLET				1	0.7
	1	5	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	3	0.69
	1	5	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		1	0	1	5.11
	1	6	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	2	0.44
	1	8	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	1	1	0.3
	2	2	FIRE CRACKED ROCK				4	75
	2	2	ONONDAGA CHERT DEBITAGE/CORE CORTICAL CHUNK		1	0	1	6.1
	2	3	BONE INDETERMINATE				1	1.4
	2	3	FIRE CRACKED ROCK				68	2,500.00
	2	3	FIRE CRACKED ROCK				98	2,200.00
	2	3	ONONDAGA CHERT DEBITAGE/CORE CORTICAL CHUNK		0	0	1	23.97
	2	3	ONONDAGA CHERT DEBITAGE/CORE CORTICAL FLAKE		0	0	4	2.61
	2	3	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	19	4.84
	2	3	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	1	1	0.27
	2	3	ONONDAGA CHERT DEBITAGE/CORE CORTICAL FLAKE		1	1	1	3.88
	2	3	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		2	0	2	1.68
	2	4	BONE INDETERMINATE	CALCINED			2	2.1
	2	4	FIRE CRACKED ROCK				48	2,200.00
	2	4	FIRE CRACKED ROCK				54	2,000.00
	2	4	FIRE CRACKED ROCK				58	2,600.00
	2	4	FIRE CRACKED ROCK				78	2,400.00
	2	4	FIRE CRACKED ROCK				87	2,500.00

STP	Unit	Lev	Artifact	Comments	Util. Ct.	Burn Ct.	Ct.	Wt (g)
	2	4	ONONDAGA CHERT DEBITAGE/CORE CORTICAL FLAKE		0	0	2	2.4
	2	4	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	32	9.74
	2	4	ONONDAGA CHERT DEBITAGE/CORE SHATTER		0	0	3	6.59
	2	4	ONONDAGA CHERT DEBITAGE/CORE CORTICAL FLAKE		1	0	1	0.9
	2	4	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		1	1	1	1.31
	2	4	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		3	0	3	2.02
	2	5	FIRE CRACKED ROCK				44	3,000.00
	2	5	FIRE CRACKED ROCK				71	2,200.00
	2	5	FIRE CRACKED ROCK				81	2,500.00
	2	5	FIRE CRACKED ROCK				94	3,100.00
	2	5	GRIT TEMPERED SMOOTHED-OVER CORD-MARKED UNDECORATED BODY SHERD				1	3.7
	2	5	GRIT TEMPERED SMOOTHED-OVER CORD-MARKED UNDECORATED BODY SHERD				2	3.6
	2	5	SHERDLET				1	0.7
	2	5	ONONDAGA CHERT DEBITAGE/CORE CORTICAL FLAKE		0	0	2	0.96
	2	5	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	38	8.94
	2	5	UNIDENTIFIED MATERIAL DEBITAGE/CORE NON-CORTICAL FLAKE	BLUE/GRAY CHERT	0	0	1	2.18
	2	5	ONONDAGA CHERT DEBITAGE/CORE CORTICAL FLAKE		1	0	1	2.27
	2	5	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		3	0	3	4.86
	2	6	FIRE CRACKED ROCK				32	1,600.00
	2	6	ONONDAGA CHERT DEBITAGE/CORE CORTICAL FLAKE		0	0	2	0.5
	2	6	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	22	5.99
	2	6	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		3	0	3	4.41
	2	7	FIRE CRACKED ROCK				2	97
	2	7	FIRE CRACKED ROCK				5	2,100.00
	2	7	ONONDAGA CHERT DEBITAGE/CORE BIPOLAR FLAKE		0	0	1	0.92
	2	7	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	6	3.09
	2	7	ONONDAGA CHERT DEBITAGE/CORE SHATTER		0	1	1	1.49
	2	7	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		1	0	1	1.29
	2	8	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	1	0.4
	2	9	ONONDAGA CHERT BIFACE STAGE 1 - WHOLE		0	0	1	15.34
	2	10	FIRE CRACKED ROCK				1	48
	2	10	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	1	0.4
	2	12	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	1	0.49
	3	1	FIRE CRACKED ROCK				4	107
	3	1	GRIT TEMPERED SMOOTHED CORD-IMPRESSED - NON DIAGNOSTIC NECK SHERD				1	2.4
	3	1	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	1	0.73

STP	Unit	Lev	Artifact	Comments	Util. Ct.	Burn Ct.	Ct.	Wt (g)
	3	2	FIRE CRACKED ROCK				5	168
	3	3	FIRE CRACKED ROCK				20	725
	3	3	FIRE CRACKED ROCK				27	1,400.00
	3	3	FIRE CRACKED ROCK				120	5,400.00
	3	3	ONONDAGA CHERT DEBITAGE/CORE CORTICAL FLAKE		0	0	1	0.78
	3	3	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	3	1.8
	3	3	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	4	1.11
	3	3	ONONDAGA CHERT PROJECTILE POINT UNCLASSIFIED EXPANDING-STEMMED		0	0	1	2.68
	3	3	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	1	1	0.13
	3	3	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	1	1	0.19
	3	3	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	1	1	0.85
	3	3	ONONDAGA CHERT DEBITAGE/CORE CORTICAL FLAKE		1	0	1	3.38
	3	3	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		2	0	2	2.73
	3	3	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		3	0	3	8.86
	3	4	BONE INDETERMINATE				1	3.5
	3	4	FIRE CRACKED ROCK				1	2.3
	3	4	FIRE CRACKED ROCK				9	787
	3	4	FIRE CRACKED ROCK				56	2,500.00
	3	4	PITTED STONE				1	119
	3	4	STONE WORKED	POSS.CHOPPER?			1	332
	3	4	TOOTH MAMMAL				1	1.6
	3	4	ONONDAGA CHERT DEBITAGE/CORE CORTICAL CHUNK		0	0	1	37.44
	3	4	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	4	1.25
	3	4	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	22	4.14
	3	4	ONONDAGA CHERT PROJECTILE POINT ORIENT FISHTAIL	REWORKED INTO DRILL TIP	0	0	1	6.72
	3	4	ONONDAGA CHERT PROJECTILE POINT UNCLASSIFIED STRAIGHT-STEMMED	LIMESTONY; POSS.CHERT; LAMOKA POINT?	0	0	1	2.44
	3	4	ONONDAGA CHERT DEBITAGE/CORE CORTICAL FLAKE		0	1	1	0.66
	3	4	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	1	1	0.3
	3	4	ONONDAGA CHERT DEBITAGE/CORE CORTICAL FLAKE		1	0	1	1.42
	3	4	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		1	0	1	1.52
	3	4	ONONDAGA CHERT DEBITAGE/CORE CORTICAL FLAKE		1	1	1	4.72
	3	4	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		1	1	1	0.73
	3	4	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		2	0	2	2.05
	3	5	FIRE CRACKED ROCK				12	527
	3	5	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	2	0.39
	3	5	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		1	0	1	2.65

STP	Unit	Lev	Artifact	Comments	Util. Ct.	Burn Ct.	Ct.	Wt (g)
	3	6	ONONDAGA CHERT DEBITAGE/CORE CORTICAL FLAKE		0	0	1	0.3
	3	6	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	2	0.11
	3	7	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	1	0.71
	3	8	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	2	0.26
	4	1	BONE INDETERMINATE				1	0.6
	4	1	FIRE CRACKED ROCK				5	132
	4	1	FIRE CRACKED ROCK				16	1,700.00
	4	1	GRIT TEMPERED ERODED SURFACE UNDECORATED BODY SHERD				1	6.1
	4	1	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	3	2.24
	4	1	ONONDAGA CHERT DEBITAGE/CORE SHATTER		0	0	1	1.5
	4	1	QUARTZITE BIFACE FRAGMENT		0	0	1	2.69
	4	1	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		1	0	1	0.82
	4	2	BONE INDETERMINATE				1	1.7
	4	2	FIRE CRACKED ROCK				31	2,000.00
	4	2	FIRE CRACKED ROCK				68	3,100.00
	4	2	GRIT TEMPERED SMOOTHED-OVER CORD-MARKED UNDECORATED BODY SHERD				2	7.1
	4	2	SHELL UNDIAG. SHELL				2	0.2
	4	2	ONONDAGA CHERT DEBITAGE/CORE CORTICAL FLAKE		0	0	3	1.03
	4	2	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	11	1.36
	4	2	ONONDAGA CHERT PROJECTILE POINT TIP		0	0	1	1.38
	4	2	ONONDAGA CHERT PROJECTILE POINT UNCLASSIFIED STRAIGHT-STEMMED		0	0	1	1.93
	4	2	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	1	2	0.22
	4	2	UNIDENTIFIED MATERIAL DEBITAGE/CORE CORTICAL FLAKE	PEBBLE CHERT	1	0	1	12.28
	4	2	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		2	2	2	2.24
	4	3	BONE INDETERMINATE				3	2.5
	4	3	BONE INDETERMINATE	CALCINED			1	0.5
	4	3	BONE MAMMAL				1	2.9
	4	3	FIRE CRACKED ROCK				1	1.76
	4	3	FIRE CRACKED ROCK				28	1,114.00
	4	3	FIRE CRACKED ROCK				72	5,000.00
	4	3	FIRE CRACKED ROCK				90	2,900.00
	4	3	GRIT TEMPERED ERODED SURFACE UNDECORATED BODY SHERD				3	18.4
	4	3	GRIT TEMPERED SMOOTHED CORD-IMPRESSED - NON DIAGNOSTIC NECK SHERD				1	1.1
	4	3	GRIT TEMPERED SMOOTHED OAK HILL CORDED RIM SHERD				1	29.2
	4	3	GRIT TEMPERED SMOOTHED-OVER CORD-MARKED UNDECORATED BODY SHERD				1	4.6
	4	3	GRIT TEMPERED SMOOTHED-OVER CORD-MARKED UNDECORATED BODY SHERD				3	28.3
	4	3	SHELL UNDIAG. SHELL				4	0.7

STP	Unit	Lev	Artifact	Comments	Util. Ct.	Burn Ct.	Ct.	Wt (g)
	4	3	SHELL UNDIAG. SHELL	POSS.SNAIL			1	0.2
	4	3	SHERDLET				2	1.8
	4	3	TOOTH MAMMAL				1	0.4
	4	3	ONONDAGA CHERT BIFACE FRAGMENT		0	0	1	1.42
	4	3	ONONDAGA CHERT DEBITAGE/CORE CORTICAL FLAKE		0	0	1	0.3
	4	3	ONONDAGA CHERT DEBITAGE/CORE CORTICAL FLAKE		0	0	3	11.64
	4	3	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	10	2.32
	4	3	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	27	8.31
	4	3	ONONDAGA CHERT DEBITAGE/CORE SHATTER		0	0	1	0.84
	4	3	ONONDAGA CHERT DEBITAGE/CORE SHATTER		0	0	2	3.6
	4	3	UNIDENTIFIED MATERIAL DEBITAGE/CORE CORTICAL FLAKE	TAN/RED/GRAY CHERT	0	1	1	0.51
	4	3	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	3	3	1.55
	4	3	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		1	0	1	0.43
	4	3	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		2	0	2	1.21
	4	4	FIRE CRACKED ROCK				22	2,100.00
	4	4	GRIT TEMPERED ERODED SURFACE UNDECORATED BODY SHERD				1	4
	4	4	ONONDAGA CHERT DEBITAGE/CORE CORTICAL FLAKE		0	0	3	7.08
	4	4	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	15	3.34
	4	4	ONONDAGA CHERT DEBITAGE/CORE SHATTER		0	0	1	2.09
	4	4	ONONDAGA CHERT DEBITAGE/CORE CORTICAL FLAKE		1	0	1	9.16
	4	4	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		1	0	1	0.7
	4	5	FIRE CRACKED ROCK				6	240
	4	5	SHELL UNDIAG. SHELL				1	0.8
	4	5	ONONDAGA CHERT DEBITAGE/CORE CORTICAL FLAKE		0	0	1	0.31
	4	5	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	8	2.05
	5	2	FIRE CRACKED ROCK				7	700
	5	2	GLASS POLYCHROME MARBLE	BLUE & WHITE			1	5.8
	5	2	ONONDAGA CHERT BIFACE FRAGMENT		0	0	1	9.56
	5	2	ONONDAGA CHERT DEBITAGE/CORE CORTICAL FLAKE		0	0	1	0.33
	5	2	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	1	0.32
	5	3	FIRE CRACKED ROCK				38	1,600.00
	5	3	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	10	1.82
	5	3	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	2	2	0.45
	5	3	ONONDAGA CHERT DEBITAGE/CORE CORTICAL FLAKE		1	0	1	1.77
	5	4	FIRE CRACKED ROCK				6	480
	5	4	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	3	0.71

STP	Unit	Lev	Artifact	Comments	Util. Ct.	Burn Ct.	Ct.	Wt (g)
	5	4	UNIDENTIFIED MATERIAL DEBITAGE/CORE NON-CORTICAL FLAKE	LT GRAY/WHITE CHERT W/IRON MOTTLES	0	0	2	1.33
	5	4	ONONDAGA CHERT DEBITAGE/CORE CORTICAL FLAKE		1	0	1	3.94
	5	4	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		1	0	1	0.52
	5	5	FIRE CRACKED ROCK				10	430
	5	5	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	8	2.49
	5	5	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	1	1	0.21
	5	5	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		1	0	1	2.19
	5	6	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		1	0	1	2.29
	6		FIRE CRACKED ROCK				33	1,175.00
	6		ONONDAGA CHERT DEBITAGE/CORE CORTICAL FLAKE		0	0	2	0.51
	6		ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	4	0.55
	6	3	FIRE CRACKED ROCK				14	920
	6	3	ONONDAGA CHERT DEBITAGE/CORE CORTICAL FLAKE		1	0	1	0.92
	6	4	FIRE CRACKED ROCK				92	2,300.00
	6	4	GRIT TEMPERED SMOOTHED CORD-IMPRESSED - NON DIAGNOSTIC NECK SHERD				1	4.8
	6	4	ONONDAGA CHERT BIFACE FRAGMENT		0	0	1	0.96
	6	4	ONONDAGA CHERT DEBITAGE/CORE CORTICAL CHUNK		0	0	4	23.84
	6	4	ONONDAGA CHERT DEBITAGE/CORE CORTICAL FLAKE		0	0	2	1.07
	6	4	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	31	11.34
	6	4	ONONDAGA CHERT PROJECTILE POINT INDETERMINATE FRAGMENT		0	0	1	3.59
	6	4	ONONDAGA CHERT PROJECTILE POINT UNCLASSIFIED STRAIGHT-STEMMED		0	0	1	3.51
	6	4	ONONDAGA CHERT RETOUCHED PIECE UNIFACIAL		0	0	1	10.37
	6	4	ONONDAGA CHERT DEBITAGE/CORE CORTICAL FLAKE		3	0	3	8.11
	6	4	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		3	0	3	4.4
	6	5	FIRE CRACKED ROCK				25	503
	6	5	ONONDAGA CHERT DEBITAGE/CORE CORTICAL FLAKE		0	0	2	1.94
	6	5	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	4	2.64
	6	5	ONONDAGA CHERT DEBITAGE/CORE CORTICAL FLAKE		0	1	1	0.3
	6	5	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		1	0	1	6.39
	6	6	FIRE CRACKED ROCK				16	300
	6	6	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	3	1.04
	6	6	UNIDENTIFIED MATERIAL DEBITAGE/CORE NON-CORTICAL FLAKE	NORMANSKILL/MT.MERINO CHERT?	0	0	1	0.29
	6	6	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		1	0	1	0.33
	6	7	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	1	0.12

STP	Unit	Lev	Artifact	Comments	Util. Ct.	Burn Ct.	Ct.	Wt (g)
	6	8	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	1	0.27
	6	8	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		1	0	1	0.94
SE	1	1	FIRE CRACKED ROCK				4	308
SE	2	1	FIRE CRACKED ROCK				19	953
SE	2	1	GRIT TEMPERED SMOOTHED-OVER CORD-MARKED UNDECORATED BODY SHERD				1	2.9
SE	2	1	ONONDAGA CHERT DEBITAGE/CORE CORTICAL FLAKE		0	0	1	0.31
SE	2	1	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	3	1.44
SE	2	1	ONONDAGA CHERT DEBITAGE/CORE SHATTER		0	0	2	0.49
SE	3	1	FIRE CRACKED ROCK				28	1,243.00
SE	3	1	ONONDAGA CHERT DEBITAGE/CORE CORTICAL FLAKE		0	0	1	0.66
SE	3	1	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	6	1.34
SE	3	1	ONONDAGA CHERT DEBITAGE/CORE SHATTER		0	0	1	0.74
SE	3	1	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		2	0	2	1.14
SE	4	1	FIRE CRACKED ROCK				3	409
SE	5	1	FIRE CRACKED ROCK				12	850
SE	5	1	ONONDAGA CHERT DEBITAGE/CORE CORTICAL FLAKE		0	0	1	0.31
SE	5	1	ONONDAGA CHERT DEBITAGE/CORE NON-CORTICAL FLAKE		0	0	2	0.38

APPENDIX IV. AMS RECORDS FOR THE GLEN SITE

BETA ANALYTIC INC.
DR. M.A. TAMERS and MR. D.G. HOOD
4985 S.W. 74 COURT
MIAMI, FLORIDA, USA 33155
PH: 305-667-5167 FAX:305-663-0964
beta@radiocarbon.com

REPORT OF RADIOCARBON DATING ANALYSES

Report Date: 5/5/2014

Material Received: 4/29/2014

Sample Data	Measured Radiocarbon Age	13C/12C Ratio	Conventional Radiocarbon Age(*)
Beta - 379393	1430 +/- 30 BP	-24.6 o/oo	1440 +/- 30 BP

SAMPLE : GLENFEA2
ANALYSIS : AMS-PRIORITY delivery
MATERIAL/PRETREATMENT : (charred material): acid/alkali/acid
2 SIGMA CALIBRATION : Cal AD 570 to 655 (Cal BP 1380 to 1295)

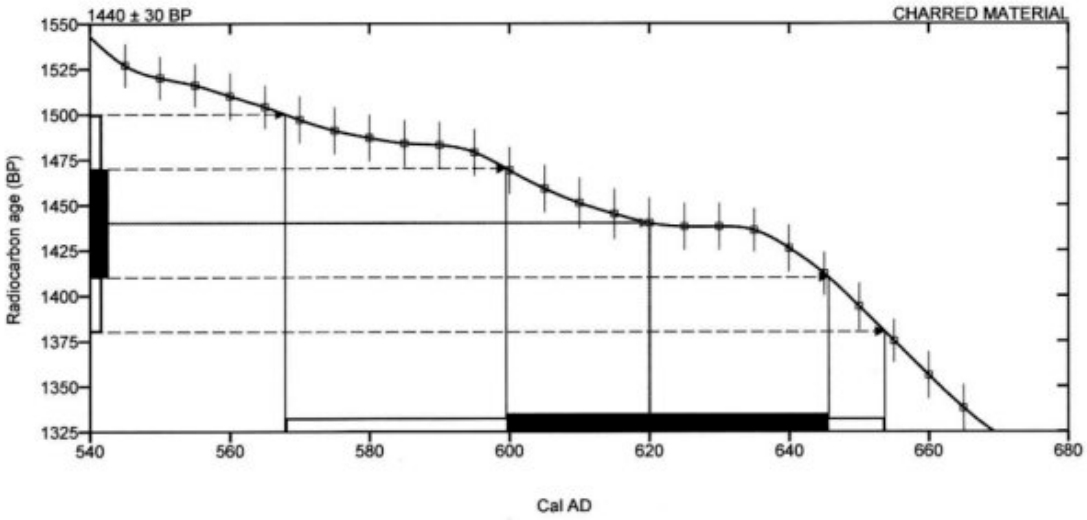
Dates are reported as RCYBP (radiocarbon years before present, "present" = AD 1950). By international convention, the modern reference standard was 95% the 14C activity of the National Institute of Standards and Technology (NIST) Oxalic Acid (SRM 4990C) and calculated using the Libby 14C half-life (5568 years). Quoted errors represent 1 relative standard deviation statistics (68% probability) counting errors based on the combined measurements of the sample, background, and modern reference standards. Measured 13C/12C ratios (delta 13C) were calculated relative to the PDB-1 standard.

The Conventional Radiocarbon Age represents the Measured Radiocarbon Age corrected for isotopic fractionation, calculated using the delta 13C. On rare occasion where the Conventional Radiocarbon Age was calculated using an assumed delta 13C, the ratio and the Conventional Radiocarbon Age will be followed by "*". The Conventional Radiocarbon Age is not calendar calibrated. When available, the Calendar Calibrated result is calculated from the Conventional Radiocarbon Age and is listed as the "Two Sigma Calibrated Result" for each sample.

CALIBRATION OF RADIOCARBON AGE TO CALENDAR YEARS

(Variables: C13/C12 = -24.6 o/oo : lab. mult = 1)

Laboratory number	**Beta-379393**
Conventional radiocarbon age	**1440 ± 30 BP**
2 Sigma calibrated result 95% probability	**Cal AD 570 to 655 (Cal BP 1380 to 1295)**
Intercept of radiocarbon age with calibration curve	Cal AD 620 (Cal BP 1330)
1 Sigma calibrated results 68% probability	Cal AD 600 to 645 (Cal BP 1350 to 1305)



Database used

INTCAL13

References

Mathematics used for calibration scenario

A Simplified Approach to Calibrating C14 Dates, Talma, A. S., Vogel, J. C., 1993, Radiocarbon 35(2):317-322

References to INTCAL13 database

Reimer PJ et al. IntCal13 and Marine13 radiocarbon age calibration curves 0– 50,000 years cal BP. Radiocarbon 55(4):1869– 1887.

Beta Analytic Radiocabon Dating Laboratory

• Tel: • Fax: • Email:

APPENDIX V. OPRHP SITE FORMS

NEW YORK STATE PREHISTORIC ARCHAEOLOGICAL SITE INVENTORY FORM
NYS OFFICE OF PARKS, RECREATION & HISTORIC PRESERVATION
(518) 237-8643

Bernadette Castro
Commissioner

For Office Use Only--Site Identifier

Project Identifier: Traditions Resort and Casino Development Project **Date**: May 2014
Name: Michael Jacobson **Phone**: (607) 777-4786
Address: Rm. 146, Science I, Binghamton University, Binghamton NY
Organization (if any): Public Archaeology Facility

1. Site Identifier(s): Traditions Precontact Site (SUBi-3070; A00714.000094)

2. County: Broome
City:
Township: Union
Incorporated Village:
Unincorporated Village or Hamlet:

3. Present Owner: Traditions at the Glen Resort and Conference Center
Address: 4101 Watson Boulevard, Johnson City, New York

4. **Site Description (check all appropriate categories):**

Site:	□ Stray find	□ Cave/Rock shelter	□ Workshop
	□ Pictograph	□ Quarry	□ Mound
	□ Burial	□ Shell midden	□ Village
	□ Surface evidence	□ Camp	☒ Material in plow zone
	□ Material below plow zone	☒ Buried Evidence	□ Intact occupation floor
	□ Single Component	□ Multi-component	□ Stratified
	☒ Evidence of features (FCR)		
Location:	□ Under cultivation	□Never cultivated	□ Previously cultivated
	□ Pastureland	□ Woodland	☒ Floodplain
	□ Upland	□ Sustaining erosion	

Soil Drainage:	□ Excellent	☒ Good	□ Fair	□ Poor
Slope:	☒ Flat	□ Gentle	□ Moderate	□ Steep

Distance to nearest water from site (approx.): 250 m (820 ft) to Susquehanna River
Elevation: approximately 253 m (830 ft) ASL

5. Site Investigation (append additional sheets if necessary):
Surface Testing Date(s): February 18-24, 2014 (survey); April 22-28, 2014 (site examination)

*** Submission should be 8 ½" by 11" if feasible**
☒ Site Map (Submit with form*)
□ Collection
Subsurface Testing Date(s):
Testing: ☒ **Shovel** □ **Coring** □ **Other:**

Unit size: 40 cm diameter; 1m^2 units
Number of Units: Phase 1-111 STPs; Phase 2-17 units **(Submit plan of unit with form*)**
Investigator: Michael Jacobson
Manuscript or published report(s) (reference fully):
Michael Jacobson
2014 *Phase 1 Cultural Resource Survey Traditions Resort and Casino Development Project Town of Union, Broome County, New York.* Public Archaeology Facility, Binghamton, NY.

Michael Jacobson, Sam Kudrle, and Andrea Zlotucha Kozub
2014 *Phase 2 Site Examinations of Traditions Precontact Site (SUBi-3070), Glen Precontact Site (SUBi-3071), and Heritage Precontact Site (SUBi-3072), Traditions Resort and Casino Development Project Town of Union, Broome County, New York.* Public Archaeology Facility, Binghamton, NY.

Present repository of materials: The Public Archaeology Facility

6. Components(s) (Cultural affiliation and dates): Ap/A horizon- Transitional

7. List of material remains (be as specific as possible in identifying object and material):

Artifact Type	Count	Weight (grams)
Chopper	2	577
Fire-cracked rock	175	8,773.00
Hammerstone	2	995
Biface	1	3.28
Bipolar Flake	1	4.21
Core chunk	1	12.48
Cortical flake	40	44.21
Non-cortical flake	385	108.09
Core Shatter	8	9.49
Projectile Points (including one Orient point)	6	25.28
Polished Stone	1	396
Unidentified Stone Material	2	2.78
Unifacial	1	3.3
Unmodified Limestone and Chert Rock	2	109

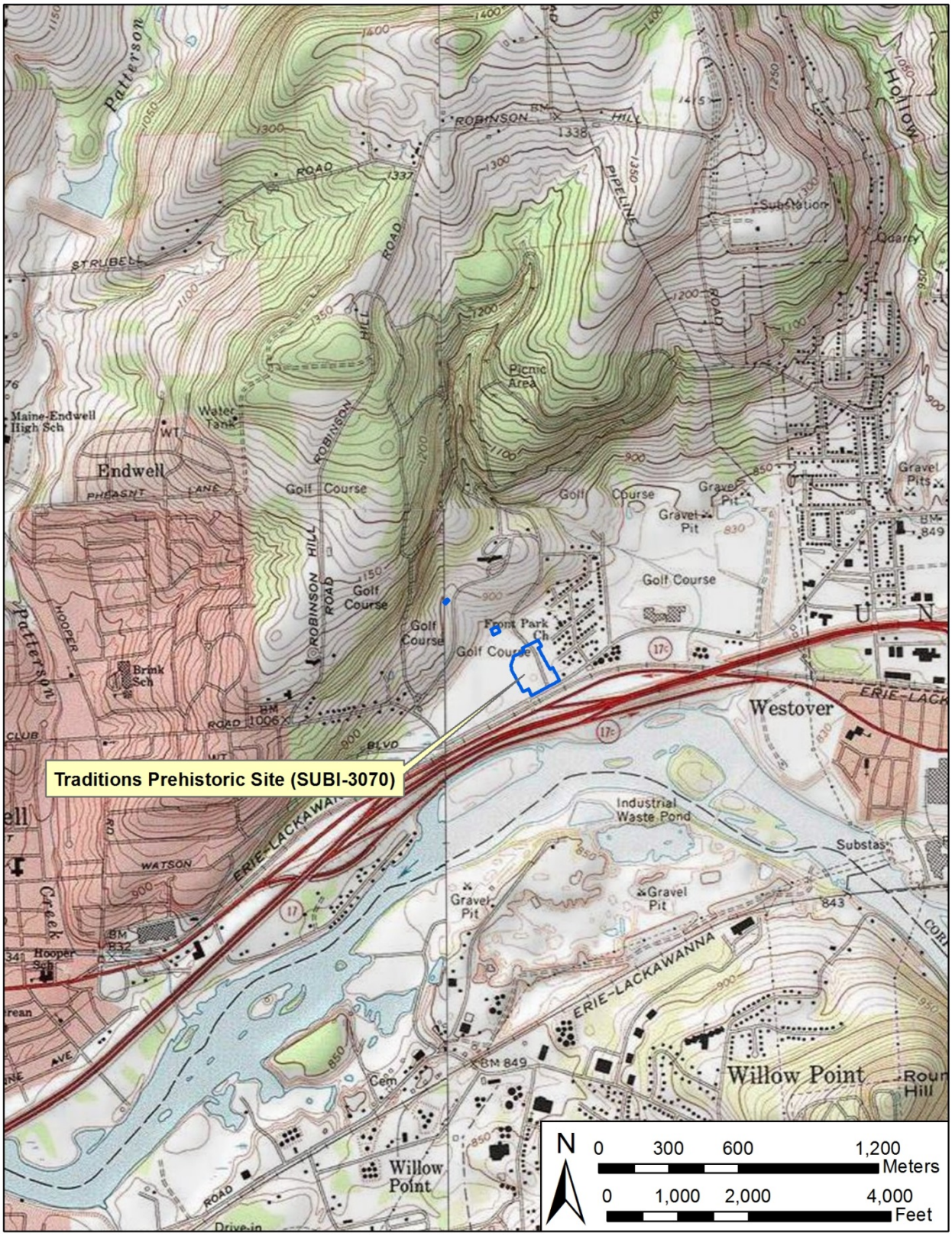
Lithic Raw Material Types	Count	Weight (grams)
Onondaga Chert	406	191.85
Rhyolite	28	12.08
Unidentified Material	1	2.17
Quartz	1	0.61
Light Brown/Gray Chert	1	0.07
Light Gray/White Chert	2	1.1
Limestone	3	3.04
Normanskill/Mt. Merino Chert	2	1.95
White Translucent Chert	1	0.25
Total	445	213.12

If historic materials are evident, check here and fill out historic site form**.** □

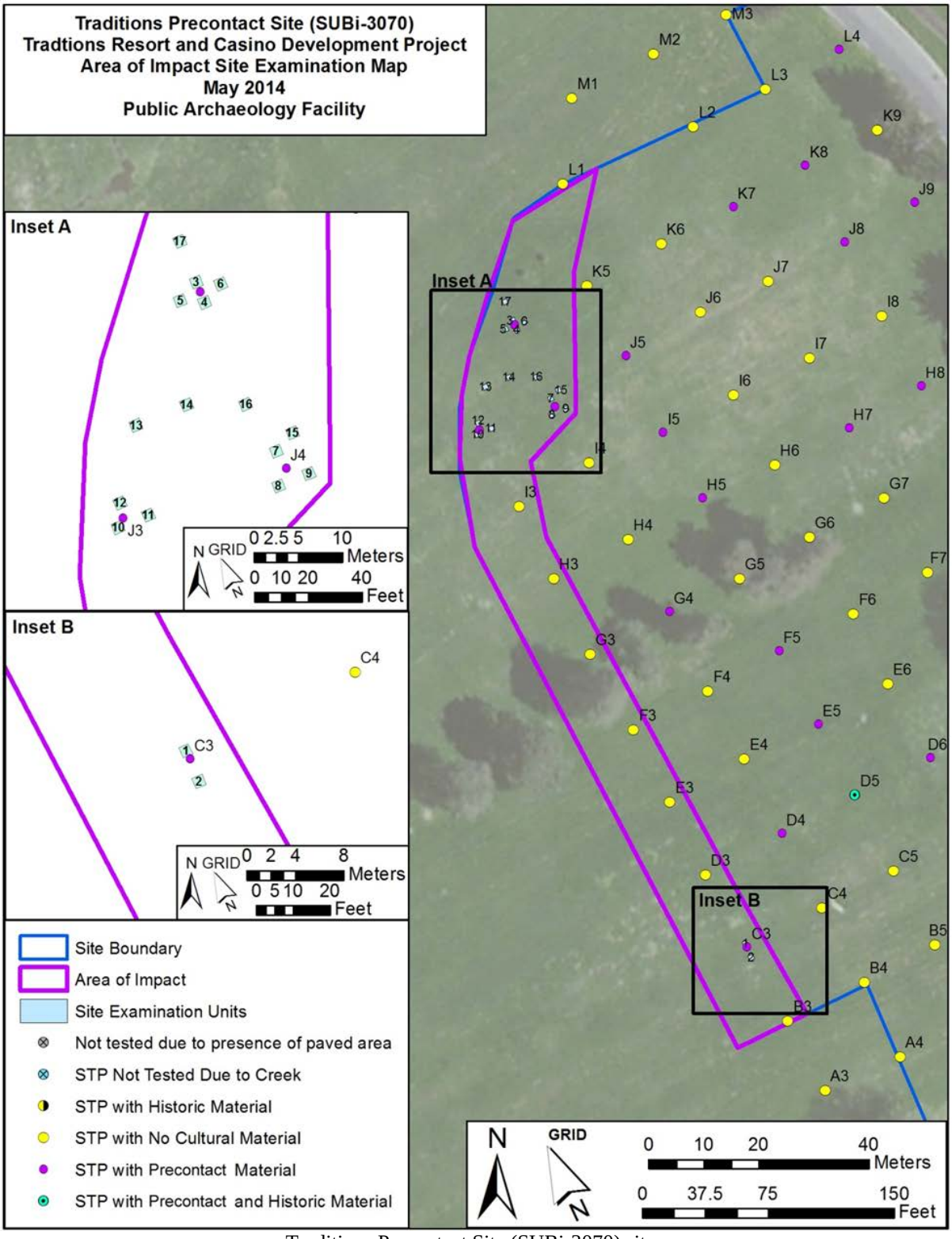
8. Map References: Map or maps showing exact location and extent of site must accompany this form and must be identified by source and date. Keep this information to 8½" by 11" if possible.

USGS 7 ½ Minute Series Quad. Name: 1968 (Photoinspected 1976) Binghamton West, NY
For Office Use Only – UTM Coordinates: _____

9. Photography (optional for environmental impact survey): Please submit 5" by 7" black and white print(s) showing the current state of the site. Provide a label for the print(s) on a separate sheet.



Location of Traditions Precontact Site (SUBi-3070) on 1968 (1976 revised) Binghamton West, NY 7.5' USGS Quadrangle.



Traditions Precontact Site (SUBi-3070) site map.

NEW YORK STATE PREHISTORIC ARCHAEOLOGICAL SITE INVENTORY FORM
NYS OFFICE OF PARKS, RECREATION & HISTORIC PRESERVATION
(518) 237-8643

Bernadette Castro
Commissioner

For Office Use Only--Site Identifier

Project Identifier: Traditions Resort and Casino Development Project **Date**: May 2014
Name: Sam Kudrle **Phone**: (607) 777-4786
Address: Rm. 146, Science I, Binghamton University, Binghamton NY
Organization (if any): Public Archaeology Facility

1. Site Identifier(s): Glen Precontact Site (SUBi-3071; A00714.000095)

2. County: Broome
City:
Township: Union
Incorporated Village:
Unincorporated Village or Hamlet:

3. Present Owner: Traditions at the Glen Resort and Conference Center
Address: 4101 Watson Boulevard, Johnson City, New York

4. **Site Description (check all appropriate categories):**

Site:	□ Stray find	□ Cave/Rock shelter	□ Workshop
	□ Pictograph	□ Quarry	□ Mound
	□ Burial	□ Shell midden	□ Village
	□ Surface evidence	☒ Camp	□ Material in plow zone
	□ Material below plow zone	☒ Buried Evidence	□ Intact occupation floor
	□ Single Component	□ Multi-component	□ Stratified
	☒ Evidence of features (FCR)		
Location:	□ Under cultivation	☒Never cultivated	□ Previously cultivated
	□ Pastureland	□ Woodland	□ Floodplain
	☒ Upland	□ Sustaining erosion	
Soil Drainage:	□ Excellent	☒ Good	□ Fair □ Poor
Slope:	□ Flat	□ Gentle	☒ Moderate □ Steep

Distance to nearest water from site (approx.): 750 m (2,461 ft) to Susquehanna River
Elevation: approximately 274 m (900 ft) ASL

5. Site Investigation (append additional sheets if necessary):
Surface Testing Date(s): February 18-24, 2014 (survey); April 14-21, 2014 (site examination)

*** Submission should be 8 ½" by 11" if feasible**
☒ Site Map (Submit with form*)
□ Collection
Subsurface Testing Date(s):
Testing: **☒ Shovel** **□ Coring** **□ Other:**

Unit size: 40 cm diameter; units 1m^2
Number of Units: Phase 1- 9 STPs; Phase 2- 10 STPs 10 units **(Submit plan of unit with form*)**
Investigator: Michael Jacobson
Manuscript or published report(s) (reference fully):
Michael Jacobson
2014 *Phase 1 Cultural Resource Survey Traditions Resort and Casino Development Project Town of Union, Broome County, New York.* Public Archaeology Facility, Binghamton, NY.

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Present repository of materials: The Public Archaeology Facility

6. Components(s) (Cultural affiliation and dates): A horizon-Transitional and Middle Woodland

7. List of material remains (be as specific as possible in identifying object and material):

Artifact Type	Count	Weight (grams)
Bifaces	5	28.0
Cortical flakes	52	72.9
Core	1	28.5
Fire-cracked rock	1004	61718.0
Hammerstone	1	119.0
Non-cortical flakes	805	506.1
Polished stones	2	14.5
Pottery	8	14.1
Projectile Points (including one Susquehanna Broad point)	3	12.2
Shatter	4	7.1

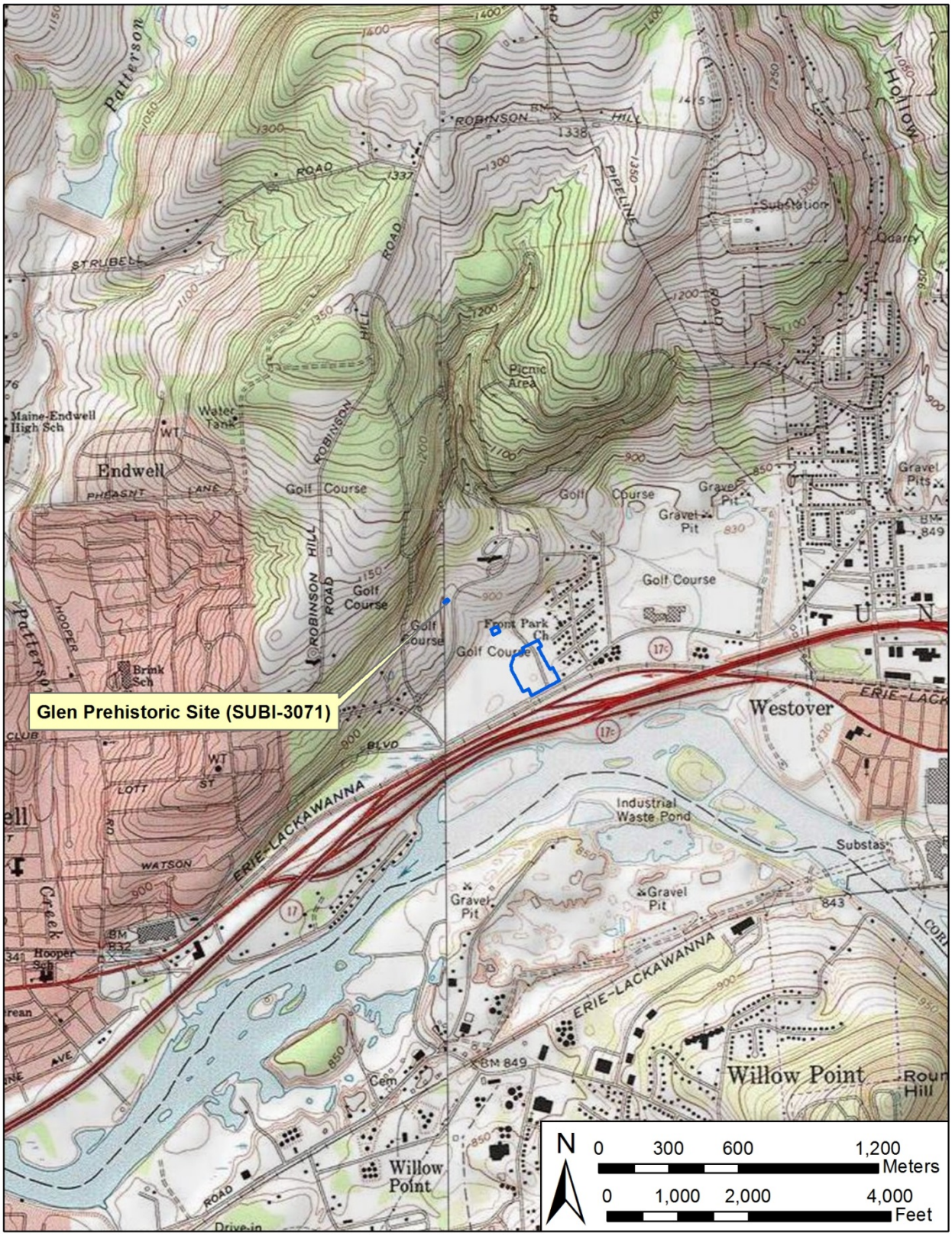
Lithic Raw Material Types	Count	Weight (grams)
Onondaga chert	757	504.68
Light gray shale/chert with iron stains	91	119.66
Rhyolite	8	18.38
Light blue/gray chert	4	2.23
Unidentified material	4	2.44
Jasper	2	1.25
Limestone	2	3.67
Brown/gray chert	1	0.59
Fine-grain white/gray chert	1	1.84
Total	870	654.74

If historic materials are evident, check here and fill out historic site form**.** □

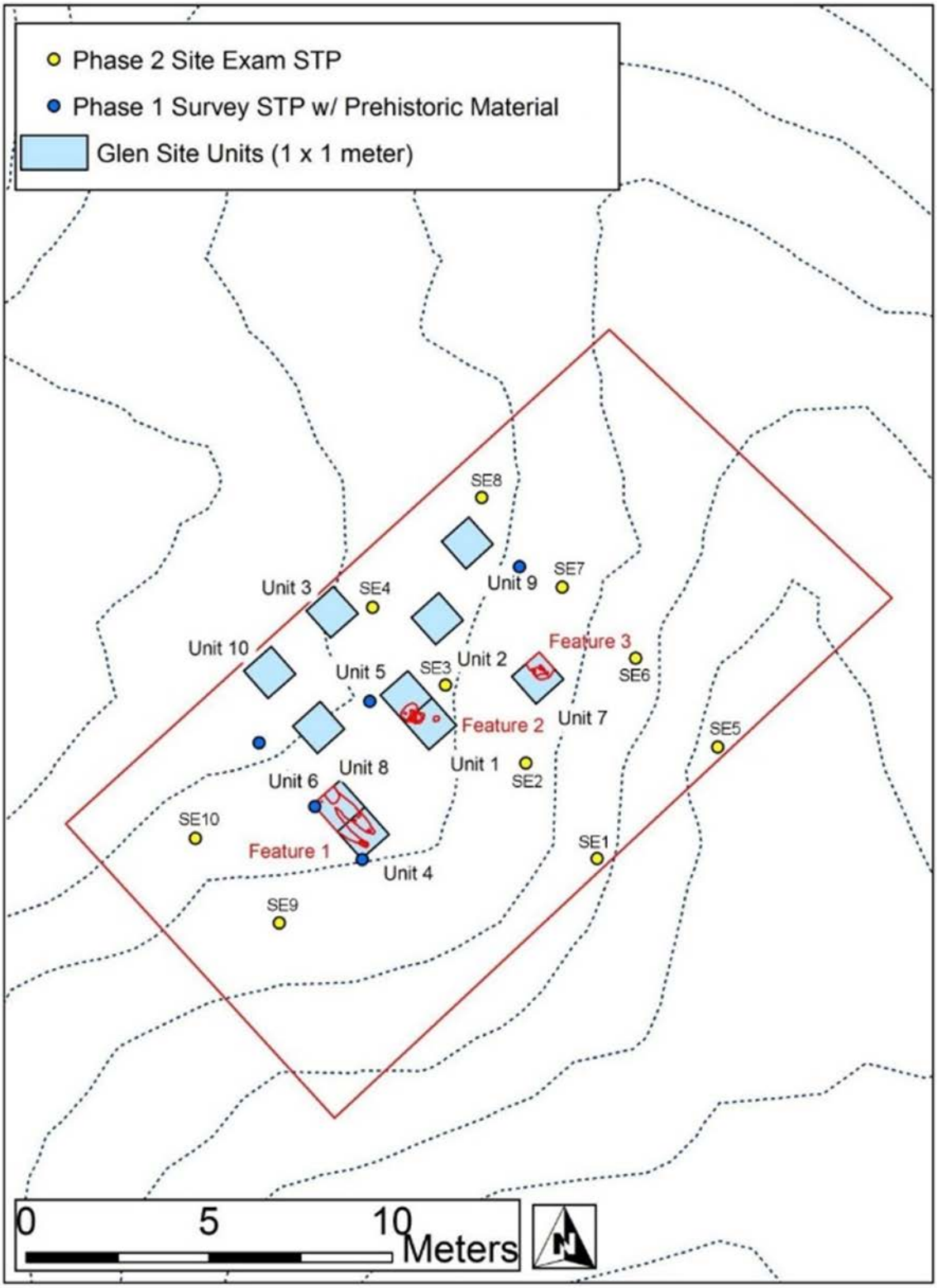
8. Map References: Map or maps showing exact location and extent of site must accompany this form and must be identified by source and date. Keep this information to 8½" by 11" if possible.

USGS 7 ½ Minute Series Quad. Name: 1968 (Photoinspected 1976) Binghamton West, NY
For Office Use Only – UTM Coordinates: _____

9. Photography (optional for environmental impact survey): Please submit 5" by 7" black and white print(s) showing the current state of the site. Provide a label for the print(s) on a separate sheet.



Location of Glen Precontact Site (SUBi-3071) on 1968 (1976 revised) Binghamton West, NY 7.5' USGS Quadrangle.



Glen Precontact Site (SUBi-3071) site map.

NEW YORK STATE PREHISTORIC ARCHAEOLOGICAL SITE INVENTORY FORM
NYS OFFICE OF PARKS, RECREATION & HISTORIC PRESERVATION
(518) 237-8643

Bernadette Castro
Commissioner

For Office Use Only--Site Identifier

Project Identifier: Traditions Resort and Casino Development Project **Date**: May 2014
Name: Andrea Zlotucha Kozub **Phone**: (607) 777-4786
Address: Rm. 146, Science I, Binghamton University, Binghamton NY
Organization (if any): Public Archaeology Facility

1. **Site Identifier(s):** Heritage Precontact Site (SUBi-3072; A00714.000096)

2. **County:** Broome
City:
Township: Union
Incorporated Village:
Unincorporated Village or Hamlet:

3. **Present Owner:** Traditions at the Glen Resort and Conference Center
Address: 4101 Watson Boulevard, Johnson City, New York

4. **Site Description (check all appropriate categories):**

Site:	□ Stray find	□ Cave/Rock shelter	□ Workshop
	□ Pictograph	□ Quarry	□ Mound
	□ Burial	□ Shell midden	□ Village
	□ Surface evidence	☒Camp	□ Material in plow zone
	□ Material below plow zone	☒ Buried Evidence	□ Intact occupation floor
	□ Single Component	☒ Multi-component	□ Stratified
	☒ Evidence of features (FCR)		
Location:	□ Under cultivation	☒Never cultivated	□ Previously cultivated
	□ Pastureland	□ Woodland	□ Floodplain
	□ Upland	□ Sustaining erosion	
Soil Drainage:	□ Excellent	☒ Good	□ Fair □ Poor
Slope:	□ Flat	☒ Gentle	□ Moderate □ Steep

Distance to nearest water from site (approx.): 525 m (1,722 ft) to Susquehanna River
Elevation: approximately 255 m (836 ft) ASL

5. **Site Investigation (append additional sheets if necessary):**
Surface Testing Date(s):
*** Submission should be 8 ½" by 11" if feasible**
☒ Site Map (Submit with form*)
□ Collection
Subsurface Testing Date(s): April 9-10, 2014 (survey); April 29-May 5, 2014 (site examination)
Testing: ☒ **Shovel** □ **Coring** □ **Other:**

Unit size: 40 cm diameter (STP); 1 x 1 m (unit)
Number of Units: 20 STPs (survey); 6 STPs and 6 units (site examination)
Investigator: Andrea Zlotucha Kozub

Manuscript or published report(s) (reference fully):
Michael Jacobson
2014 *Phase 1 Cultural Resource Survey Traditions Resort and Casino Development Project Town of Union, Broome County, New York.* Public Archaeology Facility, Binghamton, NY.
Michael Jacobson, Sam Kudrle, and Andrea Zlotucha Kozub
2014 *Phase 2 Site Examinations of Traditions Precontact Site (SUBi-3070), Glen Precontact Site (SUBi-3071), and Heritage Precontact Site (SUBi-3072), Traditions Resort and Casino Development Project Town of Union, Broome County, New York.* Public Archaeology Facility, Binghamton, NY.

Present repository of materials: The Public Archaeology Facility

6. **Components(s) (Cultural affiliation and dates):** Transitional (Orient point); Late Woodand (Oak Hill pottery, triangular point); possible Late Archaic (stemmed points)

7. **List of material remains (be as specific as possible in identifying object and material):**

Lithic Raw Material Types	Count	Weight (grams)
Onondaga chert	509	433.87
Quartzite	1	2.69
Rhyolite	1	0.04
Blue/gray chert	1	2.18
Light gray/white chert with iron oxide mottling	3	2.26
Poss. Normanskill/Mt. Merino chert	1	0.29
Tan/gray/red chert	2	2.98

Artifact Type	Count	Weight (grams)
Mammal Bone/Teeth	16	18.8
Bifaces	6	36.24
Bipolar Flake	1	0.92
Cortical flakes	51	91.36
Cortical Chunk	7	91.35
Fire-cracked rock	1939	86735.48
Pitted Stone	1	119.0
Non-cortical flakes	432	183.26
Pottery (including an Oak Hill sherd)	28	113.8
Projectile Points (including one Orient Fishtail point and a Late Woodland triangular point)	8	24.75
Retouched Piece	1	10.37
Rough Stone	1	332.00
Shatter	13	18.34
Shell	14	3.41

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8. **Map References:** Map or maps showing exact location and extent of site must accompany this form and must be identified by source and date. Keep this information to 8½" by 11" if possible.

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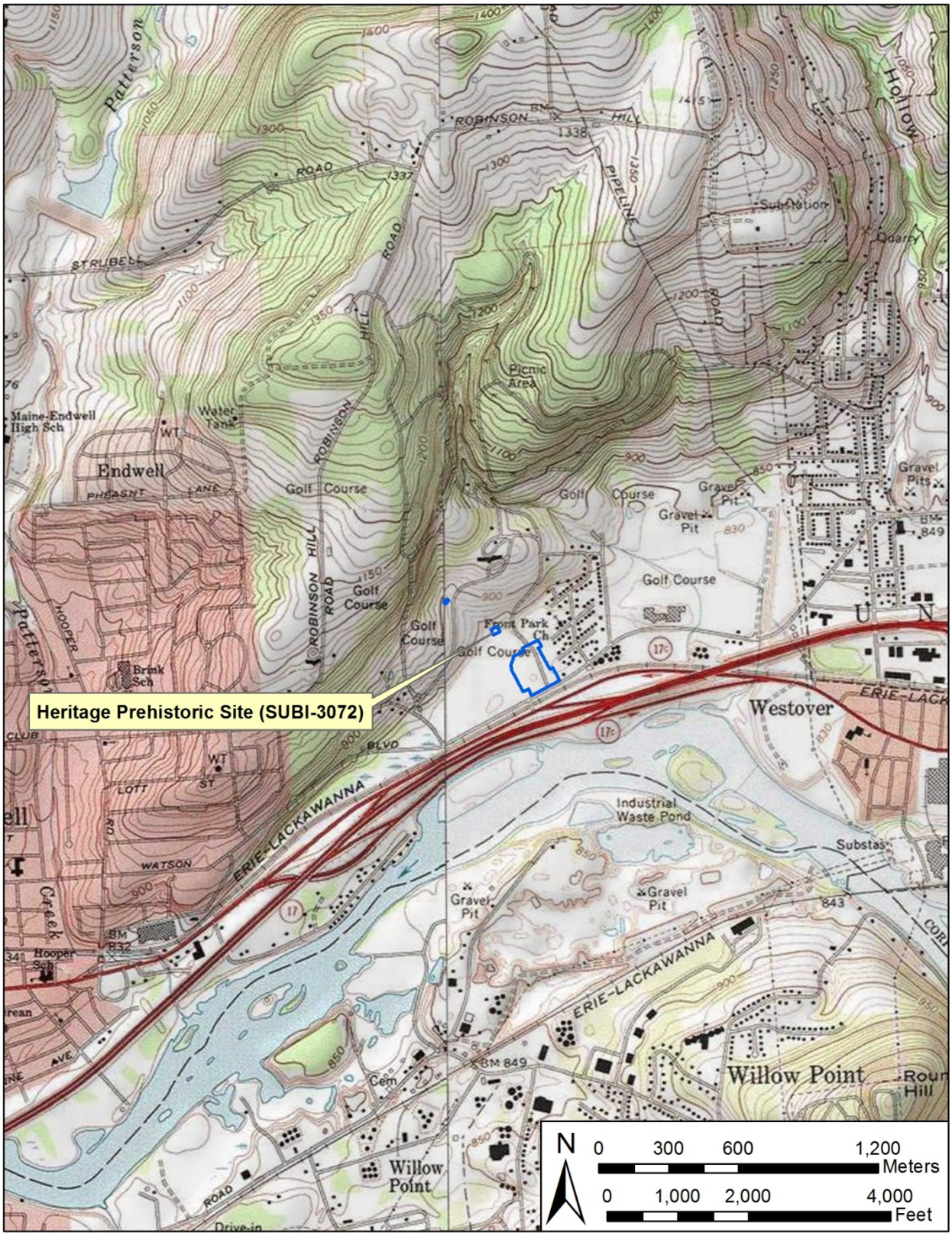
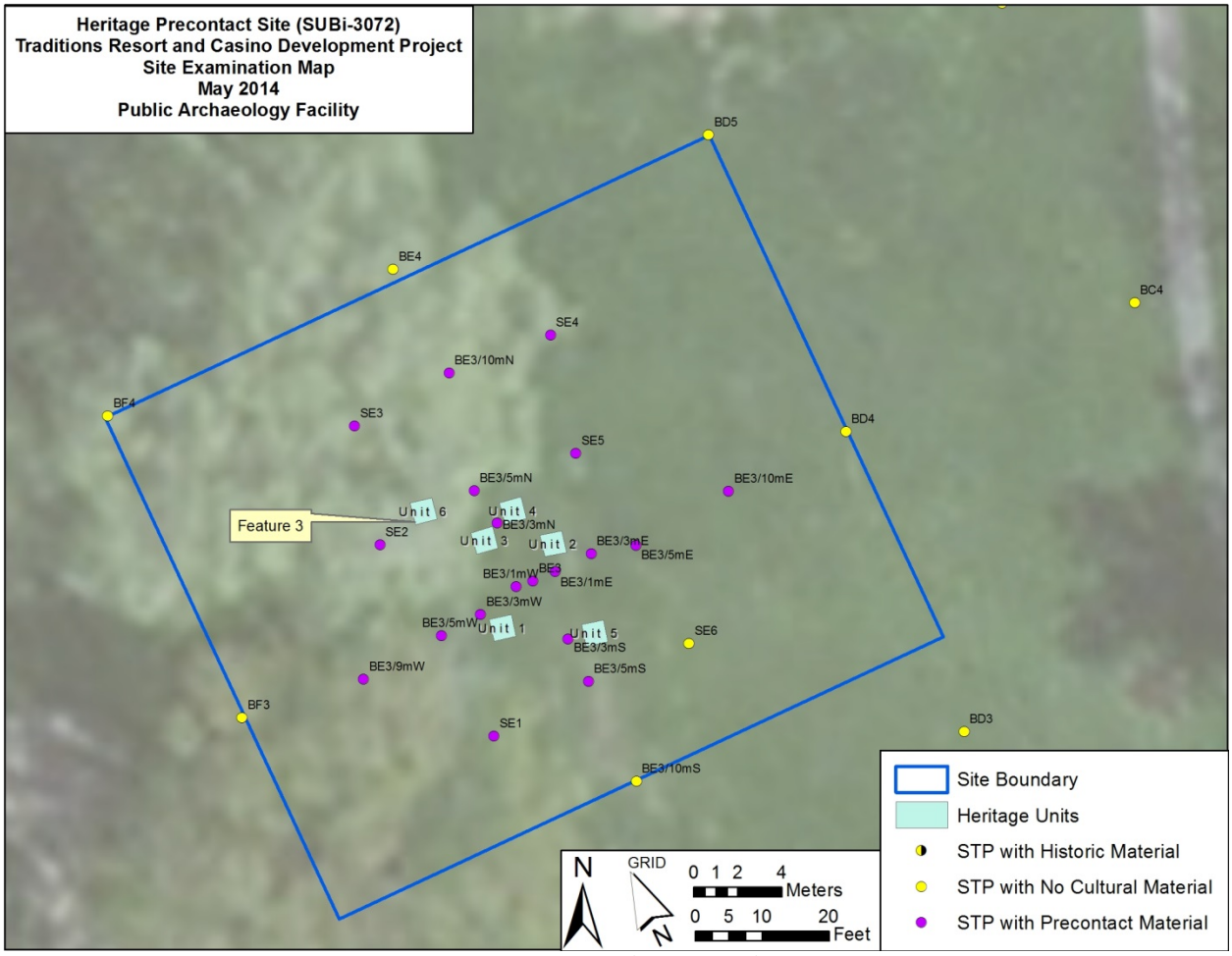


Location of Heritage Precontact Site (SUBi-3072) on 1968 (1976 revised) Binghamton West, NY 7.5' USGS Quadrangle.



Heritage Precontact Site (SUBi-3072) site map.