

APPENDIX M

CULTURAL RESOURCES SURVEY

**CULTURAL RESOURCE SURVEY
HAMPTONBURGH LAGOON SITE
TOWN OF HAMPTONBURGH
ORANGE COUNTY, NEW YORK**

Prepared for
Conestoga-Rovers & Associates

Prepared by
Hunter Research, Inc.

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**January 2002
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MANAGEMENT SUMMARY

The following report describes a Phase I Archaeological Survey conducted on the 29.3 acre former Maybrook Lagoon site, Town of Hamptonburgh, Orange County, New York. This Phase I survey was mandated as part of remediation operations on this National Priorities List (NPL; Superfund) site, under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). The project falls within the requirements of, the National Historic Preservation Act of 1966 (as amended). The Phase I survey was intended to establish whether cultural resources, which could meet the significance standards of the National Register of Historic Places, may exist, on or within the Area of Potential Effect of the property and the undertaking. The initial Scope of Work called for a Phase IA evaluation of the prehistoric, environmental, and historic background of the project area and vicinity followed by the completion of one day of field inspection. A Phase IB subsurface testing program was undertaken on areas considered to hold archaeological potential

No National Register of Historic Places or National Register of Historic Places-eligible properties were identified within the project boundaries as a result of the Phase IA or Phase IB surveys. The historical research undertaken for the project and the subsequent field investigations did not find any locations where such resources might be anticipated. The prehistoric sensitivity of the project area has also proved to be limited. Shovel testing of the archaeologically sensitive areas impacted by the proposed remediation yielded no evidence of prehistoric or historic occupation. Stratigraphy was consistent throughout the project area with sandy silt and cobbles overlying decaying shale bedrock. On the basis of these results, no additional archaeological investigations are considered necessary on the property. The regulatory requirements relating to the identification and protection of historic properties are therefore considered to be complete.

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The project was directed by William B. Liebeknecht under the supervision of Ian Burrow. The Phase IA site inspection was directed by William B. Liebeknecht with assistance from Susanne Eidson. Background research was performed by Susanne Eidson. Phase IB fieldwork was directed by George Cress and carried out by Jason Uebelaker and Rebecca White. Report graphics were drafted by Catherine Smyrski and Frank Dunsmore. Historic maps and site photos were scanned and edited by Dawn Turner. The report was written by Susanne Eidson, George Cress, and Ian Burrow. The report was edited by Deborah Gitterman and James Lee.

CHAPTER 1

INTRODUCTION

A. Project Background and Scope of Work

The following report describes a Phase I Archaeological Survey conducted on the 29.3 acre former Maybrook Lagoon site, Town of Hamptonburgh, Orange County, New York (Figure 1.1). This Phase I survey was mandated as part of remediation operations on this National Priorities List (NPL; Superfund) site, under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). The project falls within the requirements of the National Historic Preservation Act of 1966 (as amended). The Phase I survey was intended to establish whether cultural resources, which could meet the significance standards of the National Register of Historic Places, may exist, on or within the Area of Potential Effect (APE) of the undertaking.

The initial Scope of Work called for a Phase IA evaluation of the prehistoric, environmental, and historic background of the project area and vicinity followed by the completion of one day of field inspection. In response to a revised wider APE, a Phase IB subsurface testing program was initiated. The extensive background research was undertaken as a means to predict the potential of the area and to identify previously-known resources. The site inspection was intended to document any cultural resources located on the 29.3 acre property. In-house materials were consulted prior to researching the collections at Albany and Goshen, New York. Research was conducted in late January, 2001 by Susanne Eidson at the New York State Office of Parks, Recreation and Historic Preservation and at the Goshen Public Library and Historical Society, and the Office of the Orange County Historian. Shovel testing was carried

out in areas designated as archaeologically sensitive during the site inspection.

Extensive background research conducted at the New York Office of Parks, Recreation, and Historic Preservation indicated that there are four previously-known sites within a one mile radius and 13 previously-known sites within a two mile radius of the former Lagoon Site. Of the four sites located within a one mile radius, two sites are prehistoric, and two are historic. Of the 13 previously-known sites within a two mile radius of the project area, 11 are prehistoric and, two are historic. The Goshen Public Library and Historical Society and, the office of the County Historian provided access to a number of valuable sources, including a number of historic maps for the region.

On Friday, 16 February 2001, William Liebeknecht, Principal Investigator and Susanne Eidson, Senior Archaeologist, of Hunter Research, Inc. conducted a Phase IA cultural resource identification survey on the 29.3 acre former Lagoon Site (Maybrook site; Figure 1.2). Phase IB subsurface testing was carried out on November 8 and 9, 2001 by George Cress, Principal Investigator, and Senior Archaeologists Jason Uebelacker and Rebecca White of Hunter Research, Inc.

B. Criteria of Evaluation

The information generated by this survey was considered in terms of the criteria for evaluation outlined by the U.S. Department of the Interior, National Register Program:

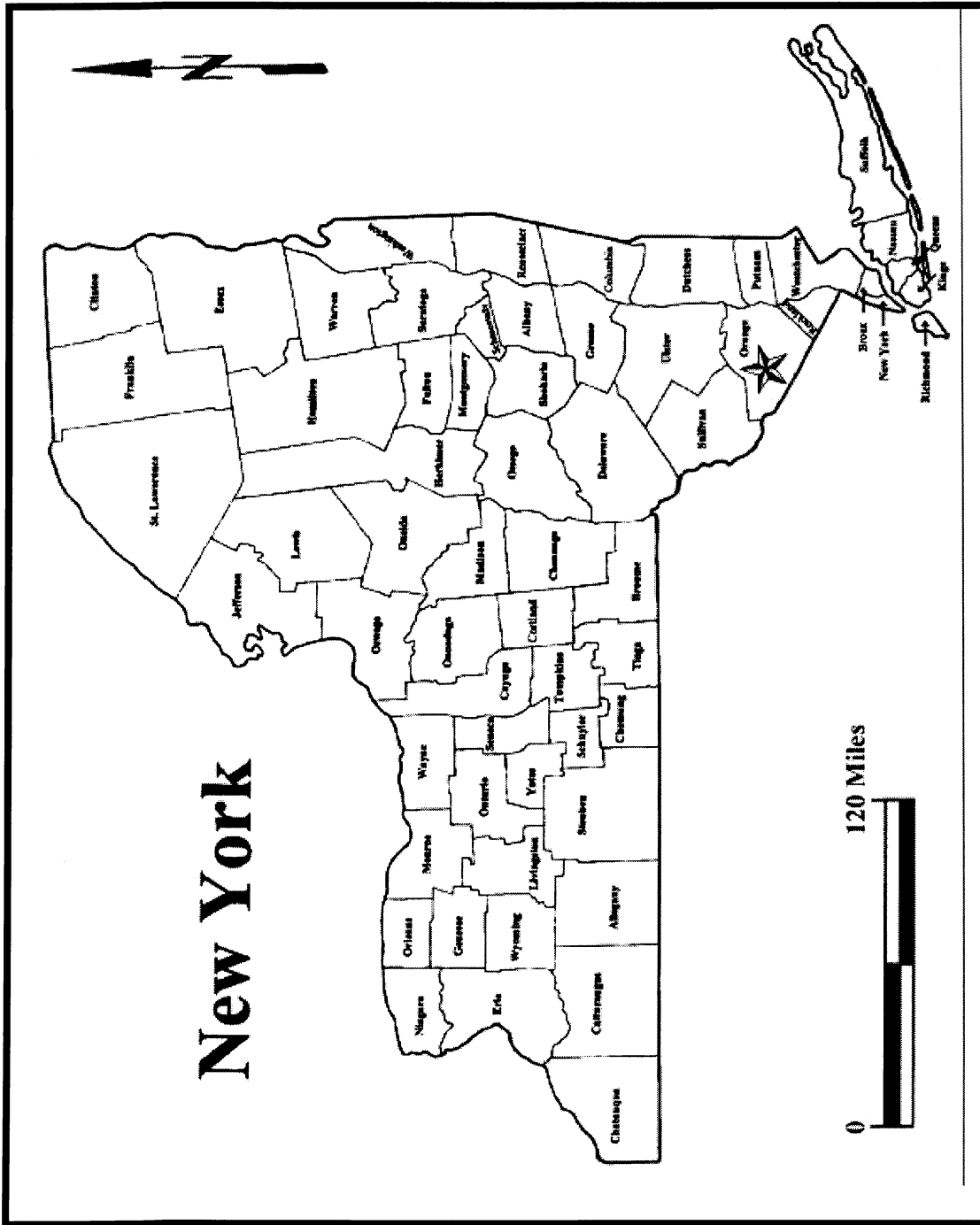


Figure 1.1. General Location of Study Area (starred).

CULTURAL RESOURCE INVESTIGATION: HAMPTONBURGH LAGOON SITE

The quality of significance in American history, architecture, archaeology and, culture is present in districts, sites, buildings, structures and, objects that possess integrity of location, design, setting, materials, workmanship, feeling and, association, and,:

A. that are associated with events that have made a significant contribution to the broad patterns of our history; or

B. that are associated with the lives of persons significant in our past; or

C. that embody the distinctive characteristics of a type, period or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and, distinguishable entity whose components may lack individual distinction; or

D. that have yielded, or may be likely to yield information important in prehistory or history.

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

A. a religious property deriving primary significance from architectural or artistic distinction or historical importance; or

B. a building or structure removed from its original location but which is significant primarily for architectural value, or which is the surviving structure most

importantly associated with a historic person or event; or

C. a birthplace or grave of a historical figure of outstanding importance if there is no other appropriate site or building directly associated with his productive life; or

D. a cemetery which derives its primary significance from graves of persons of transcendent importance, from age, from distinctive design features, or from association with historic events; or

E. a reconstructed building when accurately executed in a suitable environment and, presented in a dignified manner as part of a restoration master plan, and, when no other building or structure with the same association has survived; or

F. a property primarily commemorative in intent of design, age, tradition, or symbolic value has invested it with its own historic significance; or

G. a property achieving significance within the past 50 years if it is of exceptional importance.

C. Definition of Terms

The following definitions are from the Department of the Interior, National Register of Historic Places 36 C.F.R. 63 (Federal Register, Vol. 42, No. 183, Wed. Sept. 21, 1977, pp. 47666-67):

1. A "district" is a geographically definable area, urban or rural, possessing a significant concentration, linkage or continuity of sites, buildings, structures, or objects which are united by past events or aesthetically by plan or physical development. A district may also be comprised of individual elements which are separated geographically but are linked by associations or history.

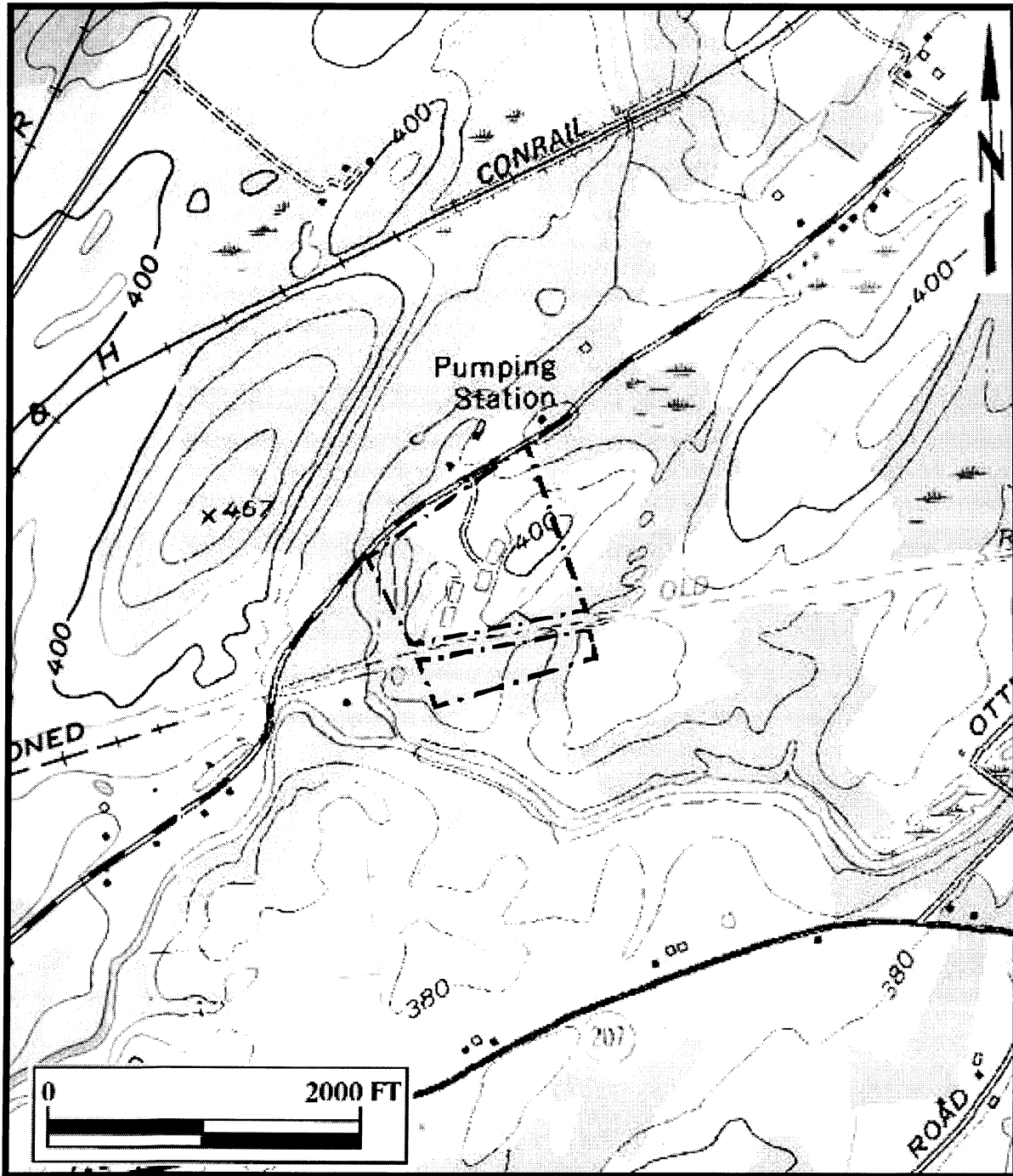


Figure 1.2. Detailed Location of Study Area (outlined). Source: USGS 7.5' Topographic Series Goshen NY Quadrangle (1957) and Maybrook NY Quadrangle, (1957 [Photorevised 1981]).

2. A "site" is the location of a significant event, or prehistoric or historic occupation or activity or a building or structure whether standing, ruined, or vanished where the location itself maintains historical or archaeological value regardless of the value of any existing structures.
3. A "building" is a structure created to shelter and, form of human activity such as a house, barn, church, hotel or similar structure. "Buildings" may refer to a historically related complex, such as a courthouse and, jail or a house and, barn.
4. A "structure" is a work make up of interdependent and, interrelated parts in a definite pattern or organization. Constructed by man, it is often an engineering project large in scale.
5. An "object" is a material thing of functional, aesthetic, cultural, historical, or scientific value that may be, by nature or design, movable yet related to a specific setting or environment.

D. Area of Potential Effect (APE)

As per the recently revised Section 106 regulations (36 CFR 800.3[e-g] and 800.4[a]), Hunter Research has defined the areas of potential effect (APE) for historic architectural and archaeological study. The architectural and archaeological APE adopted for this survey are coterminous and corresponds to the project boundaries provided by the client. Within this boundary, archaeological investigations have been confined to areas of potential within zones of anticipated ground disturbance directly associated with the proposed remediation activities (See Figure 5.1).

E. Previous Research and Principal Information Sources

No previous archaeological, architectural, or historical research has been reported in connection with the 29.3 acre former Lagoon Site (Maybrook site), Town of Hamptonburgh, Orange County, New York. In-house material consulted for this project included, but was not limited to, the following: Hunter Research Associates, *A phase 1 archaeological survey for the proposed Windsor Estates subdivision, town of Hamptonburgh, Orange County, New York*; Hunter Research Associates, *Phase 2 archaeological studies at prehistoric site AO71-06-0077, Al Turi Landfill, town of Goshen, Orange County, New York*; Hunter Research Associates, *Phase 3 archaeological data recovery at prehistoric site AO71-06-0008 at the Orange County sanitary landfill, town of Goshen, Orange County, New York*; Olsson, *Soil Survey of Orange County, New York*; Connally and, Sirkin's *Pleistocene Geology of the Walkkill Valley* and, Walters, *Early Man in Orange County*.

The following maps and, files were consulted at New York State Office of Parks, Recreation, and Historic Preservation (NYSOPRHP): County map of Orange County; the U.S.G.S. Goshen Quadrangle, 7.5 Minute Series; the U.S.G.S. Maybrook Quadrangle, 7.5 Minute Series; NYSOPRHP site forms; NYSOPRHP survey forms; New York State Museum site forms; and, the appropriate site reports.

Works consulted at the Goshen Public Library and Historical Society and the office of the County Historian, included but was not limited to: Headley's *History of Orange County New York*; Akers, *Outposts of History in Orange County*; Eager, *An Outline History of Orange County*; and, Ruttenber and, Clark, *History of Orange County, New York*. Several historic maps were consulted, including but not limited to: Beers, *Atlas of Orange County*; Burr, *Atlas of the State of New York*; Corning, *The Famous DeWitt Map*; and,

Denniston, *Map of Orange County*.

The Ontario and, Western Railway Historical Society was contacted on-line. The web page provided a history of the railroad and information pertaining to the portion of track which truncated the project area. A detailed map showing the various lines of the NY O&W and the Erie line was also examined.

CHAPTER 2

GEOGRAPHIC SETTING

A. Physiography

The 29.3 acre former Lagoon Site (Maybrook Site) in the Town of Hamptonburgh, Orange County, New York, lies within the Wallkill Valley sub-province of the Hudson-Mohawk Lowlands physiographic region which is part of the Ridge and Valley province that extends through Pennsylvania and southward (Thompson 1966; Figure 2.1). This physiographic region is characterized by a rolling, northeast-southwest trending topography (Hunter Research, Inc. 1986).

The Hudson-Mohawk Lowlands are broad and gently rolling with several large, almost flat, regions of glacial lake deposits (Olsson 1981). Overall, the region is composed of generally low-lying terrain formed through the erosion of a series of weak outcrop belts (Broughton et al. 1962). The broad valleys of the region are surrounded by four mountain ranges: the Adirondacks to the north; the Catskills and the Shawangunks to the west; and the Taconic Mountains and the Hudson Highlands to the east (Isachsen et al 1991). In Orange County, the lowlands are punctuated with hills composed primarily of sandstone and conglomerate rock known as the Shawangunk Formation (Isachsen et al 1991).

The Shawangunk Mountains are a continuation of the Kittatinny Mountains in New Jersey. The Shawangunks are structurally a subdivision of the Hudson-Mohawk region (Thompson 1966). Though not a lowland, these mountains form a prominent ridge that rises nearly 1,000 feet to the northwest of the Wallkill Valley (Broughton et al. 1962; Thompson 1966). These mountains form a steep-sided ridge on

the west side of the Wallkill Valley (Hunter Research, Inc. 1986).

The northwest corner of the former Lagoon Site is crossed by the Beaverdam Brook. The brook begins just south of Neelytown Road and flows for approximately 2.2 miles until it joins the Otter Kill. Beaverdam Brook has two unnamed branches, both of which stretch out to the east. The northernmost branch joins Beaverdam Brook just south of Neelytown and extends towards Morrison Heights, a distance of approximately 1.2 miles. The southernmost branch joins with the Beaverdam Brook one-quarter of a mile north of Orange County Route 4. This branch extends for 1.4 miles into the Town of Maybrook. Beaverdam Brook is associated with the larger, Otter Kill. The confluence of Beaverdam Brook and the Otter Kill is one-quarter mile south of the 29.3 acre former Lagoon Site.

The western extent of the Otter Kill extends begins near LaGrange. The river extends approximately three miles east until it intersects with the Beaverdam Brook. The Otter Kill continues to extend towards the east to the town of Burnside. At Burnside, the direction of the river shifts southward. The Otter Kill travels approximately 2.5 miles where it divides into Cromline Creek and Moodna Creek. Cromline Creek then flows southwest approximately three miles where it empties into Tomahawk Lake. Moodna Creek flows approximately 17 miles eastward along a winding and meandering course, ending two miles north of Cornwall-on-Hudson where it joins the Hudson River.

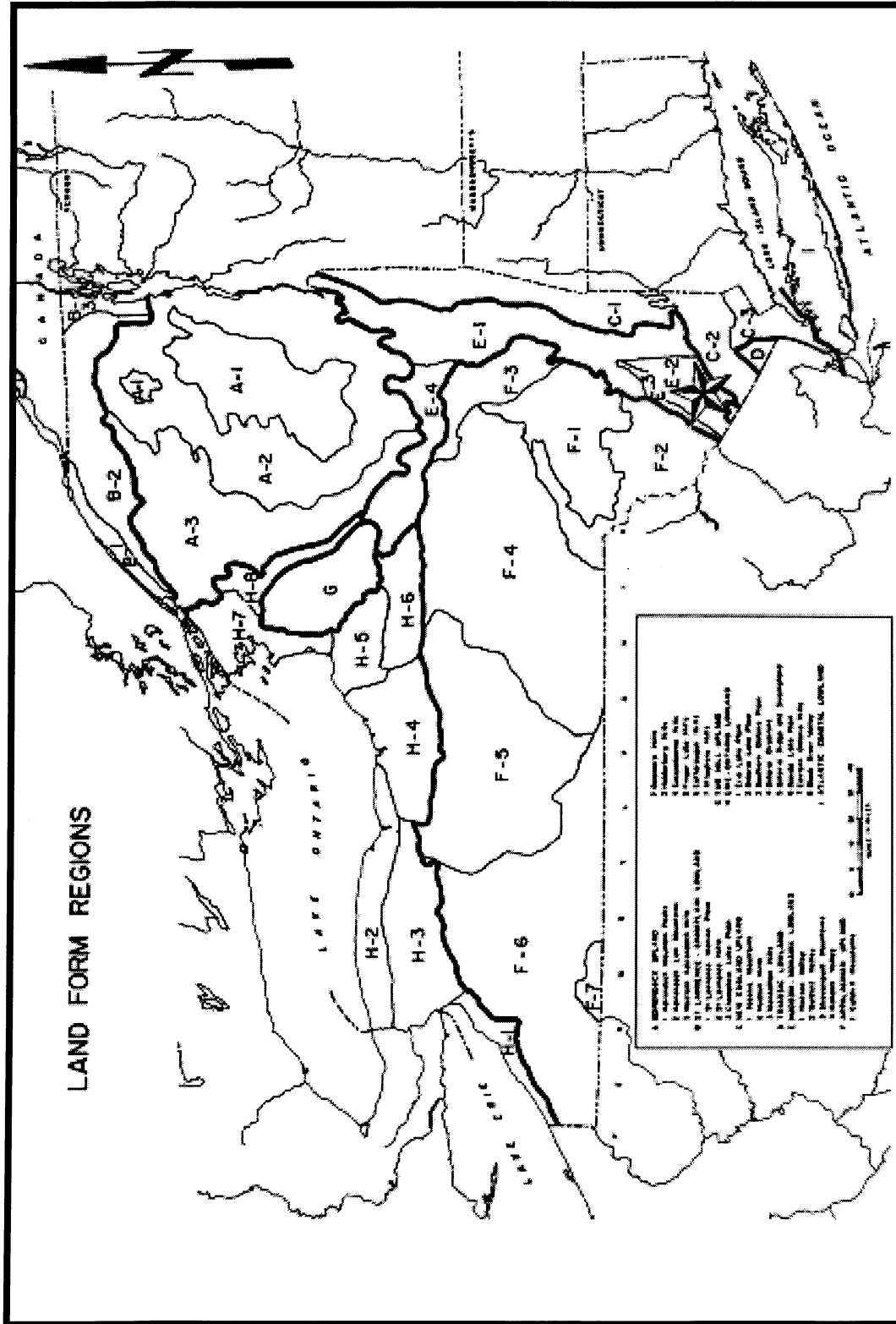


Figure 2.1. Physiographic Location of Study Area (starred). Source: Thompson 1966:26.

B. Geology

The geologic sequence for the Wallkill River Valley is quite complex. The bedrock beneath the floor of the Wallkill Valley is primarily Cambrian and Lower Ordovician rocks (between 540 and 478 MAPP) that were formed in two environments: on the shallow continental shelf and the deep waters of the continental slope and rise of proto-North America (Isachsen et al 1991). The Cambrian rocks are predominantly sandstones and the Lower Ordovician rocks are composed of shale, siltstone, sandstone, limestone and dolostone (Isachsen et al. 1991). The Cambrian and Lower Ordovician rocks are overlain by sedimentary deposits, some of which contain fossils (Isachsen et al. 1991). These sedimentary deposits formed the Silurian rocks which became the Shawangunk formation (Isachsen et al. 1991). The Silurian rocks are overlain by red and green shale and sandstone (Isachsen et al. 1991). Glaciation only moderately affected the Orange County region (Olsson 1981). The topography was modified by the advance and retreat of the ice. Current research indicates that the ice age started some time around 300,000 thousand years ago with the last retreat occurring 12,000 years ago (Olsson 1981)

Wisconsin glaciation, which occurred roughly 18,000 years ago, had an effect on the Wallkill Valley region. At this time, the ice reached its southernmost limits in the northeast, ending in the Ogdensburgh/Augusta region of Sussex County, New Jersey. In New York, a large section of this ice sheet cut through the Wallkill Valley deepening the valley floor, scouring its sides, and pushing and redepositing eroded material. As the climate warmed, the ice sheet melted and retreated. The melting caused the deposition of rock and soil (moraines) and meltwater formed proglacial lakes. (Flint 1971: 490; Embleton and King 1975: 430-463). Five major moraines and two principal proglacial lakes were formed in the Wallkill Valley (Hunter Research, Inc. 1986; Figure 2.2)

C. Soils

Five distinctive soil types were identified within the project area (Figure 2.2 and Table 2.1)

There are five soil types identified within the 29.3 acre project area: Alden silt loam (Ab); Bath- Nassau shaly silt loams, 8 to 15 percent slopes (BnC); Fredon loam (Fd); Hoosic gravelly sandy loam, 3 to 8 percent slopes (HoB); and Mardin gravelly silt loam, 3 to 8 percent slopes (MdB; Olsson 1981). The Alden silt loam and the Fredon loam are both poorly drained soils that occur in the low areas and depressions occurring in the project area. These soils were formed from glacial till and glacial outwash deposits, respectively (Olsson 1981). The Bath-Nassau shaly silt loams (8 to 15% slopes) and the Mardin gravelly silt loam (3 to 8% slopes) are both well drained soils. Both soils occur on hillsides and ridges and both were formed from glacial till deposits (Olsson 1981). The Hoosic gravelly sandy loam (3 to 8% slopes) is a somewhat excessively drained soil that occur on terraces and other undulating areas along valley floors and lowland plains. These soils formed from glacial outwash deposits (Olsson 1981).

Approximately 5 acres of the project area is located within the confines of a security fence. Throughout the 1950's and 1960's, six large lagoons were dug within this portion of the site, denoted in Figure 2.1 as quarries (Qu) and gravel pits (Pg; Table 2.1). In the 1970's, the lagoons were filled in and access to the site was limited (www.epa.gov/superfund/sites/npl/nar225.htm; www.epa.gov/region02/superfund/site_sum/0201188c.htm).

D. Flora and Fauna

The area is predominantly wooded. Tree species commonly found in the area include: Red Maple, Northern Red Oak; Black Cherry; Sugar Maples; Eastern White Pine; and Yellow Poplar. Grasses, herbaceous, and coniferous plants are also common. In the low-lying

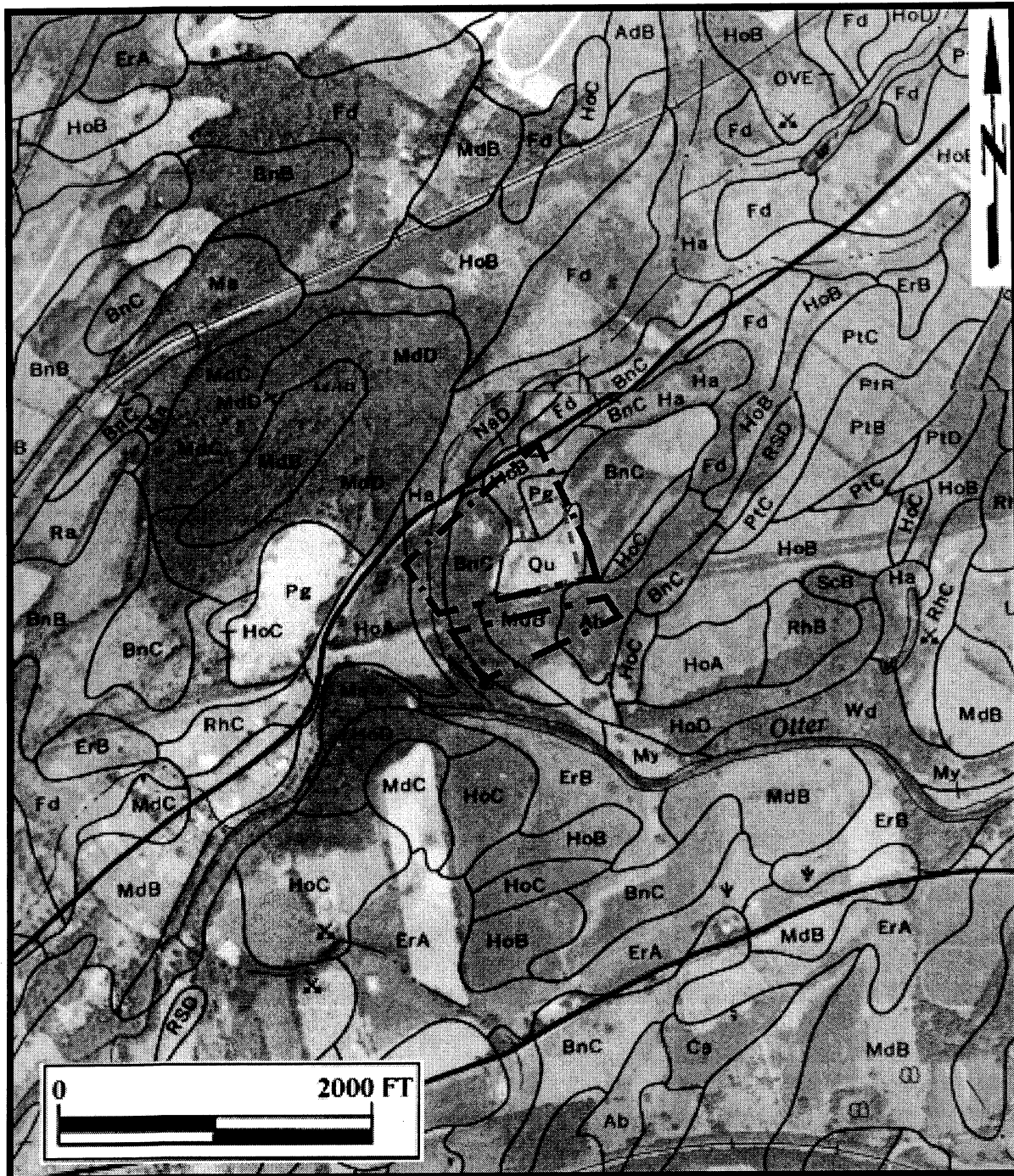


Figure 2.2. Soil Series and Morphology of Study Area. Source: *Soil Survey of Orange County, New York*. 1981. Sheets 29 and 40.

CULTURAL RESOURCE INVESTIGATION: HAMPTONBURGH LAGOON SITE

Table 2.1. Soil Series and Prominent Geomorphic Features Found Within the Project Area		
Symbol	Name	Description
Ab	Alden silt loam	Deep, very poorly drained, nearly level soil formed in glacial till deposits derived from shale, sandstone, and some limestone overlaid by silty colluvial sediments. The soil is in low areas and depressions in uplands. Slopes range from 0 to 3 percent. Areas are mostly round and 5 to 10 acres in size. Surface is typically a dark grayish-brown silt loam with few or no gravels, 9 inches thick. Subsoil is 27 inches thick with few or no gravels, upper soil is mottled dark gray heavy silt loam; middle soil is greenish gray silt loam; lower soil is mottled dark grayish brown loam. Substratum is firm, mottled olive brown fine sandy loam to 5 feet or greater (Olsson 1981).
BnC	Bath-Nassau shaly silt loams, 8 to 15 percent slopes	Deep, well drained soils and shallow, somewhat excessively drained soils that formed in glacial till deposits derived from shale and slate. These soils occur on hillsides and ridges in uplands. The underlying bedrock is folded and tilted causing the topography to become irregular and slope in numerous directions. Areas are mostly oblong and 10 to 20 acres in size. Surface soil is about 9 inches thick and is a dark brown or grayish brown silt loam with shale. Subsoil ranges from 17 to 42 inches in thickness. The upper soils are yellowish brown very shaly loam (dark gray shale bedrock may appear under this layer). The middle soils are mottled olive brown shaly silt loam and the lower soils are olive brown very shaly silt loam fragipan. Bedrock may appear below this layer (Olsson 1981).
Fd	Fredon loam	Deep, poorly drained, nearly level soil formed in glacial outwash deposits that have a high content of sand and gravel. Soil is found on low terraces and outwash plains along valley floors and in lowlands. The slope is no more than 3 percent. Areas are usually round or oval and 5 to 10 acres in size. The surface layer is 6 inches thick, dark grayish brown loam. The subsoil is 18 inches thick. The upper soil is mottled grayish brown very fine sandy loam; the middle is mottled light yellowish brown very fine sandy loam; and the lower part is mottled brown fine sandy loam. The substratum ranges from 24 to 60 inches thick and is grayish brown stratified gravelly sand (Olsson 1981).
HoB	Hoosic gravelly sandy loam, 3 to 8 percent slopes	Deep, somewhat excessively drained, gently sloping soil formed in glacial outwash deposits that have a high content of sand and gravel. Soil occurs on terraces and undulating areas along valley floors and on lowland plains. Areas are round or oval and 10-20 acres in size. Surface layer is dark grayish brown gravelly sandy loam around 6 inches thick. The subsoil is 22 inches thick. The upper soil is a yellowish brown gravelly sandy loam; the middle soil is yellowish brown very gravelly sandy loam and the lower soil is yellowish brown very gravelly loamy sand. The substratum is light olive brown very gravelly sand (loose) and is approximately 6 feet in thickness (Olsson 1981).
MdB	Mardin gravelly silt loam 3 to 8 percent slopes;	Deep, moderately well drained, gently sloping soil formed in glacial till deposits derived from sandstone, shale, and slate. It has a dense fragipan in the subsoil. It is on broad divides, hilltops, and ridges in uplands. Areas are round and 10 to 15 acres. The surface is dark brown gravelly silt loam 8 inches thick. The upper soil is yellowish brown gravelly silt loam. The mid soil is leached mottled pale brown gravelly silt loam. The bottom soil is firm, olive brown channery silt loam fragipan (Olsson 1981).
Pg	Pits, gravel	Excavations mainly in gravelly and sandy glacial outwash deposits. The pits were created by removing gravel and sand for construction. Pits vary in size, any where from 3 to 50 feet deep. May hold water. May be hazardous (Olsson 1981).
Qu	Quarries	Excavations into various kinds of bedrock, including shale, slate, limestone, and granitic gneiss. May hold water. May be hazardous (Olsson 1981).

area, wetlands plants can be found. The former lagoon area was originally stripped of vegetation but is now covered with grasses, wild flowers, and brush (Conestoga-Rovers & Associates 2000). The local fauna includes white-tailed deer, woodchuck, raccoon, and chipmunk (Hunter Research, Inc, 1989). A wide variety of birds, ranging from waterfowl to songbirds to raptors are also present within this region.

E. Current Land Use

The former Lagoon Site (Maybrook Site) is currently not in use. Between 1953 and 1968, the Nepera Chemical Company used the lagoons on this site to dispose of industrial waste that had been generated by its Harriman, New York plant. These lagoons were 160 feet long, 70 feet wide, and 6 feet deep. The plant discontinued using the site in 1968 and the lagoons were filled in 1974 (www.epa.gov/superfund/sites/npl/nar225.htm; www.epa.gov/region02/superfund/site_sum/0201188c.htm). A fence currently surrounds the site. The property had been used as farmland prior to its use as a waste disposal site. The intended future use of the site is a Nature Conservancy and graveled trails in a park-like setting (Conestoga-Rovers & Associates 2000).

CHAPTER 3

PREHISTORIC BACKGROUND

A. Prehistory of the State of New York

The chronological sequence for New York State is generally divided into five major cultural stages: Paleo-Indian (circa 12,500 - 8,000 B.P.), Archaic (circa 8,000 - 3300 B.P.), Transitional (circa 3,300 - 3,000 B.P.), Woodland (circa 3,000 B.P. - A.D. 1600) and Contact (after circa A.D. 1600). Each of these prehistoric stages can be subdivided into cultures or traditions and phases, depending on the temporal and geographic context involved. Overviews of the prehistory of New York State have been explained in extensive detail elsewhere by other authors on many occasions (Ritchie and Funk 1973; Funk 1976; Bryan 1977; Eisenberg 1978; Ritchie 1980) and will be summarized here.

The Paleo-Indian Period (circa 12,500 - 8,000 B.P.) is represented by the first migratory wave of human beings into North America. These people, known as Paleo-Indians, were hunter/gatherers who lived in small micro-band communities. The arrival of this group of people coincide with the retreat of the last ice sheet from the New York region. The environment effected the way these people lived. The climate at this time was probably quite mild and plant and tree species varied from those found in this region today.

Large mammals, such as the mastodon and mammoth were plentiful. During the Paleo-Indian Period, the Upper Wallkill Valley was comprised of 'drowned lands', marsh environments capable of sustaining a mastodon population (Fisher 1955, Ritchie 1980). Forty mastodon finds (*Mastodon Americanus*) have been excavated in Orange County (Clyne 1993). Other large mammals living in this region at the time

of the Paleo-Indian people included moose, and caribou, musk ox, and bear. Many of these and other Pleistocene species are found in conjunction with Paleo-Indian cultural materials. Some of the best faunal evidence from the Paleo-Indian period has come from the Dutchess County Rock Shelter, located less than ten miles from the Former Lagoons Site (Funk et al. 1970).

The archaeological record of the Paleo-Indian Period is characterized by a distinctive style of projectile point which was used to tip javelins or spears and also served secondarily as a knife (Hunter Research, Inc. 1986). These specialized tools, called fluted points, are easily distinguished from later cultural periods by the presence of single or multiple flake scars which extend vertically from the base of the tool towards the tip (Gramly 1984).

The Archaic Period (circa 8,000 - 3300 B.P.) is often divided into three separate categories: Early Archaic, Middle Archaic, and Late Archaic. During this time period, the climate was somewhat warmer than in the Paleo-Indian Period. This warming trend facilitated a change in the environment. New species of trees and plants began to replace those types common in the previous period. These environmental changes led to a change in the cultural resource materials associated with early Native American peoples. In particular, the fluting technique was abandoned and projectile point styles were adapted to fit the changing landscape. This shift in projectile point technology has been used to mark the Early Archaic Period (Hunter Research, Inc. 1986). In addition to the shift in projectile point technology, other objects began commonplace. For instance, the bola stones and spear-thrower (atlatl)

weights begin to appear. This change in technology does not suggest that the overall lifestyle of early Americans altered significantly between the Late Paleo-Indian Period and the Early Archaic Period (Gardner 1974; Cavallo 1981). Instead, this shift to non-fluted points only indicates a change in technological processes.

Early Archaic sites are quite rare. There is quite a discrepancy in the number of Early and Middle Archaic sites in comparison with the quantity of Late Archaic sites in this region. Some archaeologists attribute this to the low aboriginal population level of that time period. The limited population is explained by the environmental conditions of that time period which were not sufficient to sustain a larger population (Funk and Wellman 1984). Others in the field believe that the small number of Early and Middle Archaic sites is the result of sites being buried by alluvial deposits (Hunter Research, Inc. 1986).

The Transitional Period (circa 3,300 - 3,000 B.P.) is not accepted by all archaeological professionals as being distinguishable from the Late Archaic Period. Some believe that the evidence of increasingly labor intensive subsistence strategies characterize the changes in social relations which are not directly related to changes in the environment (Bender 1985; Hunter Research, Inc. 1986). For its supporters, the Transitional Period is characterized by broad blade projectile points, knives, and soap stone (steatite) bowls (Ritchie 1980). The introduction of soap stone reflects the growing trade network between early Native American groups. These stone bowls were later replaced by a rudimentary ceramic technology.

The Woodland Period (circa 3,000 B.P. - A.D. 1600) is also divided into the Early, Middle, and Late phases. Overall, this period is defined by the use of ceramic technology. During this period, the climate and overall environment in New York state is nearly identical to that found in early the early Historic period

(Hunter Research, Inc. 1986). The Early Woodland Period (circa 3000 - 2500 B.P.) is characterized by the development of the ceramic technology that replaced soap stone vessels. During this period, tubular smoking pipes, copper beads, and two-holed gorgets (an early type of personal ornament) are introduced.

The Middle Woodland Period (circa 2500 B.P. through A.D. 1000) is characterized by decorated pottery. These decorations were created by stamping the wet clay, with twigs for example, or impressing the clay with a piece of net or some other material. Elbow and platform pipes are now manufactured and take the place of the tubular pipes (Hunter Research, Inc. 1986). Within the study area region, the introduction of larger storage pits and ceramic vessels may indicate a trend towards increasingly sedentary and/or concentrated settlement (Funk 1976).

The Late Woodland Period (after circa A.D. 1000) is distinguished from the Early and Middle periods by the establishment of agriculture as a dominant way of life. The cultivation of such crops as corn, beans, and squash, sometimes referred to as 'Three Sisters', is established by this time. The archaeological record also indicates that there was a shift in settlement patterns during this time period in the form of large semi-sedentary, often palisaded villages appearing, especially on the flood plains and river terraces (Ritchie 1980). The Late Woodland toolkit remained similar to the toolkit of earlier cultures. Variations are identified and include an increased emphasis on tools related to plant and fish resources as well as stylistic changes, most notably demonstrated by the introduction of triangular projectile points (Kraft 1978).

The fifth major cultural stage in New York prehistory is identified as the Contact Period (after circa A.D. 1600). When the first European explorers entered the Wallkill and Lower Hudson Valleys, they encountered the Delaware Indians, a catch-all category for most of the Algonquin speaking groups within this region. The

northern part of the region was inhabited by the a group who spoke a dialect referred to as Munsee and the lower part of the region was inhabited by those who spoke the Unami dialect. The Wallkill Valley was inhabited primarily by the Warranawonkongs who aggressively defended their territory against European settlers during the mid-seventeenth century. The Warranawonkongs later sold the portion of their land known as the Wawayanda Patent to a group of Dutch and English settlers. Contact with the Europeans altered the way of life for the indigenous Native American groups. Traditional life ways were replaced by European religions and culture and many Native Americans were forced to migrate out of the valley. In addition to forced migration, disease, alcoholism and warfare all contributed to the decimation of the Delaware population of the Wallkill and Lower Hudson Valleys (Ruttenber et al. 1881; Goddard 1978).

B. Previously Recorded Sites Within A Two Mile Radius of the Project Area

Research conducted at the New York State Office of Parks, Recreation, and Historic Preservation indicated that there are two previously-known prehistoric sites within a one mile radius (HRI Site Identification Numbers 1 and 2) and 11 previously-known prehistoric sites (HRI Site Identification Numbers 3 - 13) within a two mile radius of the project area (Table 3.2). Site number 1 (NYSM 8695) was identified as a rock shelter and has no prehistoric cultural affiliation. Site number two (NYSDPRHP A071-08-0017) is associated with the Late Woodland period (c.1000 B.C. to 1500 A.D.). This site was recorded by Lewis A. Dumont, president of the New York Archaeological Association, Orange County Chapter. The site was collected by Russel Hallock in 1969 and then destroyed by sand mining. Prehistoric burials were reported.

Of the 11 previously-known sites within a two mile

radius of the project area, five sites, 3, 6, 7, 9, and 13 produced artifacts that are associated with specific prehistoric periods: Site 6 (NYSM 6201) is associated with the Paleo-Indian period (16,000 - 6,000 B.C.); Sites 3 (NYSDPRHP A071-12-000077), 7 (NYSDPRHP A071-08-0020), and 9 (NYSDPRHP A071-08-0015) are associated with the Late Archaic-Transitional period (4000-1000 BC); and Site 13 (NYSM 7956) is associated with the Early Woodland period (1000 - 500 B.C.). One site, HRI Site Identification Number 5, the Parker Site #9 (NYSM 4385) is possibly a contact site. This site was first recorded by S. W. Eager (1846-7) and then later by Parker (1922). This site is described as an Indian village and orchard located on the east bank of the Wallkill river along the town line between Wallkill and Montgomery. No additional information is provided. The remaining five prehistoric sites (HRI Site Identification Numbers 4, 8, and 10 - 12) were not associated with any specific prehistoric cultural period.

The Zappivigna site, the one Paleo-Indian site within a two mile radius of the project area (HRI Site 6), was first recorded by R.E. Funk of the New York State Archaeological Association, Orange County Chapter. This was a plowzone site that was excavated during the 1989-1990 field season. No additional information was available.

The three Late Archaic - Transitional Period sites, HRI Sites 3, 7, and 9 are summarized below. Site 3, the Hardware Wholesalers Development Site, was excavated by Heritage America, Ltd. under the direction of S.J. Oberon. This tool manufacturing site was defined by the surface collection of a cultivated field. The collection included a number of Brewerton and Perkiomen, associated with the Late Archaic-Transitional Period in New York state. HRI Site 7, an unnamed site was recorded by Lewis A Dumont, former president, of the New York Archaeological Association, Orange County Chapter. The site was

identified by a surface collection made by Sternitzke and Hallock (no first names provided) in 1969. The site was located at the rear of Campbell Hall church. No additional information was provided. Site number 9, also unnamed, was associated with the Transitional-Orient Phase. In this instance, the Orient Phase is being considered a sub-phase of the Transitional Period. This site was also recorded by Lewis A. Dumont and collected by Sternitzke in 1969. No additional information was provided.

The one Early Woodland period (1000 - 500 B.C.) site, HRI Site 13, was the Rowe's Farm site. This plow-zone site was recorded by Eisenberg and J. Diamond (no first names provided). The two surface collectors recovered a pestle, aboriginal pottery fragments, Adena points, a biface, a net sinker, celts, a pipe stem, knives, and a hoe. No additional information was provided.

CULTURAL RESOURCE SURVEY: HAMPTONBURGH LAGOON SITE

Table 3.1. Documented Prehistoric and Historic Sites within a Two Mile Radius of the Project Area

HRI Site Identification Number	NYS0PRHP Number	NYSM Number	Site Name	Type	Context	Remarks
1		8695	Grey Court	prehistoric		Rock shelter identified in the old site files (Site Files A, 1904).
2	A071-08-0018		unnamed	prehistoric	Possible Woodland site	Site recorded by Lewis A. Dumont, president of the New York Archaeological Association, Orange County Chapter. Site consisted of surface collections from a sand bank that is currently under cultivation. The site was collected by Russel Hallock in 1969 and then destroyed by sand mining. Prehistoric burials were identified. Possibly from the Woodland Period. (1979)
3	A071-12-000077		Hardware Wholesalers Development Site; HWI Site 2	prehistoric	Brewerton and Perkiomen phases; Late Archaic-Transitional (4000-1000 BC)	Excavated by Heritage America, Ltd. under the direction of S.J. Oberon. Site was a surface collection from a cultivated field, a number of Brewerton and Perkiomen projectile points were collected. (1994)
4	A071-12-000076		Hardware Wholesalers Development Site; HWI Site 1	prehistoric	not indicated	Excavated by Heritage America, Ltd. under the direction of S.J. Oberon. Site was a surface collection from a cultivated field which drill fragments, 2 unidentified point tips, scrapers, flakes and culturally modified chert fragments. (1994)
5		4385	Parker Site 9: an Indian Village and Orchard	possibly historic		Eager (1846-7) and Parker (1922) describes this site as an Indian village and orchard located on the east bank of the Wallkill river along the town line between Wallkill and Montgomery.
6		6201	Zappavigna	prehistoric	Paleo Indian	Site first recorded by R.E. Funk of the New York State Archaeological Association, Orange County Chapter. This is a plowzone site, excavated during the 1989-1990 field season.

7	A071-08-0020		unnamed	prehistoric	Archaic and Transitional	Site recorded by Lewis A Dumont, president of the New York Archaeological Association, Orange County Chapter. Site is located at the rear of Campbell Hall church. Site was a surface collection by Sternitzke and Hallock in 1969. (1979)
8	A071-08-0187		Zappavigna II; Marcy-South 345KV Transmission Line	prehistoric	not indicated	Site excavated by Hartgen Archaeological Assoc. in 1984 and 1987. Plowzone site which yielded chert knife and chert flakes.
9	A071-08-0015		unnamed	prehistoric	Transitional-Orient Phase	Site recorded by Lewis A. Dumont, president of the New York Archaeological Association, Orange County Chapter. Site was surface collected by Sternitzke in 1969. Site is currently cultivated. (1979).
10	A071-08-000189		1-A	unknown	not indicated	Site reported by the New York State Archaeological Association, Orange County Chapter. Site collected by Christopher Powell, Hartgen Archaeological Associates.
11		6202		unknown		Site recorded by the New York State Archaeological Association, Orange County Chapter. No additional information provided.
12	A017-15-0122		Rowe Potato Site Historic Site 91	prehistoric historic	not indicated	Excavated by SUNY Binghamton, under Linn Clark. Recovered an unfinished projectile point, biface, uniface, and flakes on the prehistoric site and glass, milkglass, whiteware, metal, buckle, porcelain, insulator, and Creamware on the historic site. (1987)
13		7956	Rowe's Farm	prehistoric	Early Woodland	Plowzone site recorded by Eisenberg and J. Diamond. Recovered a pestle, potsherds, Adena points, biface, net sinker, celts, pipe stem, knives, and a hoe. (1978)

CHAPTER 4

HISTORICAL BACKGROUND

A. Orange County History

When Orange County was originally established in 1683, it was considerably larger than it is today. Rockland county was cleaved off in 1798 and a portion was annexed from Ulster the same year (Beers 1875). The seventeenth-century Orange County was comprised of the territory that forms present day Orange County as well as portions of what are now Rockland and Ulster Counties. The earliest settlement in Orange County was Haverstraw. Located in the extreme south of the old county boundaries, Haverstraw was established by Dutch emigres in 1666 (Everts and Peck 1881). The earliest settlement within the contemporary boundaries of Orange County occurred along the Murderer's Creek. Patrick MacGregorie, a Scottish Presbyterian, purchased a tract of land for use by himself, his family, and several others (Everts and Peck 1881).

Numerous patents were purchased by Europeans from Native Americans throughout the late seventeenth and early eighteenth centuries. A large percentage of those early European emigres were facing persecution in their native countries and began settling in New York state in order to gain religious freedom. The Wawayanda patent, also known as the patent to John Bridges and Company, was signed 5 March, 1703. This patent formed much of what would become Orange County, in particular, the Towns of Hamptonburgh, Minisink, Warwick, and Goshen (Eager 1846-7; Everts and Peck 1881; Headley 1908).

The tract was sold by twelve Warranawonkong: Rapingonick, Wawastawa, Moghopuck, Cornelawaw, Nanawitt, Arawinack, Rombout, Claus, Chouckhass,

Chingapaw, Osbasquememus, and Quilapaw. The buyers of the tract were: Doctor John Bridges, Hendrick Ten Eycke, Derick Vandenburg, John Cholwekk, Christopher (Christafer) Denn (or Denne), Lancaster Syms, Daniel Honan, Philip Rokeby, John Merritt, Benjamin Aske, Peter Mthews, and Cornelius Christianses (Eager 1846-7; Everts and Peck 1881; Headley 1908).

Over the years, the shares in the patent were sold of either in whole or in part. The lands were developed, beginning with the share owned by Christopher Denne. Others soon followed, forming villages, towns, townships, and cities. As the population grew, transportation need arose. Roads were improved and turnpike companies were formed. Orange county flourished. The rich soil allowed for the growth of rich grain crops. However, by the end of the eighteenth century, dairying was growing in popularity (Akers). By the mid nineteenth century, dairying was the principal agricultural pursuit in Orange County. With the advent of improved roads and the railroad, dairying continued to flourish (Figure 4.1). In addition to the large dairy herds of Orange County, many farmers began breeding horses. The county is still known for producing world class trotting horses (Headley 1908).

B. Hamptonburgh History

The first settlement in the vicinity of the future site of the Town of Hamptonburg was established by Christopher Denne (or Denn), who had purchased a share of the Wawayanda Patent. Denne held title to land located along the west bank of the Otterkill. Denne apparently persuaded a sixteen-year-old

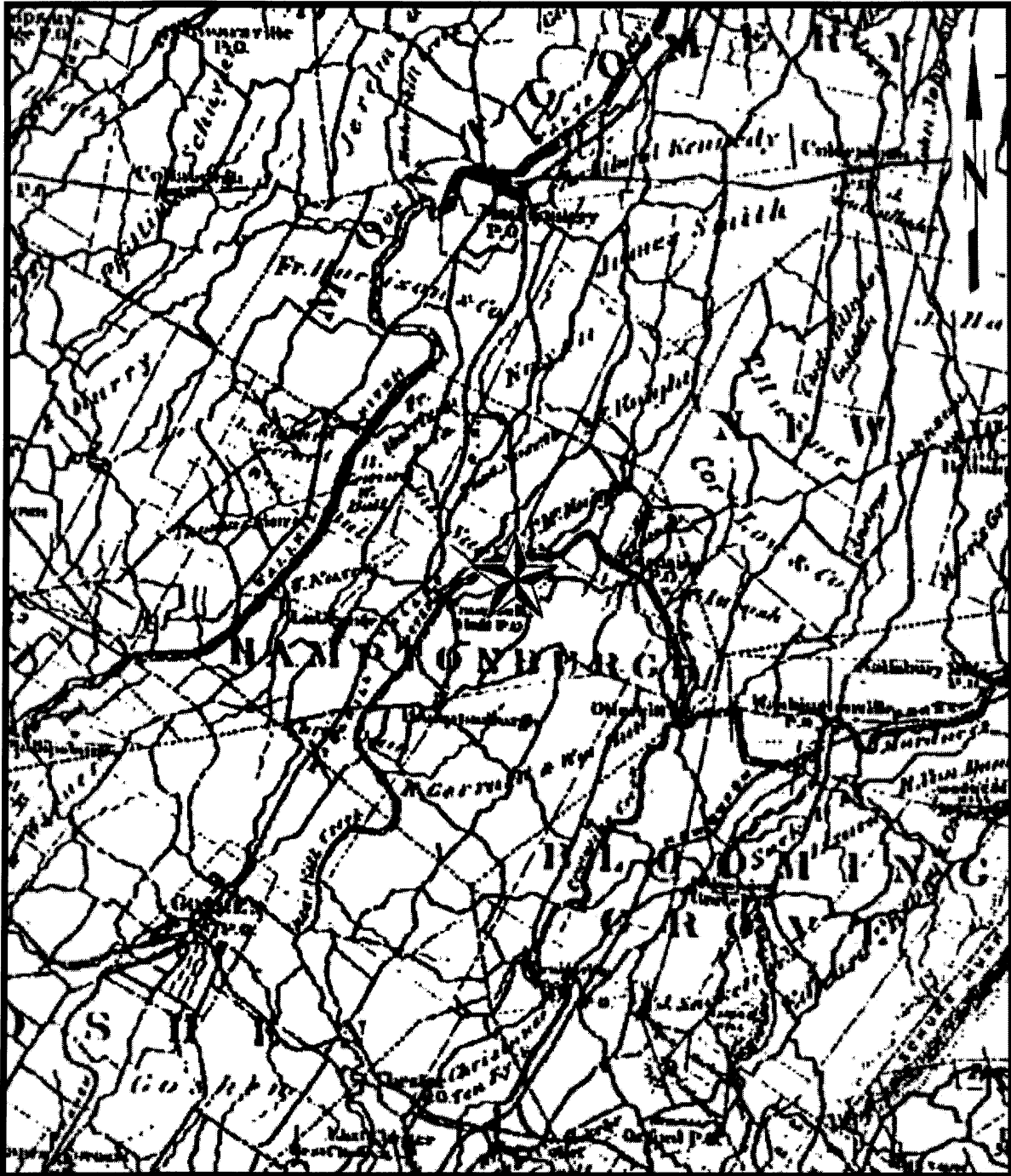


Figure 4.1. Outline Plan of Orange County New York. Project Area Starred. Source: F. W. Beer, *County Atlas of New York*. Andreas, Barken, and Burr, Chicago Illinois, 1875. Scale 1 inch: 3 miles (approximately).

orphan who was in his care, Sarah Wells, to accompany a group from New York city who were prepared to settle on his tract at the present site of the town of Goshen. This story is a well told piece of Orange County lore (Eager 1846-7 ; Ruttenber and Clark 1881; Headley 1908) and will not be reiterated here.

Sarah Wells later married William Bull, an English stone mason who immigrated to America around 1715. William and Sarah settled in Hamptonburgh, which Bull named in honor of his native Wolverhampton, England (Ruttenber and Clark 1881).

The town of Hamptonburgh was, for all intents and purposes, established in 1720 by William Bull, husband of Sarah Wells. Wells had received 100 acres of land from her foster-parents Mr. and Mrs. Denne, at the time of her marriage. Bull elected to settle on the 100 acres located on the southeasterly side of the Denne tract and not on his wife's property. The family moved onto the property William Bull selected and the land given Sara Wells as a wedding gift was later passed to her son John (Eager 1846-7; Everts & Peck 1881). During the nineteenth century, the Bull house would be used as an Underground Railroad stop. Secret compartments in the cellar were used to conceal fugitives (Coleman; Predmore). Historic research was unclear as to whether the William Bull House still stands today.

The residence of Thomas Bull, son of William and Sarah (Wells) Bull, is located within a two mile radius of the project area. The historic site is located on the south side of Route 416, between the towns of Goshen and Montgomery, New York. Portions of the site, referred to as the Bull/Jackson Homestead, was excavated in 1974 by the Department of Anthropology, New York University, under the direction of Thomas J. Riely. The structure was still standing in 1974. The historic background research was unclear as to whether the Bull/Jackson house structure is still standing.

The Town of Hamptonburgh was set apart in 1830. The town is made up of territory taken from earlier towns bounding it and from both sides of the "old county line" (Ruttenber and Clark Vol. 2 1881; Headley 1908; Figure 4.2). These towns were: Goshen, settled in 1703; Montgomery, New Windsor, and Walkkill, all established in 1788 and Blooming-Grove and; (Eager 1846-7). The town is bounded on the north by Montgomery and the Walkkill, east by New Windsor and Blooming-Grove, south by Blooming-Grove and Goshen, west by Goshen, the town of Walkkill, and the Walkkill (Ruttenber and Clark Vol. 2 1881; Headley 1908; Figure 4.1).

C. Transportation

1. Roads

Early road development in the colonies was, for the most part, confined to the expansion of old Native American trails or new paths cut along the most accessible pieces of land. The early roads of New York state were little more than broad routes with several braided tracks (Riley 1974). Construction of early roads was quite low-tech. In the highlands, roads were typically 'underbrushed', and where the land was marshy or swampy, the roads were 'corduroyed' with dirt and logs (Riley 1974).

Before the advent of turnpikes, eight documented roads ran through Orange County. As early as 1763, the 'Old New York Road' ran from Albany to New York then through the towns of Montgomery and Goshen (Eager 1846-7). The road finally ended in New Jersey (Eager 1846-7). This road later became the Goshen and Montgomery state road (Eager 1846-7; Headley 1908). A second road that originated in Albany was the King's Road. This road ran from Albany to New York, via Orange County. The King's Road split from the Old New York Road at Paltz, in Ulster County. The road passed through Newburgh, New Windsor, Cornwall and then re-connected with

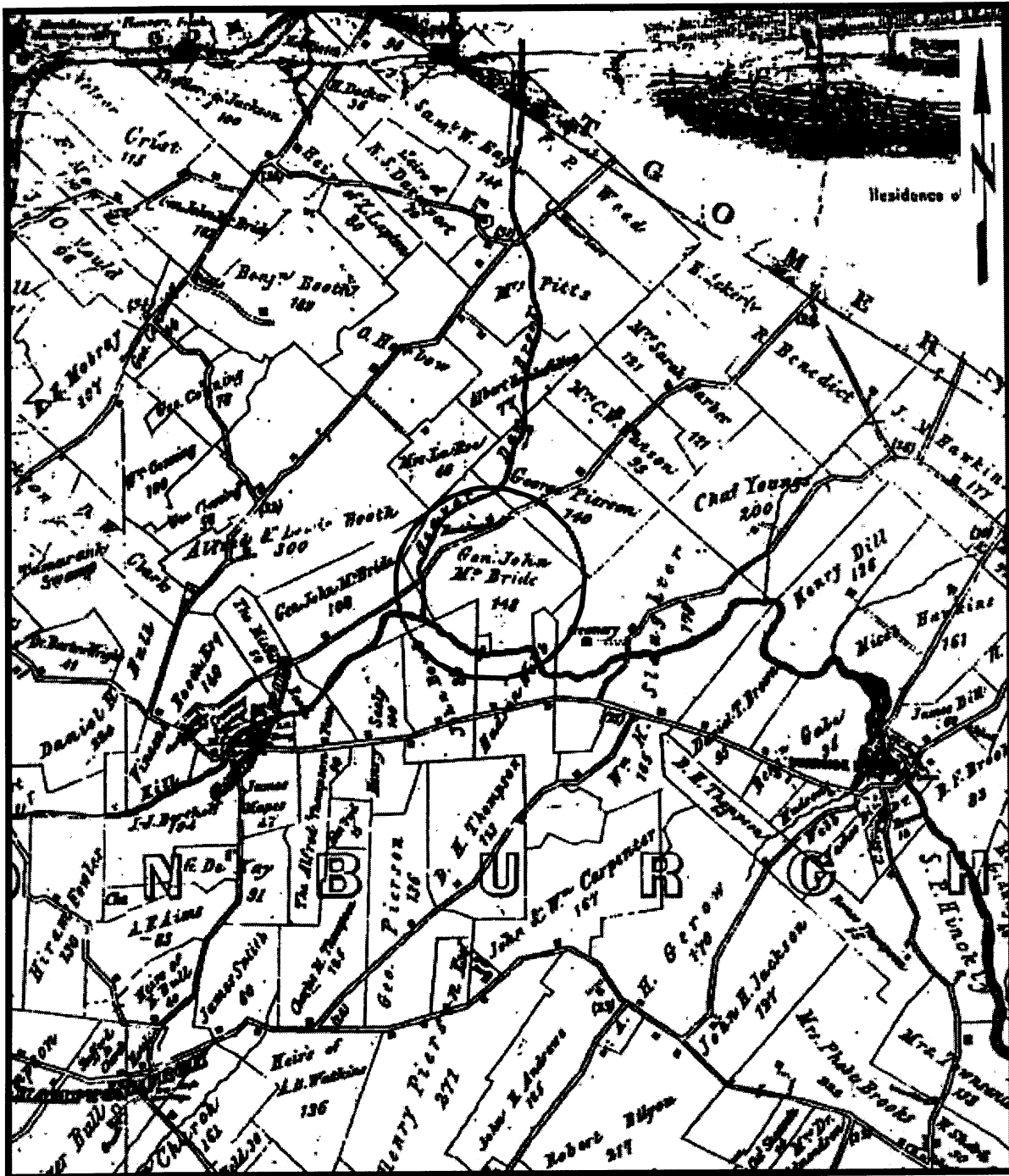


Figure 4.2. Farm Map of the Towns of Hamptonburgh and Blooming Grove, Orange County, New York. Source: James Hughes, Philadelphia, Pennsylvania, 1864. Scale 1 inch: 3000 feet (approximately).

The Old New York Road in the Ramapo Valley (Eager 1846-7). The Hokeberg road or the Holebarack led from the town of Montgomery north into Ulster County along the Shawangunk Kill (Eager 1846-7).

Some roads were found only within the confines of Orange County, and most began in Goshen. One such road went from Goshen to Carpenter's Point on the Delaware where there was a ferry to Pennsylvania. Another went from Goshen through Florida and on to Warwick (Eager 1846-7). Along the western extent of the county, there was a road from the village of Montgomery that ran through the town of Coldenham to Newburgh. Portions of this road were later incorporated into a turnpike (Eager 1846-7). Yet another road ran from the Wallkill, in the town of Montgomery through Neelytown to the Square in Little Britain (Eager 1846-7). Once at the Square, the road forked. One fork lead to New Windsor and the other fork lead to Newburgh. This was the Old Little Britain road which later became Little Britain State road (Eager 1846-7; Headley 1980).

One road lead through Hamptonburgh. This road began in Goshen and proceeded to pass through Hamptonburgh, Blooming Grove, Cornwall and New Windsor, ending in Newburgh. This road was known as the Goshen Road (Eager 1846-7; Figures 4.3 and 4.4). Another road that began in Goshen led across the Wallkill near the Drowned Lands. This road ran through the town of Minisink to Carpenter's Point (Eager 1846-7). Still another road from Goshen through passed through Florida and Warwick and on to New Jersey (Eager 1846-7).

At present, the Goshen and Montgomery State road runs northeast through the western part of the town of Hamptonburgh and the Little Britain State road joins it at Clark's Crossing (Headley 1908).

2. Railroads

Located about one mile southwest of the town of Hamptonburgh is the village of Campbell Hall Junction. In 1890, the Central New England and Western Railroad built a station in Campbell Hall (CNE&W.; Flannery 1980). Throughout the nineteenth and early twentieth centuries, numerous railroads ran through the junction, including: the Ontario and Western (O&W which runs through the southern half of the project area); the Central New England; the Wallkill Valley Division of the New York Central & Hudson Rail Road (NYC&HR); the Erie; the New York, New Haven, and Hartford; and the Lehigh and New England (Headley 1908; Flannery 1980). The Lehigh and New England ran through the eastern part of the town and had stations at Hamptonburgh, Girard and Burnside (Headley 1908).

The abandoned bed of the former Ontario and Western Railway bisects the southern extent of the project area. The O&W began its life as the New York and Oswego Midland Railroad (NY&OMR; nyow.org 2001). The NY&OMR was the concept of Dewitt C. Littlejohn. The NY&OMR was to be a direct line across New York State with the sole purpose of servicing rural towns and villages that were not yet served by any rail company (nyow.org 2001). Construction on the rail line was begun in the mid-nineteenth century. When it was finished in 1880, the NY&OMR was totally bankrupt. The same year, the line reorganized as the New York Ontario and Western Railway (NYO&W; nyow.org 2001).

The last two decades of the nineteenth century saw the NYO&W expanding into several industries. The line established itself as a tourist carrier, serving the resorts and camps in the Lower Catskills, the mountains of Orange, Sullivan, and Delaware counties (nyow.org 2001). The line also entered into the growing dairy industry, hauling mild and other products. Thirdly, the NYO&W began hauling anthracite from Pennsylvania (nyow.org 2001).

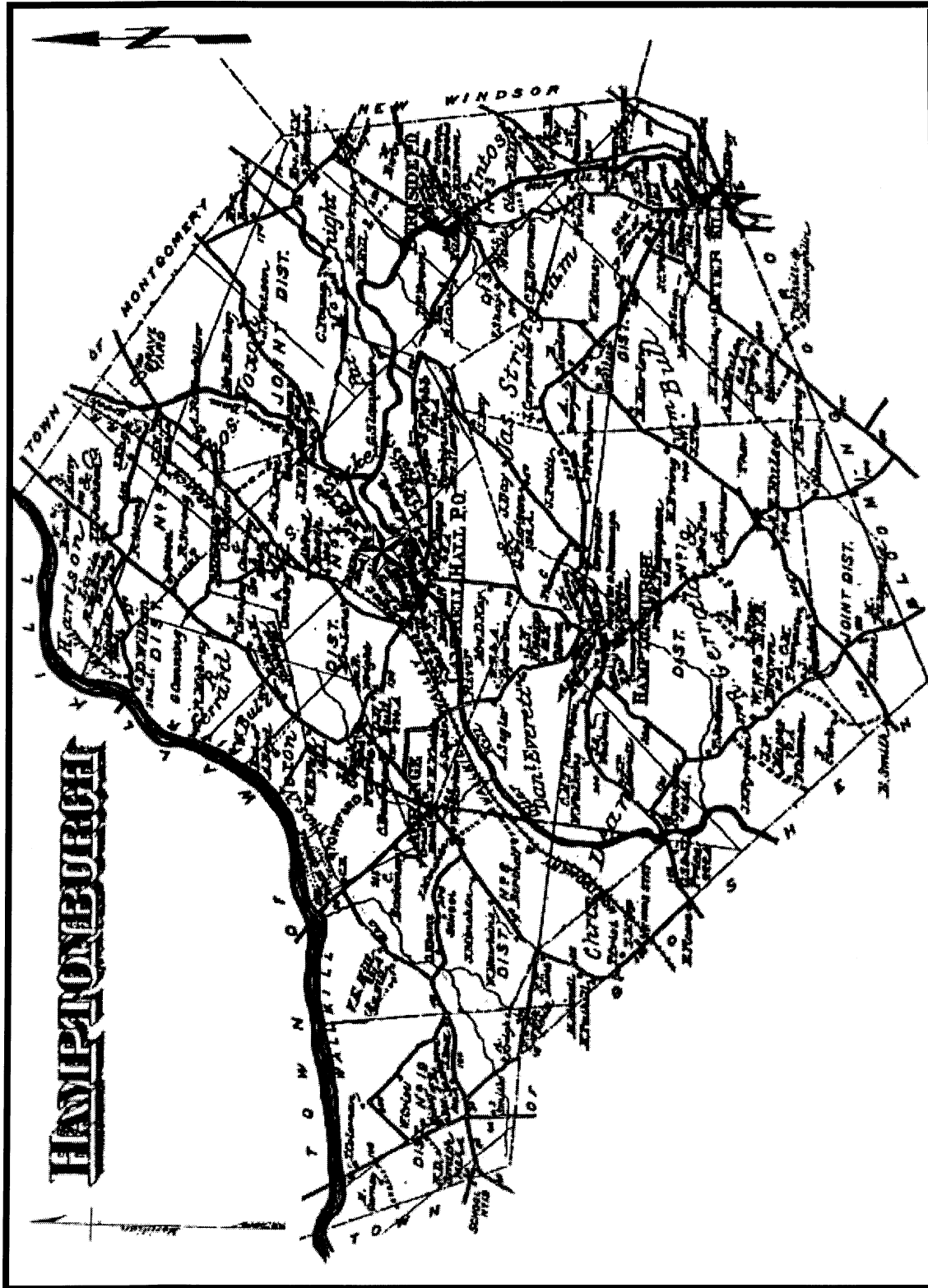


Figure 4.3. Hamptonburgh. Project Area is Starred. Source: F. W. Beer, *County Atlas of New York*. Andreas, Barken, and Burr, Chicago, Illinois, 1875. Scale 1 inch: 1 mile (approximately).

In 1920, the CNE&W sold the station at Campbell junction to the Ontario and Western Railroad (Flannery 1980). Around that same time, the anthracite industry began its gradual decline. By 1937, the NYO&W had defaulted on its bondholders. The decline in coal production and transportation, which had provided nearly one-half of the NYO&W's annual income, forced the company into voluntary bankruptcy (nyow.org 2001). A short time later, the railroad once again reorganized, this time as the Ontario and Western (O&W). The O&W continued to run competitively across New York State for several years (Figure 4.5).

As the New York, Ontario & Western Railroad, also known as the O&W became obsolete, replaced by cars and trucks, it was called: "The Old & Weary", "The Old & Wobbly"; and "The Old Woman" (Brock). As with so many railroads the O&W was no longer practical or profitable. By 1959, the portion of the O&W that ran through the project area had been abandoned, but the rails had not been torn up (Beaujon 2001). A short time later, the old track was removed and the bed allowed to revert back to nature.

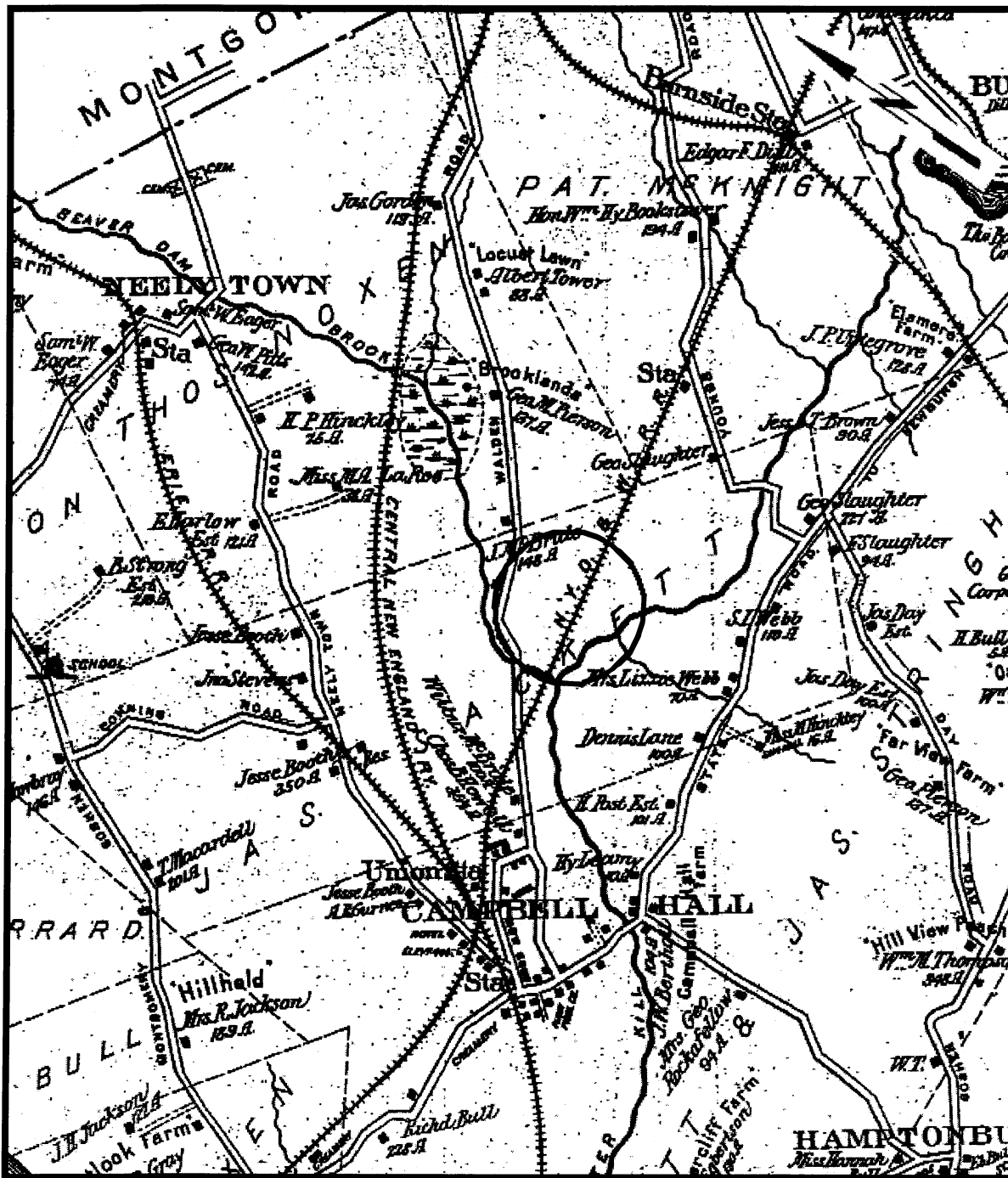


Figure 4.4. Town of Hamburg. Project Area Circled. Source: J. M. Lathrop et. al., Compilers *Atlas of Orange County, New York*, A. H. Mueller and Company, Philadelphia, Pennsylvania, 1903. Scale 1 inch: 3,600 feet (approximately).

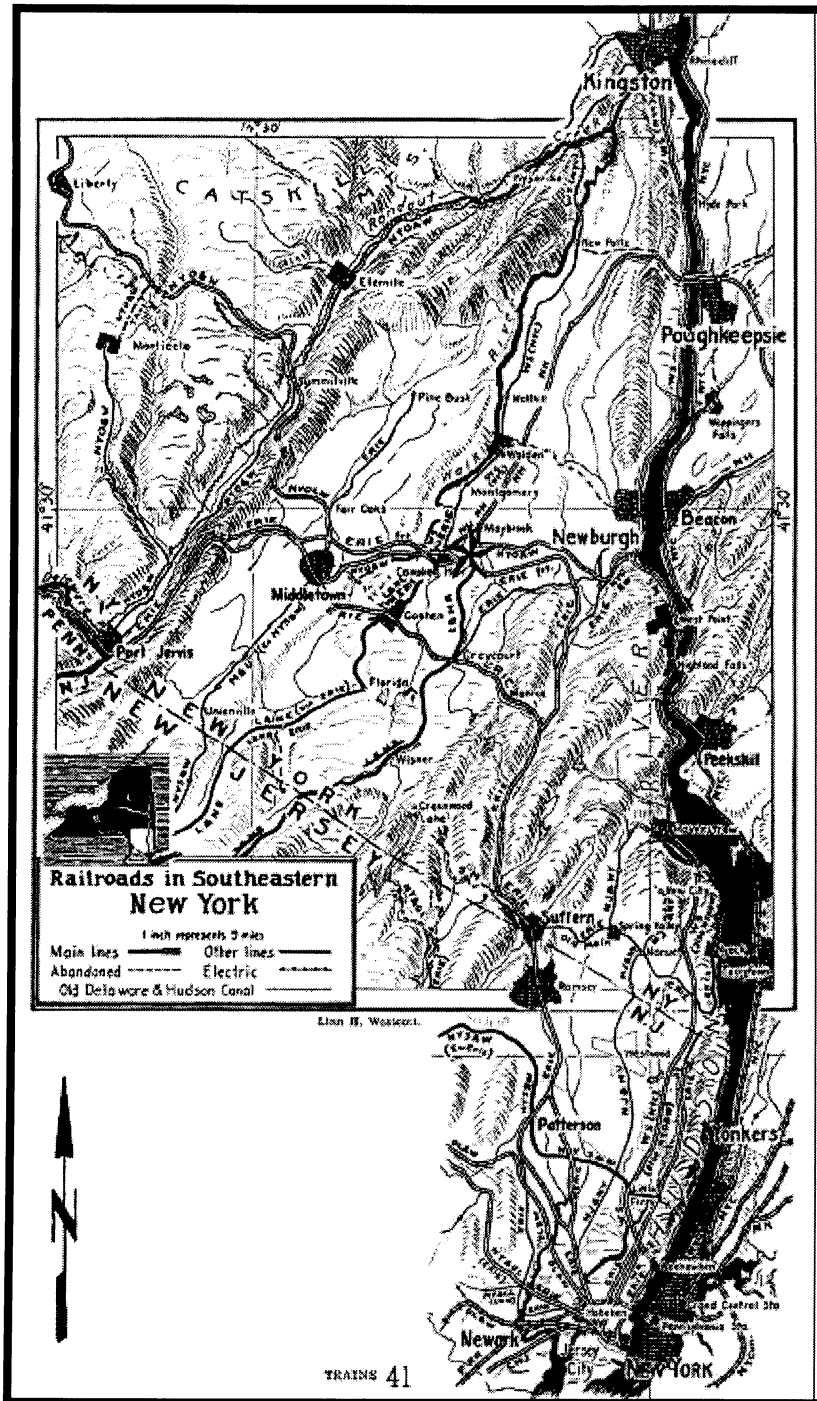


Figure 4.5. Railroads in Southeastern New York. Project Area Starred. Source: Westcott, Linn H. "Railroad Wonderland In Southern New York". *Trains*. Kalmbach Publishing, Brookfield, Wisconsin, June 1942. Scale 1 inch: 12 miles (approximately).

CHAPTER 5

ARCHAEOLOGICAL FIELD INVESTIGATIONS

A. Archaeological Potential and Field Strategy

Prior to the commencement of the site inspection and subsurface testing of the 29.3 acre Former Lagoon site, extensive background research was conducted by Hunter Research, Inc. at the New York State Department of Parks, Recreation, and Historic Preservation, the Goshen Public Library and Historical Society, and the Office of the County Historian. An assessment of documented prehistoric and historic resources was undertaken relating to the history of the project area, the town of Hamptonburgh, and Orange County. In assessing the potential for intact archaeological remains within the project area, four principal criteria were considered:

- 1) current and recent land use, with particular note being taken of areas that had been disturbed by the former Lagoon Site (Maybrook site);
- 2) basic environmental attributes, especially topography, drainage and soils,
- 3) the environmental characteristics of known prehistoric sites in this section of the Wallkill Valley; and
- 4) the evidence of historic maps and documents relating to the project site.

Based on the background research, it was determined that prehistoric resources might be present on the property. The Walkill Valley area has unquestionably been attractive to hunting and gathering peoples from Paleo-Indian times through the Contact period (see above Chapter 3). The 29.3 acre site is transected in

the northwest by the Beaverdam Brook, a mid-sized drainage associated with the larger Otterkill. The terraced environment on the western portion of the project area is of particular note, providing high ground at elevations 20 to 30 feet above Beaverdam Brook and related wetlands. Two previously-known prehistoric sites were identified within a one mile radius of the project area (HRI Site Identification Numbers 1 and 2; See Above Table 3.1). Eleven previously-known prehistoric sites were identified within a two mile radius of the project area (HRI #'s 3 - 13; See Above, Table 3.1). The prehistoric archaeological potential for the project area is considered to be moderate.

Four historic resources were identified within a two-mile radius of the project area: the Butter Factory cellar hole; stone bridge abutments and an old road bed (pre. 1927); the Bull/Jackson Homestead (See Above, Chapter 4); and the Hamptonburgh Bridge. Two houses, both located directly outside of the project area were examined. These structures are not shown on 19th century maps or the Atlas of Orange County in 1903, indicating a post-1903 date for these buildings. The potential for undocumented historic resources within the project area is considered low to moderate.

B. Surface Inspection

A preliminary surface inspection was undertaken to identify the locations of actual or potential historic resources revealed in the background research. Potential resources were documented onto a detailed map of the project area and their significance assessed. In addition, an assessment of previously undocumented prehistoric and historic archaeological resources was carried out based on the project area

history and the extent of modern disturbance, soils, topography and drainage.

The entire project area and surrounding vicinity was inspected on foot or by car. Ground visibility was somewhat limited due to a light coating of snow covering the ground. A photographic record and detailed notes were taken and the information recorded on the project map (Figure 5.1). The topography within the project area is characterized by wooded knolls and terraces interspersed with wetlands related to Beaverdam Brook and Otterkill drainages. The tops of knolls are approximately 390 feet above sea level (ASL), the lower terraces 370 feet ASL, and the wetlands 350 feet ASL. Stone field walls were observed and recorded. An abandoned railway grade bisects the southern portion of the project area, and a concrete bridge related to an abandoned roadway is located along the western portion of the project area spanning Beaverdam Brook (Plate 5.1). A former mill pond is situated at the far southwestern corner of the project area with related mill buildings (Plate 5.2, 5.3 00072/D2:23;24). Stone house foundations and an uncapped stone-lined well were observed on the north side of County Highway No. 4. These structures are part of the farm complex dating to the early 20th century. No undocumented historic structures have been identified within the APE. There were several stone boundary lines or field division walls observed and mapped onto the site plan.

C. Subsurface Testing

A total of 25 shovel tests were excavated in five distinct areas (Area A - E) identified during the site inspection (Figure 5.1). Tests were located on tops of knolls and lower terraces and generally spaced at 50 foot intervals. Stratigraphy was consistent throughout the project area with sandy silt and cobbles overlying decaying shale bedrock.

Area A was located on top of a knoll along the northern boundary of the project area immediately west of the fenced in 55 gallon drum depot (Plate 5.4). Five shovel tests (1-5)

were excavated along the high point of the knoll. Stratigraphy in all tests consisted of sandy silt [1] with dense cobbles extending to a depth of approximately 1.50 feet below ground surface (bgs). Sandy silt with decaying bedrock [2] was encountered beneath Context 1.

Shovel tests 6 through 14 were located in Area B along the top of a knoll approximately 300 feet south of Area A. The knoll, oriented north-south parallel to Beaverdam Brook, extended approximately 500 linear feet. A stone field wall crossed the north end of the shovel test line oriented north-west-southeast, extending approximately 200 feet. Stratigraphy generally consisted of sandy silt with cobbles to a depth of 1.50 feet overlying sandy silt and decaying bedrock.

Area C was located on top of a knoll on the south side of the abandoned railway grade overlooking Beaverdam Brook to the west, and wetlands to the east. Three shovel tests (15-17) were excavated on the high point of the knoll. Context 1 was relatively shallow in all three tests and consisted of sandy silt with cobbles extending to a depth of 0.50 feet below ground surface. Decaying bedrock [2] was encountered directly beneath Context 1.

Area D is a lower terrace oriented northeast-southwest located directly east of Area C and south of the abandoned railway grade. The tested area juts out into the surrounding wetlands. A stone field wall oriented northwest-southeast was observed and mapped. Five shovel tests were excavated (18-22) along the centerline of the terrace. Stratigraphy generally consisted of sandy silt with cobbles 1.60 feet thick overlying sandy silt and decaying shale bedrock.

Area E was located on top of a knoll overlooking the fenced in lagoon located immediately to the west. A stone field wall was observed running along the south edge of the knoll. Three shovel tests were excavated (23-25) along the top of the knoll. Sandy silt with cobbles approximately 1.50 feet thick overlaid sandy silt bedrock in all three shovel tests.

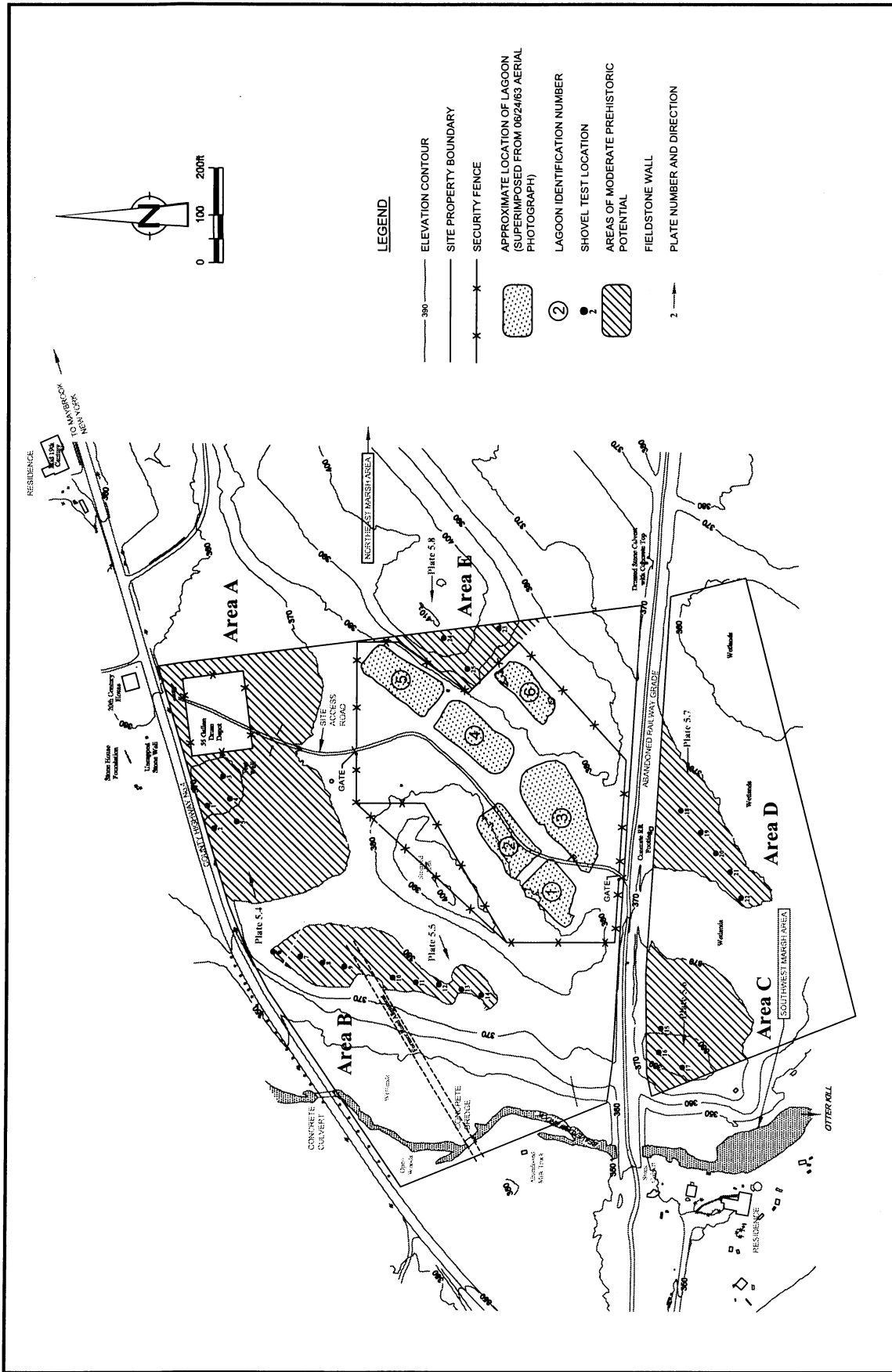


Figure 5.1. Site Plan Showing the Location of Archaeological Testing and Photo Views.

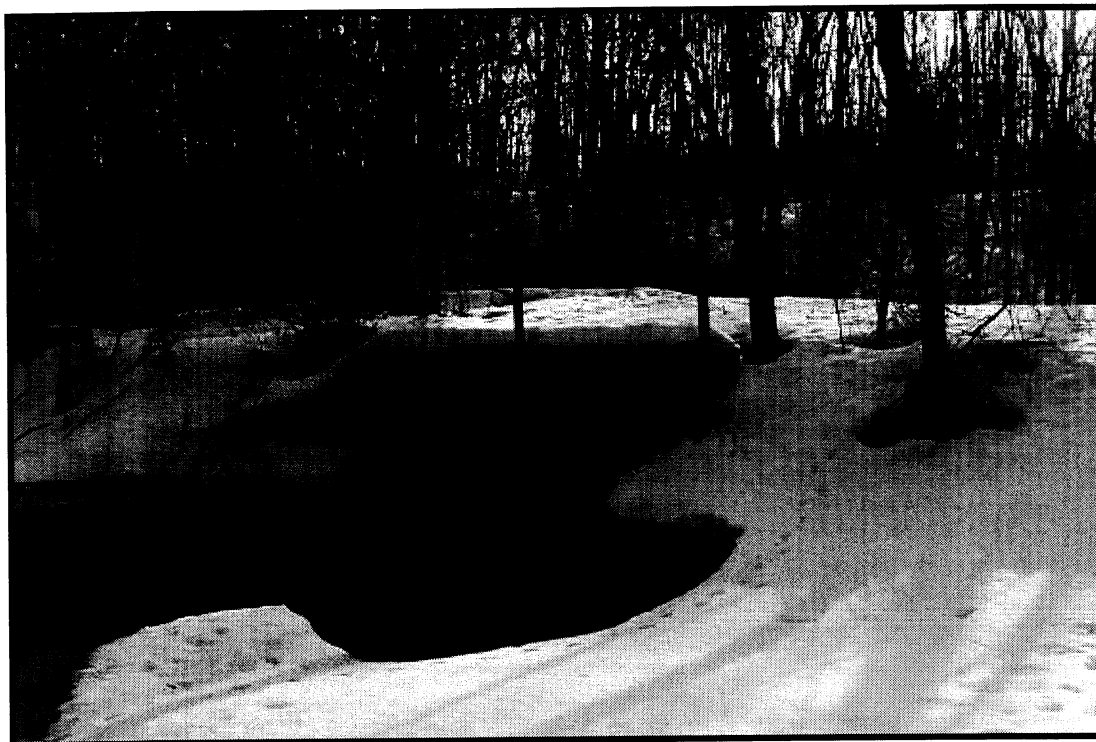


Plate 5.1. View of concrete bridge over Beaverdam Brook looking southeast. Bridge is related to former road alignment. (Photographer: Susanne Eidson, February 2001) [HRI Neg. 00075/D2:03]



Plate 5.2. View of mill buildings along Beaverdam Brook looking southwest.
(Photographer: Susanne Eidson, February 2001) [HRI Neg. 00075/D2:23]



Plate 5.3. View of Beaverdam Brook looking south. Marsh area in background. Mill buildings are located far right side of frame. (Photographer: Susanne Eidson, February 2001) [HRI Neg. 00075/D2:24]



Plate 5.4. View of Area A looking west. (Photographer: Rebecca White, November 2001) [HRI Neg. 01051/1:16]



Plate 5.5. View of Area B looking west with shovel testing in progress. (Photographer: Rebecca White, November 2001) [HRI Neg. 01051/1:6]

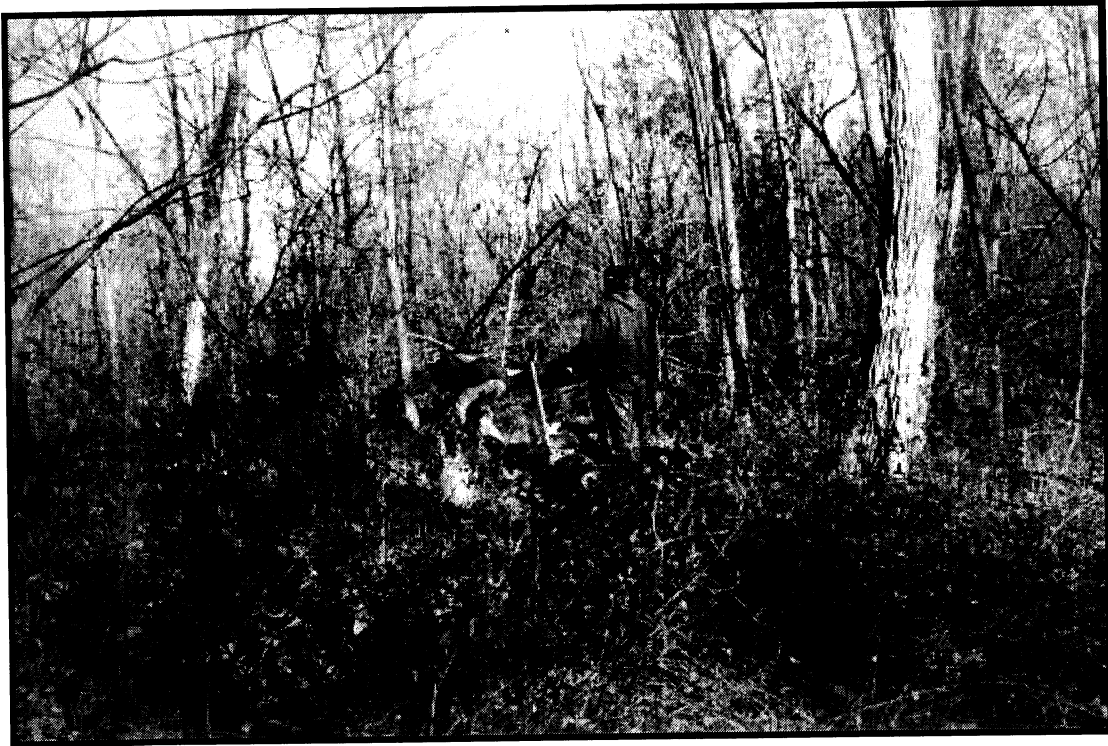


Plate 5.6. View of Area C looking west. (Photographer: Rebecca White, November 2001) [HRI Neg. 01051/1:9]



Plate 5.7. View of Area D looking west. (Photographer: Rebecca White, November 2001) [HRI Neg. 01015/1:12]



Plate 5.8. View of Area E looking west. (Photographer: George D. Cress, November 2001) [HRI Neg. 01015/1:13]

CHAPTER 6

EVALUATION AND RECOMMENDATIONS

A. Resources Within the Project Boundary

No National Register of Historic Places or National Register of Historic Places-eligible properties were identified within the project boundaries as a result of the Phase IA or Phase IB surveys. The historical research undertaken for the project and the subsequent field investigations did not find any locations where such resources might be anticipated.

The prehistoric sensitivity of the project area has also proved to be limited. Shovel testing of the archaeologically sensitive areas impacted by the proposed remediation yielded no evidence of prehistoric or historic occupation. Stratigraphy was consistent throughout the project area with sandy silt and cobbles overlying decaying shale bedrock. On the basis of these results, no additional archaeological investigations are considered necessary on the property. The regulatory requirements relating to the identification and protection of historic properties are therefore considered to be complete.

B. Resources in the Project Vicinity

No architectural resources or landscape features in the immediate vicinity of the project area are considered eligible for the National Register.

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1875 Hamptonburgh. In *County Atlas of New York from Actual Surveys by and Under the Direction of F.W. Beers*. Andreas, Barken Burr, Chicago, Illinois.
1875 Outline Plan of Orange County, New York. In *County Atlas of New York from Actual Surveys by and under the Direction of F.W. Beers*. Andreas, Barken Burr, Chicago, Illinois.
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HUNTER RESEARCH, INC.

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1836-37 *An Outline History of Orange County*. S.T. Callahan, Newburgh, New York.
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1978 Paleo-Indian Settlement Patterns in the Hudson and Delaware River Drainages. In *Occasional Publications in Northeastern Archaeology* 4. Franklin Pierce College, New Hampshire.
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1987 The Ceramics Collection from the Continental Army Cantonment at New Windsor, New York. *Historical Archaeology* 21(1):48-57.
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1859 *Map of Orange and Rockland Counties*. Corey and Bachman, Philadelphia, Pennsylvania.
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1908 *The History of Orange County, New York*, pp. 250-260. Van Deusen and Elms, Middletown, New York.
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CULTURAL RESOURCE INVESTIGATION: HAMPTONBURGH LAGOON SITE

New York.

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Hunter Research Associates

- 1986 *A Phase I Archaeological Survey at the Orange County Sanitary Landfill Site, Town of Goshen, Orange County, New York.* On file, Office of Parks, Recreation, and Historic Preservation, Albany, New York.
- 1987 *A Phase I Archaeological Survey for the Proposed 17M Sand and Gravel Mine, Town of Goshen, Orange County, New York.* On file, Office of Parks, Recreation, and Historic Preservation, Albany, New York.
- 1987A *Phase I Archaeological Survey of a 21.9 acre Sand and Gravel Mining Site Al Turi Landfill, Town of Goshen, Orange County, New York.* On file, Office of Parks, Recreation, and Historic Preservation, Albany, New York.
- 1988 *A Phase I Cultural Resource Survey for the Epiphany Apostolic College Property, Town of New Windsor, Orange County, New York.* On file, Office of Parks, Recreation, and Historic Preservation, Albany, New York.
- 1988A *Phase I Archaeological Survey for the Proposed Subdivision "The Pointe," Town of Goshen, Orange County, New York.* On file, Office of Parks, Recreation, and Historic Preservation, Albany, New York.
- 1988 *A Phase I Archaeological Survey for the Proposed Windsor Estates Subdivision, Town of Hamptonburgh, Orange County, New York.* On file, Office of Parks, Recreation, and Historic Preservation, Albany, New York.
- 1988 *A Phase I Archaeological Survey for the Windsor Square Property Section 35, Block 1, Lots 42.1 and 42.2, Town of New Windsor, Orange County, New York.* On file, Office of Parks, Recreation, and Historic Preservation, Albany, New York.
- 1988 *A Phase I Archaeological Survey of Section 4, Block 2, Lot 9, Town of Windsor, Orange County, New York.* On file, Office of Parks, Recreation, and Historic Preservation, Albany, New York.
- 1988 *Phase II Archaeological Studies at Prehistoric Site AO71-06-0077, Al Turi Landfill, Town of Goshen, Orange County, New York.* On file, Office of Parks, Recreation and Historic Preservation, Albany, New York.
- 1989 *A Phase I Archaeological Survey for the Hilltop Estates Property, Section 35, Block 1, Lot 41, Town of New Windsor, Orange County.* On file, Office of Parks, Recreation, and Historic Preservation, Albany, New York.
- 1989 *A Phase II Cultural Resource Survey for the Epiphany Apostolic College Property, Town of New Windsor, Orange County, New York.*
- 1989 *Phase III Archaeological Data Recovery at Prehistoric Site AO71-06-0008 at the Orange County Sanitary Landfill, Town of Goshen, Orange County, New York.* On file, Office of Parks, Recreation, and Historic Preservation, Albany, New York.

Hunter Research Inc.

- 1989 *Phase III Archaeological Data Recovery at Prehistoric Site A071-06-0008 at the Orange County Sanitary Landfill, Town of Goshen, Orange County, New York.* On file Department of Public Works, County of Orange, Route 17-M.
- 1989 *Phase III Archaeological Data Recovery at Prehistoric Site A071-06-0077, Al Turi Landfill, Town of Goshen, Orange County, New York.* On file, Office of Parks, Recreation and Historic Preservation, Albany, New York.
- 1994 *A Phase I Archaeological Survey Al Turi Landfill Extension, Town of Goshen, Orange County, New York.* On file, Office of Parks, Recreation and Historic Preservation, Albany, New York.
- 1995 *Phase IA Archaeological Survey ALTURI Landfill Expansion, Town of Goshen, Orange County, New York.* On file, New York State Office of Parks and Preservation, Albany, New York.

Ivey, M. G.

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HUNTER RESEARCH, INC.

1986 A Cultural Resource Survey Report of PIN 8495.08 BIN 1-04048-0, Route 207 over the Otter Kill, Town of Hamptonburgh, Orange County, New York for the New York State Department of Transportation. The Division of Historical and Anthropological Services, The New York State Museum, New York, New York.

Walters, G. R.

1973 *Early Man in Orange County*. Prior King Press, Middletown, New York.

Weinstein, E.

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Westcott, L. H.

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Brookfield, Wisconsin.

2001 [1942] Railroad Wonderland in Southern New York. In *Trains*, pp. 38-45. Kalmbach Publishing, Brookfield, Wisconsin.

APPENDIX A

RESUMES

IAN C. BURROW
Vice President/Principal Archaeologist, Ph.D., RPA

EDUCATION

Ph.D., History and Archaeology, University of Birmingham, England, 1979
B.A., History and Archaeology, University of Exeter, England, 1971

EXPERIENCE

1988- present Principal Archaeologist
 Hunter Research, Inc., Trenton, NJ

Vice President and stockholder of firm providing archaeological and historical research, survey, excavation, evaluation, report preparation and public outreach services in the Northeastern United States. Specific expertise in historical and industrial archaeology, historical geography, and historical landscape analysis. Participation in:

- Project management, budgeting and scheduling
- Proposal preparation and contract negotiation and management
- Hiring and supervision of personnel
- Supervision of research, fieldwork, analysis and report preparation
- Development of computer and data management systems
- Development of public outreach initiatives
- Company safety policy as Company Safety Officer , including oversight of HAZWOPER certification

2000- Adjunct Professor
 Burlington County College, New Jersey
 Teaching Introduction to Archaeology

1998- Adjunct Professor
 Mercer County Community College, New Jersey
 Teaching Western Civilization

1986-1988 Director
 Oxford Archaeological Unit, Oxford, England
 Principal in charge of non-profit organization undertaking archaeological projects.
 Responsibilities included:

- Overall management of organization
- Project design and cost analysis
- Survey, excavation, analysis and reports
- Public education, fund-raising and public relations
- Implementation of computerized finance systems
- Recruitment and supervision of personnel

1986-1988 Associate Staff Tutor
 Department of External Studies, University of Oxford, England

1979-1986 County Archaeologist
 Somerset County Council, England

Responsibilities for public archaeology in a county of 1,500 square miles containing c. 10,000 archaeological sites included:

- Development and implementation of historic preservation policies
- Survey, excavation, analysis and reports
- Project planning, budgeting and scheduling
- Recruitment and supervision of personnel
- Promotion of public interest in local archaeology and historic preservation

1975-1979 Archaeological Field Officer
Shropshire County Council, England

Designed and compiled comprehensive archaeological data base for use in historic preservation and planning.

1974-1986 Adult Education Tutor
Universities of Birmingham and Bristol, England

Designed, prepared and taught numerous courses on historic and prehistoric archaeology.

SPECIAL SKILLS AND INTERESTS

- 18th -century military sites
- archaeology and standing buildings
- urban archaeology
- archaeological education and public outreach
- master planning for historic sites

SELECTED PUBLICATIONS

“Archaeological Data Recovery Investigations at the Derewal Prehistoric Site, Hunterdon County, New Jersey.” *Bulletin of the Archaeological Society of New Jersey*, No. 54, 12-42, 1999, co-authored with Donald Thieme, William Liebeknecht and Joseph Schuldenrein.

“The Savich Farm Site: An Archaeological Survey for Phase I of the Long-Term Management Plan.” *Bulletin of the Archaeological Society of New Jersey*, No. 52, 35-50, 1997.

“We’ve Got Thousands of These Here Too! Significance Assessment and Farm Archaeology in New Jersey.” Paper presented at the Middle Atlantic Archaeology Conference, Ocean City, Maryland, March 1996. Published in *Bulletin of the Archaeological Society of New Jersey*, No. 52, 35-50, 1997.

“Pretty Village to Urban Place: 18th Century Trenton and Its Archaeology.” *New Jersey History*, Volume 14, Numbers 3-4, 32-52, Fall/Winter 1996, co-authored with Richard W. Hunter.

“Thundercloud and Archaeologist: Indian Burials and the Study of the Past in New Jersey.” *In Search of Cult*, Carver, Martin (ed). Boydell Press, 203-212, 1993.

“Contracting Archaeology? Cultural Resource Management in New Jersey, U.S.A.” *The Field Archaeologist* (Journal of the Institute of Field Archaeologists) 12, 194-200, March 1990, co-authored with Richard W. Hunter.

PROFESSIONAL AFFILIATIONS AND CERTIFICATIONS

Register of Professional Archaeologists

Fellow of the Society of Antiquaries of London

Society of Professional Archaeologists (Certification in Field Research and Archaeology Administration)

Institute of Field Archaeologists (UK: Founding Member)

Association of County Archaeological Officers (UK: Chairman 1984-1986)

Council for British Archaeology (Executive Board Member 1985-1988; Chairman for Southwest England Regional Group, 1980-1985)

Current 40-hour HAZWOPER and 8-hour HAZWOPER Supervisory certification

GEORGE D. CRESS
Principal Investigator, M.A.

EDUCATION

M.A. History, California State University, Dominguez Hills, CA, 2000
B.A. Anthropology/Archaeology, Temple University, Philadelphia, PA, 1980
A.A. Geology, Stockton State College, Pomona, NJ, 1977-1978

EXPERIENCE

2000-Present Principal Investigator
Hunter Research, Inc., Trenton, NJ

Technical and managerial responsibilities for survey, evaluation and mitigation of selected archaeological projects. Participation in:

- Overall site direction and day-to-day management
- Development and implementation of research, excavation and analysis strategies for prehistoric and historic archaeological sites
- Report and proposal preparation
- Hiring and supervision of personnel

1991-2000 Senior Archaeologist
Hunter Research, Inc., Trenton, NJ

Technical and supervisory responsibilities for selected field and laboratory operations and report preparation. Participation in:

- Survey and excavation
- Supervision of personnel
- Field photography
- Stratigraphic and artifact analysis
- Lithic analysis
- Report preparation

1990-1991 Assistant Archaeologist
Hunter Research, Inc., Trenton, NJ

1985-1990 Project Archaeologist
John Milner Associates, Inc., Philadelphia, PA

Archaeologist on cultural resource surveys and archaeological testing in advance of redevelopment on prehistoric and historic sites in Pennsylvania and Maryland. Extensive experience on urban archaeological projects within the city of Philadelphia. Responsible for: field direction and supervision, stratigraphic and artifact analysis, historic research and report preparation.

1983-1985 Assistant Archaeologist
John Milner Associates, Inc., Philadelphia, PA

- 1981-1982 Field Assistant
Louis Berger & Associates, Inc. East Orange, NJ
- Field assistant participating in excavation of prehistoric and historic industrial sites in Trenton, New Jersey.
- 1978-1980 Surveyor
James Strothers Associates, Sellersville, PA
- Participated in field surveys operating transit and theodolite.
- 1974-1975 Field Archaeologist
City of Winchester Rescue Unit, Winchester, England
- Site supervision on various archaeological projects in vicinity of Winchester, England. Sites included Iron Age hillfort, Roman cemetery, Roman iron foundry, and a medieval village.
- 1973-1974 Field Assistant
University of Tennessee, Knoxville, TN
- Field assistant participating in excavation and laboratory analysis of prehistoric and historic sites in Tennessee including Woodland burial mound and Cherokee village site.

PROFESSIONAL AFFILIATIONS

Archaeological Society of New Jersey
Eastern States Archaeological Federation
Philadelphia Archaeological Forum

CERTIFICATIONS

OSHA 40-hour Certification
HAZWOPER 40-hour Certification

WILLIAM B. LIEBEKNECHT
Principal Investigator, M.A.

EDUCATION

M.A., Public History, Rutgers University, Camden, New Jersey, 1993

B.A., Anthropology, Beloit College, Beloit, Wisconsin, 1984

EXPERIENCE

- 1993-present Principal Investigator
Hunter Research, Inc., Trenton, NJ
- Technical and managerial responsibilities for survey, evaluation and mitigation of selected archaeological projects. Participation in:
- Overall site direction and day-to-day management
 - Development and implementation of research, excavation and analysis strategies for prehistoric and historic archaeological sites
 - Report and proposal preparation
 - Hiring and supervision of personnel
- 1991 Senior Archaeologist
Hunter Research, Inc., Trenton, NJ
- Technical and managerial responsibilities for selected field and laboratory components of archaeological projects. Participation in:
- Survey, excavation, analysis, and reports
 - Project supervision and on-site management
 - Management of laboratory operations and graphics production
- 1988-1991 Laboratory and Drafting Supervisor
Hunter Research, Inc., Trenton, NJ
- Supervision of laboratory personnel and management of all laboratory operations. Participation in all aspects of report graphics production.
- 1988
(June-Aug.) Field Supervisor
University of Delaware Center for Archaeological Research, Newark, DE
- Technical and supervisory responsibilities for field crew personnel.
- 1985-1988 Laboratory and Field Supervisor
Research & Archaeological Management, Inc. (RAM), Highland Park, NJ
- 1984-1985 Research and Field Assistant, Historic Sites Research, Princeton, NJ

SPECIAL SKILLS AND INTERESTS

- New Jersey ceramic and glass manufacturing
- American Stoneware and Yellow ware
- Lower Delaware Valley prehistory
- British ceramics

PUBLICATIONS

"The Richards Face – Shades of an Eighteenth-Century American Bellarmine" *Ceramics in America*, 2004, co-authored with Richard Hunter.

"A Coxon Waster Deposit of the Mid-1860s Sampled in Trenton, New Jersey." *Ceramics in America*, 2004, co-authored with Rebecca White and Richard Hunter.

"Rebekah at the Marriott: Marriott Site Yellow Ware Waster Dump, Circa 1863-1868, Trenton, New Jersey." *Trenton Potteries, Newsletter of the Potteries of Trenton Society*, March 2002, 3:1. Co-authored with Rebecca White.

"Joseph Mayer's Arsenal Pottery Dump Part 3: Cut Sponge Decorated Ironstone China." *Trenton Potteries, Newsletter of the Potteries of Trenton Society*, December 2001, 2:3/4.

"William Richards' Sugar Processing Pottery 1760-1786." *Trenton Potteries, Newsletter of the Potteries of Trenton Society*, December 2000, 1:4.

"Joseph Mayer's Arsenal Pottery Dump Part 2: Majolica." *Trenton Potteries, Newsletter of the Potteries of Trenton Society*, August/September 2000, 1:3.

"Joseph Mayer's Arsenal Pottery Dump Part 1: Yellowware." *Trenton Potteries, Newsletter of the Potteries of Trenton Society*, April/May 2000, 1:2.

"Archaeological Data Recovery Investigations at the Derewal Prehistoric site, Hunterdon County, New Jersey." *Bulletin of the Archaeological Society of New Jersey*, 1999, No. 54, 12-43. Co-authored with Ian Burrow, Donald Thieme, and Joseph Schuldenrein.

"Ceramic Production at the Hickory Bluff Prehistoric Site [7K-C-411]." *Bulletin of the Archaeological Society of Delaware*, 1999, No. 36, New Series, 3-11.

"An Effigy Head from Cumberland County." *Bulletin of the Archaeological Society of New Jersey*, 1998, No. 53, 118-119.

"Early Sorrow Pattern." *Victorian Ceramics Group Newsletter*, November 1997, 3:1, p. 3.

"A Token Find." *Bulletin of the Archaeological Society of New Jersey*, 1995, No. 50.

"British Registry Marks." *Bulletin of the Archaeological Society of New Jersey*, 1993, No. 48, 69-70.

"Further Evidence: Clam Shell Fracturing Patterns From a Site in Monmouth County, New Jersey." *The Archaeology and Ethnohistory of the Lower Hudson Valley and Neighboring Regions: Essays in Honor of Louis Brennan*, 1991, *Occasional Publications in Northeastern Anthropology*, No. 11.

"The Fort Elfsborg Spoon." *Bulletin of the Archaeological Society of New Jersey*, 1986, No. 40, 45-46.

PROFESSIONAL AFFILIATIONS

Middle Atlantic Archaeological Conference
Eastern States Archaeological Federation
Archaeological Society of New Jersey, (President 2004, Third Vice President 1989-91, 1998-2000; Board Member at Large 2002-2003, Life Member)
Lower Delaware Valley Chapter of Archaeological Society of New Jersey
Archaeological Society of New York
Archaeological Society of Delaware
Society for Pennsylvania Archaeology
Council of Northeast Historical Archaeology
Potteries of Trenton Society, (Board Member 1998-present)
American Ceramic Circle (Inducted 2002)
Philadelphia Archaeological Forum
Society for Post-Medieval Archaeology
Preservation New Jersey
Boy Scouts of America Archaeology Badge Councilor

AWARDS

Who's Who Among Young Executives in America, 1992
Archaeological Society of New Jersey Award of Appreciation, 1990
NJ Historic Sites Council Historic Preservation Commendation for Archaeological Studies, 1989
Delaware Department of State, Certificate of Appreciation, 1999
US Army Corps of Engineers Philadelphia District External Partnering Team Award 2003

CERTIFICATIONS

OSHA 40-hour Initial Training, Spring 1994-Present
Hazardous Materials Supervisory Training, September 1994
Sediment and Stormwater Management Certification, 1994

SUSANNE M. EIDSON
Senior Archaeologist, BA

EDUCATION

M.A. Candidate, History, California State University, Dominguez Hills, California, 1997
B.A. Anthropology, Kutztown University, Kutztown, Pennsylvania, 1992

EXPERIENCE

- 1999- Senior Archaeologist
Hunter Research, Inc., Trenton, New Jersey
- Technical and supervisory responsibilities for selected field laboratory, drafting operations and report preparation. Participation in:
- excavation and survey
 - stratigraphic and artifact analysis
 - supervision of personnel
 - field photography
 - preparation of field report graphics
 - report preparation
 - supervision of mechanically assisted excavation
- 1996 -1999 Assistant Archaeologist
Hunter Research, Inc., Trenton, New Jersey
- Technical and supervisory responsibilities for selected field, laboratory and drafting operations and report preparation. Participation in:
- survey and excavation
 - supervision of personnel
 - field photography
 - stratigraphic and artifact analysis
 - preparation of field report graphics
 - report preparation
- 1995-1996 Field Assistant
Hunter Research, Inc., Trenton, New Jersey
- Worked on various archaeological field projects in New Jersey, New York, Delaware, and Pennsylvania. Participation in:
- excavation and survey
 - field recording
 - laboratory processing of artifacts
- 1994 Field Assistant
R. Christopher Goodwin & Associates, New Orleans, Louisiana

PROFESSIONAL AFFILIATIONS

Archaeological Society of New Jersey
Archaeological Society of Delaware
Society for Pennsylvania Archaeology

APPENDIX B
PROJECT ADMINISTRATIVE DATA

APPENDIX B

Project Administrative Data

HUNTER RESEARCH, INC. PROJECT SUMMARY

Project Name: Cultural Resource Survey, Hamptonburgh Lagoon Site, Town of Hamptonburgh, Orange County, New York

Level of Survey:

HRI Project Reference: 00075

Date of Report: January 2002

Client: Conestoga-Rovers & Associates

Address:

Review Agency: NYSOPRHP

Agency Reference:

Artifacts Records Deposited:

PROJECT CHRONOLOGY

Date of Contract Award: 12/15/2000

Notice to Proceed: 12/15/2000

Background Research: February 2001

Fieldwork: February and November 2001

Analysis: November 2001

Report Written: January 2002

PROJECT PERSONNEL

Principal Investigator(s): Ian Burrow, William Liebeknecht

Background Researcher(s): Susanne Eidson

Field Supervisor(s): George Cress

Field Assistant(s): Jason Uebelaker, Rebecca White

Analyst(s): Rebecca White

Draftperson(s): Catherine Smyrski, Frank Dunsmore, Dawn Turner

Report Author(s): Susanne Eidson, George Cress, Ian Burrow