

**PHASE 1A LITERATURE SEARCH AND SENSITIVITY ASSESSMENT &  
PHASE 1B ARCHAEOLOGICAL FIELD RECONNAISSANCE SURVEY  
DUTCHESS SHEPHERD BULKELEY SCHOOL PROJECT**

6 MULBERRY STREET  
VILLAGE OF RHINEBECK, DUTCHESS COUNTY, NEW YORK

PREPARED FOR:

DUTCHESS SHEPHERD LLC  
265 MARKET LANE  
CLINTON CORNERS, NEW YORK, 12514



PO Box 124  
LAGRANGEVILLE NEW YORK 12540

MARCH 2023

## MANAGEMENT SUMMARY

SHPO Project Review Number (if available):

Involved State and Federal Agencies: SEQR

Phase of Survey: **Phase 1A Literature Search & Sensitivity Assessment & Phase 1B Archaeological Field Reconnaissance Survey**

Location Information:

Location: **6 Mulberry Street**

Minor Civil Division: **Village of Rhinebeck**

County: **Dutchess County**

USGS Quadrangle: **2019 Kingston, East, NY Quadrangle**

Survey Area (Metric & English)

Length: **110' / 33.5 m**

Width: **62' / 18.9 m**

Number of Acres Surveyed: **±1.44 (0.58 hectares)**

Archaeological Survey Overview

Number & Interval of Shovel Tests: **15 completed @ 50' (15 m) intervals**

Number & Size of Units: N/A

Width of Plowed Strips: N/A

Surface Survey Transect Interval: N/A

Results of Archaeological Survey

Number & name of precontact sites identified: **0.**

Number & name of historic sites identified: **0**

Number & name of sites recommended for Phase II/Avoidance: **0.**

Report Author (s): **Franco Zani Jr., Beth Selig, MA, RPA.**

HCS Project Number: **23-02-674**

Date of Report: **March 20, 2023**

# TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

LIST OF PHOTOGRAPHS

|  |    |
|--|----|
| I. PHASE 1A LITERATURE SEARCH AND SENSITIVITY ASSESSMENT .....     | 1  |
| A. DUTCHESS SHEPHERD BULKELEY SCHOOLHOUSE PROJECT DESCRIPTION..... | 1  |
| B. ENVIRONMENTAL CONDITIONS .....                                  | 4  |
| • ECOLOGY .....  | 4  |
| • GEOLOGY .....  | 4  |
| • DRAINAGE.....  | 4  |
| • SOILS .....  | 4  |
| C. RECORDED ARCHAEOLOGICAL SITES AND SURVEYS .....                 | 8  |
| • PREVIOUSLY RECORDED ARCHAEOLOGICAL SITES.....                    | 8  |
| • PREVIOUSLY COMPLETED ARCHAEOLOGICAL SURVEYS .....                | 9  |
| D. PRECONTACT CONTEXT.....   | 9  |
| E. HISTORIC CONTEXT .....  | 10 |
| • HISTORY OF BULKELEY SCHOOL.....                                  | 11 |
| • CARTOGRAPHIC RESEARCH.....                                       | 13 |
| F. NATIONAL REGISTER ELIGIBLE/LISTED SITES.....                    | 27 |
| G. ASSESSMENT OF SENSITIVITY FOR CULTURAL RESOURCES .....          | 27 |
| • PRECONTACT SENSITIVITY.....                                      | 27 |
| • HISTORIC SENSITIVITY .....                                       | 27 |
| H. SUMMARY AND RECOMMENDATIONS.....                                | 27 |
| II. PHASE 1B ARCHAEOLOGICAL FIELD RECONNAISSANCE SURVEY .....      | 28 |
| I. ARCHAEOLOGICAL SURVEY METHODOLOGY .....                         | 28 |
| J. ARCHAEOLOGICAL SURVEY RESULTS .....                             | 28 |
| K. SUMMARY AND RECOMMENDATIONS.....                                | 29 |
| L. BIBLIOGRAPHY.....   | 34 |

APPENDIX A: SHOVEL TEST RECORDS

## LIST OF FIGURES

|   |    |
|---|----|
| Figure 1: 2019 USGS Topographical Map. Kingston East, NY Quadrangles. 7.5 Minute Series. (Source: USGS.gov.) Scale: 1"=1,000'.....                              | 2  |
| Figure 2: 2021 Aerial image showing the location of the Project APE (Source: New York GIS Clearinghouse). Scale: 1" =150'.....                                  | 3  |
| Figure 3: Aerial Image showing soil units within the Project Parcel. (Source: Natural Resources Conservation Service.) Scale: 1" =150'.....                     | 5  |
| Figure 4: Image of the Bulkeley School House. Circa 1870. ....  | 12 |
| Figure 5: Image of the Bulkeley School with southern addition. Circa 1908. (Source Morse 1908). ....  | 12 |
| Figure 6: Post card of the school building c. 1928. (Source: New York Heritage digital collections). ....   | 13 |
| Figure 7: 1850 J.C. Sidney <i>Atlas of Dutchess County, New York</i> . (Source: Library of Congress) Scale: 1" =1000'.....                                      | 14 |
| Figure 8: 1858 J. E. Gillette. Map of Dutchess County, New York. (Source: Library of Congress) Scale: 1" =200'.....   | 15 |
| Figure 9: 1867 F.W. Beers. <i>Village of Rhinebeck, Atlas of the County of Dutchess, N.Y.</i> (Source: David Rumsey Cartography Associates) Scale: 1"=335'..... | 16 |
| Figure 10: 1886 Sanborn Fire Insurance Map. <i>Village of Rhinebeck N.Y.</i> Scale: 1"=112'. (Source: Library of Congress) Scale: 1"=112'.....                  | 17 |
| Figure 11: 1890 L.R. Burleigh. <i>Birds Eye View of the Village of Rhinebeck N.Y.</i> (Source: Library of Congress) Scale: 1"=75'.....                          | 18 |
| Figure 12: 1905 Sanborn Fire Insurance Map. <i>Village of Rhinebeck N.Y.</i> (Source: Library of Congress) Scale: 1"=125'.....                                  | 19 |
| Figure 13: 1912 Sanborn Fire Insurance Map. <i>Village of Rhinebeck N.Y.</i> (Source: Library of Congress) Scale: 1"=1245'.....                                 | 20 |
| Figure 14: 1940 Aerial image. Village of Rhinebeck, Dutchess County. (Source: Dutchess County Parcel Access) Scale: 1"=130'.....                                | 21 |
| Figure 15: 1955 Aerial image. Village of Rhinebeck, Dutchess County. (Source: Dutchess County Parcel Access) Scale: 1"=120'.....                                | 22 |
| Figure 16: 1970 Aerial image. Village of Rhinebeck, Dutchess County. (Source: Dutchess County Parcel Access) Scale: 1"=115'.....                                | 23 |
| Figure 17; 2004 Aerial image. Village of Rhinebeck, Dutchess County. (Source: Dutchess County Parcel Access) Scale: 1"=135'.                                    |    |
| Figure 18: Dutchess Shepherd Bulkeley School. Phase 1B Archaeological Field Reconnaissance Survey. Scale 1" = 200'.....   | 33 |

## LIST OF TABLES

|  |   |
|--|---|
| Table 1: Soil Unit Descriptions (Natural Resources Conservation Service) ..... | 5 |
| Table 2: Previously Recorded Archaeological Sites within one mile-radius.....  | 8 |

## LIST OF PHOTOGRAPHS

|   |    |
|---|----|
| Photo 1: The former Bulkeley School is located in the center of the Project Parcel. View to the northwest.....  | 6  |
| Photo 2: The southern portion of the Parcel contains an asphalt covered parking lot. View to the northwest.....   | 6  |
| Photo 3: Buried utilities and a playground are in the western portion of the parcel. View to the south. ....  | 7  |
| Photo 4: Buried utilities and equipment are located on the northern side of the school building. View to the southwest... ..                                      | 7  |
| Photo 5: The northern side of the building is constructed of cinderblock, and painted red. View to the south. ....  | 25 |
| Photo 6: Access points on the eastern side of the building are below grade. View to the south. ....   | 25 |
| Photo 7: View to the south from the northern boundary of the Project Parcel. ....   | 26 |
| Photo 8: The northern portion of the parcel consists of mown lawns. View to the north. ....   | 26 |
| Photo 9: Transects 1 and 2 began near East Market Street. View to the west.....   | 30 |
| Photo 10: The landscape on the southern side of the school building is covered with asphalt. View to the north. ....  | 30 |
| Photo 11: View to the southeast from the western side of the school building.....   | 31 |
| Photo 12: A shed is located in the northwestern portion of the Project Parcel. View to the north, of the location of TR 5. ....                                   | 31 |
| Photo 13: Stormwater drains are located in the parking area, in the southern portion of the Parcel. View to the west. ....  | 32 |
| Photo 14: Deep tests, completed by the owner for proposed septic systems show extensive disturbance and building debris to the north of the school building. .... | 32 |

## I. PHASE 1A LITERATURE SEARCH AND SENSITIVITY ASSESSMENT

### A. DUTCHESS SHEPHERD BULKELEY SCHOOLHOUSE PROJECT DESCRIPTION

In February of 2023, Hudson Cultural Services (HCS) was retained by Dutchess Shepherd LLC, to complete a Phase 1A Literature Search and Sensitivity Assessment and Phase 1B Archaeological Field Reconnaissance Survey of the proposed Dutchess Shepherd Bulkeley Schoolhouse Project, located at 6 Mulberry Street in the Village of Rhinebeck, Dutchess County, New York.

The purpose of the Phase 1 Cultural Resources Survey is to determine whether previously identified cultural resources (historic and archaeological sites) are located within the boundaries of the proposed project, and evaluate the potential for previously unidentified cultural resources to be located within the boundaries of the Area of Potential Effect (APE). All work was completed in accordance with the *Standards for Cultural Resource Investigations and the Curation of Archeological Collections* published by the New York Archeological Council (NYAC) and recommended for use by New York State Office of Parks, Recreation and Historic Preservation (OPRHP). The report complies with New York State OPRHP's *Phase 1 Archaeological Report Format Requirements*, established in 2005.

The background research, as well as the cultural and environmental overviews, were completed by Franco Zani Jr. and Beth Selig, MA, RPA, President and Principal Investigator with HCS. Phase 1B testing was completed under the direction of Franco Zani Jr. and Beth Selig. A site visit was conducted by Beth Selig on February 22, 2023 to observe and photograph existing conditions within the Project. The information gathered during the walkover reconnaissance is included in the relevant sections of this report.

The Proposed Dutchess Shepherd Bulkeley Schoolhouse Project in Rhinebeck (hereafter "the Project Parcel") is a ±1.44 acre (0.58 h) parcel in the Village of Rhinebeck. The Project Parcel is comprised of one large parcel which will be subdivided into five parcels as part of the overall project. The Parcel is bounded to the south by South Street, to the east by Mulberry Street, to the north by East Market Street and to the west by residential structures. The proposed undertaking consists of constructing residential structures with associated infrastructure. The existing school will be retained, and converted into apartments.

The Project Parcel is a vacant school, surrounded by lawns, parking lots, a playground and buried utilities. With the exception of the western boundary, a chain link fence encloses the property. The southern portion of the parcel is covered with asphalt.

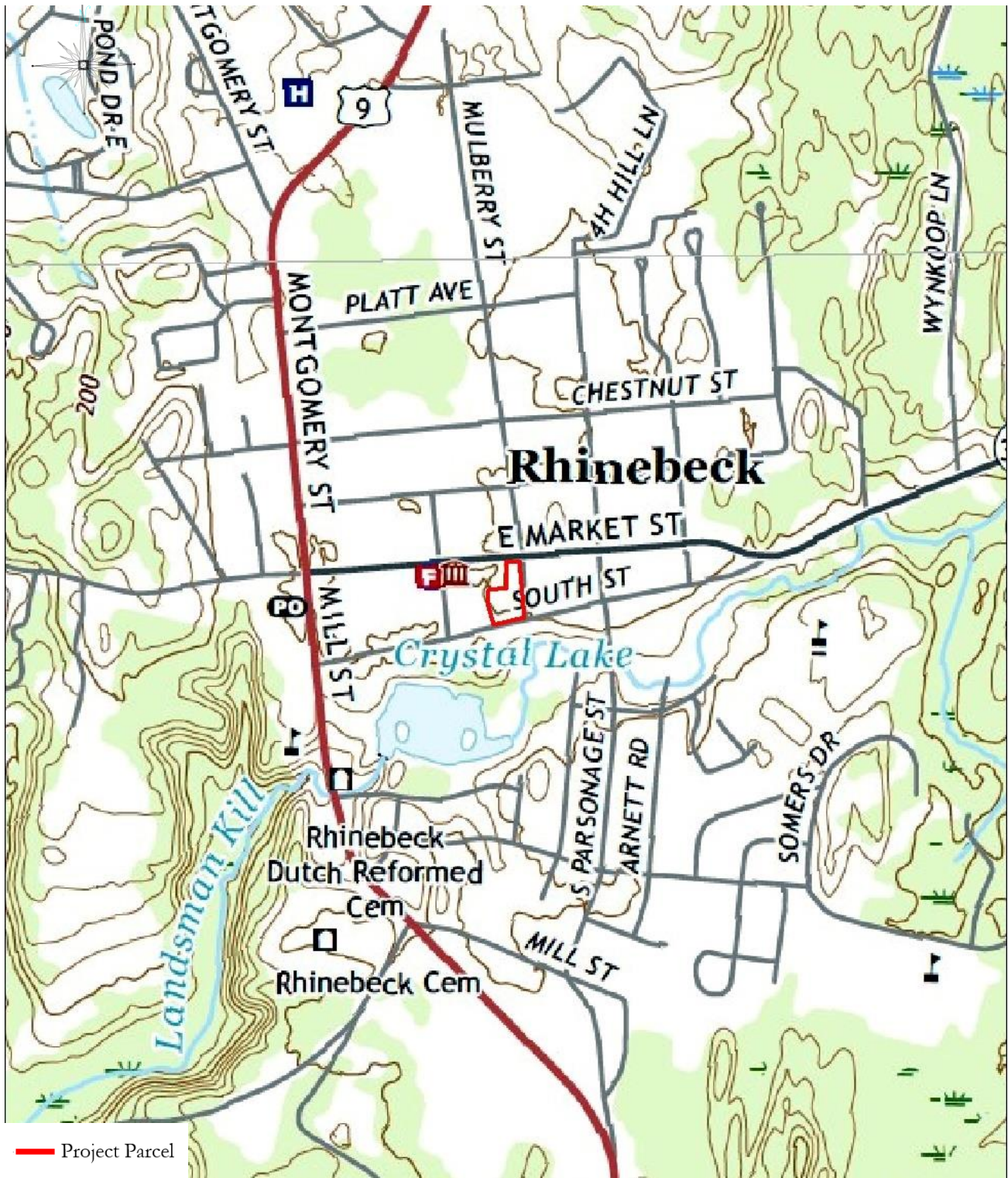


Figure 1: 2019 USGS Topographical Map. Kingston East, NY Quadrangles. 7.5 Minute Series. (Source: USGS.gov.) Scale: 1=1,000'.



Figure 2: 2021 Aerial image showing the location of the Project Parcel (Source: New York GIS Clearinghouse). Scale: 1"=150'.



## B. ENVIRONMENTAL CONDITIONS

The landscape within the Project Parcel is currently cleared, urban land that is maintained as lawn, with parking lots on the southern side of the school building. The elevation of the parcel is about 200' (61 m) Above Mean Sea Level (AMSL).

### ECOLOGY

The Project APE lies within the Eastern Broadleaf Forest. This mountainous region is in the transition zone between the boreal spruce–fir forest to the north and the deciduous forest to the south. Growth form and species are very similar to those found to the north, but red spruce tends to replace white spruce (Bailey 1995; Bryce et al. 2010).

### GEOLOGY

The Project APE is located within the Hudson–Mohawk Lowlands, adjacent to the Catskill Mountains Physiographic Province. The Catskills rise considerably higher than the neighboring parts of the upland. Summit elevations exceed 2000' and some peaks are over 4000'. The mountainous character of the Catskills is due to the action of glaciers and streams carving deep valleys in the flat-lying, stratified sandstones and shales. These sedimentary stones are capped in the high areas with resistant conglomerates that are the bedrocks of the Catskills. The topography is controlled by the bedrock with steep valley sides being a normal occurrence. Minor landforms in the valleys are outwash, kames, kame moraines, deltas, alluvial flats and lacustrine plains. Upland deposits are predominantly glacial tills that are stony or contain flagstones. The only extensive lacustrine area is near Gilboa in Schoharie County. Soils on the other minor landforms are mostly water-laid deposits of granular material (Spectra 2004).

Specifically, the Project APE lies in the Northern Glaciated Shale and Slate Valleys. The Northern Glaciated Shale and Slate Valleys contain broad, irregular rolling to hilly valleys underlain by slaty shale and fine-grained sandstone covered by glacial drift. (Bryce et al. 2010). Escarpments of limestone in the east mark the descent into the Hudson Valley.

### DRAINAGE

There are no water sources located within the boundaries of the parcel. Stormwater drains are located within the village streets, and the overall landscape generally drains to the xx to the Landsman Kill.

### SOILS

Soil surveys provide a general characterization of the types and depths of soils that are found in an area. The characteristics of the soils within the Project Parcel have an important impact on the potential for the presence of cultural material, since the types of soils present affect the ability of an area to support human populations. The Soil Survey's mapped boundaries are considered approximate, as they generally correspond poorly to the actual boundaries of landforms and soil types within an area. The Natural Resources Conservation Service indicates that the soils within the Parcel are a mix of channery and gravelly silt loam, and urban land.

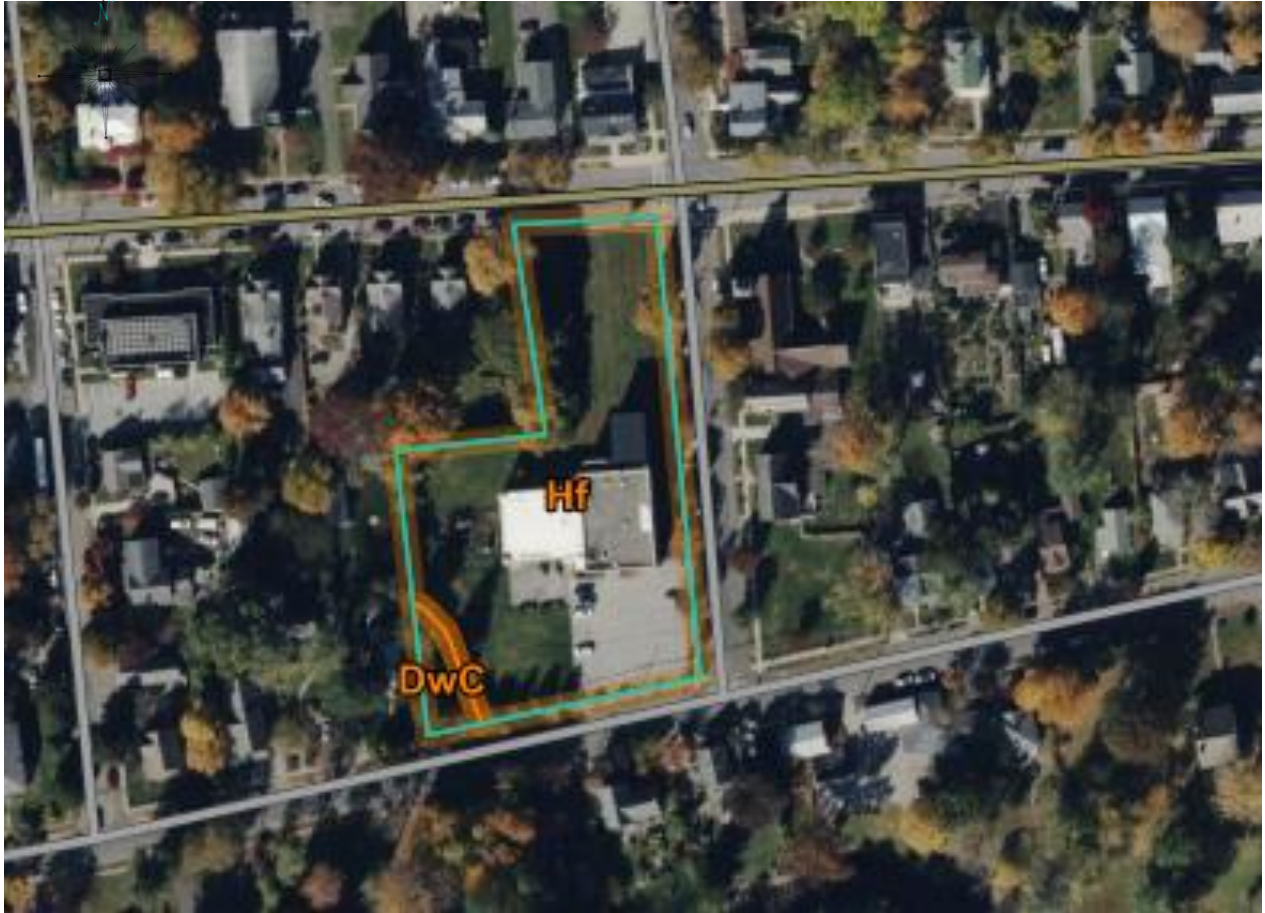


Figure 3: Aerial Image showing soil units within the Project Parcel. (Source: Natural Resources Conservation Service.) Scale: 1"=150'.

| <b>Table 1: Soil Unit Descriptions (Natural Resources Conservation Service)</b> |   |   |              |                 |                 |
|---|---|---|--------------|-----------------|-----------------|
| <b>Map Symbol</b>   | <b>Map Unit Name</b>                      | <b>Soil Horizons &amp; Texture</b>  | <b>Slope</b> | <b>Drainage</b> | <b>Landform</b> |
| DwC   | Dutchess-Cardigan complex, rolling, rocky | H1 - 0 to 8 inches: silt loam<br>H2 - 8 to 28 inches: silt loam<br>H3 - 28 to 86 inches: channery silt loam   | 5 to 16%     | Well drained    | Ridges, hills   |
|   |   | H1 - 0 to 8 inches: channery silt loam<br>H2 - 8 to 20 inches: channery loam<br>H3 - 20 to 30 inches: channery silt loam<br>H4 - 30 to 34 inches: unweathered bedrock |              |                 |                 |
| Hf  | Haven-Urban land complex                  | H1 - 0 to 12 inches: loam<br>H2 - 12 to 23 inches: gravelly loam<br>H3 - 23 to 72 inches: stratified very gravelly sand   | 0 to 3%      | Well drained    | Outwash plains  |
|   |   | H1 - 0 to 6 inches: variable  |              |                 |                 |



Photo 1: The former Bulkeley School is located in the center of the Project Parcel. View to the northwest.



Photo 2: The southern portion of the Parcel contains an asphalt covered parking lot. View to the northwest.



Photo 3: Buried utilities and a playground are in the western portion of the parcel. View to the south.



Photo 4: Buried utilities and equipment are located on the northern side of the school building. View to the southwest.

### C. RECORDED ARCHAEOLOGICAL SITES AND SURVEYS

On February 23, 2023 HCS reviewed the combined site files of the New York State Office of Parks, Recreation, and Historic Preservation (OPRHP) and the New York State Museum (NYSM) for information regarding previously recorded archeological sites within one mile (1.6 km) of the Parcel. HCS also consulted regional Native American sources (e.g., Beauchamp 1900; Parker 1920; Ritchie 1980; Ritchie and Funk 1973) for descriptions of regional archeological sites.

#### PREVIOUSLY RECORDED ARCHAEOLOGICAL SITES

Nineteen (19) previously documented archaeological sites and one (1) New York State Museum area have been identified within a one mile-radius of the Project Parcel boundaries. The historic sites are Map Documented Structures (MDS) that have been identified on the nineteenth century landowner maps. A number of these locations have been disturbed by modern development or do not have any visible surface remains.

| <b>Site Number</b> | <b>Site Name</b>             | <b>Distance from Project</b> | <b>Time Period</b> | <b>Site Type<br/>Materials Recovered</b>                                       |
|--------------------|------------------------------|------------------------------|--------------------|--|
| NYSM 7669          | Rhinebeck Rockshelter        | Includes Project APE         | Precontact         | Large generalized area that includes the entirety of the Village of Rhinebeck. |
| 2716.00096         | Rhineson Corporation Site    | 3158.6'/962.7 m              | Precontact         | Undetermined Precontact site   |
| 2716.000961        | Baptist Home Precontact Site | 4333.1'/1.32 k               | Precontact         | Undetermined camp site.  |
| 2716.000969        | Rhinebeck Site 5             | 3420.4'/1.04 k               | Precontact         | Middle Archaic to Woodland; habitation site                                    |
| 2716.00097         | Rhinebeck Site 6             | 4134.7'/1.26 k               | Precontact         | Undetermined Precontact site   |
| 2716.000971        | Rhinebeck Site 7             | 4667.9'/1.42 k               | Precontact         | Undetermined Precontact site   |
| 2716.000972        | Rhinebeck Site 8             | 4501.1'/1.37 k               | Precontact         | Undetermined Precontact site; chert debitage, scraper.                         |
| 2716.000973        | Rhinebeck Site 9             | 4871.8'/1.48 k               | Precontact         | Undetermined Precontact site   |
| 2716.000975        | Knollwood Precontact Site    | 3975.6'/1.21 k               | Precontact         | Late Archaic site. Poplar Island pp.   |
| 2716.000987        | Grasmere Precontact Site     | 4833.8'/1.47 k               | Precontact         | Undetermined Precontact site; 2 chert debitage                                 |
| 2716.001032        | Darling Historic Site        | 2986.1'/910 m                | Historic           | Early 19 <sup>th</sup> century homestead.                                      |
| 2750.000432        | Rhinebeck Site 1             | 2472.4'/753.5 m              | Precontact         | Middle Archaic to Woodland   |
| 2750.000433        | Rhinebeck Site 3             | 2867.5'/874 m                | Precontact         | Middle to Late Archaic   |

|             |                                    |                 |            |  |
|-------------|------------------------------------|-----------------|------------|--|
| 2750.000434 | Rhinebeck Site 4                   | 3507.5'/1.07 k  | Precontact | Middle Archaic to Woodland habitation site   |
| 2750.000435 | Spring Historic Site               | 1553.4'/473.4 m | Historic   | Late 18 <sup>th</sup> to 19 <sup>th</sup> century historic dump. Ceramics, tobacco pipes, glass, nails and faunal remains recovered. |
| 2750.000436 | Rhinebeck Site 2                   | 2670'/813.8 m   | Precontact | Middle Archaic to Woodland habitation site   |
| 2750.000437 | Rhinebeck Site 10                  | 3123.1'/952 m   | Precontact | Late Archaic to Woodland habitation site   |
| 2750.000438 | Rhinebeck Site 11<br>Historic      | 2668.6'/813.4 m | Historic   | Remains of Late 18 <sup>th</sup> C dwelling and barn. Ceramics, glass and pipe fragments.  |
| 2750.000439 | Rhinebeck Site 2                   | 2628.6'/801.2 m | Precontact | Middle Archaic to Woodland habitation site   |
| 2750.00044  | Rhinebeck Wagon Shop Historic Site | 1488.2'/453.6 m | Historic   | Late 19 <sup>th</sup> to 20 <sup>th</sup> c wagon shop.  |

PREVIOUSLY COMPLETED ARCHAEOLOGICAL SURVEYS

As part of the research for this report, surveys completed for projects in the general area were consulted. Eleven (11) surveys and 1 (one) building survey have been completed within a one-mile radius of the Parcel. These surveys have identified areas of Native American occupation sites and eighteenth to twentieth century period domestic sites. These identified sites, included in Table 2, will not be impacted by the proposed Project.

D. NATIVE AMERICAN CONTEXT

During the Paleoindian period, mobile bands of hunter-gatherers occupied what is now New York State. These bands exploited the resources of the landscape by hunting game and gathering plants. Paleoindian sites have been in the upland regions a short distance from the Hudson River (Ritchie and Funk 1976). Frequently these sites are associated with sources of stone, as is the case with a site in Greene County where a quarry-workshop complex has been excavated. More frequently, the sites appear to have been temporary campsites located where it would be possible to watch for game as it moved across the landscape (Ritchie 1980).

With the lowering of the water table during the Archaic period, subsistence methods and technologies changed in response to climatic warming. This was accompanied by an increase in vegetation density and diversity, changing faunal migrations and a change in sea levels (Sirkin 1977). The Archaic Period was likely a time of incipient sedentism among the inhabitants of the area. Changes in settlement and subsistence patterns that occurred during the Late Archaic period reflect an increased exploitation of coastal and riverine resources (Snow 1980). Ground stone food processing tools are more common, reflecting an increase in processed plant resources in the diet. Projectile points commonly found at Late Archaic sites include narrow stemmed, broad stemmed and side notched types (Snow 1980). The Laurentian Tradition of the Late Archaic is the most represented throughout New York State, and is subdivided into a series of phases: Vergennes, Vosburg, Sylvan

Lake, River and Snook Kill. Ground stone tools appear, and steatite bowls are associated with the later part of this time period (Pretola and Freedman 2007).

The Woodland period is distinguished from the Archaic in part, by the use of ceramics. Horticulture, although practiced in other parts of North America at an earlier date, does not appear in the Hudson River Valley until c. 1000 AD (Funk 1976). The soil and moisture requirements for the cultivation of maize, beans, and squash created a marked change in the pattern of land use and the selection of locations for villages (Hart and Brumbach 2005). It was no longer necessary for the entire group to move from place to place following a seasonal round of migration fueled by fluctuating sources of food. Cord marked ceramics became common during the Middle Woodland period, and incised vessels, many with a collar area, are typical of Late Woodland cultures (Lavin et al 1993).

Up to the time of Contact, two Algonquin-speaking Indian nations, referred to locally as the Wappinger and the Mohigan (Mahican), occupied the southern and northern sections of Dutchess County. These tribal people were sedentary, living in small permanent villages and growing crops such as maize and squash (Cronon 1983). While the original population of the Wappinger is unknown, Snow suggests that it may have reached 50,000 people (1980). The introduction of small pox by the Dutch reduced the Native Population to less than 1000 by the year 1700 (MacCracken 1956).

#### E. HISTORIC CONTEXT

Dutchess County, one of New York's original counties, was created in 1683, and at that time included all of Putnam County and part of Columbia County (Cronon 1983). The county was divided into thirteen patents, with the Rombout Patent being one of the earliest. Dutch settlement on the patents began in the late 1600s, with English Quakers from Rhode Island and Long Island moving into the eastern part of the county in the 1740s (Cronon 1983)

The Town of Rhinebeck was made up of three early land patents; the "water lots" section of the Nine Partners Patent of 1697, the Pawling patent of 1696, and the Fauconnier Patent of 1705. As early as 1730, a part of the Fauconnier Patent was known as the Hyde Park Patent (Rhinevault 2009). Settlement began in the Town of Rhinebeck as early as 1735, when Jacob Stoutenburgh, a Dutchman and trader from Westchester, purchased Water Lot 9 on the Nine Partners Patent on the south side of Crum Elbow Creek (Smith 1877). Stoutenburgh, had been purchasing property in Dutchess County for some time when he moved his wife and eight children up the Hudson to the area. Dr. John Bard, an eminent New York City doctor, married Suzanne Valleau, who was the granddaughter of Peter Fauconnier. Following Fauconnier's death, Bard purchased a portion of the Fauconnier Patent and continued to buy land until he owned all of the lands of the original Fauconnier Patent (Rhinevault 2009).

By the 1790's, considerable settlement had taken place along the Albany Post Road, including the hamlets of Staatsburg at the north end of town and Hyde Park, which was to the south and a half mile east of the Hudson River. The Town of Rhinebeck was established in 1821 (Hasbrouck 1909). The eastern portion of the Town of Rhinebeck includes the hamlet of Staatsburg which was first settled by Dr. Samuel Staats in 1715. He purchased the land from the owner of the land patent, Henry Pawling (Smith 1877). By 1813 Staatsburg had a post office, and was primarily a farming community with grain being the main crop. Several mills were established on Crum Elbow Creek to grind the grain. In addition to gristmills, there were also sawmills, a plaster mill, a fulling mill, and mills that made nails and other types of tools. Sloops docked daily at the Hudson

River piers to transport grain and other products to New York City, including hay for the New York City police horses. There were also other industries located near the mouth of Crum Elbow Creek, including shipbuilding and ship repair. The Hudson River also provided important resources such as sturgeon. The harvesting of sturgeon provided employment for a significant number of Hyde Park residents (Rhinevault 2009). In the late nineteenth century the hamlet of Staatsburg became the location of ice harvesting and storage industries. During the winter months, the Mutual Benefit Ice Company and the Knickerbocker Ice Company would cut river ice and store it until it could be shipped to markets in Albany and New York.

In 1847, construction began on the Hudson River Railroad, which ran along the bank of the River through Staatsburg. Railroad service began in 1849, although the entire span between New York and Albany was not completed until 1851. In 1869, the New York Central and Hudson Railroad replaced the Hudson River Railroad (Frederiksen 1962).

The Flatts, as William Traphagen called the village, or Rhinebeck Flatts, was located at the intersection of the well-traveled Sepasco Trail and King's Highway. Landsman Kill which flowed parallel to Sepasco Trail provided the settlers with their primary source of power. Grist, woolen, saw and paper mills were concentrated around along the Landsman Kill where it intersected with the King's Highway. Soon there was a wagoner, a cooper, a seinemaker, a shoemaker, a mason, a saddle and harness maker, a linen weaver, a tailor, a gunsmith, a tanner, a cordwainer, a wheelwright, a blacksmith and a carpenter in the neighborhood (Morse 1908).

#### HISTORY OF BULKELEY SCHOOL

In 1805, the public school and district system was introduced in the Town of Rhinebeck. The first village school was the Union Free School District No. 5, and initially consisted of an oblong one-story two-room structure (Morse 1908). From 1811 to 1839 school was kept for a short time every year in different parts of the district by itinerant teachers. In 1839, the South Street (Mulberry Street) lot was purchased and a school building was built. In 1844, the district was divided and second school building was constructed on Oak Street. In 1868, a new school building replaced the original South Street building which was in desperate need of repairs. The new structure, which featured high ceilings and spacious halls, was designed and built by Peter M. Fulton. The structure was enlarged to accommodate the growing number of students in the Village of Rhinebeck, and because new construction was financially practical. The school accommodations remained the same until 1901, when a large addition was made to the building (Morse 1908).

The Sanborn Fire Insurance Maps (Figures 10, 12-13) show that the addition was constructed on the southern side of the building. The building was expanded again in 1912, and is identified as the Rhinebeck High School. The additions were reportedly completed in 1903, 1911 and 1921 (Poughkeepsie Journal 1939a). On April 21, 1939 the "old wing" of the building burned down. The original portion of the building was destroyed along with the heating plant for the newer portions of the building. The fire doors protected the newer portions of the school (Poughkeepsie Eagle News 1939a) Adolph Knappe was hired by the school district to design the improvements and renovations (Poughkeepsie Eagle News 1939b). The building was not immediately rebuilt, as plans were in place to centralize the district, which occurred in 1941. The Rhinebeck District purchased a 28-acre site, and began making improvements for a new school building. (Poughkeepsie Journal 1949). In the late 1940's the village residents rejected plans to build a new school building, rather than improve the Bulkeley school building (Poughkeepsie Journal 1948). The 1940 aerial image (Figure 14) shows that between 1912 and 1940 the footprint of the building changed, with the 1921



addition on the western side of the building. The northern and southern “wings” of the building were removed, presumably as a result of the fire. The school gets its name from the president of the School board, Dr. H. S. Bulkeley (Poughkeepsie Eagle News 1938).



Figure 4: Image of the Bulkeley School House. Circa 1870.



Figure 5: Image of the Bulkeley School with southern addition. Circa 1908. (Source Morse 1908).



Figure 6: Post card of the school building c. 1928. (Source: New York Heritage digital collections). This image shows the additions from the early 1900s, and the northern addition completed by 1912.

In 1952, a new school building was opened, and the Mulberry Street School was used by the lower elementary grades (Poughkeepsie Journal 1952). The 1955 aerial image (Figure 15) shows that a small addition has been added to the northern side of the building. By 1963, the school building, which consisted primarily of the 1905 and circa 1955 additions, was evaluated for modernization by W. Parker Dodge and Associates (Poughkeepsie Journal 1963). In 1970, a plan to construct an 8-room addition on the existing school at Mulberry Street was presented to the school board (Poughkeepsie Journal 1970). This addition was not completed. In 1977 the school board voted to keep the school open, despite inadequacies of space and condition (Trilling 1977). The school was sold in 1997 to Good Shepherd Catholic Church (Haviland 1996).

#### CARTOGRAPHIC RESEARCH

HCS examined historical maps of Dutchess County to identify possible structures, previous road alignments and other landscape features or alterations that could affect the likelihood that archeological and/or historic resource might be located within the Project Parcel. These maps are included in this report, with the boundaries of the Project Parcel superimposed. Nineteenth century maps frequently lack the accuracy of location and scale present in modern surveys. As a result of this common level of inaccuracy on the historic maps, the location of the Project Parcel is drafted relative to the roads, structures, and other features as they are drawn, and should be regarded as approximate. The historic maps included in this report depict the sequence of road construction and settlement/development in the vicinity of the Project Parcel.



Figure 7: 1850 J.C. Sidney *Atlas of Dutchess County, New York*. (Source: Library of Congress) Scale: 1" = 1000'.

The earliest map included in this report is the 1850 *Atlas of Dutchess County, New York*. No structures are shown within the Project Parcel, although there is a building located on the western boundary. The village is densely settled, but no details are shown for the buildings except the tavern and churches within the villages.



Figure 8: 1858 J. E. Gillette. *Map of Dutchess County, New York*. (Source: Library of Congress) Scale: 1" = 200'

The second map consulted for this report is the J.E. Gillette *Map of Dutchess County New York* published in 1858. This map shows three buildings within the boundaries of the Project Parcel. The Seymour residence is located near South Street, the school is in the center of the parcel near Mulberry Street, and a building identified as the Episcopal Church, at the intersection of Market Street and Mulberry Street.

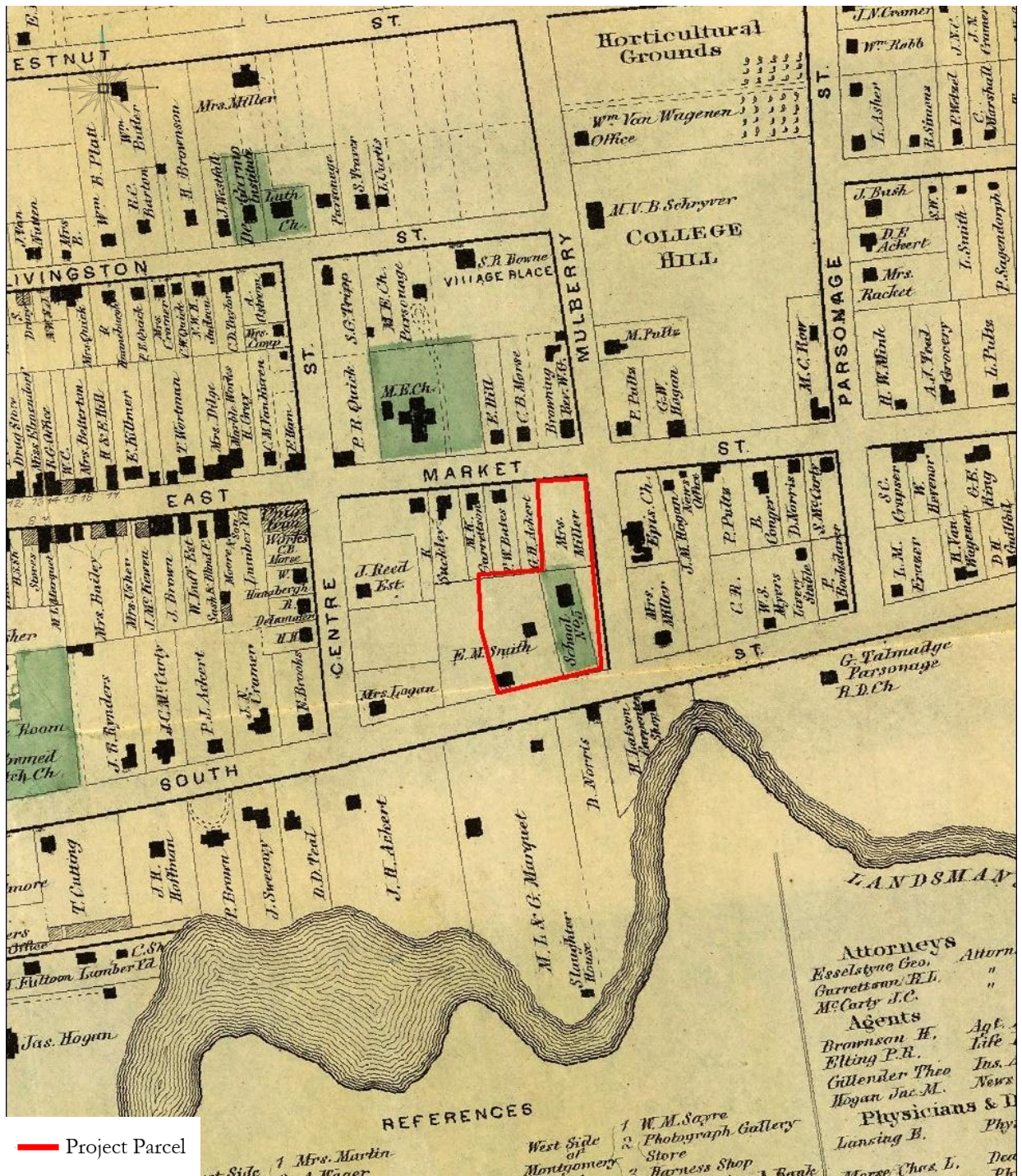


Figure 9: 1867 F.W. Beers. *Village of Rhinebeck, Atlas of the County of Dutchess, N. Y.* (Source: David Rumsey Cartography Associates) Scale: 1"=335'.

The next consulted for this report is the 1867 *Atlas of Dutchess County, New York, Village of Rhinebeck* map surveyed by Beers. This map shows Schoolhouse number 5 is within the Project Parcel. Two structures owned by E.M. Smith are located to the west and southwest of the school. Mrs. Miller owned the vacant lot to the north of the school.

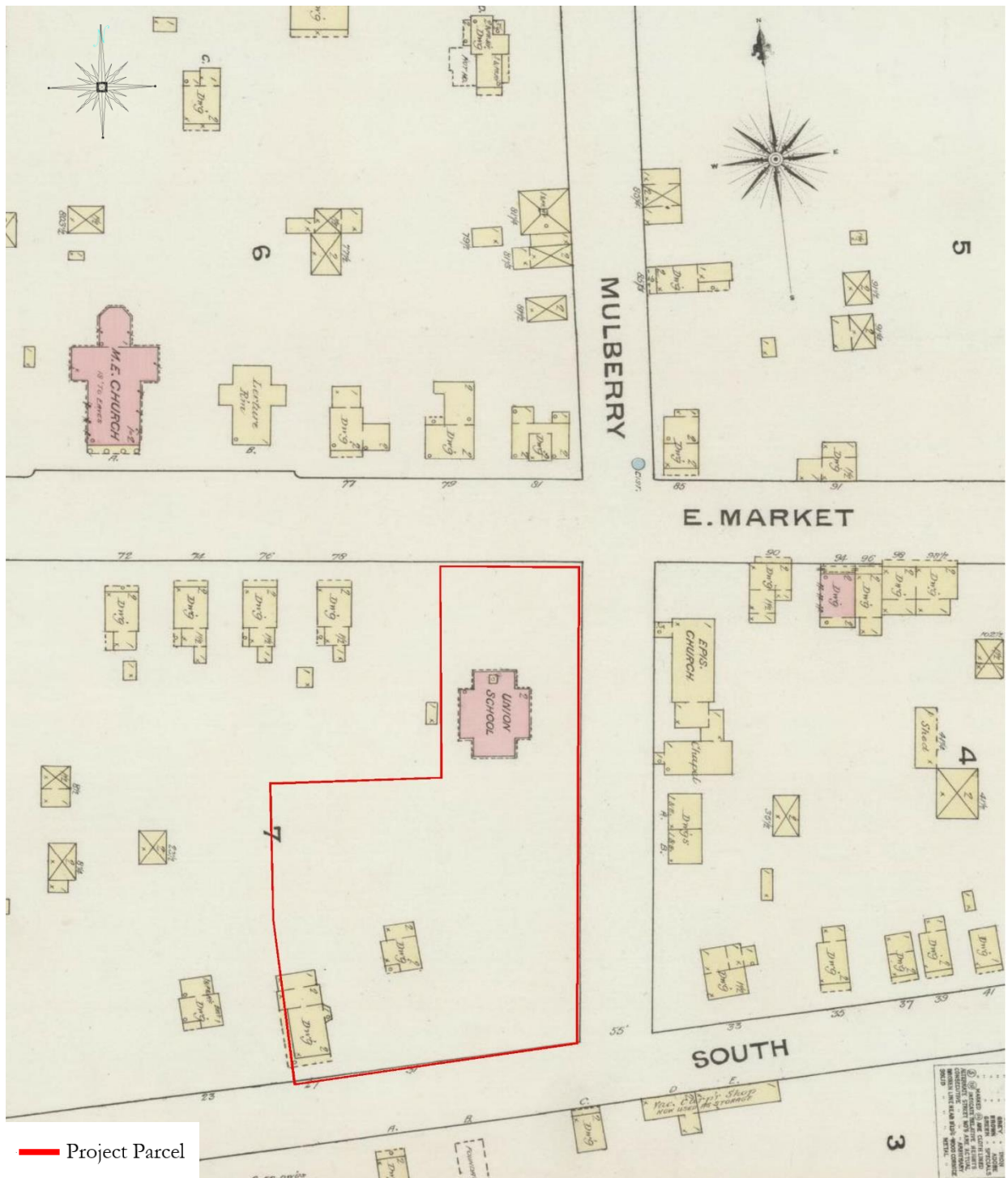


Figure 10: 1886 Sanborn Fire Insurance Map. *Village of Rhinebeck N.Y.* Scale: 1"=112'. (Source: Library of Congress) Scale: 1"=112'

The 1886 Sanborn Fire Insurance Map shows the Union School in the northern portion of the Project Parcel. The two-story brick building is shown with a wooden cupola on the northern side of the roof. Two wood framed residential buildings are shown in the southern and southwestern portions of the Project Parcel. The school is cruciform shape with the main entrance on the northern side of the building.

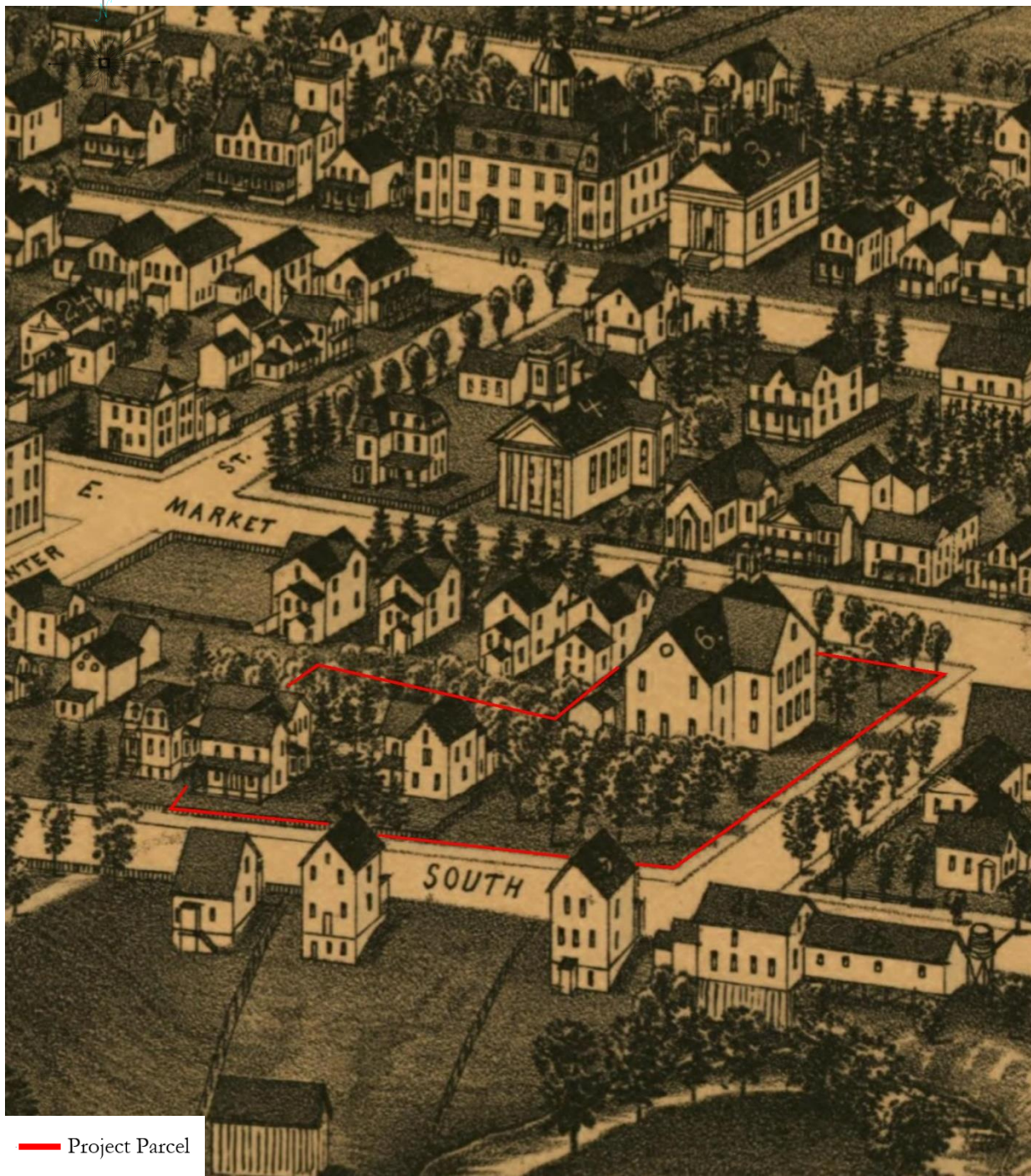


Figure 11: 1890 L.R. Burleigh. *Birds Eye View of the Village of Rhinebeck N. Y.* (Source: Library of Congress) Scale: 1"=75'.

The 1890 L.R. Burleigh *Birds Eye View of the Village of Rhinebeck*. The schoolhouse is shown within the northern and central portion of the Parcel, with residential structures to the south and west. The residential structures front along South Street. The school is shown as a two story building, with a wooden cupola on the northern side of the roof. The lawn areas to the south are shown as containing decorative trees.

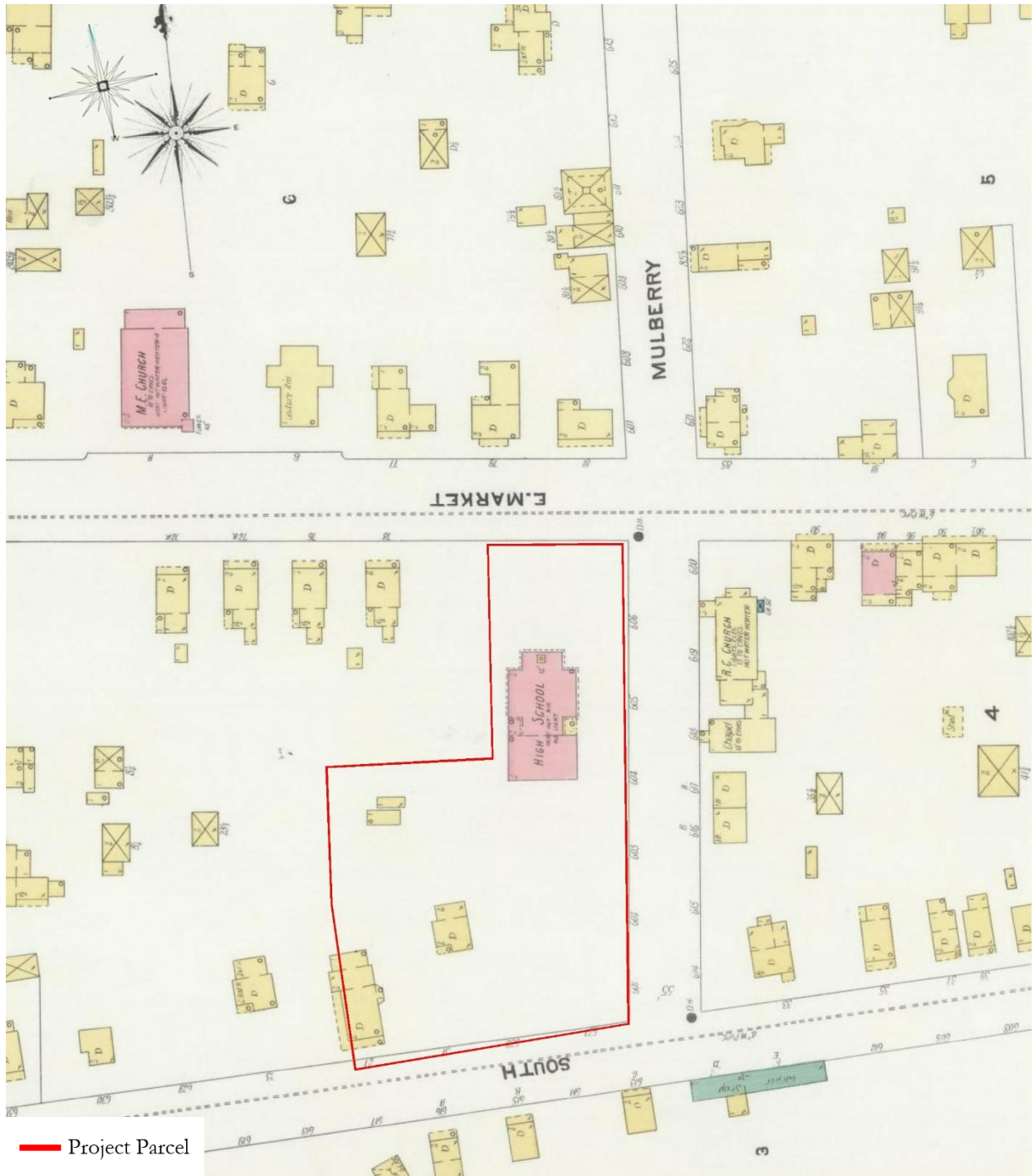


Figure 12: 1905 Sanborn Fire Insurance Map. *Village of Rhinebeck N.Y.* (Source: Library of Congress) Scale: 1"=125'.

By 1905 the school has been altered, with an addition on the southern side of the existing building. The addition is shown as constructed of brick, without the decorative wood cornice of the earlier structure. The Parcel also contains two residential buildings that have wooden shed located to the north of the building.





Figure 13: 1912 Sanborn Fire Insurance Map. *Village of Rhinebeck N.Y.* (Source: Library of Congress) Scale: 1"=1245'.

By 1912 an addition has been constructed on the northern side of the original school structure. The 1868 structures has been incorporated into the larger brick high school building. To the south and southwest, the residential structures are shown on their own lots. The school is two stories in height, and is identified as being fully electric with a furnace and hot water plant.



Figure 14: 1940 Aerial image. Village of Rhinebeck, Dutchess County. (Source: Dutchess County Parcel Access) Scale: 1"=130'.

The 1940 aerial image indicates that dramatic changes have taken place to the school building and surrounding property. The structures shown consists of the circa 1905 addition, with a new addition (c. 1921) located on its western side. A newspaper article identifies three additions, the 1903, 1912 and a 1921. The northern portion of the parcel has been graded and leveled, likely the result of the burned portions of the building being removed. The residential structure in the southwestern corner of the Parcel is still present. Due to the vegetation and tree cover, it is unclear if the second residential building is still present.



Figure 15: 1955 Aerial image. Village of Rhinebeck, Dutchess County. (Source: Dutchess County Parcel Access) Scale: 1"=120'.

The 1955 aerial image indicates shows that a small addition has been constructed on the northern side of the building. The residential structures in the southern and southwestern portions of the Parcel have been removed, and the area graded as lawn.



Figure 16: 1970 Aerial image. Village of Rhinebeck, Dutchess County. (Source: Dutchess County Parcel Access) Scale: 1"=115'.

The 1970 aerial image shows that there have been few changes to the parcel. The southern side of the building appears to be gravel or recently graded.



Figure 17: 2004 Aerial image. Village of Rhinebeck, Dutchess County. (Source: Dutchess County Parcel Access) Scale: 1"=135'.

The 2004 aerial image shows that the southern portion of the Parcel is covered with asphalt, and utilized as a parking lot. A playground has been constructed on the western side of the building.



Photo 5: The northern side of the building is constructed of cinderblock, and painted red. View to the south.



Photo 6: Access points on the eastern side of the building are below grade. View to the south.



Photo 7: View to the south from the northern boundary of the Project Parcel.



Photo 8: The northern portion of the parcel consists of mown lawns. View to the north.

## F. NATIONAL REGISTER ELIGIBLE/LISTED SITES

The OPRHP files were reviewed to identify structures on or in the vicinity of the Project APE that have been listed on the National Register of Historic Places (NRL) or identified as National Register Eligible. The Project Parcel is located within the boundaries of the Rhinebeck Village Historic District and adjacent to the Hudson River Historic District and the Village of Rhinebeck Historic District Boundary Increase.

The Project Parcel, contains the Bulkely Schoolhouse, which contributes to the to the Rhinebeck Village Historic District Boundary Increase. The Hudson River Historic District and the Rhinebeck Village historic District are located within a one-half mile radius of the Proeject Parcel. Five individually listed properties are located within a one-half mile radius of the Project Parcel. These properties which include the Benner House, the Rhinebeck Post Office, the Astor Home for Children, the Henry Delamater House, and Grasmere will not be directly impacted by the proposed project

## G. ASSESSMENT OF SENSITIVITY FOR CULTURAL RESOURCES

### PRECONTACT SENSITIVITY

Precontact period archaeological sensitivity of an area is based primarily on proximity to previously documented precontact archaeological sites, known precontact resources, and physiographic characteristics such as topography and proximity to fresh water. Precontact resources have been located within Rhinebeck and along the Landsman Kill. The project's location, near sources of fresh water, along with the presence of level terrain within the Project Parcel, makes this landscape sensitive for precontact cultural resources. this potential has been eliminated due to the successive episodes of construction and demolition, along with grading of soils that have occurred within the boundaries of the parcel.

### HISTORIC SENSITIVITY

The Project Parcel has held a school since the 1860s, and the southern portion has been occupied by residential structures through the late nineteenth and early twentieth century. In the mid-nineteenth century a church was located in the northern portion of the Parcel, that was removed by the mid-late nineteenth century. This northern area has been disturbed through the construction and removal of a school addition and the original school building. The southern portion of the parcel, outside the area of the asphalt covered parking area retained the potential to contain historic resources.

## H. SUMMARY AND RECOMMENDATIONS

The environmental conditions present within and adjacent to the Project Parcel indicate that the area is sensitive for historic cultural resources. It is therefore recommended that a Phase 1B Archaeological Field Reconnaissance Survey be undertaken on those undisturbed areas within the Project Parcel that will be impacted by the proposed Dutchess Shepherd Bulkeley Schoolhouse Project.



## II. PHASE 1B ARCHAEOLOGICAL FIELD RECONNAISSANCE SURVEY

### I. ARCHAEOLOGICAL SURVEY METHODOLOGY

Results of the Phase 1A confirmed that the Project Parcel is located in an area of historic activity. Phase 1B field investigations took place on March 7, 2023 under the supervision of Franco Zani Jr and Beth Selig, MA, RPA.

Areas selected for subsurface testing were identified during an intensive walkover inspection which evaluated the landscape to determine areas of prior disturbance, slope in excess of 12% grade, saturated or wet soils, and documented evidence of former land usage. Shovel tests were excavated at intervals of 50' (15 m) along transects conforming to the land surface and the boundaries of the Project Parcel. The locations of the tests and disturbed areas were recorded on a scaled map that shows surveyed borders and has the locations of the various structures or features identified (Field Reconnaissance Map).

Shovel tests (ST's) approximately 45 cm in diameter were spaced 50 feet apart and excavated at least 10 cm into sterile subsoil, unless impeded by rocks or other obstructions. This subsurface testing strategy was employed in areas of undisturbed soils and areas that did not contain surface water. All excavated soils were screened through 0.25-inch hardware cloth. Shovel test profiles were recorded on standard field forms which included stratigraphic depths, Munsell soil color, texture and inclusions, disturbances and artifacts (Appendix B). The presence of clearly modern materials, such as plastic fragments, modern bottle glass fragments, or twentieth-century architectural materials was noted on field forms, but HCS does not generally collect these materials for analysis or inclusion in the artifact assemblage. If any cultural material was recovered, these finds would be bagged and labeled with standard project provenience information. Following completion of archaeological fieldwork, all recovered materials would be washed, identified, inventoried, and re-bagged in labeled clean 4-mil archival quality plastic bags. All cultural material collected would be identified and described based on material type and standard descriptive characteristics and included in an artifact inventory.

### J. ARCHAEOLOGICAL SURVEY RESULTS

Initially the field methodology included the completion of five (5) transects each containing a various number of shovel tests. However, given the amount of disturbance identified at the ground surface, and the asphalt parking area a number of tests were not completed.

Testing began in the north of the Project Parcel, near the corner of Mulberry and East Market Street. This area, consisting of Transects 1 and 2, was previously cleared and contains a packed gravel road, leach field, and large lawn area. The 1940's aerial (figure x) shows that the ground surface has been graded. Soils in this area consisted of brown gravelly silt loams or gravelly loam overlaying a dark yellowish brown gravelly silt loam. Near the schoolhouse, an intermediate layer of dark brown gravelly loam was found under the brown gravelly silt loam and overlying a yellowish brown clay with packed gravel. Plastic, brick fragments, coal, coal slag and window glass fragments were recovered and discarded.

Transect 3 was behind the school, in an area that was heavily disturbed with buried utilities. Only a single shovel test was done here, finding a brown sandy loam overlaying a very dark grayish brown sandy clay loam with dense gravel overlaying a dark yellowish brown coarse sand and gravel.

Transects 4 and 5 were in the western and southern portions of the Project Parcel. These areas have been disturbed by buried utilities and the construction of a playground and parking lot. Soils here were mixed, with soils consisting of dark brown sandy clay loam with gravel, very dark brown gravelly silty clay loam, dark brown coarse sand and gravel, dark brown gravelly silty clay loam, mixed brown and dark yellowish brown gravelly silt loam or mixed dark brown and dark yellowish brown gravelly sandy loam overlaying dark yellowish brown clay loam with gravel, sandy clay with gravel packed gravel and clay or gravelly clay or a dark grayish brown coarse sand and gravel. Transect 4 shovel test 13, and transect 5 shovel test 16 encountered a large ash layer. Metal, nails, coal, coal slag, slag, brick fragments and window glass were recovered from this layer and discarded in the field. Portions of the school burned in 1939, and it is unclear if the existing dwellings on the lot burned at the same time. The ash layer which contained various type of burned and rusted metal, may be the result of building removal and landscape improvements in the wake of the fire.

#### K. SUMMARY AND RECOMMENDATIONS

In March of 2023, Hudson Cultural Services (HCS) completed a Phase 1A Literature Search and Sensitivity Assessment and Phase 1B Archaeological Field Reconnaissance Survey of the proposed Dutchess Shepherd Bulkeley Schoolhouse Project in the Village of Rhinebeck, Dutchess County, New York. The survey evaluated the portions of the parcel to be disturbed. The Project Parcel of Potential Effect (APE) includes ±1.44 acres (0.58 hectares) of urban landscape. Fifteen (15) shovel tests were completed within the boundaries of the Project Parcel. Coal, ash, coal slag, brick fragments, slag, metal, window glass, plastic and nails were found and discarded. The soil profile within the parcel indicates that disturbance has taken place due to the construction and demolition of portions of the school building and the removal of the residential structures in the southern portion of the Parcel.

It is the recommendation of Hudson Cultural Services that no further archaeological investigation is warranted.

These recommendations are subject to concurrence by the New York State Office of Parks, Recreation and Historic Preservation.



Photo 9: Transects 1 and 2 began near East Market Street. View to the west.



Photo 10: The landscape on the southern side of the school building is covered with asphalt. View to the north.



Photo 11: View to the southeast from the western side of the school building.



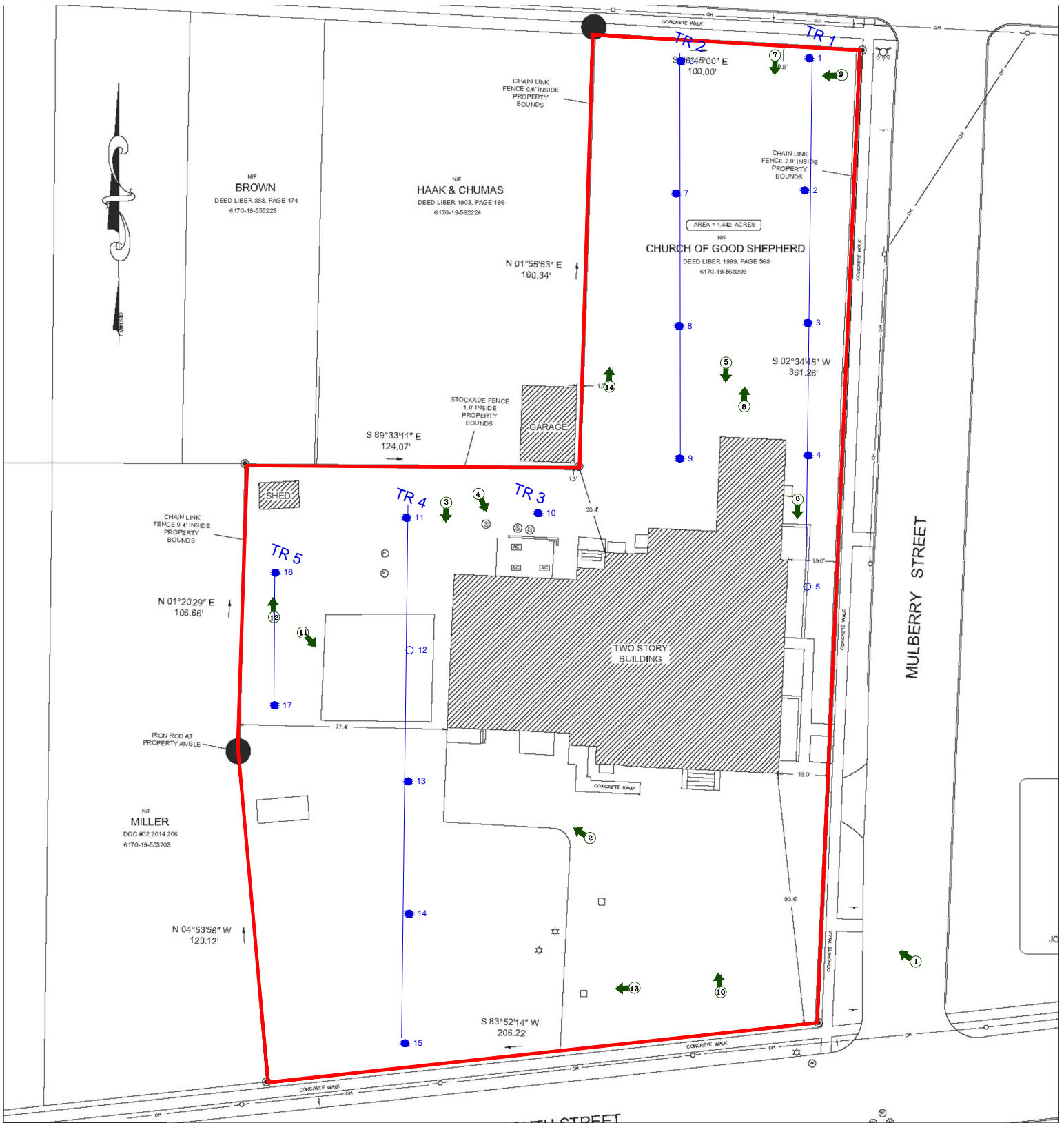
Photo 12: A shed is located in the northwestern portion of the Project Parcel. View to the north, of the location of TR 5.



Photo 13: Stormwater drains are located in the parking area, in the southern portion of the Parcel. View to the west.

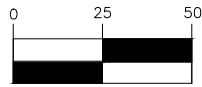


Photo 14: Deep tests, completed by the owner for proposed septic systems show extensive disturbance and building debris to the north of the school building.



**H·C·S**  
Hudson Cultural Services

Figure 18: Dutchess Shepherd Bulkeley School  
Phase 1B Field Reconnaissance Map  
Scale 1" = 50'



( IN FEET )  
1 inch = 50 ft.

- LEGEND**
- ST Sterile Shovel Test Location
  - ST Planned Shovel Test, Not Excavated
  - ➔ ① Photographic View
  - Parcel Boundaries



## L. BIBLIOGRAPHY

- Bailey,  
1995 Description of the Ecoregions of the United States.  
<http://www.fs.fed.us/land/ecosysmgmt/index.html>. Accessed March 9, 2023.
- Beauchamp, William  
1900 *Aboriginal Occupation of New York*. New York State Museum Bulletin No. 32: Albany, NY.
- Bachman, Charles and C.H. Corey.  
1858 *Map of Dutchess County, New York from Actual Surveys*. Gillette, Philadelphia, Pennsylvania.
- Beers, F.W.  
1867 *Atlas of New York*. F.W. Beers, A.D. Ellis, and G.G. Soule, New York.  
1891 *Atlas of the Hudson River Valley from New York City to Troy*. Watson and Co.: New York.
- Coles, Christopher  
1789 *A Survey of the Roads of the United States of America*. Christopher Colles, New York.
- Croswell, E.  
1838 *Laws of the State of New York. Passed at the Sixty-First Session of the Legislature*. Wm.A. Gould & Co. Albany.
- de Laubenfels, D.C.  
1975 *Mapping the World's Vegetation: Regionalization of Formations and Flora*. Syracuse University Press.
- Domack, E.W. (Ed.), Lothrop, J.C., Bradley, J.A.,  
2012 *Paleoindian Occupations in the Hudson Valley, New York*. Texas A & M University Press.
- Dunn, S.  
1994 *The Mohican's and Their Land*. Purple Mountain Press. Fleischmann's NY.
- Eisenstadt, Peter ed.  
2005 *The Encyclopedia of New York State*. Syracuse University Press, Syracuse, NY.
- Fisher, Donald W., Yngvar W. Isachsen, Lawrence V. Rickard  
1970 *Geologic Map of New York, Lower Hudson Sheet*. New York State Museum and Science Service Map and Chart Series No. 15. New York State Museum, Albany, New York.
- Flad, Harvey K., Clyde Griffen  
2009 *Main Street to Main Frames: Landscape and Social Change in Hyde Park*. Ed. Thomas Wermuth. State University of New York Press, Albany.
- Fredriksen, Beatrice  
1962 *Our Local Heritage, A Short History of the Town of Rhinebeck*. Hyde Park, New York: Cross Road Press.
- Funk, Robert E.  
1976 *Recent Contributions to Hudson Valley Prehistory*. New York State Museum Memoir 22. Albany, NY.
- Geo-Access- Dutchess County Web Mapping (<http://geoaccess.co.dutchess.ny.us/geoaccessv2/>) September 21, 2021.

- Hart, J. P., and H. J. Brumbach.  
2005. Cooking Residues, AMS Dates, and the Middle-to-Late Woodland Transition in Central New York. *Northeast Anthropology* 69:1–34.
- Hasbrouck, Frank. Ed.  
1909 *The History of Dutchess County, New York*. S. A. Matthieu: Hyde Park, NY.
- Haviland, Jim  
1996 “Plans Underway for Shift in Sept”. Poughkeepsie Journal. 26 Dec 1996. Accessed at Newspapers.com.
- Küchler, August W.  
1964 *Potential Natural Vegetation of the Conterminous United States*. American Geographical Society, New York.
- Lavin, L., F. Gudrian and L. Miroff.  
1993 Prehistoric Pottery from the Morgan Site, Rocky Hill, Connecticut. *Bulletin of the Archaeological Society of Connecticut* 56:63–100.
- MacCracken, Henry Noble  
1956 *Old Dutchess Forever*. Hasting House Publishers, New York.
- Morse, Howard  
1908 *Historic Old Rhinebeck echoes of two centuries A Hudson River and Post Road Colonial Town*. Self-published, Rhinebeck, NY.
- Natural Resources Conservation Service  
[www.websoilsurvey](http://www.websoilsurvey). March 22, 2022.
- New York State Archaeological Council (NYAC)  
1994 *Standards for Cultural Resource Investigations and the Curation of Archaeological Collections in New York State*. New York Archaeological Council.
- New York State Office of Parks Recreation and Historic Preservation CRIS  
[cris.parks.ny.gov](http://cris.parks.ny.gov) Web Accessed March 30, 2022.
- Parker, Arthur  
1920 *Archaeological History of New York*. New York State Museum Bulletin. No. 237 and 238. The University of the State of New York: Albany, NY.
- Pierson, William H., Jr.  
1970 *American Buildings and Their Architects: The Colonial and Neo-Classical Styles*. Doubleday: New York, N. Y.
- Pretola, J.P. & J.A. Freedman  
2009 *Management Summary: Phase III Data Recovery Black Dirt Deep Testing, Towns of Minisink & Warwick, Orange County, New York*. Submitted to the Federal Agency Regulatory Commission, Docket # CP98-150-000, OPRHP # 04PR02896 by Gray & Pape, Inc., Providence, RI
- Poughkeepsie Eagle News  
1939a “Four Neighbor Companies go to Village Aid”. 21 Apr 1939. Accessed at Newspapers.com.  
1939b “Architect Engaged for Rhinebeck School.” 2 Jun 1939. Accessed at Newspapers.com.  
1938 “Voters in Rhinebeck Reject Playground.” 27 Sept 1938. Accessed at Newspapers.com.
- Poughkeepsie Journal  
1963 “Rhinebeck Slates School Space Talks”. 18 Dec 1963. Accessed at Newspapers.com



- 1952 "Rhinebeck to Move Soon to New Building. 26 Mat 1952. Accessed at Newspapers.com.  
 1949 "Rhinebeck School Plan indicates 1 Million Cost." 13 Jan 1949. Accessed at Newspapers.com.  
 1948 "Rhinebeck Beats School Project." 23 Oct 1948. Accessed at Newspapers.com.
- Reynolds, Helen Wilkenson  
 1938 *The Role of Plant Life in the History of Dutchess County*. Hyde Park: NY.
- Ritchie, William A.  
 1969 *The Archaeology of New York State*. Natural History Press: Garden City, NY.
- Ritchie, William A. and Robert Funk  
 1973 *Aboriginal Settlement Patterns in the Northeast*. Memoir 20. New York State Museum and Science Service. Albany, NY.
- Rhinevault, Carney  
 2009 Town of Rhinebeck History. <http://www.hydeparkny.us/Community/>.
- Salomon, Julian H.  
 1983 "*Munsee and Mahican: Indians of Dutchess County*." Dutchess County Historical Society Yearbook: 68. Hyde Park: NY.
- Shaver, Peter (compiler)  
 1992 *The National Register of Historic Places in New York State*. Preservation League of New York State: Albany, NY.
- Sidney, J.C.  
 1850 *Map of Dutchess County, New York from Original Surveys*. Gillette, Philadelphia, Pennsylvania.
- Smith, James H.  
 1882 *History of Dutchess County, New York*. D. Mason & Co.: Syracuse, NY.
- Smith, Philip H  
 1877 *General History of Dutchess County from 1609 to 1876*. Pawling, New York.
- Snow, Dean R.  
 1980 *The Archaeology of New England*. Academic Press: New York, NY.
- Spectra Inc.  
 2004 Draft Generic Environmental Impact Statement (Dgeis) New York State Statewide Wireless Network (Swn) Geologic Resources Appendix C: Geologic, Structural and Topographic Features of Physiographic Provinces.
- Stilgoe, John R.  
 1982 *Common Landscape of America, 1580-1845*. Yale University Press: New Haven, CT.
- United States Office of Agriculture  
 1981 *Soil Survey of Dutchess County, New York*. In cooperation with Cornell University Agricultural Experimentation Station. U.S. Government Printing Office. Washington D.C.
- United States Geological Survey  
 2019 United State Geological Survey Topographical Map. Kingston East, NY Quadrangle. 7.5 Minute Series.  
 1963 United State Geological Survey Topographical Map. Kingston East, NY Quadrangle. 7.5 Minute Series.

APPENDIX A: SHOVEL TEST RECORDS

| TR | ST | Level | Depth (in) | Depth (cm) | Munsell   | Soil Description  | Cultural Material                                 |
|----|----|-------|------------|------------|-----------|---|---|
| 1  | 1  | 1     | 0-9        | 0-22       | 10YR 4/3  | Brown gravelly silt loam                                  | NCM   |
|    |    | 2     | 9-13       | 22-32      | 10YR 4/6  | Dark yellowish brown gravelly silt loam                   | NCM   |
|    | 2  | 1     | 0-10       | 0-25       | 10YR 4/3  | Brown gravelly silt loam                                  | NCM   |
|    |    | 2     | 10-15      | 25-39      | 10YR 4/6  | Dark yellowish brown gravelly silt loam                   | NCM   |
|    | 3  | 1     | 0-11       | 0-28       | 10YR 4/3  | Brown gravelly silt loam                                  | NCM   |
|    |    | 2     | 11-16      | 28-40      | 10YR 4/6  | Dark yellowish brown gravelly silt loam                   | NCM   |
|    | 4  | 1     | 0-7        | 0-18       | 10YR 4/3  | Brown gravelly loam                                       | NCM   |
|    |    | 2     | 7-11       | 18-29      | 10YR 3/3  | Dark brown gravelly loam                                  | NCM   |
|    |    | 3     | 11-16      | 29-40      | 10YR 5/6  | Yellowish brown packed gravel and clay                    | NCM   |
|    | 5  |       |            |            |           | Not Excavated - Sidewalk Grading                          |   |
| 2  | 6  | 1     | 0-11       | 0-27       | 10YR 4/3  | Brown gravelly silt loam                                  | Plastic discarded                                 |
|    |    | 2     | 11-15      | 27-39      | 10YR 4/6  | Dark yellowish brown gravelly silt loam                   | NCM   |
|    | 7  | 1     | 0-13       | 0-34       | 10YR 4/3  | Brown gravelly silt loam                                  | NCM   |
|    |    | 2     | 13-18      | 34-46      | 10YR 4/6  | Dark yellowish brown gravelly silt loam                   | NCM   |
|    | 8  | 1     | 0-10       | 0-26       | 10YR 4/3  | Brown gravelly silt loam, Stopped by large flat stone.    | Brick fragments, window glass, coal and coal slag |
|    | 9  | 1     | 0-13       | 0-32       | 10YR 4/3  | Brown gravelly silt loam                                  | Coal, coal slag discarded                         |
|    |    | 2     | 13-18      | 32-45      | 10YR 4/6  | Dark yellowish brown gravelly silt loam                   | NCM   |
| 3  | 10 | 1     | 0-7        | 0-18       | 7.5YR 4/4 | Brown sandy loam  | NCM   |
|    |    | 2     | 7-12       | 18-30      | 10YR 3/2  | Very dark grayish brown sandy clay loam with dense gravel | NCM   |
|    |    | 3     | 12-16      | 30-40      | 10YR 4/6  | Dark yellowish brown coarse sand and gravel               | NCM   |
| 4  | 11 | 1     | 0-17       | 0-42       | 10YR 3/3  | Dark brown sandy clay loam with gravel                    | Nail, coal and brick fragments discarded          |
|    |    | 2     | 17-22      | 42-56      | 10YR 4/6  | Dark yellowish brown clay loam with gravel                | NCM   |
|    | 12 | 1     |            |            |           | Not Excavated - Playground                                |   |

| TR | ST | Level | Depth (in) | Depth (cm) | Munsell        | Soil Description  | Cultural Material                                    |
|----|----|-------|------------|------------|----------------|---|--|
|    | 13 | 1     | 0-9        | 0-22       | 10YR 3/2       | Very dark grayish brown gravelly silty clay loam              | NCM  |
|    |    | 2     | 9-11       | 22-28      |                | Coal and Ash Layer  | Coal, coal slag and ash discarded                    |
|    |    | 3     | 11-15      | 28-38      | 10YR 4/6       | Dark yellowish brown sandy clay with gravel                   | NCM  |
|    | 14 | 1     | 0-14       | 0-35       | 10YR 3/3       | Dark brown coarse sand and gravel, Stopped by concrete        | Brick fragments, window glass and coal discarded     |
|    | 15 | 1     | 0-4        | 0-11       | 10YR 3/3       | Dark brown gravelly silty clay loam                           | NCM  |
|    |    | 2     | 4-16       | 11-30      | 10YR 4/6       | Dark yellowish brown packed gravel and clay                   | NCM  |
| 5  | 16 | 1     | 0-12       | 0-31       | 10YR 4/3 & 4/6 | Mixed brown and Dark yellowish brown gravelly silt loam       | Metal and coal discarded                             |
|    |    | 2     | 12-17      | 31-44      |                | Coal and Ash Layer  | Coal, coal slag and slag discarded                   |
|    |    | 3     | 17-22      | 44-57      | 10YR 4/6       | Dark yellowish brown gravelly clay                            | NCM  |
|    | 17 | 1     | 0-19       | 0-47       | 10YR 3/3 & 4/6 | Mixed dark brown and dark yellowish brown gravelly sandy loam | Brick, coal, coal slag, slag, window glass discarded |
|    |    | 2     | 19-25      | 47-63      | 2.5Y 4/2       | Dark grayish brown coarse sand and gravel. Stopped by rock    | NCM  |