Cricket Valley Energy Laydown Site

Interim Phase 1B Archaeological Field Reconnaissance Survey Report

(OPRHP 07PR03272)

Route 22 at County Route 6 (Old Route 22)
Town of Dover, Dutchess County, New York

Prepared for:

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By:

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January 2011

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Management Summary

SHPO Project Review Number (if available): **OPRHP 07PR03272**

Involved State and Federal Agencies (DEC, CORPS, FHWA, etc): DEC,

Phase of Survey: **Interim Phase 1B Archaeological Field Reconnaissance Survey**

Location Information:

Location: **Route 22 at County Route 6 (Old Route 22)**

Minor Civil Division: **Town of Dover**

County: **Dutchess**

Survey Area (Metric & English)

Length:

Width:

Depth (when appropriate):

Number of Acres Surveyed**: ±30 acres (12 hectares)**

Number of Square Meters & Feet Excavated (Phase II, Phase III only): **N/A**

Percentage of the Site Excavated (Phase II, Phase III only):

USGS 7.5 Minute Quadrangle Map: **Dover Plains**

Archaeological Survey Overview

Number & Interval of Shovel Tests **217 @ 50'**

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 prehistoric sites identified: 0

Number & name of historic sites identified: 0

Number & name of sites recommended for Phase II/Avoidance: N/A

Results of Architectural Survey

Number of buildings/structures/cemeteries within project area: **0**

Number of buildings/structures/cemeteries adjacent to project area: **0**

Number of previously determined NR listed or eligible buildings/structures/cemeteries/districts:

Number of identified eligible buildings/structures/cemeteries/districts: N/A

Report Author (s): **Gail T. Guillet, Stephanie Roberg-Lopez M.A., R.P.A. and Beth Selig**

Date of Report: **January 2011**

Introduction

In December of 2010, CITY/SCAPE: Cultural Resource Consultants began a field reconnaissance level archaeological survey of the Cricket Valley Energy Laydown Site in the Town of Dover Plains, Dutchess County, New York. (Maps 1 & 2) Archaeological fieldwork was supervised by Stephanie Roberg-Lopez, M.A., R.P.A., Principal Investigator. Stephanie Bower acted as crew chief. Field technicians included Samantha Browne, Eric Riesman, Franco Zani and David Harris. Writing of the interim Phase 1B report was completed by Beth Selig, under the supervision of Stephanie Roberg-Lopez. The preparation of the field reconnaissance map, the shovel test records, site photography and production of the interim report were completed by Beth Selig.

This interim Phase 1B report of the field survey for the Cricket Valley Energy Laydown Site is being provided at the request of Cricket Valley Energy LLC. Work on the Cricket Valley Energy Laydown Site began on December 15 and continued through December 20, 2010. Work was suspended due to a precipitous drop in temperature which froze the ground to a depth of 8 inches, precluding further hand excavation. Following the drop in temperature, almost 2 feet of snow fell, effectively obscuring the ground surface. A site visit on January 3, 2011 confirmed that conditions on the site remained unchanged, despite the insulation of the snow cover and several days of warmer weather. Fieldwork has, therefore, been suspended until the snow cover melts and the ground has thawed. At this time, approximately one half of the project APE has been tested, and the results to date are presented below. Once the final fieldwork has been completed, the Phase 1B report will be updated to reflect the completed survey.

Project Area Description

The proposed project is located on the east side of NYS Route 22 in the Town of Dover, Dutchess County, New York. (Maps 1-2 & Fig. 1) The Cricket Valley Laydown Site consists of a generally triangular shaped parcel of land with a keyhole shaped outparcel on the southern boundary. The northern boundary extends west to east through a series of agricultural fields planted with corn and rye. The eastern boundary extends to County Route 6 (CR 6/Old Route 22) north of the farmstead located on the east side of CR 6. The southern boundary is an irregular line that generally follows a small stream that flows from the west side of Route 22 along the base of the hill located south of the project area. The entire project area consists of ±30 acres (12 hectares). The project area appears completely level, but topographical maps indicate that the land slopes gently from the north to the south and west to east. The project area is vacant, but is associated with the dwellings and farm buildings that front on CR 6 (Old Route 22).

It is proposed to use the Cricket Valley Laydown Site to store construction material and to provide parking for as many as 849 vehicles. Three stormwater management basins are proposed along the southern boundary of the site. Two of the three will be located on either side of the keyhole shaped outparcel, while the third is to be located directly behind the large barn associated with the farmstead. There will be an entrance into the site from Route 22.

Phase 1A Information

The Phase 1A Literature Review and Sensitivity Analysis for the Cricket Valley Energy Laydown Site was completed in October 2010. In order to provide a background for the Interim Phase 1B report, information from the Phase 1A report is presented below:

> The topography of the Cricket Valley Energy Laydown Site is generally level, with elevations on the site sloping gently from 412' (125.6 m) Above Mean Sea Level (AMSL) in the center of the field to 399' (121.6 m) in the southwestern corner of the site and 380' (115.8 m) in the southeastern portion.
>
> The characteristics of the soils within the project area have an important impact on the potential for the presence of cultural material, since the types of soils present affected the ability of an area to support human populations. Topographically, the Cricket Valley Energy Laydown Site is located in an area characterized by level plains with slopes ranging from 0 to 2 percent. With the exception of a small steeper area along Route 22, which contains Copake gravelly silt loam (CuC), the majority of the Cricket Valley Laydown Site APE is Copake gravelly silt loam (CuA). Copake gravelly silt loam, formed in glaciofluvial deposits, is very deep to bedrock and well drained. It is found on valley floors and outwash plains. The keyhole outparcel, which is within the property boundary, but outside the APE, and the land immediately to the north, along the stream corridor (also outside the APE), is Pawling silt loam complex (Pg) and Wayland silt loam complex (Wy). Pawling silt loam complex is associated with floodplains; it is very deep to bedrock and moderately well drained. Wayland silt loam complex is identified in the *Soil Survey of Dutchess County* as a wetland soil that is very deep to bedrock, nearly level, and poorly to very poorly drained. The soils within the APE, being level and well drained, would potentially have been attractive to prehistoric peoples, particularly since there is fresh water immediately to the south.
>
> The forest zone in which the project area is located is the Appalachian Oak-Northern Hardwood Zone, which is characterized by red and white oak intermingled with northern hardwoods, such as beech, sugar maple and birch, and evergreens, such as hemlock (Küchler 1964). Oak and beech, as well as other hardwoods, including chestnut and shagbark hickory, provide nuts that would have been an attraction for wildlife, as well as providing an important food resource for Native American peoples.
>
> Drainage on the site is southward into the unnamed stream that flows along the southern boundary of the site. The presence of fresh water, which could have provided water for Native American peoples, would also have attracted game and provided fresh water resources, such as fish and amphibians. The stream flows into the Swamp River, a tributary of the Ten Mile River. These river corridors could have been used by Native Americans to access the interior of the Town of Dover and the Cricket Valley Energy Laydown Site.
>
> Based on environmental conditions on the project area (described in brief above), it was considered that the Cricket Valley Energy Laydown Site had a moderate to high potential to contain prehistoric cultural material. The sensitivity of the site was increased by the fact that prehistoric material has been recovered from land with similar topography to that found on the Cricket Valley Energy Laydown Site. In addition to these factors, two prehistoric sites had been identified on the River Valley Estates property, which is located on the south side of Sherman Hill Road.

In 2003, Greenhouse Consultants Incorporated (GCI) completed a Stage 1 and Stage 2 Archaeological Survey of the River Valley Estates site, which is, as stated, located on the east side of Sherman Hill Road GCI 2003). The Phase 1B survey of the property identified two prehistoric sites, which GCI named the Jasper Site and the Corn Snake Site. Initial testing on the Jasper Site yielded a hammerstone (recovered from shovel test pit 64 (STP 64)) and a "very small [red] jasper core." Six additional shovel test pits and a single 3 foot by 3 foot unit (Unit 4) were excavated on the Jasper Site, but no additional prehistoric cultural material was recovered. Based on the results of the Phase 2 investigation, it was GCI's opinion that the Jasper Site had a low research potential, and no further work was recommended. The Corn Snake Site, located on a terrace overlooking the Swamp River, yielded prehistoric material (STP 93, 94 & 138) in the form of black, gray and blue-gray chert and clear quartz debitage, a quartzite abrader and Fire Cracked Rock (FCR). Shovel testing and unit excavations at the Corn Snake Site led to the determination that the Corn Snake Site was eligible for listing on the National Register of Historic Places, and preservation in place was recommended. During the Phase 2 work on the River Valley Estates site, an additional area, located within the floodplain of the Swamp River, was added to the APE. This area, identified as Grid 5, was subjected to trenching with mechanical equipment to determine whether buried cultural horizons were present: no prehistoric cultural material was recovered, and it was concluded, based on the soil profiles in the area, that deeply stratified deposits were not possible.

The historic potential of the Cricket Valley Energy Laydown Site, in contrast to the prehistoric potential, was considered low. The property was owned by the Waller family from the mid-19th century through 1876, and perhaps later, but the Waller dwelling and farm buildings are located along CR 6/Old Route 22; no Map Documented Structures (MDS) were located within the project area. Given farming practices in the past, it was considered possible that a scattering of historic artifacts might be recovered from the project area, but that these would represent materials broadcast across the landscape, rather than an historic archaeological site.

Based on the moderate to high potential for the Cricket Valley Energy Laydown Site to contain prehistoric cultural resources, it was recommended that testing at the level of a Phase 1B Field Reconnaissance Survey be undertaken within the APE (Area of Potential Effect) to rule out the presence of prehistoric cultural remains.

Interim Phase 1B Report

As explained above, this interim Phase 1B report of the field survey for the Cricket Valley Energy Laydown Site has been requested by the Cricket Valley Energy LLC, in order to provide information concerning the work completed to date on the Cricket Valley Energy Laydown Site. Work on the Cricket Valley Energy Laydown Site began on December 15, 2010 and continued through December 20, 2010, but was suspended when a precipitous drop in temperature froze the ground to a depth of 8 inches, precluding further hand excavation. Following the drop in temperature, almost 2 feet of snow fell, effectively obscuring the ground surface. A site visit on January 3, 2011 confirmed that conditions on the site remained unchanged, despite the insulation of the snow cover and several days of warmer weather. Fieldwork has, therefore, been suspended until the snow cover melts and the ground has thawed. At this time, approximately one half of the project APE has been tested, and the results of the Phase 1B excavations

to date are presented below. Once the final fieldwork has been completed, the Phase 1B report will be updated to reflect the completed survey.

Phase 1B Methodology

The Cricket Valley Energy Laydown Site is located in an area where prehistoric archaeological material has been identified, including one at the intersection of Route 22 and County Route 6 (Old State Route 22), and two others on the River Valley Estates property on the south side of Sherman Hill Road to the south of the Cricket Valley Energy Laydown Site. As discussed above, the presence of prehistoric sites less than a ¼ mile from the project area suggests that the potential for the Cricket Valley Energy Laydown Site to contain prehistoric cultural resources is moderate to high. In addition, the Cricket Valley Energy Laydown Site closely conforms to an ecological model that suggests the project area is highly sensitive for prehistoric cultural materials. The site consists of a large level corn field with well drained soils. Although the corn had been harvested from the field, the owner of the property was unwilling to plow the field before the spring planting. As a result, hand excavation was required in the portions of the field within the APE.

Areas selected for subsurface testing were identified during a comprehensive walkover of the property. This walkover served to evaluate the site, assess any areas of prior disturbance, rule out slope and designated wetlands, assess available raw material and habitation resources, and determines former land usage. For the purposes of the Phase 1B survey, the Area of Potential Effect (APE) is the Cricket Valley Energy Laydown Site, which is located within a larger parcel of land. On the accompanying maps, the parcel boundaries are indicated by a red line, while those of the project area APE are indicated by a blue line.

Areas selected for shovel testing were tested at intervals of 50 feet (15.24 m) along transects conforming to the land surface. The areas selected for testing were identified based on environmental factors, topography and known activity patterns of prehistoric populations. The locations of the tests and the boundaries of the APE are depicted on a large scale map that shows surveyed borders, the locations of structures and the current project boundaries. (Field Reconnaissance Map)

Field Methodology

Field Methodology employed at the Cricket Valley Energy Laydown Site consisted of several stages of investigation. These included:

1. A walkover and visual inspection of the site to assess areas of potential sensitivity for prehistoric cultural remains;

2. The excavation of a stratigraphic control test to establish the stratigraphy of the site and to identify the depth and composition of the sterile glacially deposited subsoil;

3. Systematic visual inspection of the land surface to rule out the presence of rock faces and overhangs;

4. Shovel testing in the areas identified as having a potential sensitivity for prehistoric remains;

The field methodology utilized was hand excavation of shovel test pits (STPs) in the sensitive areas within the Area of Potential Effect (APE) on the Cricket Valley Energy Laydown Site. The testing involved excavating 40cm (16 inches) diameter shovel tests at 50 feet (15.24 m) intervals. Soils were passed through a ¼ inch (6 mm) steel mesh screen and the materials remaining in the screens were carefully examined for historic and prehistoric artifacts. Had items been recovered from the screens, they would have been assigned to the stratum from which they were obtained. The stratigraphy of each test was recorded, including the depth and the soil description of each layer. (Appendix B: Shovel Test Record)

Field Results

At the time that the fieldwork was suspended at the end of December, 2010, a total of 216 shovel tests had been excavated along 24 transects, effectively testing the southern half of the Cricket Valley Energy Laydown Site APE. This is the area of the Cricket Valley Energy Laydown Site APE in which several of the stormwater management features are to be located, and represents the most extensive area within the Cricket Valley Energy Laydown Site where subsurface excavations related to the project will take place. Transects began along the eastern boundary of the site, and were aligned east to west terminating at the Cricket Valley Energy Laydown Site's western boundary parallel to Route 22. Soils encountered in the testing completed in December, 2010 consisted of dark brown silt loam overlying dark yellowish brown sandy clay with gravel. No cultural material of any kind was recovered.

At the time of this interim Phase 1B report, the northern portion of the site has not been tested, due to the ground being frozen to a depth of 8 inches. It is in the northern area that Stormwater Management Area 2 is located; this is also the area where parking spaces will be created for the crew working on the Cricket Valley Energy LLC site. Although a member of the field crew will periodically spot check conditions in the field, the Phase 1B field work has been suspended until the soils have thawed. The results of the testing in the northern half of the Cricket Valley Energy Laydown Site APE will be included in the final Phase 1B Archaeological Field Reconnaissance Survey report.

Rock Shelters and Mines

The site was carefully inspected for any rock formations with the potential to yield lithic raw materials or shelter. The Cricket Valley Energy Laydown Site APE is a level agricultural field, with no bedrock outcrops or areas of surficial bedrock that could have provided shelter or lithic resources to prehistoric peoples.

Summary and Conclusions

In late December, 2010, an interim Phase 1B Archaeological Field Reconnaissance Survey report for the Cricket Valley Energy Laydown Site APE was prepared at the request of Cricket Valley Energy LLC of Boston,

MA. At the present time, the Phase 1B Archaeological Field Reconnaissance Survey has not been completed due to weather conditions that have frozen the soil to a depth of 8 inches and snow cover that has obscured the ground surface. A site visit made on January 3, 2011 confirms that the weather conditions have not moderated, and that the soils have not begun to thaw. We will continue to monitor conditions on the site, and expect that the crew will complete the Phase 1B excavations on the Cricket Valley Energy Laydown Site as soon as the ground is sufficiently thawed to allow hand excavation of the shovel test pits.

The Phase 1B Archaeological Field Reconnaissance Survey has excavated 216 shovel test pits within an area representing approximately half of the Cricket Valley Energy Laydown Site APE. To date the Phase 1B survey has not identified any prehistoric sites of any kind within the Cricket Valley Energy Laydown Site APE, and CITY/SCAPE does not consider it likely that any sites identified in the second half of the Phase 1B survey would preclude development of the Cricket Valley Energy Laydown Site. In discussions between Cricket Valley LLC and CITY/SCAPE: Cultural Resource Consultants, it has been agreed that Cricket Valley LLC will not begin work of any kind on the Cricket Valley Energy Laydown Site until the Phase 1B Archaeological Field Reconnaissance Survey has been completed. Based on this agreement with Cricket Valley LLC, it is the recommendation of CITY/SCAPE: Cultural Resource Consultants that the permit process be allowed to proceed while we wait for the weather to moderate to a point where subsurface testing can be completed.

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MAPS & FIGURES

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Maps

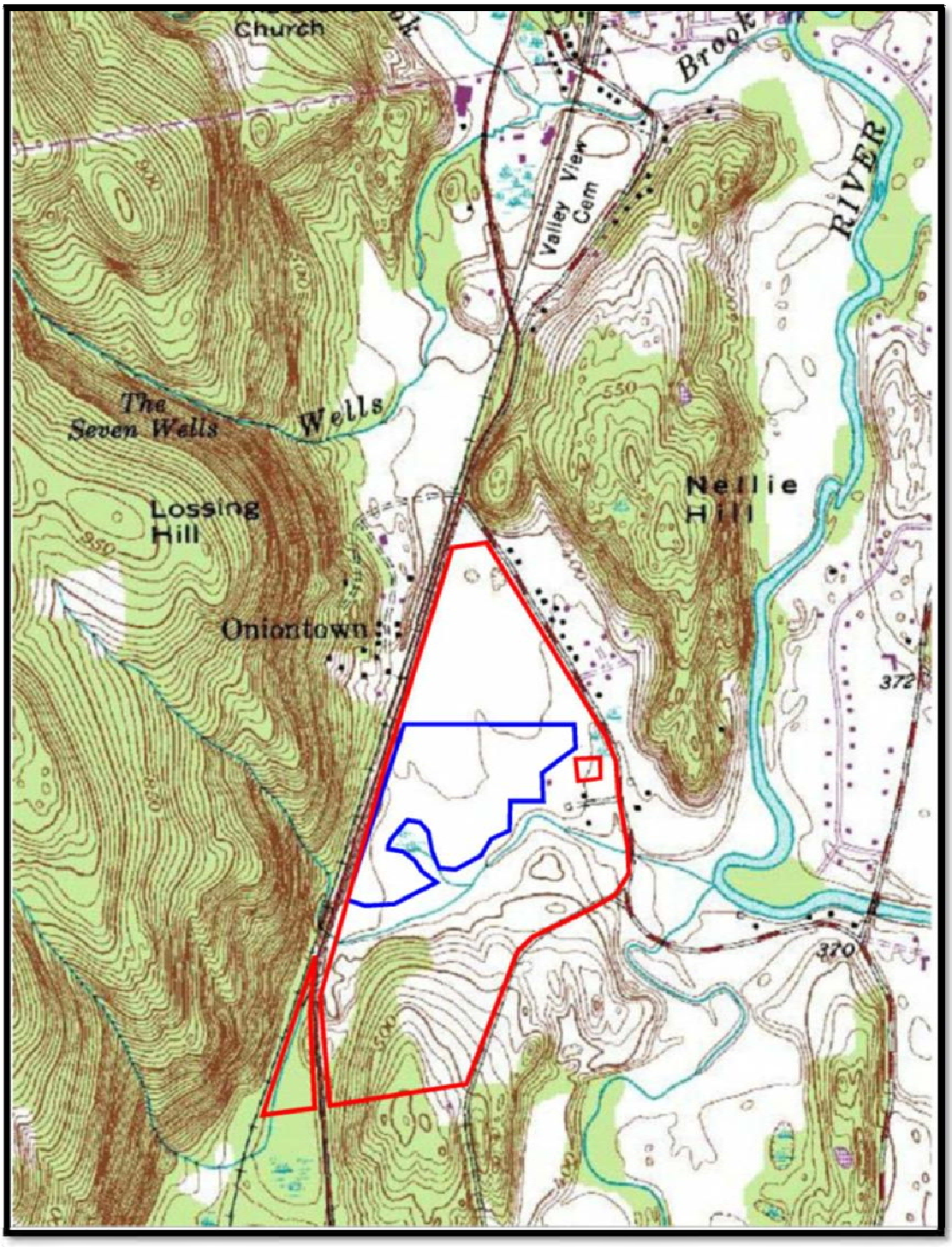
Map 1: 1989 USGS Topographical Map. Dover Plains Quadrangle. 7.5 Minute Series. Red line indicates property boundaries. Blue line indicates APE. Scale: 1"=1500'.

Map 2: Location map showing the Cricket Valley Energy Laydown Site. Source: Hagstrom's *Dutchess County Street Atlas* 2004. Red line indicates property boundaries. Blue line indicates APE. Scale: 1"=2250'.

Figures

Fig. 1: Aerial Image of Cricket Valley Laydown Site. Source: The Chazen Companies. Red line indicates property boundaries. Yellow dashed line indicates APE. Scale: 1"=750'.

Fig. 2: Cricket Valley Energy Laydown Site. Interim Phase 1B Field Reconnaissance Map. Scale 1"-100'



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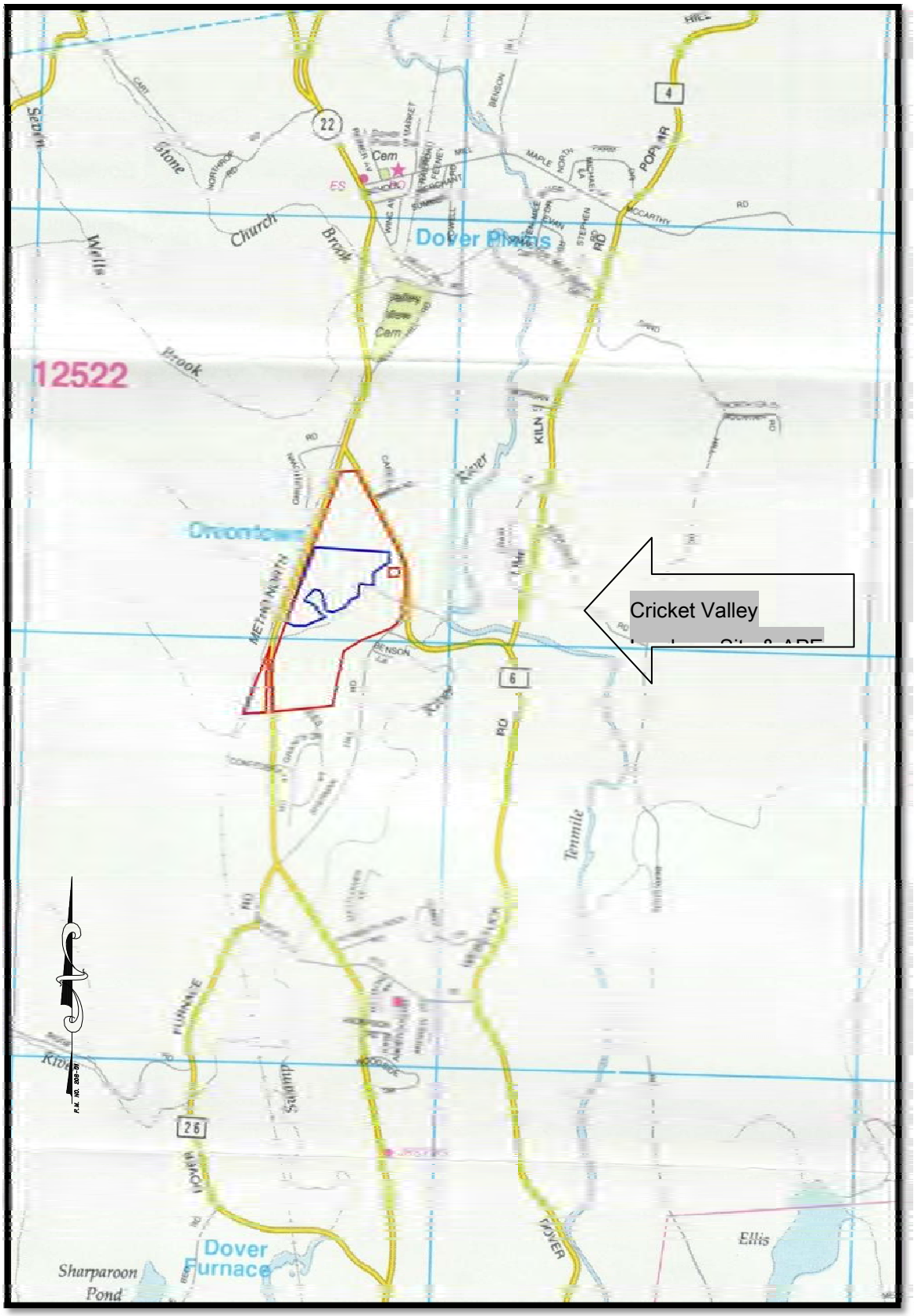

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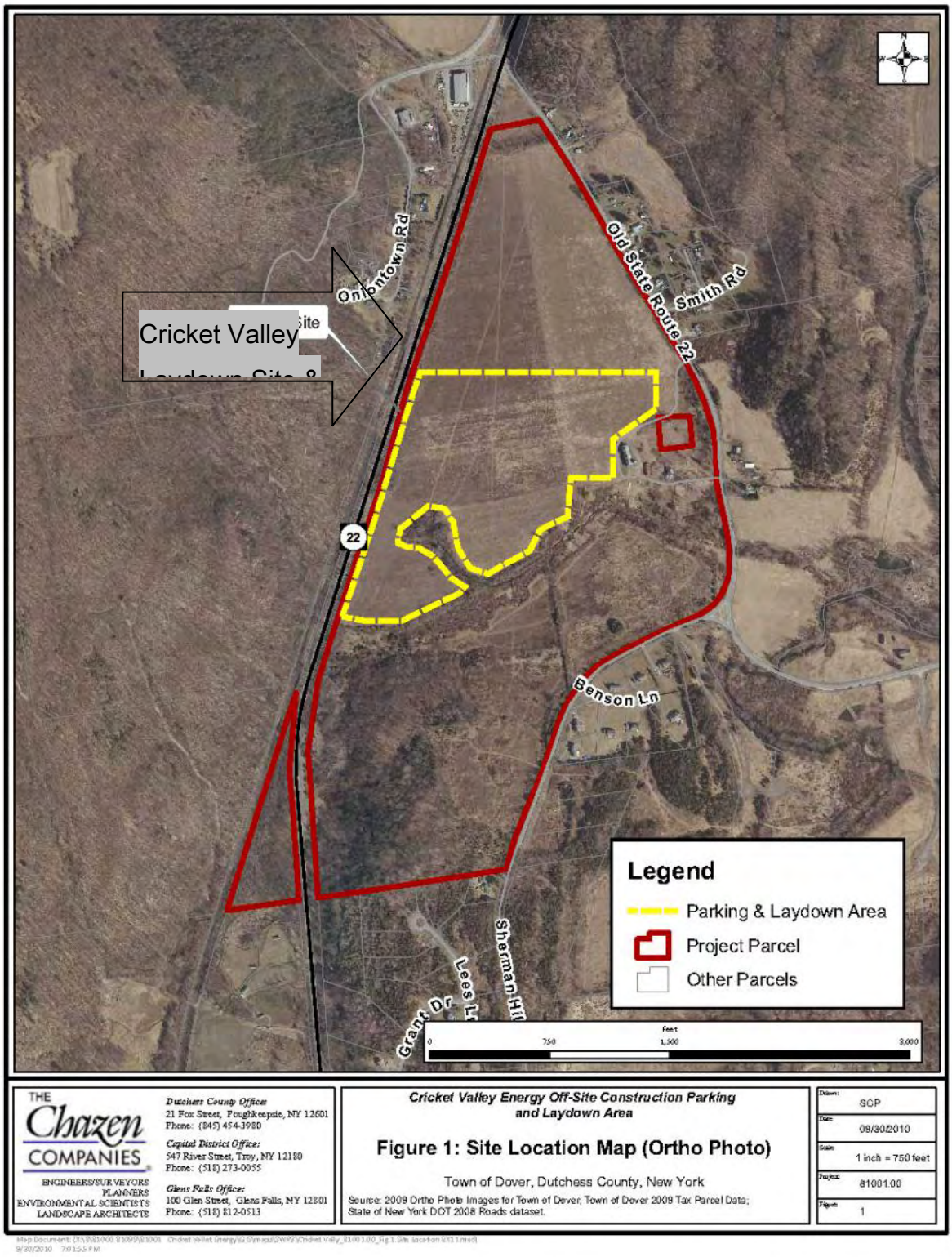

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