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ADDENDUM II TO THE PHASE I ARCHAEOLOGICAL SURVEY OF THE BEECH RIDGE WIND ENERGY PROJECT & ASSOCIATED TRANSMISSION SUPPORT LINE, GREENBRIER AND NICHOLAS COUNTIES, WEST VIRGINIA

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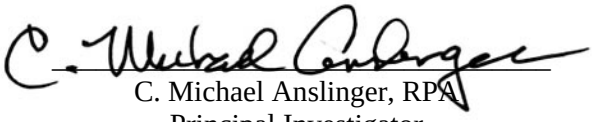

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Lead Agency: West Virginia Public Service Commission, Case #.: 05-1590-E-CS
West Virginia State Historic Preservation Office FR #.: 06-147-GB-27

MANAGEMENT SUMMARY

In 2008, Cultural Resource Analysts, Inc. conducted Phase I archaeological survey for the proposed Beech Ridge Wind Energy and associated Transmission Support Line project in Greenbrier and Nicholas counties, West Virginia. The survey was completed under contract with Potesta & Associates, Inc., on the behalf of Beech Ridge Energy LLC. Systematic survey resulted in the identification of six newly recorded archaeological sites (46Gb445-46Gb450). The West Virginia State Historic Preservation Office commented on the report in a letter dated March 9, 2009.

During the period April 6-8, 2009, Cultural Resource Analysts, Inc. completed systematic Phase I survey for an approximate 8.9-ha (22.1-ac) addendum tract selected as the new site for the construction laydown and batch plant located in Williamsburg District, Greenbrier County, West Virginia. Systematic survey resulted in the identification of one previously undocumented archaeological site (46Gb467).

In September 2009, Beech Ridge Energy LLC notified Cultural Resource Analysts, Inc. that they required Phase I survey of an additional tract for the location of a newly proposed Operations and Maintenance Facility, not examined during prior 2008 and 2009 investigations. The newly proposed Operations and Maintenance Facility tract incorporates approximately 0.92 ha (2.26 ac) of ridgetop saddle located between Beech Knob and Little Beech Knob in Williamsburg District, Greenbrier County, West Virginia. Phase I survey of the tract was completed during the period September 29-30, 2009.

Because of the general lack of surface visibility, the principal method of investigation was shovel testing. Systematic survey resulted in the identification of one previously undocumented archaeological site (46Gb468). The site consists of a multicomponent, low-density artifact scatter containing mixed deposits of prehistoric lithic materials and historic/modern domestic materials within disturbed contexts. Evidence of cultural features and/or midden was not discovered.

Based on extant information, it is the recommendation of Cultural Resource Analysts, Inc. that 46Gb468 is ***not eligible*** for listing in the National Register of Historic Places. ***No additional archaeological investigations*** are recommended for the site or the proposed Operations and Maintenance Facility tract in general. However, should evidence of intact archaeological deposits or human burials be identified during construction or project activities, work in the area of discovery should cease and the West Virginia Public Service Commission and the West Virginia State Historic Preservation Office should be notified of the discovery.

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I. INTRODUCTION AND BACKGROUND

Between August 25 and September 26, 2008, personnel from Cultural Resource Analyst Inc. (CRA) conducted Phase I archaeological survey on approximately 69.9 ha (172.6 ac) of land for the proposed Beech Ridge Wind Energy project and associated Transmission Support Line (Beech Ridge Wind Energy Facility) located in Greenbrier and Nicholas counties, West Virginia (Meece and Smith 2008). The survey was completed under contract with Potesta & Associates, Inc. (Potesta) to aid Beech Ridge Energy LLC (Beech Ridge) achieve compliance. The Beech Ridge Wind Energy Facility is located in north central Greenbrier County and southeast Nicholas County, West Virginia (Figure 1), and includes the development of a wind turbine power-generating facility, new access roads, upgrading existing access roads, an operations and maintenance facility, a transmission line, and a substation.

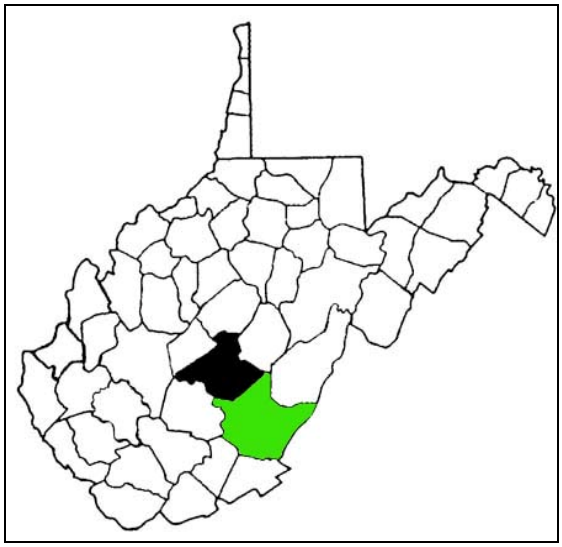

Figure 1. Location of Greenbrier and Nicholas Counties, West Virginia.

This survey resulted in the identification of six newly recorded archaeological sites (46Gb445-46Gb450). Site 46Gb445 is a potential stone mound. Site 46Gb446 is a multicomponent artifact scatter containing prehistoric lithic debris and historic-period refuse. Sites 46Gb447 and 46Gb448 are possible historic-period gravesites. Sites 46Gb449 and 46Gb450 are prehistoric lithic scatters of unknown cultural and temporal affiliation.

A technical report detailing information generated by the survey was submitted on January 28, 2009 (Meece and Smith 2008). In response, the WVSHPO issued a comment letter dated March 9, 2009, stating that the report satisfactorily addressed their concerns regarding the presence of intact archaeological resources within the area proposed for the construction of the Beech Ridge Wind Energy Facility (Appendix A).

In early April 2009, CRA was notified by Beech Ridge that Phase I survey was required for the location of a proposed construction laydown and batch plant not examined during the 2008 survey. Phase I survey of the 8.9-ha (22.1-ac) tract selected for the proposed laydown and batch plant was examined by CRA during the period April 6-8, 2009. Systematic survey resulted in the identification of one previously undocumented archaeological site (46Gb467), defined as a prehistoric lithic scatter of unknown cultural and temporal affiliation. A technical report detailing information generated by the survey was submitted on April 13, 2009 (Meece 2009). In response, the WVSHPO issued a comment letter dated April 17, 2009, stating that the report satisfactorily addressed their concerns regarding the potential of the project to affect historic properties, and indicated that no further consultation was required regarding 46Gb467 (Appendix A).

In September 2009, Beech Ridge notified CRA that they required Phase I survey of an additional tract for the location of a newly proposed Operations and Maintenance (O&M) Facility not examined during prior 2008 and 2009 investigations. The newly proposed O&M Facility tract incorporates approximately 0.92 ha (2.26 ac) of ridgetop saddle located between Beech Knob and Little Beech Knob (Figures 2-3).

Phase I survey of the tract selected for the newly proposed O&M Facility was examined by CRA during the period September 29-30,

2009. The purpose of the survey was to examine the tract for any archaeological sites that might be present. Project boundaries were defined by Beech Ridge personnel prior to the start of survey.

Fieldwork was conducted by project archaeologist Jason Baker, with assistance from Richard Butler, Paul Paternostro, and Shawn Parsons. Laboratory analysis was conducted by Leslie Holder and Jamie Meece. Michael Anslinger served as principal investigator, over-seeing all aspects of the survey.

II. PURPOSE AND SCOPE

For the purpose of this project, a ***Phase I archaeological survey*** is defined as a reconnaissance-based survey designed to document and evaluate archaeological sites. An ***archaeological site*** is defined as any belowground remains and/or aboveground ruins of a district, site, building, structure, or object 50 years of age or older. A ***historic property*** is defined as any archaeological site listed in or determined eligible to the NRHP. An ***effect*** is defined as any activity that alters a characteristic of a historic property qualifying it for inclusion in, or eligibility to, the NRHP.

The 0.92-ha (2.26-ac) project area is considered the direct Area of Potential Effects (direct APE) as defined by 36 CFR 800.16 (d). CRA understands that the indirect APE and indirect effects to historic properties from the Beech Ridge Wind Energy Facility have previously been addressed. Therefore, the sole purpose of this report is to address direct effects to archaeological sites located within the footprint of the newly proposed O&M Facility.

The Beech Ridge Wind Energy Facility is subject to review by the West Virginia Public Service Commission (WVPSC). To meet WVPSC conditions, the project requires consultation with the WVSHPO concerning effects to historic properties.

Consultation between Beech Ridge and the WVSHPO lead to the execution of a Memorandum of Agreement (MOA), which included programmatic language requiring archaeological work prior to the initiation of construction activities (Appendix B). The results of the archaeological investigation reported herein were prepared to meet the requirements of Stipulation B.1 of the MOA. As required by Stipulation B.1.a of the MOA, a Scope of Work (SOW) for conducting Phase I archaeological survey for the Beech Ridge Wind Energy Facility was developed in consultation with the WVSHPO (see Meece and Smith 2008). The tasks completed to address the SOW for the current project followed the same guidelines and conditions developed for the original survey.

III. PROJECT AREA DESCRIPTION

The current project area consists of approximately 0.92 ha (2.26 ac) located within the saddle situated between Beech Knob and Little Beech Knob in Williamsburg District, Greenbrier County, West Virginia (Figures 2-4).

Elevations range from approximately 1,196.4 m (3,925.2 ft) to 1,209.1 m (3,966.9 ft) above mean sea level (msl). Vegetation is dominated by maintained grasses, and much of the area exhibits evidence of ground disturbance likely associated with historic and/or modern mechanical grading and agricultural activities (Figure 5). Primary surface drainage is provided by McMillion Creek and Beech Run to the north, both of which flow into Laurel Creek, and Long Branch to the south, which flows into Big Clear Creek.

Project Soils

The general soils map of Greenbrier County indicates that the project area is located within the Dekalb-Gilpin-Laidig-Cookport soil association. Soils in this association are moderately deep-to-deep, well-drained to moderately well-drained, very steep to gently sloping, very stony soils along high mountains (Gorman et al. 1972).

Specific soils in the project area consist of Dekalb-Cookport loams, 3 to 12 percent

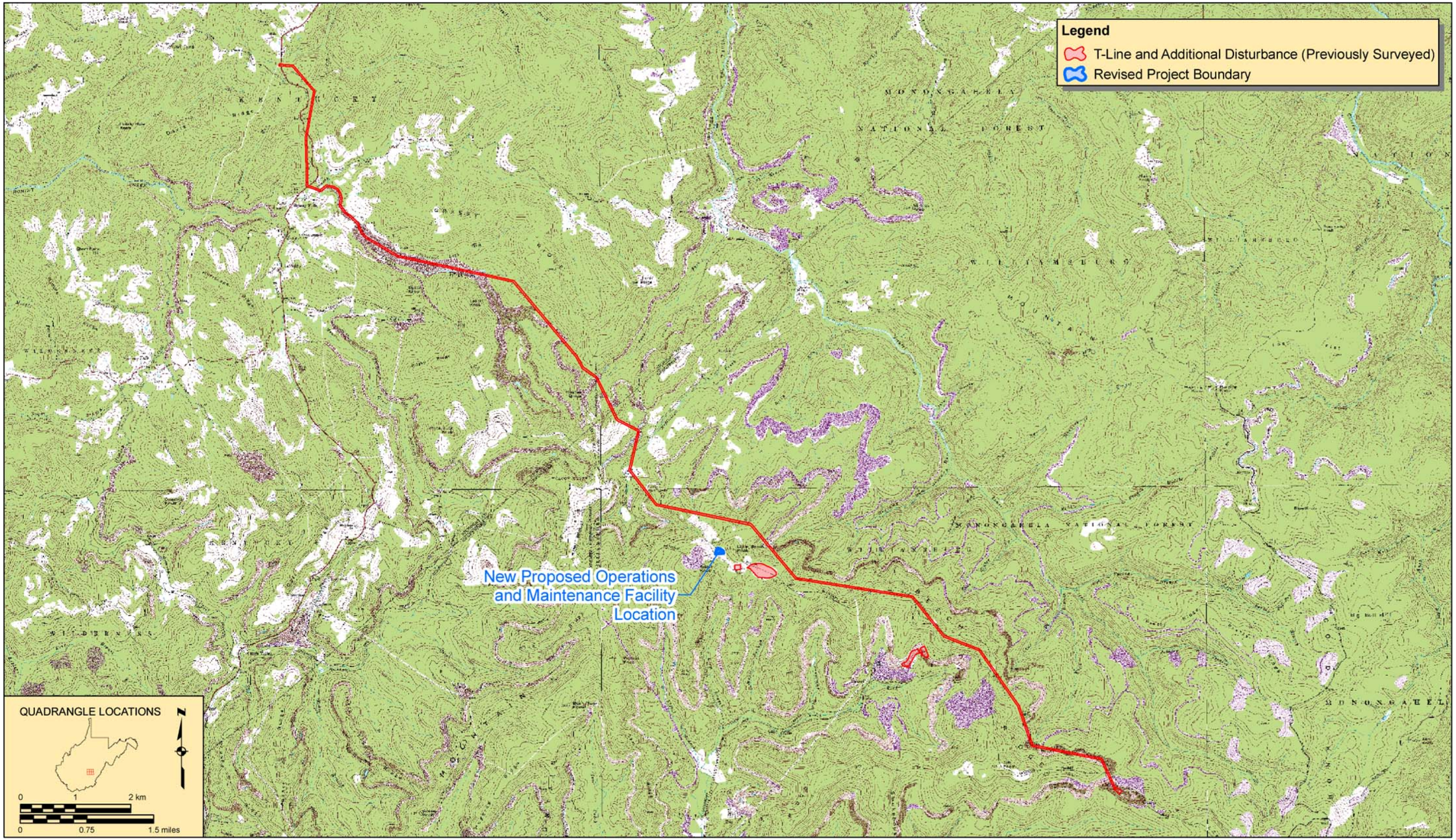

Figure 2. Overview showing previous survey and newly proposed O&M Facility location.

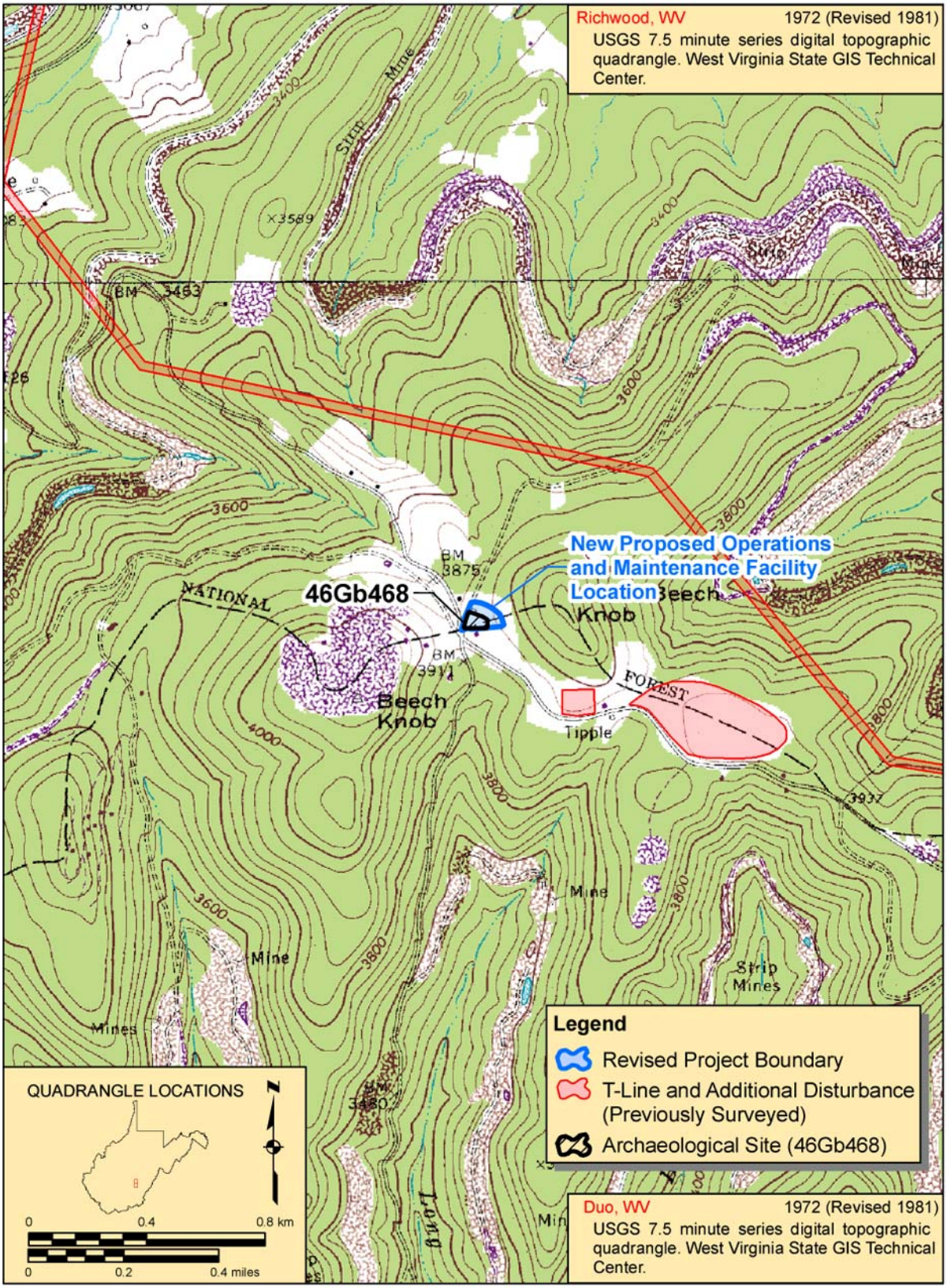

Figure 3. Portions of USGS 7.5-minute 1972 (1981) Duo and Richwood, WV quadrangles showing project area and newly identified archaeological site 46Gb468.

Figure 4. Portion of 2004 Duo orthophotograph showing project area and newly identified archaeological site 46Gb468.

Figure 5. Figure 5. Project area overview looking west-northwest.

slopes (DoB) and Dekalb-Gilpin very stony complex, 40 to 65 percent slopes (DsF) (Gorman et al. 1972: Soil Map 12). Dekalb-Cookport loams, 3 to 12 percent slopes, is described as moderately deep, gently sloping to very steep, well-drained soil located mostly on broad ridgetops, but can occur on benches (Gorman et al. 1972:16). Dekalb-Gilpin very stony complex, 40 to 65 percent slopes, is described as moderately deep, gently sloping to very steep, well-drained soil located mostly on mountain slopes (Gorman et al. 1972:17).

IV. BACKGROUND RESEARCH

The search of archaeological records for the Beech Ridge O&M Facility was completed by the author on October 9, 2009, at the WVSHPO (Appendix A). Results indicated that three previous cultural resources investigations, or portions thereof, had been conducted within 1.6 km (1 mi) of the proposed project area, with one archaeological site documented.

Previous Cultural Resources Studies

In 2006 an architectural investigation was completed for the proposed Beech Ridge Wind Energy project, with historic-period buildings and structures located within 8 km (5 mi) of the project recorded (O'Bannon and Sweeten 2007). The current project for the new O&M Facility is located within 1.6 km (1 mi) of the proposed T-line, indicating that it was examined for architectural resources during the 2006 study.

In 2008 CRA conducted a Phase I archaeological survey for the proposed Beech Ridge Wind Energy project (Meece and Smith 2008). The survey examined areas of proposed ground disturbance, which for the T-line passed within approximately 0.62 km (0.38 mi) north of the proposed new O&M Facility (Figure 2). A total of approximately 69.9 ha (172.6 ac) was examined.

In the spring of 2009 CRA conducted a Phase I archaeological survey for a laydown

and batch plant, with approximately 8.9-ha (22.1 ac) examined (Meece 2009). The project was located about 0.62 km (0.38 mi) east of the proposed O&M Facility (Figure 2).

Previously Recorded Archaeological Sites

Information obtained by the records search indicates that the only previously recorded site located within 1.6 km (1 mi) of the proposed O&M Facility is 46Gb467, recorded by CRA in the spring of 2009 at the location of the laydown and batch plant (Meece 2009). The site, located about 0.62 km (0.38 mi) east of the current project area, consists of a low-density prehistoric lithic scatter of unknown cultural and temporal affiliation. Evidence for cultural features and/or midden was not discovered. CRA was of the opinion that the site was not eligible to the NRHP, and that no additional archaeological investigations were warranted (Meece 2009). In a letter dated April 17, 2009, the WVSHPO concurred with CRA's recommendation (Appendix A).

Previously Recorded Architectural Resources

The records examined during the records search indicated that no architectural resources have been recorded within the proposed O&M Facility, or within 1.6 km (1 mi) of its boundaries. None of the architectural properties documented by Gray & Pape, Inc. / BHE Environmental, Inc. during their survey of the direct and visual APE's are located within or adjacent to the proposed O&M Facility (O'Bannon and Sweeten 2007).

Historical Map Review

Review of the USGS 15-minute 1923 Richwood topographic quadrangle (Figure 6), the USGS 15-minute 1935 Richwood topographic quadrangle (Figure 7), and the WVGS 1936 Topographic Map of Greenbrier County (Figure 8) indicates that one historic-period structure was located in close proximity to the proposed O&M Facility tract. Based on the mapped location of this structure, it is also represented on the USGS 7.5 minute 1972 (1981) Duo topographic quadrangle, which depicts the structure outside the O&M Facility tract, west of the unimproved gravel road that bounds the project (Figure 3).

However, the USGS 7.5-minute 1972 (1981) Duo topographic quadrangle does depict an outbuilding within the O&M Facility tract that appears to have predated 1972 (Figure 3). Located within 1.6 km (1 mi) of the proposed T-line, the standing remains of this modern building were not documented by Gray & Pape, Inc. / BHE Environmental Inc. during the architectural investigation of the project viewshed (O'Bannon and Sweeten 2007). Additionally, the USGS 7.5-minute 1972 (1981) Duo topographic quadrangle depicts the addition of a second structure south of the O&M Facility tract as a revision, indicating that this modern structure postdates 1972 and predates 1981 (Figure 3).

V. METHODS

Methods used to complete the survey and report followed guidelines developed by the WVSHPO (Trader 2001).

Field Methods

Identification of Project Boundaries

Field personnel used Garmin GPSMap 60CSx Chartplotting receivers, henceforth referred to as units, to verify locations in the field. Project boundaries, as mapped by Beech Ridge were first plotted onto the USGS 7.5-minute Duo quadrangle using the track function in *Maptech Terrain Navigator* software. Maps for use with the units were downloaded from the Garmin MapSource Eastern United States Topographic Maps CD-Rom. The datum used by both packages of software was set to NAD 1983. The geo-referenced tracks created in *Maptech Terrain Navigator* were loaded directly onto the units and appeared as an overlay on the Duo quadrangle. The units were then used in the field to verify crew location in relation to project area boundaries.

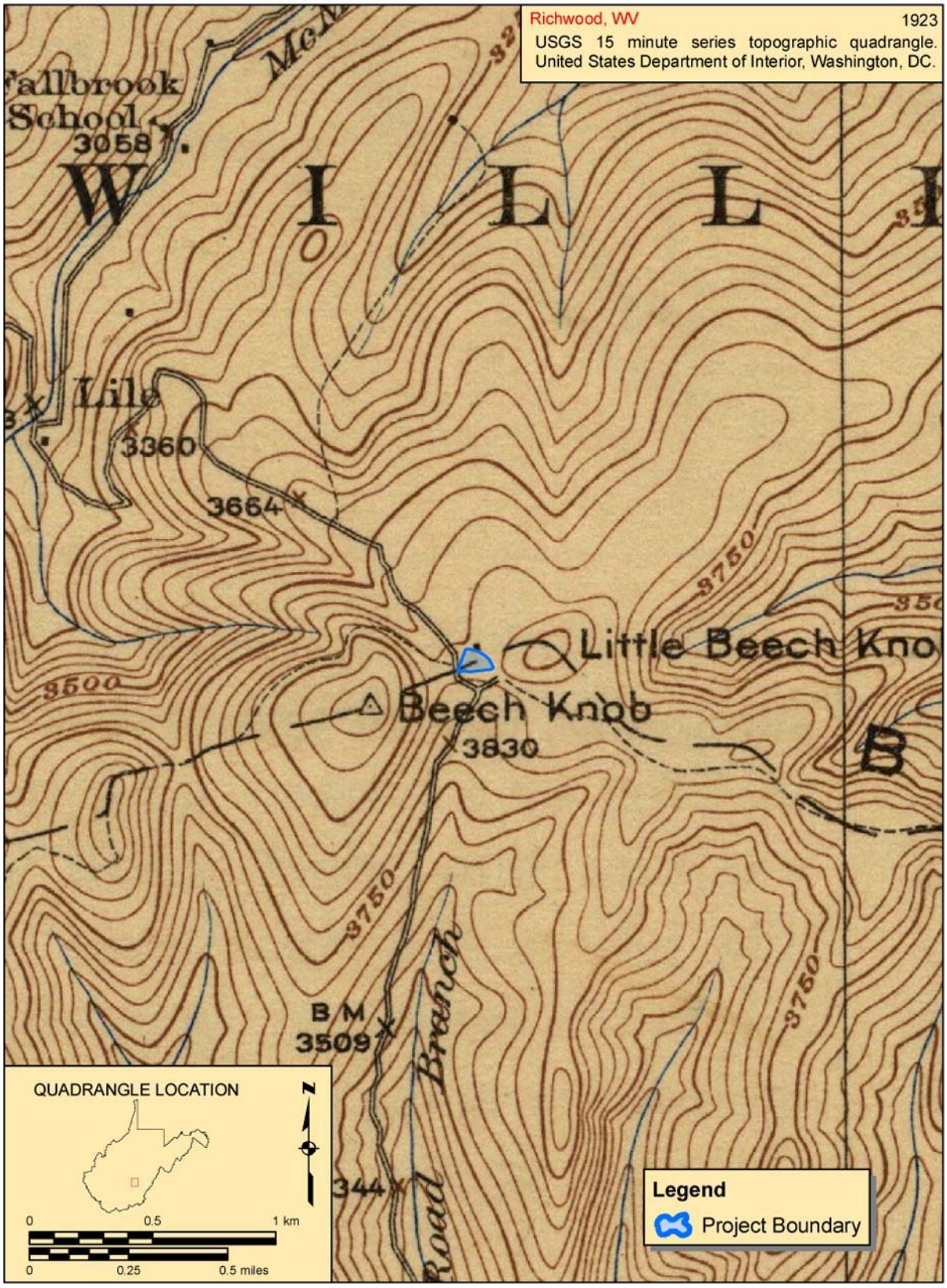

Figure 6. Portion of USGS 15-minute 1923 Richwood, WV topographic quadrangle depicting approximate project location.

Figure 7. Portion of USGS 15-minute 1935 Richwood, WV topographic quadrangle depicting approximate project location.

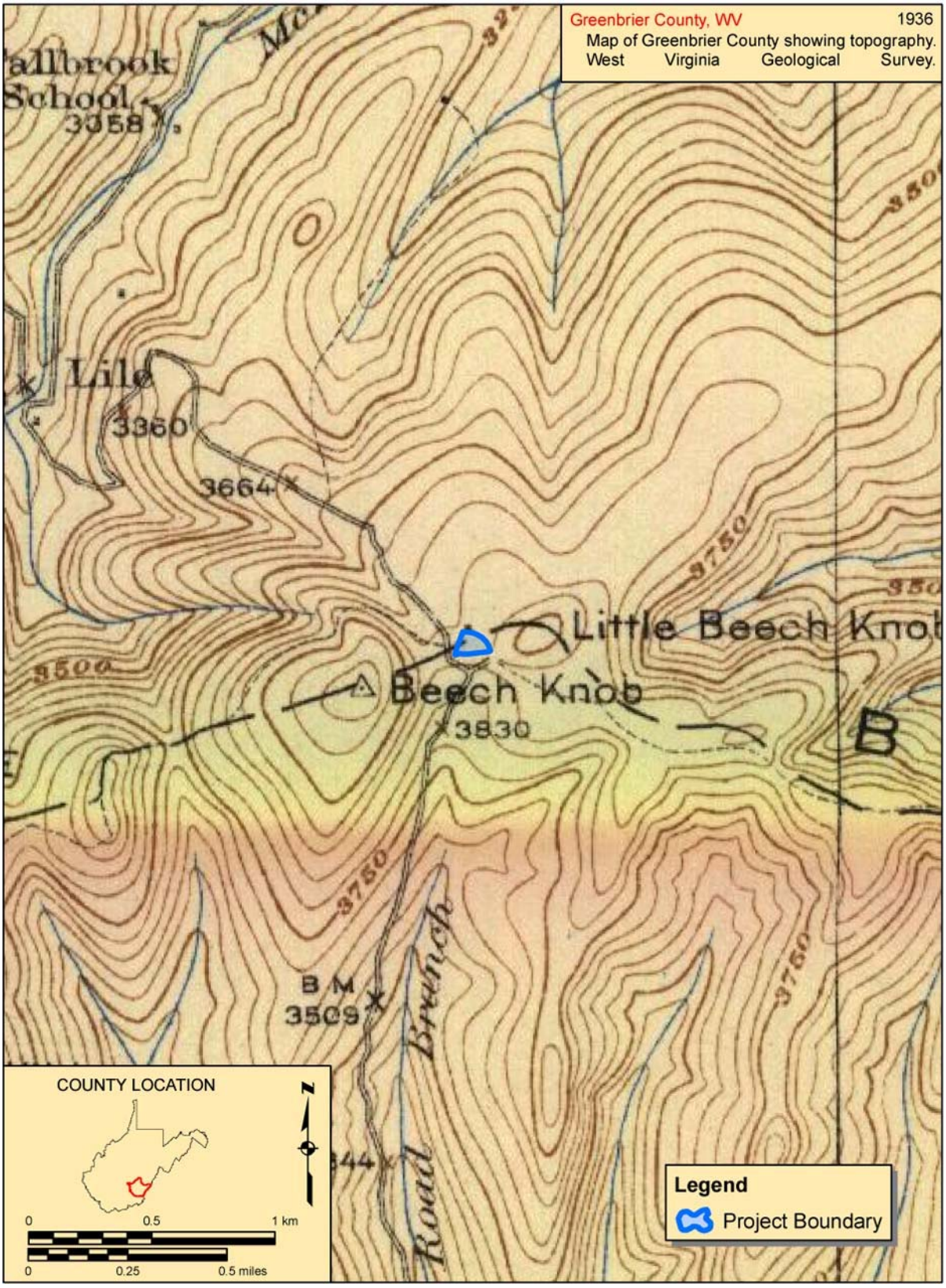

Figure 8. Portion of WVGS 1936 Topographic Map of Greenbrier County depicting approximate project location.

Pedestrian Survey

The entire 0.92 ha (2.26 ac) tract was examined systematically by walkover survey. Due to favorable conditions, survey transects were spaced at 15-m (49-ft) intervals. The purpose of the survey was to identify surface sites (e.g., mounds, foundations, cemeteries) that might be present.

Shovel Probing

The subsurface of the entire 0.92 ha (2.26 ac) tract was sampled through the excavation of shovel test probes (STPs) when accessible. To the extent possible, STPs were placed on grid at 15-m (49-ft) intervals. Excavated soil was sifted through 0.64-cm (0.25-in) mesh hardware cloth. STPs measured approximately 50 cm (20 in) in diameter and were excavated into culturally sterile subsoil. A representative sample of soil profiles was documented, with information for soil horizons, texture, structure, Munsell color, and the presence or absence of natural or cultural inclusions recorded. All STPs were backfilled.

Documentation

All aspects of the field investigation were documented through the completion of notes, standardized forms developed by CRA, and digital color photography. All data recovered from the Phase I investigation was collected and returned to CRA's West Virginia office for analysis.

VI. RESULTS

Systematic survey of the project area resulted in the identification of one previously undocumented archaeological site assigned trinomial 46Gb468 by the WVSHPO. A completed copy of the West Virginia Archaeological Site Form for 46Gb468 is provided in Appendix C. A detailed description of the site is provided below.

VII. SITE DESCRIPTIONS AND EVALUATIONS

46Gb468

Quadrangle: 1972 (1981) USGS 7.5-minute Duo, WV
UTM Location: Z-17, 4218630N, 0535018E (NAD 83)
Elevation: 1203.9 m (3950 ft) above msl
Size: 40-x-70 m (131.2-x-229.7 ft)
Component: Prehistoric (Middle and Late Archaic), Historic (1901-Present)
Topographic Setting: Saddle
Closest named water: McMillion Creek
Type of nearest water: Permanent
Slope: 0-5 percent
Soil: Dekalb-Cookport loams, 3 to 12 percent slopes (DoB)

Description

Site 46Gb468 is a multicomponent, low-density artifact scatter containing mixed deposits of prehistoric lithic materials and historic/modern domestic materials within disturbed and highly disturbed contexts. The site is located approximately 12.5 km (7.8 mi) south of the community of Fenwick and is situated within the saddle located between Beech Knob and Little Beech Knob (Figures 3-4).

The site boundary was established on the basis of the spatial distribution of positive STPs and the project boundary (Figure 9). Based on field observations, the integrity of the site has been negatively impacted by historic and/or modern mechanical grading and agricultural activities.

Identified archaeological deposits were recovered in association with a modified natural spring and the partially standing remains of a non-historic outbuilding (Figures 10-11). A review of available historic-period maps indicates that the extant remains likely represent an outbuilding depicted on the USGS 7.5-minute 1972 (1981) Duo topographic quadrangle.

The natural spring is deeply entrenched, and the walls immediately adjacent to the

spring have been reinforced with large boulders. A deep drainage ditch, that was potentially mechanically excavated, extends west from the natural spring, and an earthen dam has been constructed within the ditch to retain water (Figure 9). Based on these observations, it is presumed that the natural spring was likely modified to function as a livestock-watering pond, and that the extant outbuilding remains likely represent a barn or equipment storage building.

Archaeological Investigations

At the time of the survey, the vast majority of the site area was covered by maintained lawn grasses (Figure 12). A small area immediately north of the outbuilding was littered with overgrown piles of logs and construction materials, the latter presumably removed from the outbuilding, and thus it was considered unsafe and inaccessible (Figures 9 and 13-14). Twenty-five STPs were excavated within and adjacent to the site; 12 of these were positive for archaeological materials (Figure 9). Artifact-bearing deposits were primarily restricted to shallow subsurface contexts associated with a highly disturbed A horizon. Careful examination of the soil profiles and screened deposits failed to discover any evidence of cultural features or midden.

The representative soil profile for this site, as documented in STP A02, consists of very dark grayish-brown (10YR3/2) silt loam O/A horizon 5 cm (2 in) thick that overlies a mottled grayish-brown (10YR5/2), light yellowish-brown (10YR6/4), and strong brown (7.5YR5/6) silt loam A horizon 17 cm (6.7 in) thick, and brownish-yellow (10YR6/6) clay loam B horizon with reddish-yellow (7.5YR6/6 & 7.5YR6/8) redoximorphic features that extend below the base of the probes (Figures 9 and 15).

Atypically, STPs D02 and R01 revealed a soil profile that evidenced a lesser degree of mechanical disturbance; however, the excavation of STP D02 indicated that archaeological deposits were mixed, as historic/modern materials were recovered at greater depths within the A horizon than the prehistoric materials. This profile, as documented in STP R01, consisted of brown (10YR4/3) silt loam A or Ap horizon 16 cm (6.3 in) thick with approximately five percent yellowish-brown (10YR5/4) mottles that overlies yellowish-brown (10YR5/8) clay loam B horizon that extends to depths below the base of the STPs (Figures 9 and 16).

Materials Recovered

The site assemblage consists of 11 prehistoric artifacts and 29 historic and/or modern artifacts recovered during the excavation of 12 positive STPs (Appendix D).

Description of Prehistoric Materials

Identified prehistoric materials consist of 11 lithic artifacts recovered during the excavation of five positive STPs (Appendix D). No ceramics, groundstone tools, thermally altered rock, or floral or faunal remains were identified.

Lithic Analysis

Technological analysis of the lithic assemblage identified nine pieces of lithic debitage and two formal flaked stone tools.

Lithic Debitage

Debitage is represented by Size Grade 1 (n=6) and Size Grade 2 (n=3) specimens. Raw material analysis indicates that the entire debitage assemblage was manufactured from Hillsdale chert. One specimen retains cortex.

Formal Flaked Stone Tools

Formal flaked stone tools are represented by two hafted bifaces. The first specimen, recovered from STP R02, was identified as a Terminal Archaic Transition/Broad Blade Cluster hafted biface manufactured from low quality Kanawha chert (Figure 17a). This specimen is nearly complete, but missing the base. Overall, it exhibits a maximum length of 41.83 mm (1.7 in), a maximum width of 20.5 mm (0.8 in), and a maximum thickness of 6.84 mm (0.3 in).

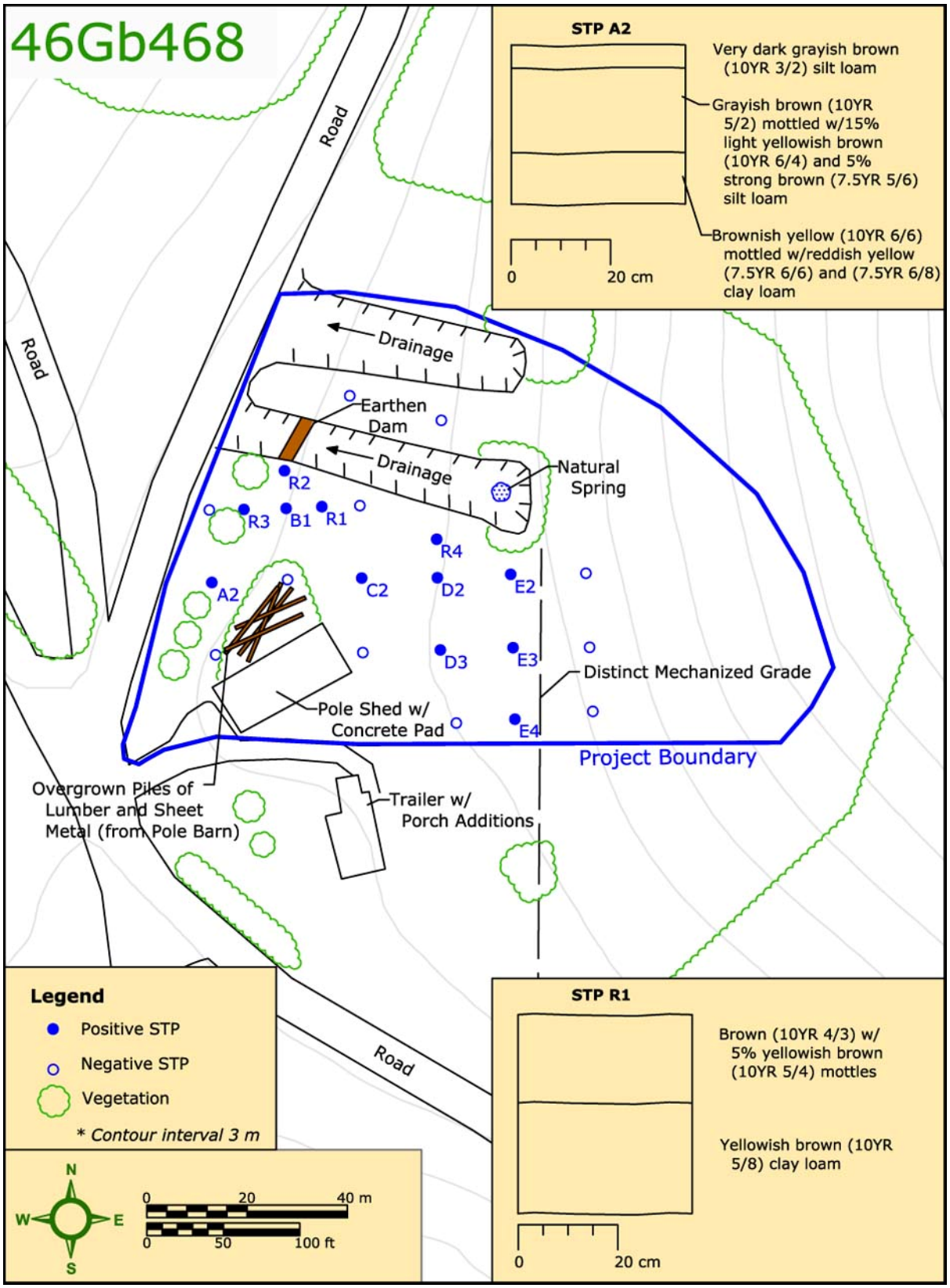

Figure 9. Site plan map and soil profile diagrams, 46Gb468.

Figure 10. Site overview looking west-southwest detailing modified natural spring and extant outbuilding remains, 46Gb468.

Figure 11. Detail extant outbuilding remains looking northeast, 46Gb468.

Figure 12. Site overview looking southeast detailing area of archaeological deposits and typical survey conditions, 46Gb468.

Figure 13. Detail overgrown area of piled construction materials, 46Gb468.

Figure 14. Detail overgrown area of piled logs, 46Gb468.

Figure 15. Typical disturbed soil profile revealed by STP excavation, 46Gb468.

Figure 16. Atypical intact soil profile revealed by STP excavation, 46Gb468.

The specimens placed in this group share morphological characteristics with regional stemmed types including those of the Genesee, Savannah River, and Susquehanna clusters defined by Justice (1987). Named types in these clusters include Genesee, Snook Kill, Savannah River Stemmed, Susquehanna Broad, Orient Fishtail, and Perkiomen Broad. These types are common in the Mid-Atlantic coast region and the Northeast during the Late to Terminal Archaic period, and some (e.g., Perkiomen, Susquehanna Broad) are commonly associated with steatite bowls. For West Virginia, Wilkins (1978:33-34) discusses Transitional Archaic points recovered from upland settings in the southern coalfield region, including Perkiomen, Susquehanna, Snook Kill, and a lanceolate variety of Orient Fishtail. At the Hansford Ballfield site (46Ka104), Youse (1992) reported the recovery of Perkiomen points of exotic brown chert from a cremation burial associated with stone bowl fragments dated to 1170 B.C. One of the Perkiomen points from the cremation was heat fractured, a pattern common for the type in the Atlantic coast region.

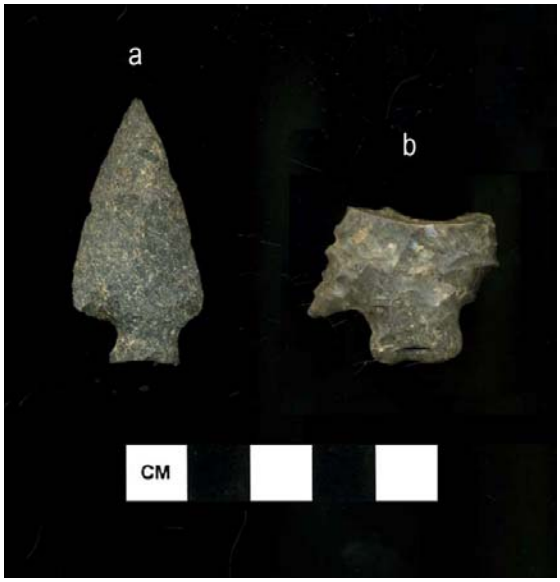

Figure 17. Hafted Bifaces, 46Gb468.

The second specimen, recovered from STP D02, was identified as the proximal fragment of a Stanly Stemmed hafted biface manufactured from Hillsdale chert (Figure

17b). This specimen exhibits ground notches and an incurvate basal shape. Overall, it exhibits a maximum length of 24.92 mm (1 in), a maximum width of 30.9 mm (1.2 in), and a maximum thickness of 8.14 mm (0.3 in).

These hafted bifaces exhibit broad, triangular blades and narrow, square stems with shallow basal notching (Coe 1964:35). The blade edges range from excurvate to incurvate and are often serrated. Stanly points can range in size and basal edging. Several recovered at Icehouse Bottom (40Mr23) by Chapman (1977:34-5) and other sites in the Lower Little Tennessee River Valley are smaller than the classic Stanly points described by Coe (1964:35). However, they conform morphologically to comparisons by Perino (1985:361) and Cambron and Hulse (1965:A-79; 1975:118). Cambron and Hulse (1965:A-79; 1975:118) state about the Stanly point and its variations "the basal edge of the plesiotypes is more incurvate than notched, as is the cotypes." Coe places the Stanly point in the Middle Archaic, around 5,000 B.C. A date range of 5800 to 5500 BC was suggested for the Tellico Reservoir area in east Tennessee (Chapman 1985). In West Virginia, Stanly points recovered from the Hansford site dated to 5745±155 B.C. (UGa-1093) (Youse 1992), and the Glasgow site dated to 5161±70 B.C. (Beta-44416) (Niquette et al. 1991), both of which are located in Kanawha County. Slightly earlier dates around 6000 BC were also obtained by Broyles (1969:35).

Description of Historic/Modern Materials

The excavation of nine positive STPs resulted in the recovery of 29 historic and/or modern artifacts belonging to the Architecture (n=12), Domestic (n=11), Furnishings (n=1), Maintenance and Subsistence (n=1), and Miscellaneous (n=4) groups (Appendix D).

Architecture Group

Architecture Group materials consist of window glass (n=5) and wire nails (n=7). Window glass is represented one each by fragments exhibiting a thickness of 1.59 mm, 1.68 mm, 2.04 mm, 2.2 mm, and 2.48 mm, representing a date range of 1847-2009. All nails and nail fragments are wire nails that postdate 1885. Nails consist of one 3d specimen, one 5d specimen, and five indeterminate fragments.

Domestic Group

Domestic Group materials consist of ceramic (n=4) and glass (n=7) artifacts (Table 1). Ceramic items include three fragments of plain white granite stoneware, dating from 1850 to 2009, and one fragment of American yellowware, dating from 1830-2009. Glass container fragments include aquamarine (n=3), colorless, amethyst tint (n=1), and colorless, clear (n=3) glass.

Table 1. Domestic Group Artifacts by Context, 46Gb468.

Primary Context	Class	Object	Type	Production	Quantity	Date Range
STP C02	Ceramic Tableware	Hollowware: Body	Stoneware, White Granite	Plain	1	1850-2009
STP D02	Glass Storage Container	Indet. Container: Body	Colorless, Clear Glass	ABM (Non-Owens)	1	1917-2009
STP D03	Ceramic Tableware	Hollowware: Body	Stoneware, White Granite	Plain	1	1850-2009
STP E02	Glass Beverage Container	Indet. Bottle: Body	Colorless, Amethyst Tint Glass	Blown in Mold	1	1880-2009
STP E02	Glass Beverage Container	Indet. Bottle: Body	Colorless, Clear Glass	Blown in Mold	1	1875-2009
STP E03	Glass Storage Container	Indet. Container: Body	Aquamarine Glass	Blown in Mold	1	
STP R01	Misc. Domestic Ceramic	Indet. Object: Body	R.E., Yellowware, American	Other Decoration	1	1830-2009
STP R03	Misc. Domestic Glass	Indet. Object	Aquamarine Glass	Indet. Manufacture	1	
STP R04	Glass Beverage Container	Indet. Bottle: Body	Colorless, Clear Glass	ABM (Non-Owens)	1	1917-2009
STP R04	Glass Storage Container	Indet. Container: Body	Aquamarine Glass	Blown in Mold	1	
STP R04	Misc. Domestic Ceramic	Indet. Object: Body	Stoneware, White Granite	Plain	1	1850-2009

Furnishings Group

The Furnishings Group is represented by one fragment of a machine-made, colorless, clear glass light bulb.

Maintenance and Subsistence Group

This group is represented by one piece of indeterminate slag.

Miscellaneous Group

The Miscellaneous Group is represented by two fragments of curved colorless, clear glass, one fragment of curved aquamarine glass, and one ferrous metal rod.

Discussion

Current data indicate 46Gb468 is a multicomponent, low-density artifact scatter containing mixed deposits of prehistoric lithic materials and historic/modern materials within disturbed and highly disturbed contexts. Identified artifacts are from a non-stratified deposit within an extensively modified landscape and evidence of cultural features or midden is lacking.

Identified prehistoric deposits appear to represent small, open-air camps or stations dating to the Middle and Late/Terminal Archaic temporal periods based on recovered hafted bifaces, and may have been associated with a natural spring. Based on the type and quantity of materials identified, lithic reduction appears to have been the primary site activity. Artifact densities are low, suggesting that site activities were temporally and functionally limited. Analysis of the lithic assemblage suggests that flaked stone tool production and/or subsequent maintenance was conducted.

Recovered historic/modern deposits appear to represent a scatter of primarily architectural and domestic materials dating to the late nineteenth and twentieth centuries that surround an outbuilding. The vast majority of identified deposits are non-diagnostic fragments of glass and ceramics, and most represent items with open-ended dates that are still manufactured today.

Although historic/modern landscape features and structural remains were identified at the site, mechanical grading and/or bioturbation results of livestock activity, has destroyed the physical integrity, mixing prehistoric and historic deposits within a shallow, highly disturbed A horizon. Given the extensive level of disturbance, the shallow, mixed nature of the site deposits, the lack of subsurface features, and the restricted range of functional groups represented in the historic and prehistoric artifact assemblages, 46Gb468 is considered to lack archaeological data important for refining our knowledge of local history or prehistory, and no further work is recommended.

VII. CONCLUSIONS AND RECOMMENDATIONS

Systematic survey of the approximate 0.92-ha (2.26-ac) tract selected for the construction of the O&M Facility identified one previously undocumented archaeological site assigned trinomial 46Gb468 by the WVSHPO. Site 46Gb468 is a multicomponent, low-density artifact scatter containing mixed deposits of prehistoric lithic materials and historic/modern domestic materials within highly disturbed contexts. Extant data indicate that the site has low potential to produce information important to furthering our understanding of local or regional prehistory or history.

Based on these conclusions, the following recommendations are made:

1. Site 46Gb468 is ***not eligible*** for inclusion in the NRHP;
2. ***No additional archaeological investigations*** are warranted for 46Gb468;
3. ***No additional archaeological investigations*** are warranted for the larger project tract in general, and
4. Should evidence of intact archaeological deposits or human burials be identified during construction or project activities, work in the area of discovery should cease, and the WVPSC and the

WVSHPO should be notified immediately of the discovery.

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APPENDIX A

WVSHPO CORRESPONDENCE & USER FORM

WEST VIRGINIA
DIVISION OF
CULTURE & HISTORY

The Cultural Center
1900 Kanawha Blvd., E.
Charleston, WV
25305-0300

Phone 304.558.0220
Fax 304.558.2779
TDD 304.558.3562
www.wvculture.org
EEO/AA Employer

March 9, 2009

Mr. Erik Duncan
Beech Ridge Energy, LLC
Invenergy, LLC
7564 Standish Place
Suite 123
Rockville, MD 20855

RE: Beech Ridge Wind Energy Facility
Phase I Archaeological Survey
FR#: 06-147-GB-25

Dear Mr. Duncan:

We have reviewed the report titled *Phase I Archaeological Survey of the Beech Ridge Wind Energy Project and Associated Transmission Support Line, Greenbrier and Nicholas Counties, West Virginia*, which was submitted for the above referenced project. The following comments are offered under West Virginia Code 29-1-8.

The report satisfactorily addresses our concerns regarding the presence of intact archaeological resources within the area proposed for construction of the above referenced project. According to the report, 4 new archaeological sites, 46Gb445, 46Gb446, 46Gb449 and 46Gb450, and two possible historic period grave sites, 46Gb447 and 46Gb448, were identified during the survey. Portions of the project area where sites were identified are the access roads for Turbines D-4 and C-6, Turbines C-3, E-24/E-25 and J-10 and the proposed location of the operation and maintenance facility.

Archaeological Resources:
Sites 46Gb449 and 46Gb450 consist of low density lithic scatters from an unknown prehistoric period. It is our understanding that all artifacts were recovered from the soil O/A Horizons and that no evidence was observed suggesting the presence of cultural features, midden or stratified deposits. We concur that these sites are not likely to produce significant information and as such, are not eligible for inclusion in the National Register of Historic Places. No further work is necessary for these resources.

Site 46Gb446 is a multicomponent site consisting of an intermixed scatter of historic and prehistoric period artifacts along an existing access road in the vicinity of Turbine C-6. Project plans propose to upgrade this access road. It is our understanding that the prehistoric component of the site produced an ephemeral scatter of non-diagnostic lithic debris and that the historic component consists of an ephemeral scatter of domestic and architectural debris. Because diagnostic materials, subsurface cultural features or midden and stratified deposits were not identified at 46Gb446, we concur that the portion of the site within the project area (or direct APE) lacks research potential and is not eligible for inclusion in the National Register of Historic Places.

Site 46Gb446 also contains a series of stone piles and section of a stone wall. Because there was an historic era farm at this location, the stone piles have been interpreted to be the result of field clearing activities. Shovel probes in the vicinity of the stone piles did not result in the recovery of cultural materials. However, the stone piles themselves were not investigated. Consequently, their cultural association is tentative and their historic significance is unknown. It is our understanding that the stone piles and stone wall are located outside the direct APE and will not be impacted by the proposed turbine construction or access road upgrade. Provided that they are avoided by proposed construction activities, it is our opinion that this project will have no effect to this part of 46Gb446. Please notify this office if 46Gb446 cannot be avoided.

Site 46Gb445 consists of a stone mound that was identified along the proposed route of the access road for proposed Turbine D-1. Although no artifacts were recovered from shovel probes excavated in the vicinity of the stone mound, its size and shape are similar to others that have been determined to be prehistoric burial mounds. As a result, we concur with the recommendation that 46Gb445 be avoided by the proposed project and strongly advise that alternatives be considered. If it cannot be avoided, Federally recognized Native American Tribes will need to be notified and invited to participate in consultation. We also concur that Phase II investigations will need to occur to determine the eligibility of this resource. Provided that this resource is avoided by proposed construction activities, it is our opinion that this project will have no effect to 46Gb445. Please notify this office if 46Gb445 cannot be avoided.

Cemetery Resources:
It is our understanding that two possible grave sites, 46Gb447 and 46Gb448, were identified within the proposed project area. Grave 46Gb447 was identified at the proposed location of Turbine C-3, while grave 46Gb448 was found along the proposed access road between the proposed locations of Turbines E-24 and E-25. Both possible graves are marked by upright, uncarved fragments of sandstone. In addition, pedestrian investigation of the area surrounding each possible grave failed to discover evidence of other graves or markers, fencing, ornamental plantings or other cultural features typically associated with cemeteries. Currently, very little is known about the possible graves. As a result, the report recommends that they be avoided by the proposed project or undergo Phase II National Register assessment. While we concur that 46Gb447 and 46Gb448 should be avoided by construction activities associated with this project, it is our opinion that they do not meet the criteria to consider them eligible for listing in the National Register of Historic Places.

We appreciate the opportunity to be of service. *If you have questions regarding our comments or the Section 106 process, please contact Lora A. Lamarre, Senior Archaeologist at (304) 558-0240.*

Sincerely,

Susan M. Pierce
Deputy State Historic Preservation Officer

SMP/LAL

WEST VIRGINIA
DIVISION OF
CULTURE & HISTORY

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TDD 304.558.3562
www.wvculture.org
EEO/AA Employer

April 17, 2009

Mr. Eric Duncan
Beech Ridge Energy, LLC
Invenergy, LLC
7564 Standish Place
Suite 123
Rockville, MD

RE: Addendum to the Phase I Archaeological Report
Beech Ridge Energy, LLC
FR#: 06-147-GB-27

Dear Mr. Duncan:

We have reviewed the report titled *Addendum to the Phase I Archaeological Survey of the Beech Ridge Wind Energy Project & Associated Transmission Support Line, Greenbrier and Nicholas Counties, West Virginia* for the above referenced project. As required by Section 106 of the National Historic Preservation Act of 1966, as amended, and its implementing regulations, 36 CFR 800: "Protection of Historic Properties," we submit our comments.

It is our understanding that Beech Ridge Energy intends to place a construction layout and batch plant within a 22.1 acre area northeast of Tipple, in the Williamsburg District, Greenbrier County, WV. The report satisfactorily addresses the direct effects to archaeological resources located within the footprint of the proposed construction area and satisfies the requirements set forth in the *WV Guidelines for Phase I, II and II Archaeological Investigations and Technical Reports.*

One archaeological site was identified during the phase I survey. 46GB467 is a low density prehistoric lithic scatter of unknown cultural and temporal affiliation located on a slightly sloping ridgetop along Beech Ridge. Artifact bearing deposits are shallow and lack stratification. The artifact assemblage consists of lithic debitage of unknown age and likely represents a small short-term camp site. The site was not considered eligible for inclusion in the National Register of Historic Places and no further work was recommended. We concur with this determination. No further consultation is required regarding 46GB467.

We appreciate the opportunity to be of service. If you have any questions regarding our comments or the Section 106 process, please contact Kristin D. Scarr, Archeologist, at (304) 558-0240.

Sincerely,

Susan M. Pierce
Deputy State Historic Preservation Officer

SMP/KDS

cc: Ms. Darla Spencer, RPA ; CRAI, Hurricane, WV

West Virginia State Historic Preservation Office

Cultural Resources Files and Library
User Registration and Research Record Form

INSTRUCTIONS: Part I must be completed before you will be permitted access to the SHPO Cultural Resource Files and Library. Part II is a record of the site files, cultural resource reports, USGS topographic maps and other materials you utilize during your visit. Part III will be completed and signed by a SHPO staff member only when you have completed your research and have returned the materials to which you have been given access.

I. IDENTIFICATION

DATE: 9 Oct 09

Name (s) Jason Baker

Organization or Company: CRA

Address: 3556 Teays Valley Rd. Suite 3

Hurricane WV 25526 Phone 304/562-7233

FR Number (if known) _____

II MATERIALS UTILIZED

ARCHAEOLOGY:

USGS QUAD MAP NAMES:

Duo | Richwood | _____

_____ | _____ | _____

_____ | _____ | _____

ARCHAEOLOGY SITE FORM #s

46 GB 467 | 46 GB 449 | _____

_____ | _____ | _____

_____ | _____ | _____

CRM Reports/Publications

06-147-GB | _____ | _____

SURVEY AND NATIONAL REGISTER:

County Survey Files

National Register Files

Other Materials

Beech Ridge Architectural Investigations Report

III MATERIALS RETURNED IN GOOD ORDER

DATE: 10-9-08 # Photocopies 5 $ 1.25

USER NAME: Jason C. Eaken

SHPO STAFF SIGNATURE: Bethany D. Canfield

(Signature assures that materials have been returned to file)

APPENDIX B

MOA FOR BEECH RIDGE WIND ENERGY FACILITY

MEMORANDUM OF AGREEMENT

Whereas, Beech Ridge Energy LLC (Beech Ridge) has determined that the proposed Beech Ridge Wind Energy Wholesale Electric Generating Facility and Related Transmission Support Line (Beech Ridge Wind Energy Facility), located in Greenbrier County may potentially have an effect on historic resources and;

Whereas after public notice and public hearings affording the public reasonable opportunity to participate in the review process, the West Virginia Public Service Commission (PSC) issued an order dated August 28, 2006 granting Beech Ridge Energy LLC a Siting Certificate to construct and operate the Beech Ridge Wind Energy Facility and;

Whereas the Certificate contains a condition that Beech Ridge shall receive all necessary agency approvals including that of the West Virginia Division of Culture and History - State Historic Preservation Office (WVSHPO) and;

Whereas Beech Ridge has consulted with the WVSHPO pursuant to 82 CSR 2 Standards and Procedures for Administering State Historic Preservation Programs implementing West Virginia Code 29-1-8(a) including identification of historic resources listed in or eligible for the National Register of Historic Places and assessment of possible effects to these resources and;

Whereas, Beech Ridge has conducted a survey of above ground historic resources located within the defined Area of Potential Effect and received concurrence from the WVSHPO regarding their eligibility according to the Criteria of Evaluation for listing in the National Register of Historic Places and;

Whereas, Beech Ridge has agreed to complete stipulations regarding the identification, evaluation of eligibility and assessment of effects regarding archaeological resources as elaborated below and;

Whereas, it is agreed that the potential adverse effects to above ground historic resources cannot be reasonably eliminated due to the nature of the Project and the necessary wind turbine height; and

Beech Ridge has identified and analyzed the potential alteration of the view shed and subsequent impact to the historic resources in the report entitled, "Assessment of Effects for the Proposed Beech Ridge Energy Facility," dated February 15, 2008, prepared by BHE Environmental, Inc., for the WVSHPO;

Now therefore, Beech Ridge and the WVSHPO agree that the following will be implemented to address the PSC Certificate condition and the potential effect of the Project on historic resources:

STIPULATIONS

A. Mitigation of Visual Effects to Above Ground Historic Resources

1. Beech Ridge will provide up to six copies of the completed survey, entitled "Architectural Investigations for the Proposed Beech Ridge Energy Facility," dated March 16, 2007, in hard-copy format and in electronic format on compact disk (CD) for deposit in the Greenbrier County Public Library, Greenbrier Historical Society (GHS), Williamsburg District Historical Foundation (WHF) in Greenbrier County, the Summersville and Richwood public libraries in Nicholas County, and the Nicholas County Historical & Genealogical Society.

2. Beech Ridge will provide one-time monetary funding of up to $10,000 or in-kind service of equivalent value for future assistance in historic preservation-related activities conducted for or by the WVSHPO and/or WHF that fall within the defined WVSHPO historic preservation program activities. Proposed activities shall focus upon the communities visually impacted by the Beech Ridge Energy Facility. This funding will be available at any time for a period of two years following notification by Beech Ridge to the WVSHPO of initiation of construction at the Beech Ridge site. An approved scope of work by the WVSHPO will be submitted to Beech Ridge.

3. Upon notification by WVSHPO, but no earlier than the initiation of construction of the Beech Ridge Wind Energy Facility, Beech Ridge shall provide said funding or in-kind services to WVSHPO and/or WHF for the approved historic preservation activities.

4. After fulfillment of the conditions described above or the expiration of the two year period following initiation of construction without a request from WVSHPO or WHF for funding, Beech Ridge

will have satisfied its mitigation requirements for this specific stipulation.

B. Identification and Mitigation Efforts for Archaeological Resources

1. Prior to the initiation of any construction activities that could potentially disturb or damage archaeological resources , Beech Ridge shall carry out archaeological investigations in accordance with WVSHPO *Guidelines for Phase I, II, and III Archeological Investigations and Technical Reports*, published in 2001 and in accordance with the methodology set forth in this Memorandum of Agreement. Beech Ridge shall ensure that all scopes of work for archaeological identification and evaluation include a plan for the treatment of human remains and funerary objects that might be encountered.

a) Phase I Archaeological Survey. Beech Ridge shall ensure that a Phase I Scope of Work will be developed in consultation with WVSHPO. Phase I work will be designed to provide information regarding the significance of all identified archaeological sites as "site is not eligible" or "eligibility of site is indeterminable" to the National Register of Historic Places (NRHP). This work will be done in consultation with WVSHPO and all deliverables will be submitted for WVSHPO review and comment.

    1) If Beech Ridge and the WVSHPO agree that a "site is not eligible" for the NRHP, then no further investigations of that site will be conducted.

    2) If Beech Ridge and the WVSHPO agree that a site with indeterminable eligibility can and will be avoided by the Beech Ridge Wind Energy Facility, which would be the preferred option, then no further investigation of that site will be conducted, unless avoidance no longer becomes feasible.

b) Phase II Archaeological Testing. If all parties agree that the "eligibility of a site is indeterminable" and avoidance is not feasible, Beech Ridge shall ensure that a Phase II Research Design will be developed in consultation with the WVSHPO. This document will be consistent with WVSHPO guidelines. Phase II work will be designed to provide information regarding the significance of an archaeological site as "site is not eligible" or

"site is eligible" to the NRHP. This work will be done in consultation with WVSHPO and all deliverables will be submitted for WVSHPO review and comment.

1. If Beech Ridge and WVSHPO agree that a "site is not eligible" for the NRHP, then no further investigations of that site will be conducted.
2. If Beech Ridge and WVSHPO cannot agree regarding eligibility, all appropriate information regarding the site will be submitted by Beech Ridge to the Keeper of the National Register, National Park Service, for review. The Keeper's determination of eligibility will be final.
3. If Beech Ridge and WVSHPO agree that an eligible site can and will be avoided by the Beech Ridge Wind Energy Facility, which would be the preferred option, then no further investigation of that site will be conducted, unless avoidance no longer becomes feasible.

c) Application of Criteria of Adverse Effects. If parties agree that the "site is eligible" and avoidance is not a feasible alternative, then Beech Ridge will consult with WVSHPO to apply the criteria of adverse effects. This work will be completed in consultation with WVSHPO guidelines and all deliverables will be submitted for WVSHPO review and comment.

1. If following the application of the criteria of adverse effects, parties agree that the Beech Ridge Wind Energy Facility will have "no effect" or "no adverse effect" on an eligible site, then no further investigations of that site will be conducted.
2. If parties agree that the Beech Ridge Wind Energy Facility will have an "adverse effect" on an eligible site, but the project is subsequently redesigned to avoid adverse effects, then the finding would be changed to "no effect". Beech Ridge shall provide written documentation demonstrating avoidance for WVSHPO concurrence.
3. If continued design of the project determines that avoidance is no longer feasible, the effect will be reassessed.

d) Phase III Archaeological Data Recovery. If all parties agree that the Beech Ridge Wind Energy Facility will have an "adverse effect " on an eligible site and avoidance is not a feasible option, then Beech Ridge will consult with WVSHPO to identify measures to minimize and mitigate the adverse effect to the site. Beech Ridge shall ensure that a Data Recovery Plan will be developed in consultation with WVSHPO. The plan will be consistent with WVSHPO guidelines. The Phase III work will be designed to recover, interpret, and disseminate significant data for any eligible site. This work will be completed in consultation with WVSHPO guidelines and all deliverables will be submitted for WVSHPO review and comment.

1. Following WVSHPO review and approval of Phase III deliverables, no further investigations of that site will be conducted, unless an unanticipated post-review discovery is made.

e) Post-review discoveries.

In the event of any unanticipated discoveries of archaeological sites, unmarked cemeteries, or human remains and associated funerary objects during the implementation of the Beech Ridge Wind Energy Facility, all activities will be suspended in the area of discovery. Beech Ridge will contact WVSHPO within 48 hours of the discovery. In consultation with WVSHPO, Beech Ridge shall ensure that, if necessary, a qualified archaeologist will visit and assess the discovery within 72 hours of the initial WVSHPO notification. Through consultation, Beech Ridge and WVSHPO shall agree upon the appropriate treatment of the discovery prior to resumption of construction activities in the area of discovery. If human remains are determined to be of Native American origin, WVSHPO, in consultation with Beech Ridge, shall comply with W. Va. Code §29-1-8a. Beech Ridge affirms that all human remains will be avoided by direct construction impacts where feasible.

3. Dispute Resolution

During the execution of the stipulations as outlined above, should Beech Ridge and the WVSHPO be unable to reach a mutually satisfactory decision, except as noted, the WVSHPO will provide written comments to Beech Ridge. Beech Ridge shall respond to WVSHPO comments. This exchange of correspondence shall demonstrate that Beech Ridge has afforded the WVSHPO an opportunity to comment and considered potential effects to historic resources. All stipulations not subject to the dispute shall remain in force.

4. Reporting

Should there be an interruption of activity associated with the project for any significant length of time, Beech Ridge will provide at the minimum every six months a project status letter regarding the completion of work associated with the above stipulations.

5. Amendment

Beech Ridge and the WVSHPO may request an amendment to this agreement and consult with the other party prior to execution.

Execution of this Memorandum of Agreement by the Consulting Parties evidences that Beech Ridge has afforded the WVSHPO an opportunity to comment on the Project and its effects on historic properties and that Beech Ridge has addressed the Siting Certificate's condition of coordination with the WVSHPO in this regard.

CONSULTING PARTIES:

Susan M Pierce 7/31/08

West Virginia State Historic Preservation Office Date

David Roberts 8/4/08

Beech Ridge Energy LLC Date

1104590

APPENDIX C

WV ARCHAEOLOGICAL SITE FORM

WEST VIRGINIA ARCHAEOLOGICAL SITE FORM

1. Site No(s) **46Gb468** 2. Site Name **FS#1**

3. County: **Greenbrier** 4. 7.5' Quadrangle: **USGS 1972 (1981) Duo**

5. UTM Zone **17** Northing **4218630** Easting **0535018** Datum **NAD 83**

6. Location Description

The site is located approximately 12.5 km (7.8 mi) south of the community of Fenwick and is situated within the saddle located between Beech Knob and Little Beech Knob.

7. Ownership (Name/Address/Tenant) **Unknown**

8. Temporal Periods:

Prehistoric	☐ Unassigned	☐ Paleo-Indian	☒ **Archaic**, E **M L**
	☐ Woodland, E M L	☐ Late Prehistoric/Protohistoric	
Historic	☐ 1700-1750	☐ 1751-1800	☐ 1801-1850
	☐ 1851-1900	☒ **1901-1950**	☒ **1951-Present**

9. Cultural Affiliations(s), if known **Unknown**

10. Prehistoric Site Type:

☐ Isolated Find ☐ Open Air Habitation (Village/Camp/Hamlet)
☐ Cave/Rock Shelter ☐ Mound/Earthwork ☒ **Lithic Scatter**
☐ Rock Art (Petroglyph/Pictograph) ☐ Unknown ☐ Quarry/Reduction

Remarks:

11. Historic Site Type:

☒ **Domestic** ☐ Industrial ☐ Military
☐ Cemetery ☐ Rural ☐ Other
☐ Urban (Tax Map 3..... Parcel # .....) ☐ Unknown

Remarks: **Artifact Scatter**

12. Site Condition:

☐ Unknown ☐ Undisturbed ☐ Destroyed

☒ **Disturbed** (explain): **The site exhibits extensive disturbance likely associated with mechanical grading and livestock.**

13. Topography/Landform:

☐ Floodplain ☐ Terrace ☐1 ☐2 ☐ 3 ☐ Ridge Top ☒ Gap/**Saddle**
☐ Hillside/Bench ☐ Other:
Remarks:

WEST VIRGINIA ARCHAEOLOGICAL SITE FORM

14. Physiographic Province:

☒ **Appalachian Plateau** ☐ Transitional ☐ Ridge and Valley

☐ Other

15. Soils **Dekalb-Cookport loams, 3 to 12 percent slopes (DoB)**

16. Vegetation **Maintained Lawn Grasses**

17. Elevation **3950' AMSL** 18. Slope **0-5%** 19. Slope Direction **West**

20. Nearest Water (Name) **McMillion Creek** ☒ **Permanent** ☐ Intermittent

21. Site Size (Dimensions in Meters) **40-x-70 m**

22. Site Description (Note features, present land use, etc.) **See Continuation Sheets**

23. Investigation Type:

☒ **Reconnaissance** (**Surface survey**, **shovel tests**) ☐ Intensive (Phase II Testing) ☐ Excavation (%)

24. Investigated By (Name/Organization/Date) **Cultural Resource Analysts, Inc. Sept. 2009**
Remarks: **Recorded for Section 106 Compliance for the Proposed Beech Ridge Wind Energy Project & Associated Transmission Support Line, Greenbrier and Nicholas Counties, West Virginia.**

25. Site Significance: (For Official Use Only)

☐ NHL ☐ Not Evaluated ☐ National Register

☐ Considered Eligible ☐ Not Eligible

26. Artifacts Collected: ☒ **All** ☐ Some ☐ None

Check types collected:

☒ **Lithics** ☐ Ceramics ☐ Floral ☐ Faunal ☒ **Historical** ☐ Other

Remarks: **See Continuation Sheets**

27. Curation Location: **Cultural Resource Analysts, Inc: Hurricane, WV (Temporary)**

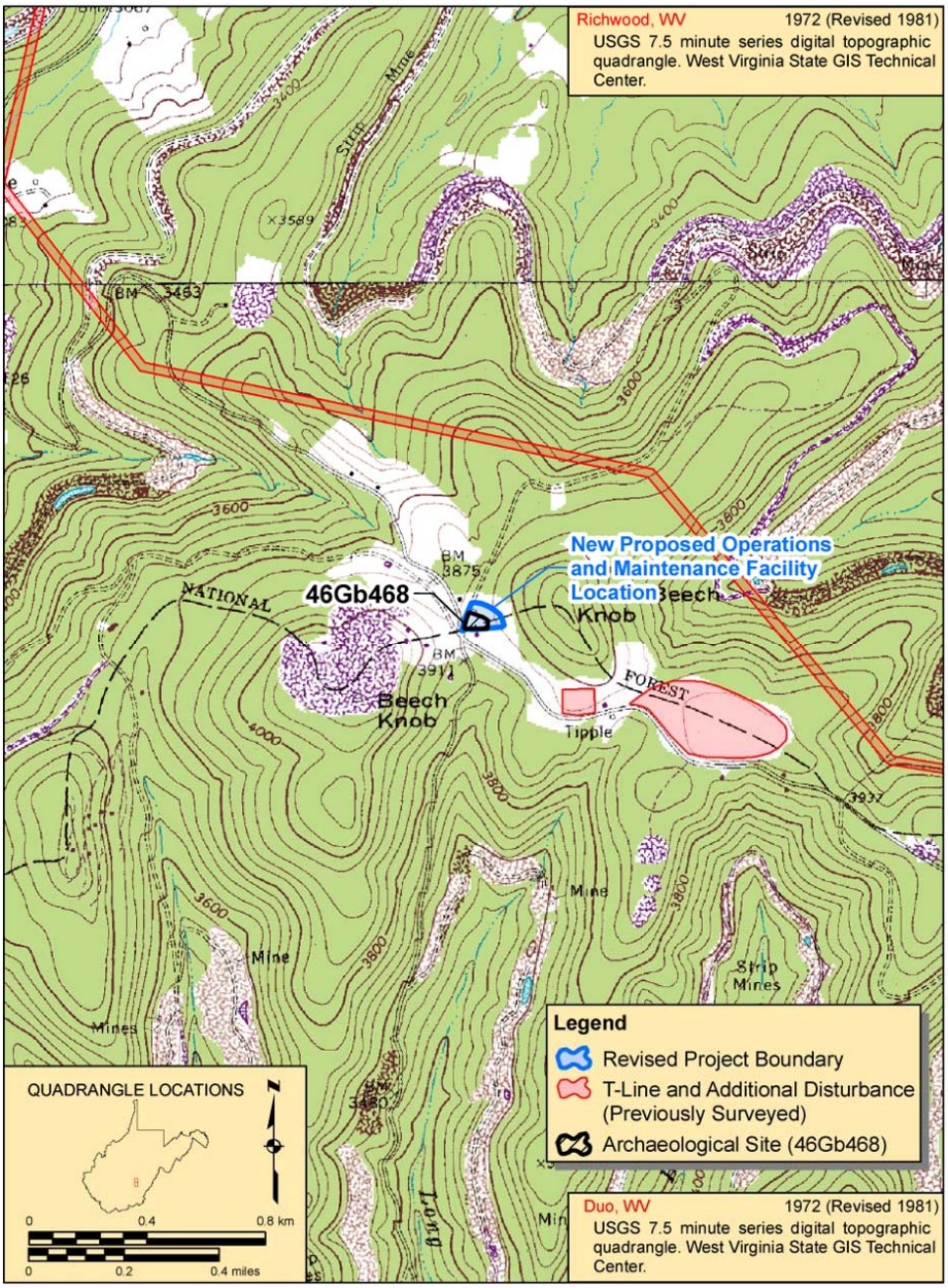
28. Recorder: **Jason Baker** Date: **09-09**

Cultural Resource Analysts, Inc., 3556 Teays Valley Road, Suite 3, Hurricane, West Virginia 25526

29. Map/References (Attach quad map or sketch location with nearest landmarks and include north arrow. Also note references, if any.) **See Continuation Sheets**

WEST VIRGINIA ARCHAEOLOGICAL SITE FORM
CONTINUATION SHEET

Site #:	46Gb468	Site Name:	FS#1	
Cultural Resource Analysts, Inc.	**County**	Greenbrier	**Page**	3 of 7



Portions of 1972 (1981) USGS 7.5-minute Duo and Richwood, WV Quadrangles showing the location of site 46Gb468 within the proposed O&M Facility location.

WEST VIRGINIA ARCHAEOLOGICAL SITE FORM CONTINUATION SHEET

Site #:	46Gb468		Site Name:	FS#1	
Cultural Resource Analysts, Inc.		**County**	Greenbrier	**Page**	4 of 7

The following is adapted from

Jason A. Baker

2009 *Addendum II to the Phase I Archaeological Survey of the Beech Ridge Wind Energy Project & Associated Transmission Support Line, Greenbrier and Nicholas Counties, West Virginia.* Contract Publication Series WV09-60. WVSHPO FR No. 06-147-GB-XX. Prepared for Beech Ridge Energy LLC. Prepared by Cultural Resource Analysts, Inc., Hurricane, West Virginia.

Site 46Gb468 is a multicomponent, low-density artifact scatter containing mixed deposits of prehistoric lithic materials and historic/modern domestic materials within highly disturbed contexts. The site is located approximately 12.5 km (7.8 mi) south of the community of Fenwick and is situated within the saddle located between Beech Knob and Little Beech Knob. The site boundary was established on the basis of the spatial distribution of positive STPs and the project boundary. Based on field observations, the integrity of the site has been negatively impacted by historic and/or modern mechanical grading and agricultural activities.

Identified archaeological deposits were recovered in association with a modified natural spring and the partially standing remains of an outbuilding. A review of available historic-period maps indicates that the extant remains likely represent an outbuilding depicted on the USGS 7.5-minute 1972 (1981) Duo topographic quadrangle, and that it was likely associated with a historic-period structure located immediately west of the project.

The natural spring is deeply entrenched, and the walls immediately adjacent the spring have been reinforced with large boulders. A deep drainage ditch, that was potentially mechanically excavated, extends west from the natural spring, and an earthen dam has been constructed within the ditch to retain water. Based on these observations, it is presumed that the natural spring was likely modified to function as a livestock-watering pond, and that the extant outbuilding remains likely represent a barn or equipment storage building associated with a larger historic farmstead.

At the time of the survey, the vast majority of the site area was covered by maintained lawn grasses. A small area immediately north of the outbuilding was littered with overgrown piles of logs and construction materials, the latter presumably removed from the outbuilding, and thus it was considered unsafe and inaccessible. Twenty-five STPs were excavated within and adjacent to the site; 12 of these were positive for archaeological materials. Artifact-bearing deposits were primarily restricted to shallow subsurface contexts associated with a highly disturbed A horizon. Careful examination of the soil profiles and screened deposits failed to discover any evidence of cultural features or midden.

The representative soil profile for this site, as documented in STP A02, consists of a very dark grayish-brown (10YR3/2) silt loam O/A horizon 5 cm (2 in) thick that overlies a mottled grayish-brown (10YR5/2), light yellowish-brown (10YR6/4), and strong brown (7.5YR5/6) silt loam A horizon 17 cm (6.7 in) thick, and a brownish-yellow (10YR6/6) clay loam B horizon with reddish-yellow (7.5YR6/6 & 7.5YR6/8) redox that extends below the base of the STPs.

Atypically, STPs D02 and R01 revealed a soil profile that evidenced a lesser degree of mechanical disturbance; however, the excavation of STP D02 indicated that archaeological deposits were mixed, as

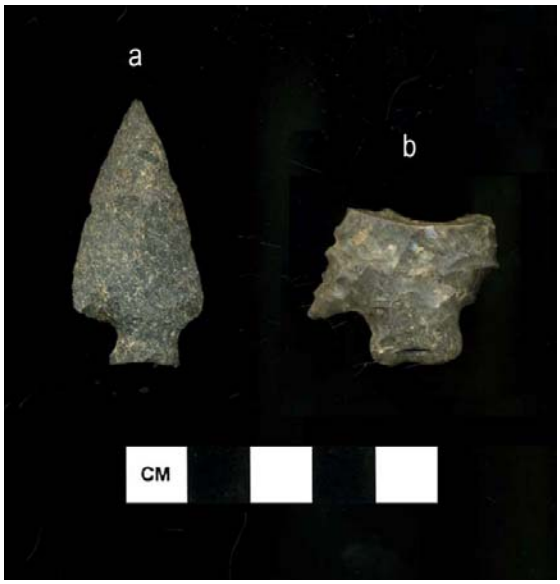
historic materials were recovered at greater depths within the A horizon than the prehistoric materials. This profile, as documented in STP R01, consisted of a brown (10YR4/3) silt loam A or Ap horizon 16 cm (6.3 in) thick with approximately five percent yellowish-brown (10YR5/4) mottles that overlies a yellowish-brown (10YR5/8) clay loam B horizon that extends to depths below the base of the STPs.

The site assemblage consists of 11 prehistoric artifacts and 29 historic and/or modern artifacts recovered during the excavation of 12 positive STPs. Identified prehistoric materials consist of 11 lithic artifacts recovered during the excavation of five positive STPs. No ceramics, groundstone tools, thermally altered rock, or floral or faunal remains were identified.

Technological analysis of the lithic assemblage identified nine pieces of lithic debitage and two formal flaked stone tools.

Debitage is represented by Size Grade 1 (n=6) and Size Grade 2 (n=3) specimens. Raw material analysis indicates that the entire debitage assemblage was manufactured from Hillsdale chert. One specimen retains cortex.

Formal flaked stone tools are represented by two hafted bifaces. The first specimen, recovered from STP R02, was identified as a Terminal Archaic Transition/Broad Blade Cluster hafted biface manufactured from low quality Kanawha chert (Figure a). This specimen is nearly complete, but missing the base. Overall, it exhibits a maximum length of 41.83 mm (1.7 in), a maximum width of 20.5 mm (0.8 in), and a maximum thickness of 6.84 mm (0.3 in).



The specimens placed in this group share morphological characteristics with regional stemmed types including those of the Genesee, Savannah River, and Susquehanna clusters defined by Justice (1987). Named types in these clusters include Genesee, Snook Kill, Savannah River Stemmed, Susquehanna Broad, Orient Fishtail, and Perkiomen Broad. These types are common in the Mid-Atlantic coast region and the Northeast during the Late to Terminal Archaic period, and some (e.g., Perkiomen, Susquehanna Broad) are commonly associated with steatite bowls. For West Virginia, Wilkins (1978:33-34) discusses Transitional Archaic points recovered from upland settings in the southern coalfield region, including Perkiomen, Susquehanna, Snook Kill, and a lanceolate variety of Orient Fishtail. At the Hansford Ballfield site (46Ka104), Youse (1992) reported the recovery of Perkiomen points of exotic brown chert from a cremation burial associated with stone bowl fragments dated to 1170 B.C. One of the Perkiomen points from the cremation was heat fractured, a pattern common for the type in the Atlantic coast region.

The second specimen, recovered from STP D02, was identified as the proximal fragment of a Stanly Stemmed hafted biface manufactured from Hillsdale chert (Figure b). This specimen exhibits ground notches and an incurvate basal shape. Overall, it exhibits a maximum length of 24.92 mm (1 in), a maximum width of 30.9 mm (1.2 in), and a maximum thickness of 8.14 mm (0.3 in).

These hafted bifaces exhibit broad, triangular blades and narrow, square stems with shallow basal notching (Coe 1964:35). The blade edges range from excurvate to incurvate and are often serrated. Stanly points can range in size and basal edging. Several recovered at Icehouse Bottom (40Mr23) by Chapman (1977:34-5) and other sites in the Lower Little Tennessee River Valley are smaller than the classic Stanly points described by Coe (1964:35). However, they conform morphologically to comparisons by Perino (1985:361) and Cambron and Hulse (1965:A-79; 1975:118). Cambron and Hulse (1965:A-79; 1975:118) state about the Stanly point and its variations "the basal edge of the plesiotypes is more incurvate than notched, as is the cotypes." Coe places the Stanly point in the Middle Archaic, around 5,000 B.C. A date range of 5800 to 5500 BC was suggested for the Tellico Reservoir area in east Tennessee (Chapman 1985). In West Virginia, Stanly points recovered from the Hansford site dated to 5745±155 B.C. (UGa-1093) (Youse 1992), and the Glasgow site dated to 5161±70 B.C. (Beta-44416) (Niquette et al. 1991), both of which are located in Kanawha County. Slightly earlier dates around 6000 BC were also obtained by Broyles (1969:35).

The excavation of nine positive STPs resulted in the recovery of 29 historic and/or modern artifacts belonging to the Architecture (n=12), Domestic (n=11), Furnishings (n=1), Maintenance and Subsistence (n=1), and Miscellaneous (n=4) groups.

Architecture Group materials consist of window glass (n=5) and wire nails (n=7). Window glass is represented one each by fragments exhibiting a thickness of 1.59 mm, 1.68 mm, 2.04 mm, 2.2 mm, and 2.48 mm, representing a date range of 1847-2009. All nails and nail fragments are wire nails that postdate 1885. Nails consist of one 3d specimen, one 5d specimen, and five indeterminate fragments.

Domestic Group materials consist of ceramic (n=4) and glass (n=7) artifacts. Ceramic items include three fragments of plain white granite stoneware, dating from 1850 to 2009, and one fragment of American yellowware, dating from 1830-2009. Glass container fragments include aquamarine (n=3), colorless, amethyst tint (n=1), and colorless, clear (n=3) glass.

The Furnishings Group is represented by one fragment of a machine-made, colorless, clear glass light bulb. The Maintenance and Subsistence Group is represented by one piece of indeterminate slag. The Miscellaneous Group is represented by two fragments of curved colorless, clear glass, one fragment of curved aquamarine glass, and one ferrous metal rod.

Current data suggest 46Gb468 is a multicomponent, low-density artifact scatter containing mixed deposits of prehistoric lithic materials and historic/modern domestic materials within highly disturbed contexts. Identified artifacts are from a non-stratified deposit within an extensively modified landscape and evidence of cultural features or midden is lacking.

Identified prehistoric deposits appear to represent small, open-air stations dating to the Middle and Late/Terminal Archaic temporal periods based on recovered hafted bifaces, and may have been associated with a natural spring. Based on the type and quantity of materials identified, lithic reduction appears to have been the primary site activity. Artifact densities are low, suggesting that site activities were temporally and functionally limited. Analysis of the lithic assemblage suggests that flaked stone tool production and/or subsequent maintenance was conducted.

WEST VIRGINIA ARCHAEOLOGICAL SITE FORM CONTINUATION SHEET

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Recovered historic/modern deposits appear to represent a scatter of primarily architectural and domestic materials dating to the late nineteenth and twentieth centuries that surround an outbuilding associated with a larger historic farmstead. The vast majority of identified deposits are non-diagnostic fragments of glass and ceramics, and most represent items with open-ended dates that are still manufactured today.

Although historic/modern landscape features and structural remains were identified at the site, mechanical grading has destroyed the physical integrity, mixing prehistoric and historic deposits within a shallow, highly disturbed A horizon. Given the extensive level of disturbance, the shallow, mixed nature of the site deposits, the lack of subsurface features, and the restricted range of functional groups represented in the historic and prehistoric artifact assemblages, 46Gb468 is considered to lack archaeological data important for refining our knowledge of local history or prehistory, and no further work is recommended.

APPENDIX D

ARTIFACT INVENTORY

Beech Ridge Wind Farm Phase I Prehistoric Inventory

Context		Class	Attribute 1	Attribute 2	Attribute 3	Attribute 4	Qty	Wt (g)
46Gb468								
STP A02	0-33 cmbgs	Debitage		Size 2 (1/4 inch)	Cortex Present	Hillsdale Chert; 1 w/ cortex	1	0.7
						STP A02 0-33 cmbgs Subtotal:	**1**	**0.7**
						STP A02 Total:	**1**	**0.7**
STP B01	0-30 cmbgs	Debitage		Size 1 (< 1/4 inch)		< 1/4 inch size	1	0.1
STP B01	0-30 cmbgs	Debitage		Size 2 (1/4 inch)	Cortex Absent	Hillsdale Chert	1	0.3
						STP B01 0-30 cmbgs Subtotal:	**2**	**0.4**
						STP B01 Total:	**2**	**0.4**
STP D02	0-30 cmbgs	Formal Flaked Stone	Hafted Biface	Stanly Stemmed	Proximal	Hillsdale Chert; Ground notches	1	5.8
						STP D02 0-30 cmbgs Subtotal:	**1**	**5.8**
						STP D02 Total:	**1**	**5.8**
STP R-1	0-23 cmbgs	Debitage		Size 1 (< 1/4 inch)		< 1/4 inch size	5	0.3
STP R-1	0-23 cmbgs	Debitage		Size 2 (1/4 inch)	Cortex Absent	Hillsdale Chert	1	0.3
						STP R-1 0-23 cmbgs Subtotal:	**6**	**0.6**
						STP R-1 Total:	**6**	**0.6**
STP R-2	0-30 cmbgs	Formal Flaked Stone	Hafted Biface	Terminal Archaic Transition/Broad Blade	Other Portion	Kanawha Chert: Low Quality; Base missing	1	5.1
						STP R-2 0-30 cmbgs Subtotal:	**1**	**5.1**
						STP R-2 Total:	**1**	**5.1**
						46Gb468 Site Total:	**11**	**12.6**
						Survey Total:	**11**	**12.6**

Beech Ridge Wind Farm Phase I Historic Inventory

Context		Class	Attribute 1	Attribute 2	Attribute 3	Comments	Qty	Wt (g)
46Gb468								
STP C02	0-25 cmbgs	Ceramic Tableware	Hollowware: Body	Stoneware, White Granite	Plain	Crazing 1850-2009 -burned-	1	2.2
						STP C02 0-25 cmbgs Subtotal:	**1**	**2.2**
						STP C02 Total:	**1**	**2.2**
STP D02	0-30 cmbgs	Glass Storage Container	Indet. Container: Body	Colorless, Clear Glass	ABM (Non-Owens)	Plate embossing "…N…"/ "…EDY…"/ "…U…" Embossed on Body 1917-2009	1	2.4
STP D02	0-30 cmbgs	Misc. Glass	Aquamarine Glass	Curved			1	1.6
STP D02	0-30 cmbgs	Misc. Glass	Colorless, Clear Glass	Curved		1875-2009	1	0.9
STP D02	0-30 cmbgs	Nails	Wire	Fragment(s)	Common	1885-2009	1	6.3
STP D02	0-30 cmbgs	Window Glass	Pane Glass	1.59 mm		1847-1847	1	0.3
STP D02	0-30 cmbgs	Window Glass	Pane Glass	1.68 mm		1854-1854	1	0.6
STP D02	0-30 cmbgs	Window Glass	Pane Glass	2.48 mm		1915-2009	1	2.0
						STP D02 0-30 cmbgs Subtotal:	**7**	**14.1**
						STP D02 Total:	**7**	**14.1**
STP D03	0-30 cmbgs	Ceramic Tableware	Hollowware: Body	Stoneware, White Granite	Plain	Crazing 1850-2009	1	1.9
STP D03	0-30 cmbgs	Window Glass	Pane Glass	2.04 mm		1885-1885	1	0.1
						STP D03 0-30 cmbgs Subtotal:	**2**	**2.0**
						STP D03 Total:	**2**	**2.0**
STP E02	0-40 cmbgs	Glass Beverage Container	Indet. Bottle: Body	Colorless, Amethyst Tint Glass	Blown in Mold	Mend 1880-2009	1	1.2
STP E02	0-40 cmbgs	Glass Beverage Container	Indet. Bottle: Body	Colorless, Clear Glass	Blown in Mold	1875-2009	1	2.1
						STP E02 0-40 cmbgs Subtotal:	**2**	**3.3**
						STP E02 Total:	**2**	**3.3**
STP E03	0-30 cmbgs	Glass Storage Container	Indet. Container: Body	Aquamarine Glass	Blown in Mold		1	2.0
STP E03	0-30 cmbgs	Lighting	Light Bulb, Indet.	Colorless, Clear Glass	Machine-made	1878-2009	1	0.1
STP E03	0-30 cmbgs	Nails	Wire	5d	Indet. Nail Head	1885-2009	1	3.3
STP E03	0-30 cmbgs	Nails	Wire	Fragment(s)	Indet. Nail Head	1885-2009	4	11.1
						STP E03 0-30 cmbgs Subtotal:	**7**	**16.5**
						STP E03 Total:	**7**	**16.5**
STP E04	0-30 cmbgs	Misc. Metal	Ferrous Metal	Rod	Machine-made		1	25.0
						STP E04 0-30 cmbgs Subtotal:	**1**	**25.0**

Beech Ridge Wind Farm Phase I Historic Inventory

Context		Class	Attribute 1	Attribute 2	Attribute 3	Comments	Qty	Wt (g)
						STP E04 Total:	**1**	**25.0**
STP R-1	0-23 cmbgs	Fuel	Other Fuel			Slag -burned-	1	9.5
STP R-1	0-23 cmbgs	Misc. Domestic Ceramic	Indet. Object: Body	R.E., Yellowware, American	Other Decoration	White, pitted glaze 1830-2009	1	0.4
STP R-1	0-23 cmbgs	Nails	Wire	3d	Common	Pulled 1885-2009	1	2.2
						STP R-1 0-23 cmbgs Subtotal:	**3**	**12.1**
						STP R-1 Total:	**3**	**12.1**
STP R-3	0-30 cmbgs	Misc. Domestic Glass	Indet. Object	Aquamarine Glass	Indet. Manufacture		1	0.2
						STP R-3 0-30 cmbgs Subtotal:	**1**	**0.2**
						STP R-3 Total:	**1**	**0.2**
STP R-4	0-37 cmbgs	Glass Beverage Container	Indet. Bottle: Body	Colorless, Clear Glass	ABM (Non-Owens)	1917-2009	1	0.5
STP R-4	0-37 cmbgs	Glass Storage Container	Indet. Container: Body	Aquamarine Glass	Blown in Mold		1	2.5
STP R-4	0-37 cmbgs	Misc. Domestic Ceramic	Indet. Object: Body	Stoneware, White Granite	Plain	Crazing 1850-2009	1	0.8
STP R-4	0-37 cmbgs	Misc. Glass	Colorless, Clear Glass	Curved		1875-2009	1	0.2
STP R-4	0-37 cmbgs	Window Glass	Pane Glass	2.2 mm		1898-1898	1	1.4
						STP R-4 0-37 cmbgs Subtotal:	**5**	**5.4**
						STP R-4 Total:	**5**	**5.4**
						46Gb468 Site Total:	**29**	**80.8**
						Survey Total:	**29**	**80.8**