

**A Phase I Archaeological Literature Review and Reconnaissance
Survey for the Proposed New Interstate 79 Interchange between the
Westover and Star City Interchanges near the City of Morgantown,
Monongalia County, West Virginia**

By

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ABSTRACT

In May 2013, Burgess & Niple, Inc. contracted Archaeological Consultants of the Midwest to conduct a Phase I archaeological literature review and reconnaissance survey for a proposed new interchange on Interstate 79 near the City of Morgantown in Monongalia County, West Virginia. Specifically, the new interchange will be located between the Westover and Star City interchanges. The direct Area of Potential Effects (APE) for the new interchange is approximately 281 acres in area.

An examination of the records maintained by Division of Culture and History indicated that no archaeological sites have been recorded and no professional investigations have been conducted in the APE. It was determined that five professional investigations have been undertaken, as well as one site and three cemeteries have been recorded within a 1-mile radius of the APE. No National Register of Historic Places (NRHP) properties or cemeteries have been inventoried in the APE. A review of the USGS 1904 Blacksville and 1931 Morgantown quadrangles (15' topographic maps) indicated that no buildings and/or structures were noted in the APE. An examination of the USGS 1999 Osage and 2000 Morgantown North quadrangles (7.5' topographic maps) revealed that a great deal of the APE has been disturbed from previous mining activities.

The fieldwork confirmed that large parts of the APE have been disturbed from prior mining activities, as well as from the installation of gas pipelines. Shovel probes were excavated in those sections of the APE that were visually undisturbed and had landforms with the potential for archaeological resources. An examination of the soil profiles indicated that the shovel probed areas have been previously disturbed and/or heavily eroded. While no archaeological sites were inventoried, the investigation did document the Breakiron Cemetery (small rural family cemetery that will be avoided by the proposed project) [site 46MG304].

Because the cemetery will be avoided, no archaeological sites were recorded, and the information collected from the shovel probes indicated that the APE has been disturbed and/or heavily eroded, it can be determined that the proposed project will have *no effect* on any archaeological resources that are eligible for inclusion on the NRHP under Criterion D.

No further work is recommended within the proposed APE.

TABLE OF CONTENTS

Abstract	i
Table of Contents	ii
List of Figures	ii
List of Plates	iii
List of Tables	iv
Introduction	1
Environmental Setting	10
Research Design	14
Field Methods	14
Results of the Reconnaissance Survey	15
Area 1	27
Area 2	29
Area 3	30
Area 4	30
Area 5	34
Area 6	35
Area 7	38
Summary and Conclusions	39
References	41
Appendix A: Project Documentation	43
Appendix B: Copy of the Cultural Resources Files and Library User Registration and Research Record Form	44
Appendix C: Vitae of Appropriate Staff	45

LIST OF FIGURES

Figure 1	Map of the State of West Virginia showing the general location of the APE	2
Figure 2	Map of Monongalia County showing the general location of the APE	3

Figure 3	A section of the USDA 1999 Osage and 2000 Morgantown North quadrangles (7.5' topographic maps) showing the location of the APE	4
Figure 4	Aerial map showing the location of the APE	5
Figure 5	Preliminary construction drawing of the interchange and the boundary of the APE	6
Figure 6	Hillshade map showing the slope and contours in the APE	7
Figure 7	A section of the USDA 1999 Osage, 2000 Morgantown North, 1997 Rivesville, and 2001 Morgantown South quadrangles (7.5' topographic maps) showing the location of the APE and previously surveyed areas	9
Figure 8	A section of the USGS 1904 Blacksville and 1931 Morgantown quadrangles (15' topographic maps) showing the location of the APE	11
Figure 9	USDA (2003) soil map showing the location of the APE	13
Figure 10	A section of the 1999 Osage and 2000 Morgantown North quadrangles (7.5' topographic maps) showing the location of the APE, slope within the APE, and disturbances	16
Figure 11	A section of the 1999 Osage and 2000 Morgantown North quadrangles (7.5' topographic maps) showing the location of the APE and the photographs	25
Figure 12	A section of the USGS 1999 Osage and 2000 Morgantown North quadrangle (7.5' topographic map) showing the location of the APE, slope within the APE, disturbances, and survey areas	26
Figure 13	Aerial map showing the location of the northern half of the APE, slope in the APE, disturbances, Areas 1 to 4, and shovel probes	28
Figure 14	Soil profiles documented in the APE	31
Figure 15	Aerial map showing the southern section of the APE, slope in the APE, disturbances, Areas 4 to 7, and shovel probes	33

LIST OF PLATES

Plate 1	Photograph of a previously mined area and associated building, looking east	17
Plate 2	Photograph of a previously mined area, looking east	17

Plate 3	Photograph of a disturbed area that has been bench mined, looking southeast	18
Plate 4	Photograph of a previously mined area, looking southeast	18
Plate 5	Photograph of a disturbed area from a bench mine, looking south	19
Plate 6	Photograph of a previously bench mined area and Area 2, looking south	19
Plate 7	Photograph of a previously bench mined area showing recent tree growth, looking north	20
Plate 8	Photograph of a previously mined area showing recent tree growth, looking southeast	20
Plate 9	Photograph of gob piles from previous mining activities, looking south	21
Plate 10	Photograph of a close-up view of a gob pile showing tree growth, looking east	21
Plate 11	Photograph of a gas pipeline traversing through the APE and Area 1, looking northeast	22
Plate 12	Photograph of a mine entry, looking east	22
Plate 13	Photograph of a second mine entry documented in the APE, looking west	23
Plate 14	Photograph of a third mine entry, looking northwest	23
Plate 15	Photograph of a visually undisturbed landform showing the ground cover in Area 6, looking south	24
Plate 16	Photograph of a visually undisturbed area showing the ground cover and steep slope in Area 7, looking northwest	24

LIST OF TABLES

Table 1	Soil profiles documented in Area 1	27
Table 2	Soil profiles documented in Area 2	29
Table 3	Soil profiles documented in Area 3	30
Table 4	Soil profiles documented in Area 4	32

Table 5	Soil profiles documented in Area 5	34
Table 6	Soil profiles documented in Area 6	36
Table 7	Soil profiles documented in Area 7	39

INTRODUCTION

In May 2013, Burgess & Niple, Inc. contracted Archaeological Consultants of the Midwest to conduct a Phase I archaeological literature review and reconnaissance survey for a proposed new interchange on Interstate 79 (I-79) near Morgantown in Monongalia County, West Virginia (Figures 1 and 2). Specifically, the new interchange will be located between the Westover and Star City interchanges (Figures 3 and 4). Figure 5 shows the preliminary drawing of the proposed interchange with the Area of Potential Effects (APE) outlined in red.

The zone of study for the new interchange is approximately 281 acres in area and it is this zone of study that constitutes the APE for this investigation. Because the plans for the interchange are at this time only preliminary, there is the probability that the final plans might include design changes that may need additional areas outside of what is currently anticipated. As a result of this possibility, it was decided to have the APE encompass this larger area in order to ensure that if additional land is needed, then this has been examined.

It should be noted that the University Town Centre Drive expansion located roughly in the center of the preliminary plans and east of the red line shown on Figure 5 is a separate project. Because of this, no work was undertaken by this investigation on the proposed road east of the red line.

The APE (project area) is situated on gradual to moderate slopes, ridge tops, small ravines, benches, and previously mined areas (Figure 6). The ground cover consists of mine spoil, immature wooded areas, and previously disturbed areas.

Because several archaeological sites have been recorded in the region and on similar landforms that are in the APE, Division of Culture and History (DCH) determined that there is the potential for sites to be situated in the project area. As a result of this potential, DCH requested that a Phase I archaeological investigation needed to be conducted prior to any construction activities that would impact the APE (Appendix A).

The archaeological investigation for this project was conducted in response to Section 106 of the National Historic Preservation Act of 1966, as amended in 1992, U.S.C. 470f (Appendix A). The document is congruent with the standards established by the Advisory Council of Historic Preservation and all Section 106 (36 CFR Part 800) regulations. The federal standards and guidelines are supplemented by the procedures presented by the West Virginia Historic Preservation Office (Trader 2001). The goals of this survey are to determine whether archaeological resources exist within the APE and to determine whether any of these archaeological resources meet the National Register of Historic Places (NRHP) Criteria for Evaluation.

Since this investigation failed to document any new archaeological sites, this report utilizes the short report format that is detailed in *Guidelines for Phase I, II, and III Archaeological Investigations and Technical Reports* (Trader 2001).

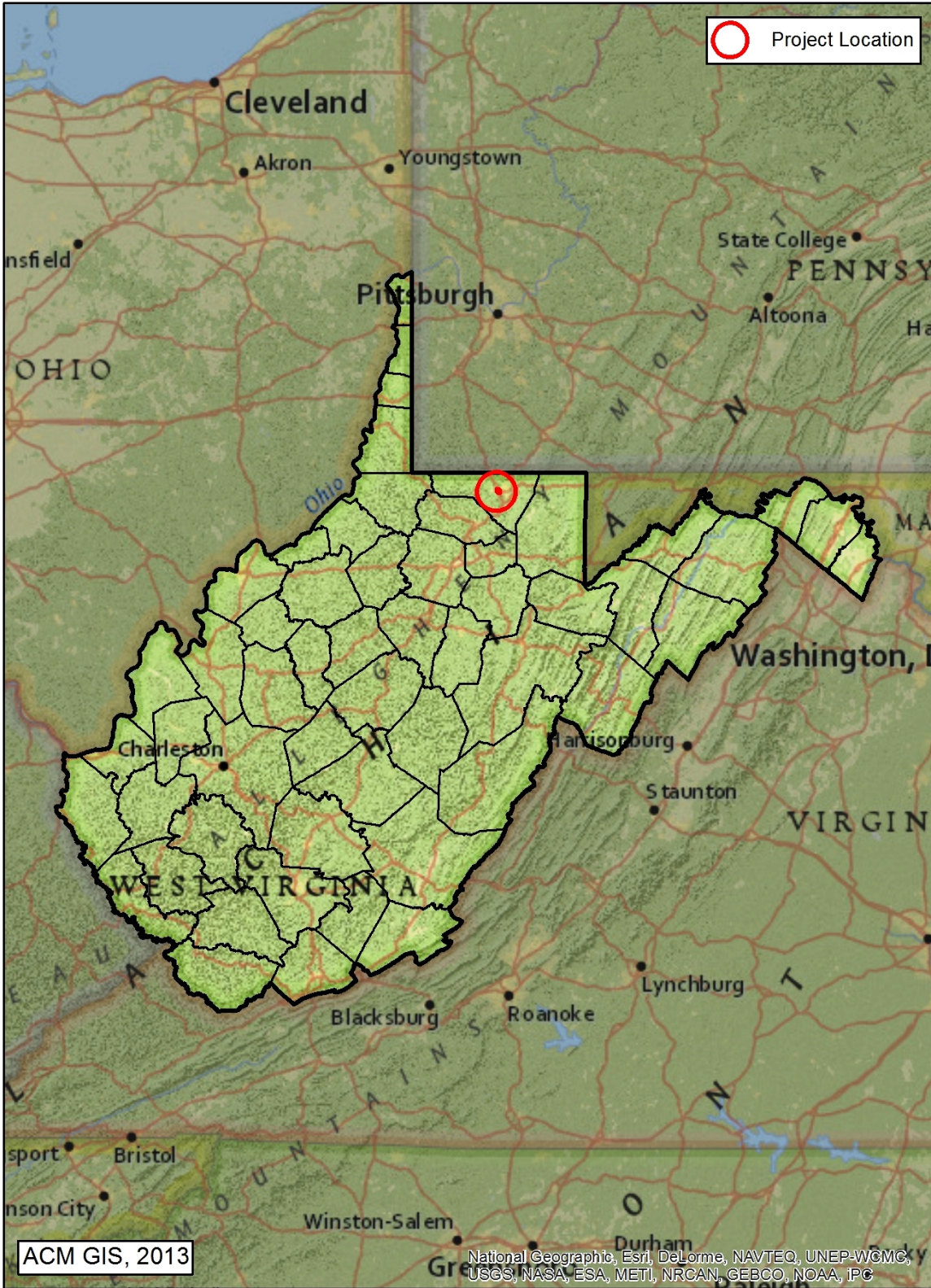


Figure 1. Map of the State of West Virginia showing the general location of the APE.

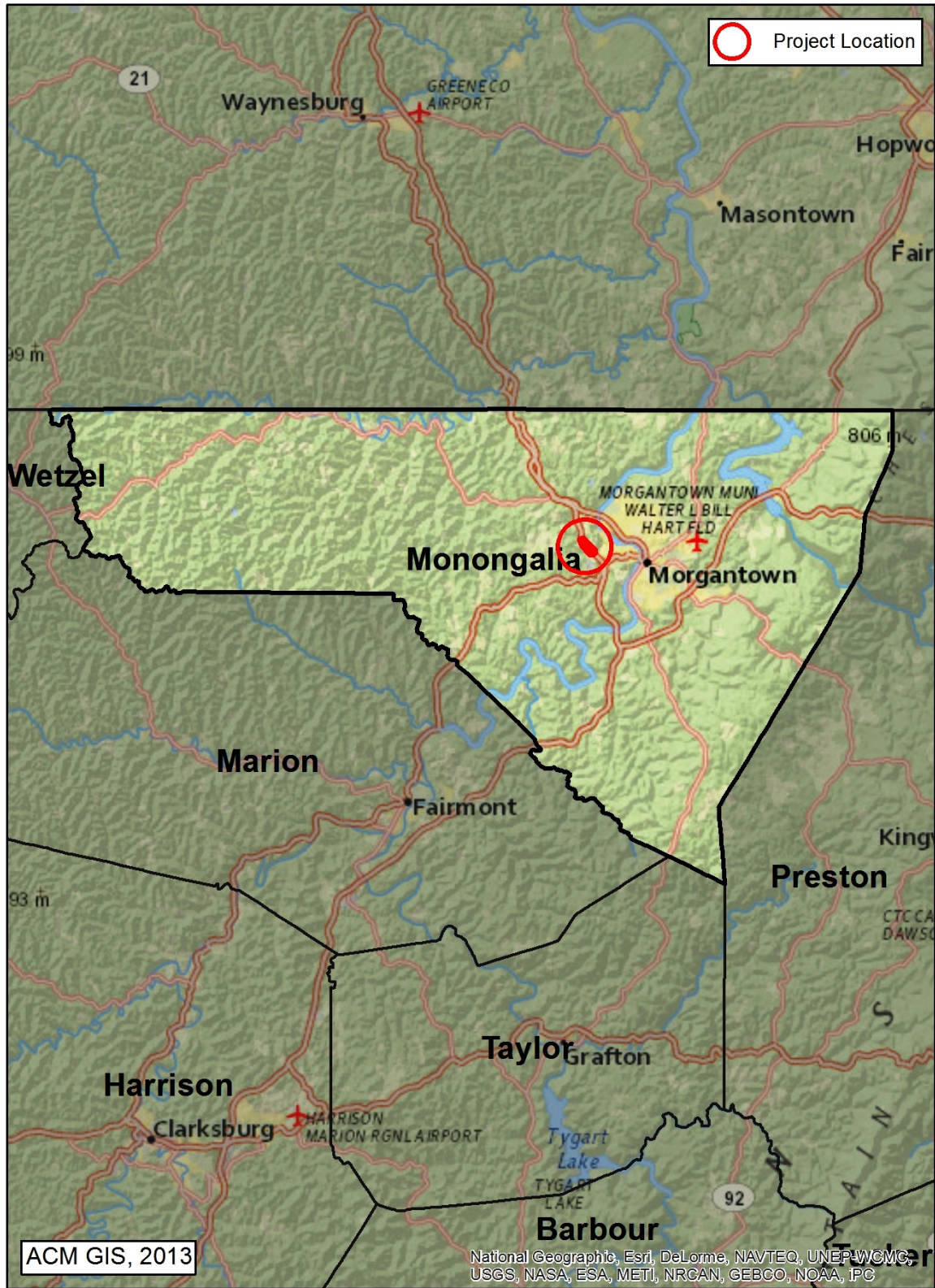


Figure 2. Map of Monongalia County showing the general location of the APE.

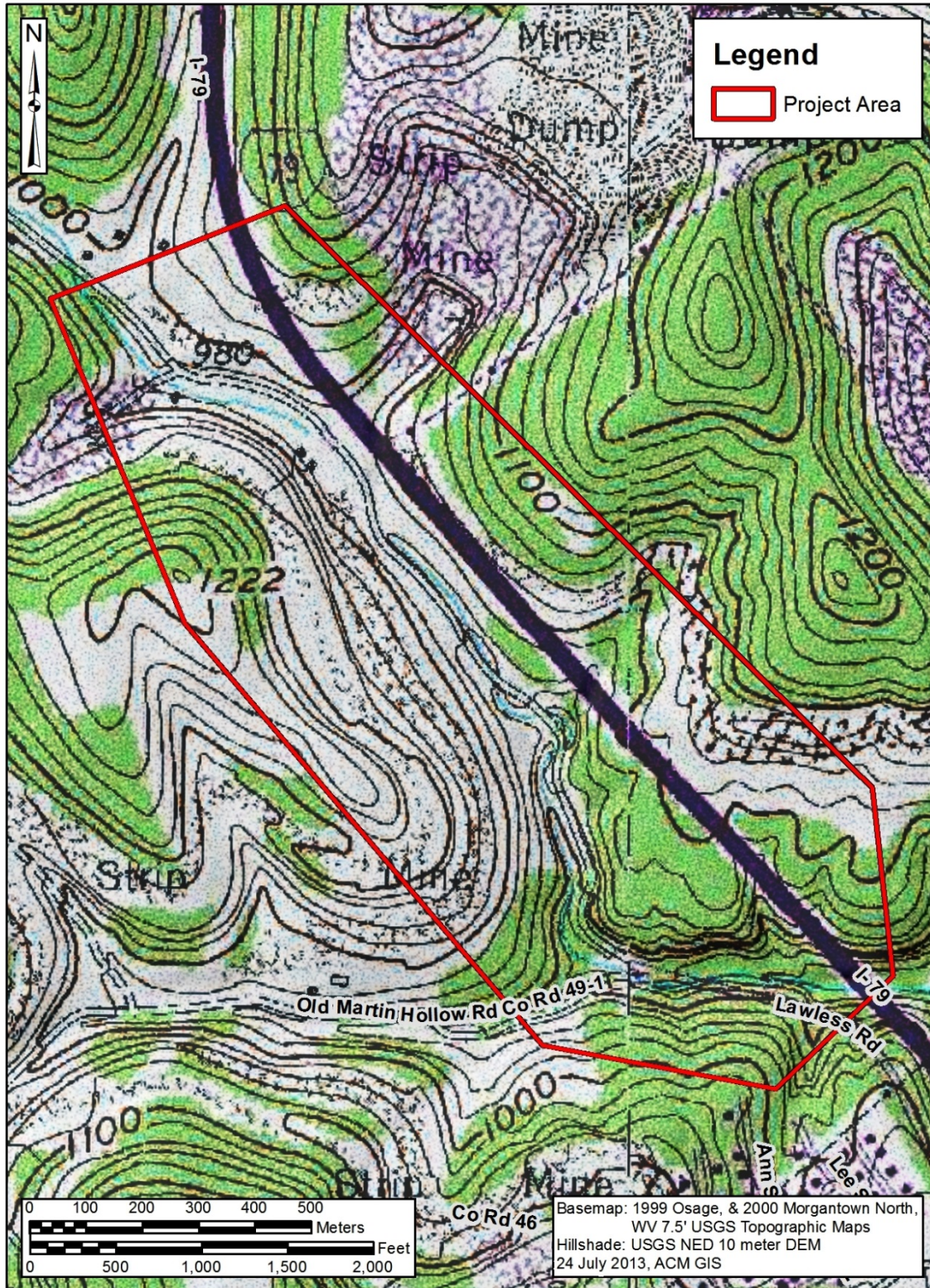


Figure 3. A section of the USDA 1999 Osage and 2000 Morgantown North quadrangles (7.5' topographic maps) showing the location of the APE.

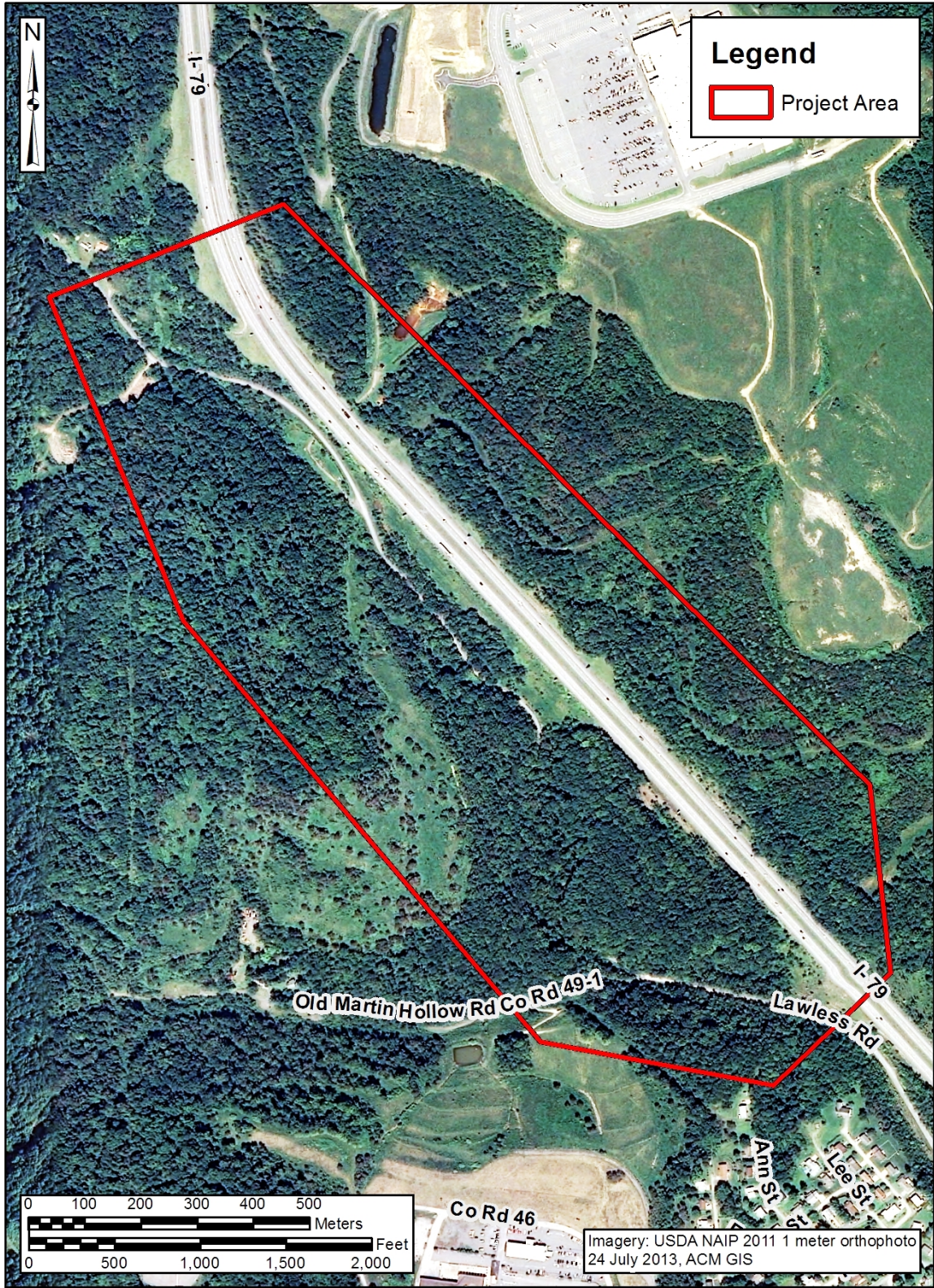


Figure 4. Aerial map showing the location of the APE.

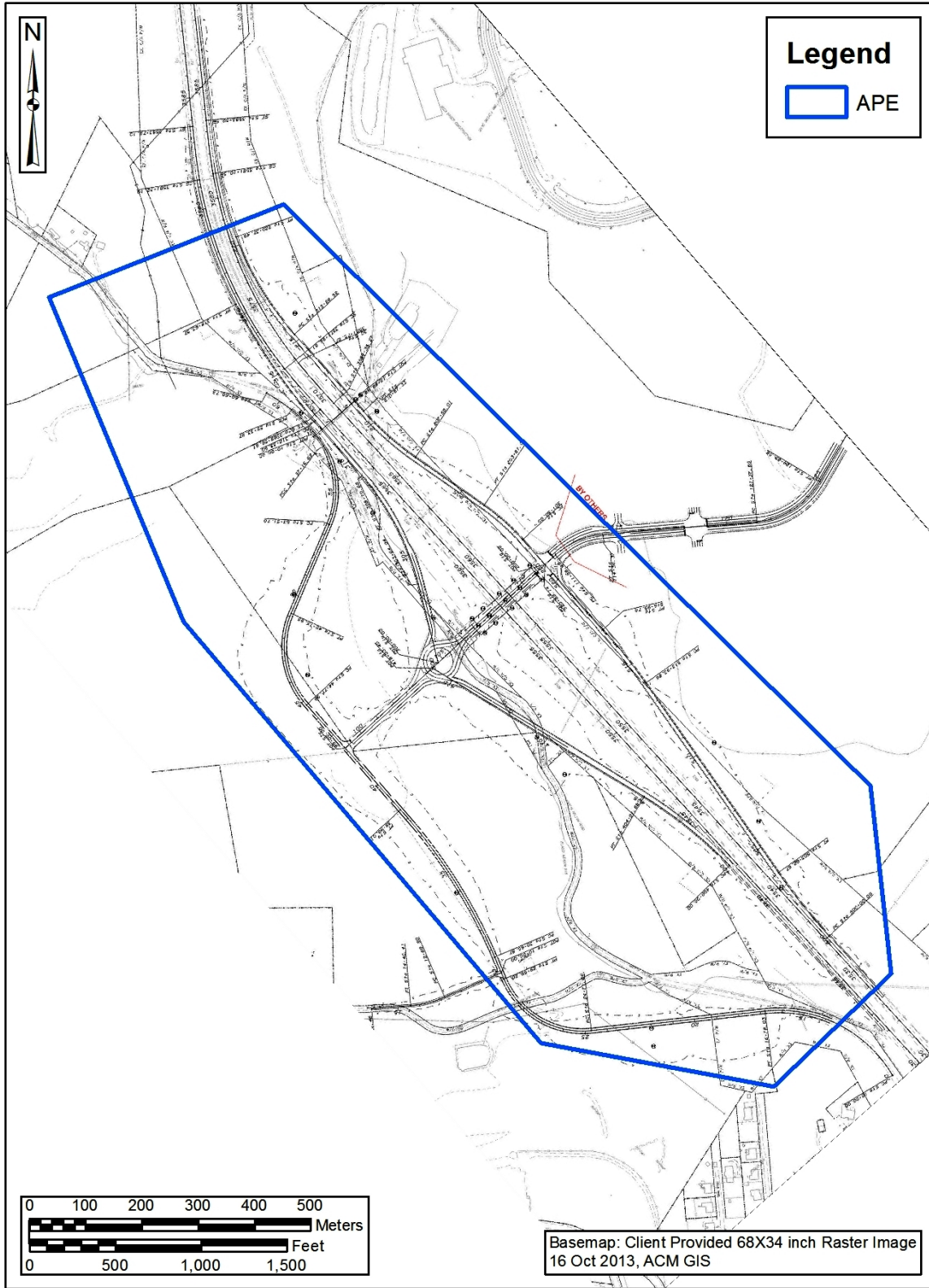


Figure 5. Preliminary construction drawing of the interchange and the boundary of the APE.

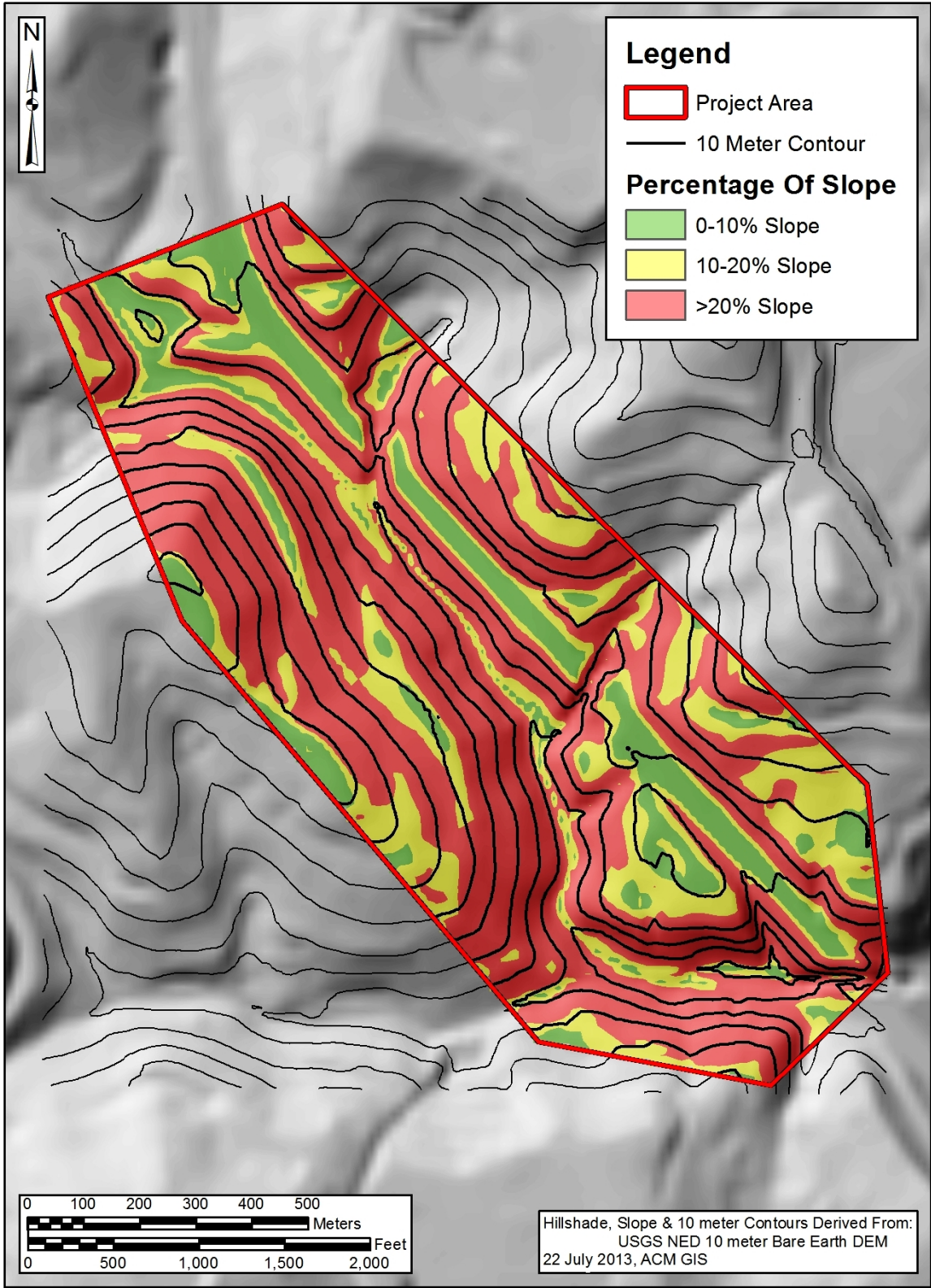


Figure 6. Hillshade map showing the slope and contours in the APE.

The literature review, which was conducted by Brittany Vance on May 9, 2013, consisted of an examination of the records maintained at DCH. These records include cultural resource management (CRM) reports, quadrangles showing the location of professionally investigated areas and archaeological sites, archaeological site forms, and cemetery records. From an examination of the records it was determined that no professional investigations have been conducted and that no archaeological sites have been recorded in the APE.

However, further examination of the records indicated that five professional investigations have been undertaken (Figure 7) and four sites recorded within a 1 mile radius of the APE; hereafter defined as the study area. The following is a brief description of these investigations, beginning with the most recent and proceeding in reverse chronological order.

The most recent professional investigation occurred in 2011. The investigation was undertaken by The Louis Berger Group, and consisted of a Phase I cultural resources survey for the proposed Osage-Whiteley 138 kV Transmission Line (FR# 07-1095-Multi). The survey is located northwest of the APE (Figure 7). The purpose of the project was to construct a transmission line from the Whiteley substation in Greene County, Pennsylvania to the Osage substation situated west of Morgantown. Archaeologically, only two sites were documented in the West Virginia section of the Phase I survey (The Louis Berger Group 2011); neither site is located in the study area.

The second investigation was a Phase I survey undertaken in 2000 by Christine Davis Consultants for the proposed Star City Telecommunications Tower sites (FR# 00-474-MG). The survey is situated west-northwest of the APE (Figure 7). No sites were recorded by that survey (Davis et al. 2000).

The third investigation consisted of a Phase I survey for the proposed Scotts Run Public Service District's Sanitary Sewer Collection System project (FR# 99-545-MG). The survey, which is located north of the APE (Figure 7), was conducted by Big Blue Archaeological Research in 2001. No sites were documented by that survey (Stathakis 2001).

The fourth investigation, which is situated west and northwest of the APE (Figure 7), was a Phase I survey also by Big Blue Archaeological Research. The survey was undertaken in 2000 for the proposed Guston Run North Surface Mine (FR# 97-905-MG). One site (46MG184) and two cemeteries (46MG185 and 46MG186) were recorded by that investigation (Stathakis 2000).

The oldest investigation in the study area was conducted in 1994 by Big Blue Archaeological Research. The investigation, which is situated northwest of the APE (Figure 7), consisted of a Phase I survey for the proposed Chaplin Hill #2 Prospects Road project (FR# 94-1446-MG). No sites were recorded by that survey (Stathakis and Harrison 1994).

Four sites have been recorded in the study area; these sites consist of three cemeteries (46MG185, 46MG186, and 46MG223) and an isolated find (46MG184). No prehistoric diagnostic artifacts were collected from site 46MG184. None of these sites will be directly impacted by the proposed project.

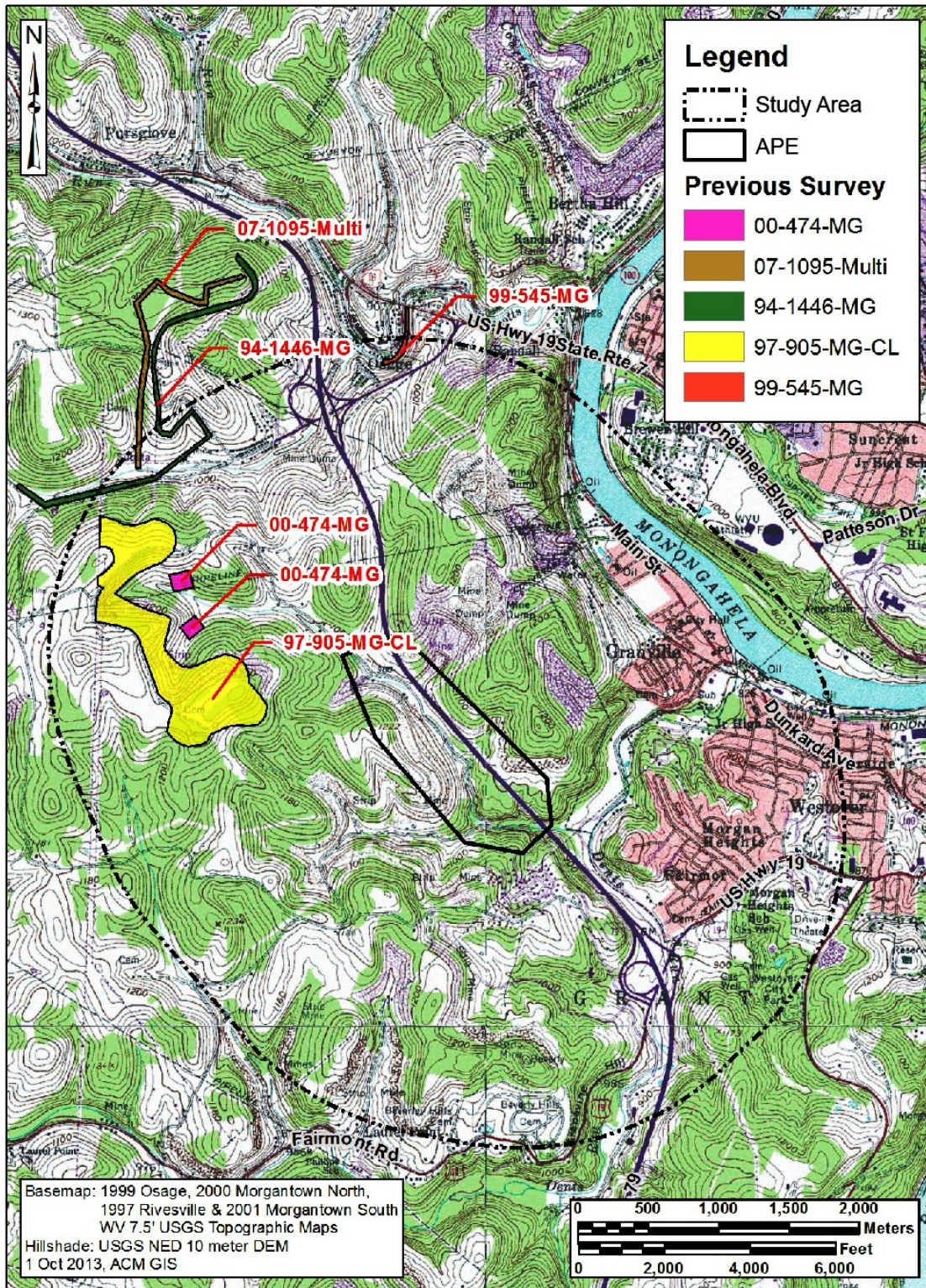


Figure 7. A section of the USDA 1999 Osage, 2000 Morgantown North, 1997 Rivesville, and 2001 Morgantown South quadrangles (7.5' topographic maps) showing the location of the APE and previously surveyed areas.

A review of the cemetery records indicated that although cemeteries have been reported within the study area, none have been recorded in the APE. An online search of the GIS map maintained by DCH was conducted in order to determine the presence/absence of NRHP properties in the APE. This search indicated that no NRHP properties have been inventoried in or immediately adjacent to the APE.

In order to ascertain the potential for historic sites in the APE, the USGS 1904 Blacksville and 1931 Morgantown quadrangles (15' topographic maps) were examined. From this review, it was determined that no buildings/structures had been recorded in the APE (Figure 8).

Christopher Jackson M.S., RPA, directed the field investigation, and which was undertaken by Jon Walker, Brittany Vance, and James Vosvick between July 9 and 15, 2013. Christopher Jackson M.S., RPA, is the Principal Investigator for this project while Kimberly Jackson serves as the Project Manager. Graphics for this report were compiled by Jon Walker.

The weather at the time of the investigation varied from sunny to partly sunny skies and high temperatures ranging from approximately 83 degrees to 92 degrees F.

ENVIRONMENTAL SETTING

The project area is located in the Appalachian Plateaus physiographic province which is characterized by an extensive, mature plateau with generally moderate to high relief (Fenneman 1938). Specifically, the project area is situated on the crown, shoulders, and sideslopes of a broad ridgetop with approximately 60 percent of the project area's ground surface displaying slope that either equals or exceeds 20 percent (Figure 6). The project area's elevation ranges from 1,000 to 1,270 ft above mean sea level (amsl).

The underlying bedrock for the project area and its vicinity consists of sedimentary rocks belonging to the Dunkard and Monongahela groups; these groups date to the Permian and Pennsylvanian epochs (Caldwell and Erwin 1986). Both groups contain cyclic sequences of sandstone, siltstone, red and gray shale, limestone, and coal. While the potential for the occurrence of chert within the project area is unknown, the Uniontown formation of the Monongahela Group in southwestern Pennsylvania does contain nodules of Monongahela and Uniontown cherts, both of which were utilized extensively by the prehistoric populace of the region (East et al. 1996).

Since there are no floodplains situated in the project area, and the fact that the soils in the project area are predominately residual in nature, the potential for buried archaeological deposits in the project area is minimal at best. According to the *Soil Survey of Marion and Monongalia Counties, West Virginia* (Wright et al. 1982), soils documented in the project area and its vicinity are from the Westmoreland-Culleoka-Clarksburg soil association. This soil association is noted for its gently sloping to very steep soils that are usually well-drained; soils of this association are predominantly found on uplands and foot slopes.

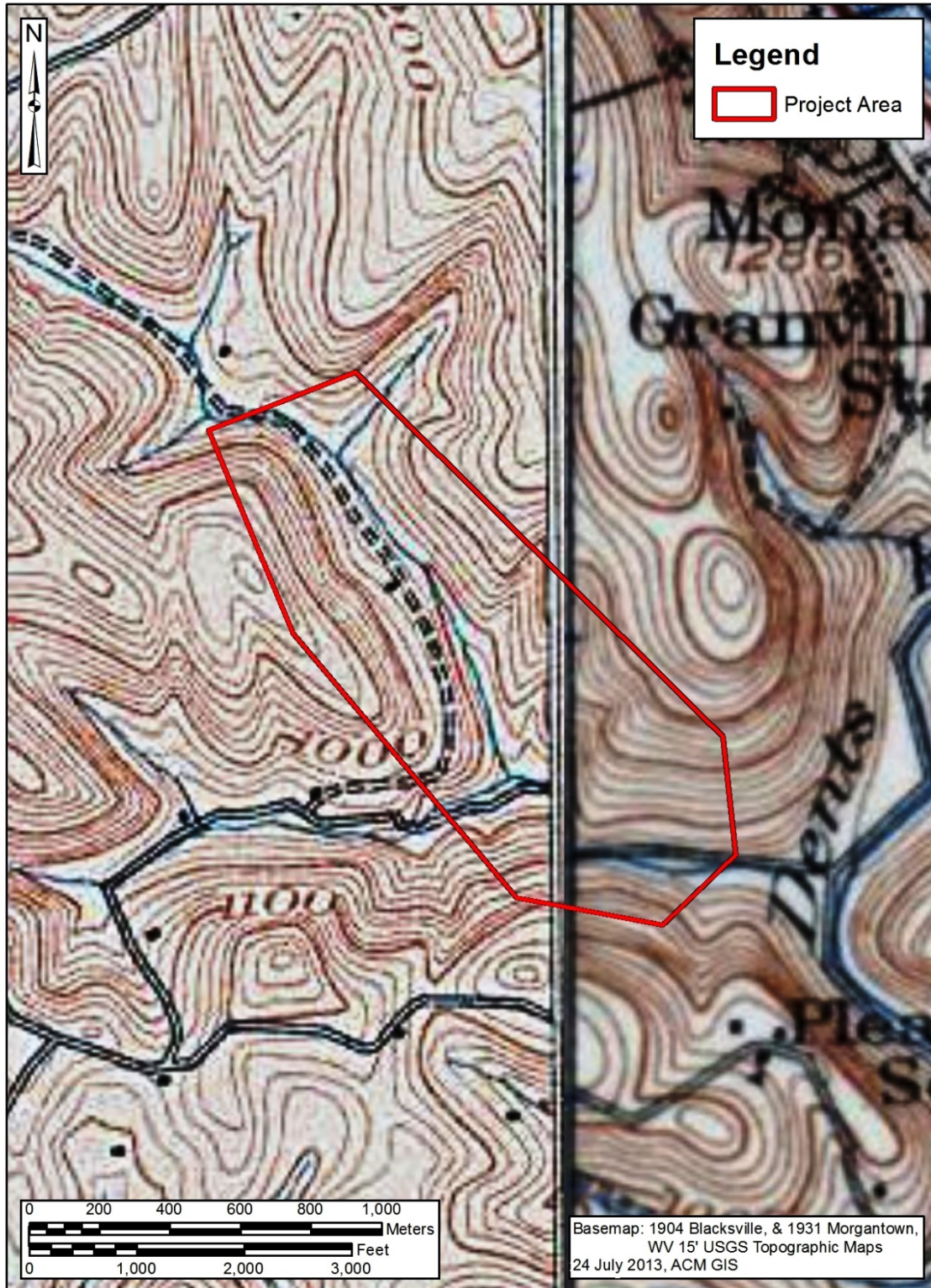


Figure 8. A section of the USGS 1904 Blacksville and 1931 Morgantown quadrangles (15' topographic maps) showing the location of the APE.

Specific soils documented in the APE include Culleoka-Westmoreland silt loams with 8 to 15 percent slope (CwC), Culleoka-Westmoreland silt loams with 15 to 25 percent slopes (CwD), Culleoka-Westmoreland silt loams with 25 to 35 percent slope (CwE), Culleoka-Westmoreland silt loams with 35 to 65 percent slope (CwF), Dormont and Guernsey silt loams with 15 to 25 percent slope (DgD), Gilpin-Culleoka-Upshur silt loams with 35 to 65 percent slope (GuF), Tilsit silt loam with 3 to 8 percent slope (TIB), and Westmoreland silt loam with 25 to 35 percent slope (WeE). Disturbed soils recorded in the APE include Udorthents, cut and fill (U1), Udorthents, dumps and low base (U2), Udorthents, mudstone and sandstone with a high base (U4), and Udorthents, mudstone and sandstone with a low base (U5) [Figure 9].

The Culleoka-Westmoreland soils that have less than 25 percent slope are primarily located on benches and ridges with the parent material consisting of loamy residuum weathered from limestone, sandstone, and shale. These soils are well drained (USDA 2003).

The Culleoka-Westmoreland soils with greater than 25 percent slope are found on hillslopes, ridges, and benches. The parent material consists of loamy residuum weathered from limestone, sandstone, and shale. These soils are well drained (USDA 2003).

The Dormont and Guernsey soils are documented on benches and ridges with the parent material consisting of either loamy residuum weathered from limestone and shale or clayey residuum weathered from limestone and shale. These soils are moderately well drained (USDA 2003).

Gilpin-Culleoka-Upshur soils are noted on benches, hillslopes, and ridges with the parent material consisting of loamy residuum weathered from sandstone, sandstone, and shale. These soils are well drained (USDA 2003).

Tilsit soils are located on ridges. The parent material consists of fine silty residuum weathered from shale and siltstone. These soils are moderately well drained.

Westmoreland soils are situated on ridges, hillslopes, and benches. The parent material consists of loamy residuum weathered from limestone, sandstone, and shale. These soils are well drained (USDA 2003).

An intermittent tributary of Dent's Run flows roughly parallel to Interstate 79 and the center of the APE. Several ephemeral streams also flow through the APE (Figure 3). All of these streams are situated in the Monongahela River basin. The river is located northeast and east of the APE.

Monongalia County has a humid continental climate with an average of 22.0 inches of rain and 32.0 inches of snow per year. In the coldest month of the year, January, the daytime average high averages 38.7 degrees F and the nighttime low averages 21.6 degrees F. July is the hottest month, with daytime highs averaging 83.9 degrees F and lows averaging 62.5 degrees F. A typical growing season is 160 days (Wright et al. 1982).

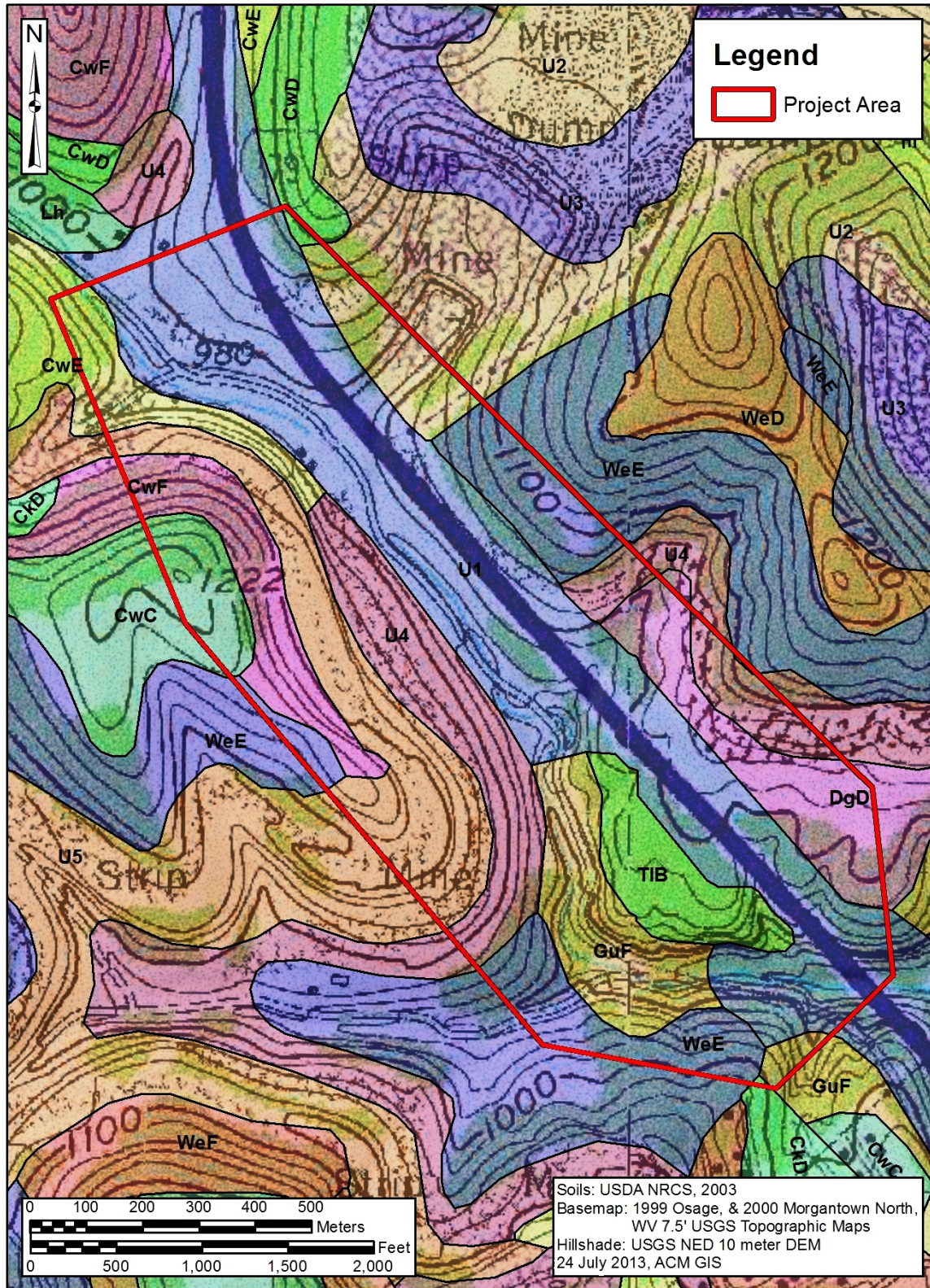


Figure 9. USDA (2003) soil map showing the location of the APE.

By the end of the Pleistocene, the project area and in fact northern West Virginia had a mixed conifer-northern hardwoods ecosystem. By 5000 BP, except for the eastern panhandle, West Virginia consisted of a mixed hardwoods ecosystem, which was the floral community when the state was the first Euro-Americans began to settle in the state (Delcourt and Delcourt 1980). The study area and APE fall within the limits of the Mixed Mesophytic Forest region (Braun 1950). This tall, broadleaf deciduous forest type provides cover for a majority of West Virginia, and is dominated by sugar maple, sweet buckeye, beech, tulip poplar, and red oak (Wright et al. 1982).

White tailed deer, black bear, wild turkey, gray squirrels, ruffed grouse, and cottontail rabbit are the major game animals of Monongalia County. Common fur bearing animals include red fox, gray fox, raccoon, woodchuck, mink, and muskrat (Wright et al. 1982).

RESEARCH DESIGN

Utilizing data from the literature review and from the region, a research design was formulated that aided in this investigation. As noted in the literature review, an isolated find and three cemeteries have been documented in the study area (none in the APE). However, archaeological data from the region indicates that due to the steepness of the terrain in the APE, if an archaeological site is inventoried by this investigation, the site would be indicative of a transitory occupation. Thus, the site would probably consist of a small lithic scatter and/or an isolated find.

From an examination of the modern USGS topographic maps, it can be determined that large sections of the APE have been disturbed from previous mining activities. Because the historic USGS topographic maps do not indicate any mining activities in the APE, it can be inferred that the mining activities are of recent origin. Further review of the historic USGS quadrangles indicate that no buildings/structures were recorded in the APE. This would suggest that if a historic site is documented by this investigation, then it is likely that the site would consist of a dump and/or outbuilding.

FIELD METHODS

Field methods utilized by Archaeological Consultants of the Midwest during this investigation consisted of shovel probing and visual inspection. The following is a brief description of these methods.

Shovel probing: This method was utilized in areas that had less than 20 percent slope and where ground surface visibility was less than 25 percent. Shovel probes were 50 cm by 50 cm in size and excavated at 15 m and 30 m intervals depending upon the soil profiles documented within each area. If an area was determined to be disturbed/eroded, then the interval was increased to 30 m until intact soil profiles were encountered. When intact soils were identified, the interval was reduced to 15 m. If radial shovel probes are warranted, then the interval would be reduced to 7.5 meters with the radial shovel probes

excavated in all four cardinal directions until negative shovel probes are encountered. Fill from the shovel probes was screened through .25 inch hardware mesh cloth. Excavation of the shovel probes terminated when either 10 cm of sterile subsoil had been excavated, or if subsoil was not encountered, then at 50 cm.

A record was kept for all shovel probes excavated. This record included soil profile, soil texture, soil color (Munsell), and the presence /absence of cultural materials.

Visual Inspection: All of the project area was visually inspected. This consisted of a walkover with the intention to locate disturbed areas, as well as potential structure remnants, dumps, etc.

Curation

All field notes and photographs will eventually be permanently curated at the Archaeological Collections Facility in Moundsville, West Virginia when the agency begins taking collections.

RESULTS OF THE RECONNAISSANCE SURVEY

Christopher Jackson M.S., RPA, supervised the field investigation, and which was conducted by James Vosvick, Jon Walker, and Brittany Vance. The field investigation was undertaken between July 9 and 15, 2013. The weather at the time of the investigation varied from sunny to partly sunny skies and high temperatures ranging from approximately 83 degrees to 92 degrees F.

Visual inspection indicated that large sections of the APE have been disturbed from previous mining activities, gas pipelines, and the construction of I-79. Examination of the mined areas documented bench mines, mine entries, and gob piles (Plates 1 to 11). In fact, three mine entries were documented in the APE (Plate 12 to 14). In those areas that were not visually disturbed, the area was eroded and the ground cover consisted mainly of woods with 0 percent surface visibility (Plate 15). It was also observed that most of the APE is situated in moderate to steep slopes (Figure 6; Plate 16). Figure 10 shows the location of the photographs, while Figure 11 indicates the slope in the APE and the areas of disturbance.

Therefore, due to the non-existent surface visibility, shovel probes were excavated in visually undisturbed areas and on landforms that have less than 20 percent slope. In order to better provenience possible site locations, as well as vegetation, and method of survey, these visually undisturbed areas were divided into seven separate survey areas (designated Area 1 to Area 7) [Figure 12]. The following is a brief description of these survey areas beginning with Area 1 and proceeding numerically. The description will include ground cover, terrain, method of survey, and the presence/absence of archaeological materials.

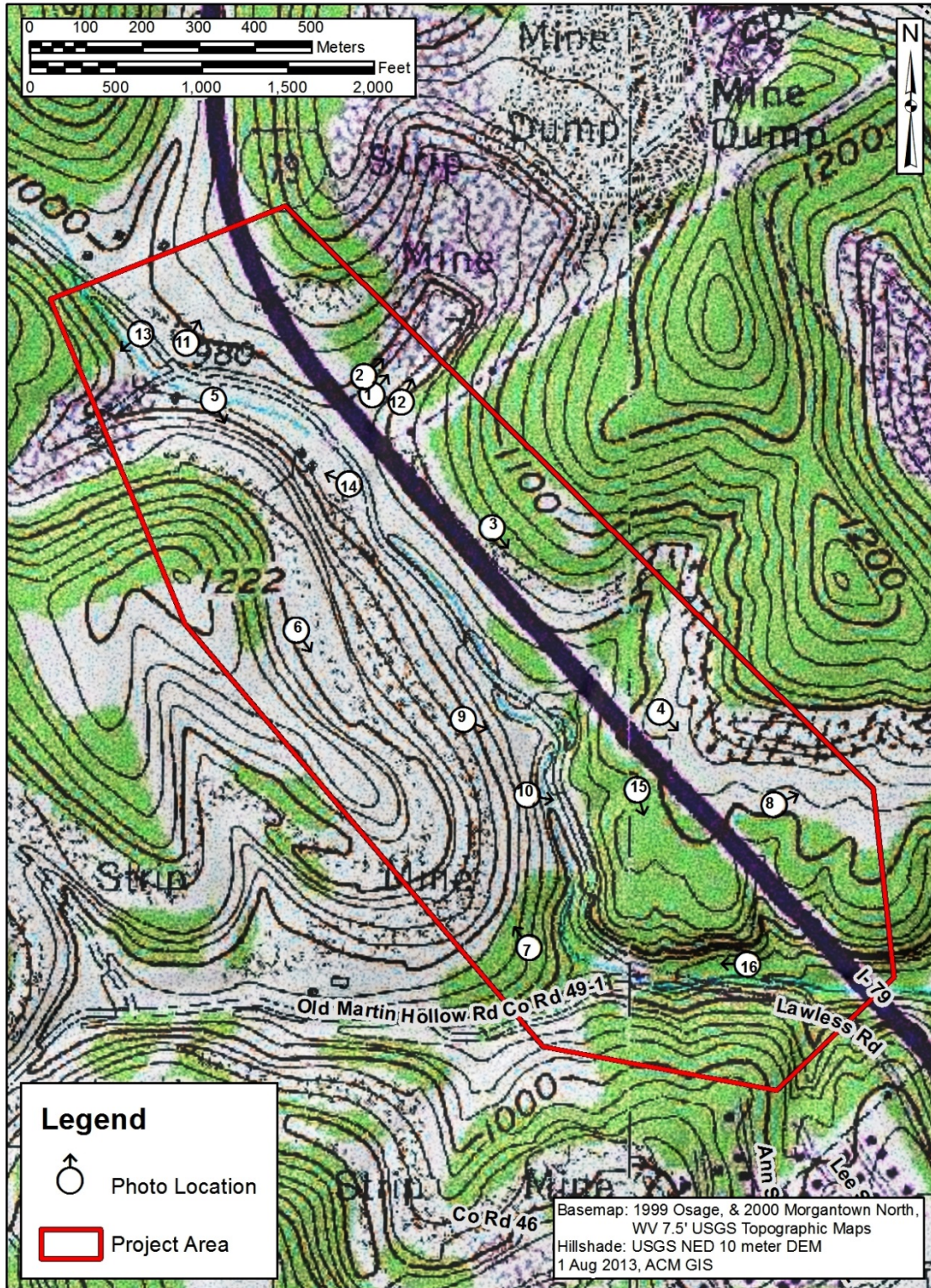


Figure 10. A section of the 1999 Osage and 2000 Morgantown North quadrangles (7.5' topographic maps) showing the location of the APE and the photographs.



Plate 1. Photograph of a previously mined area and associated building, looking east.



Plate 2. Photograph of a previously mined area, looking east.



Plate 3. Photograph of a disturbed area that has been bench mined, looking southeast.



Plate 4. Photograph of a previously mined area, looking southeast.



Plate 5. Photograph of a disturbed area from a bench mine, looking south.



Plate 6. Photograph of a previously bench mined area and Area 2, looking south.



Plate 7. Photograph of a previously bench mined area showing recent tree growth, looking north.



Plate 8. Photograph of a previously mined area showing recent tree growth, looking southeast.



Plate 9. Photograph of gob piles from previous mining activities, looking south.



Plate 10. Photograph of a close-up view of a gob pile showing tree growth, looking east.



Plate 11. Photograph of a gas pipeline traversing through the APE and Area 1, looking northeast.



Plate 12. Photograph of a mine entry, looking east.



Plate 13. Photograph of a second mine entry documented in the APE, looking west.



Plate 14. Photograph of a third mine entry, looking northwest.



Plate 15. Photograph of a visually undisturbed landform showing the ground cover in Area 6, looking south.



Plate 16. Photograph of a visually undisturbed area showing the ground cover and steep slope in Area 7, looking northwest.

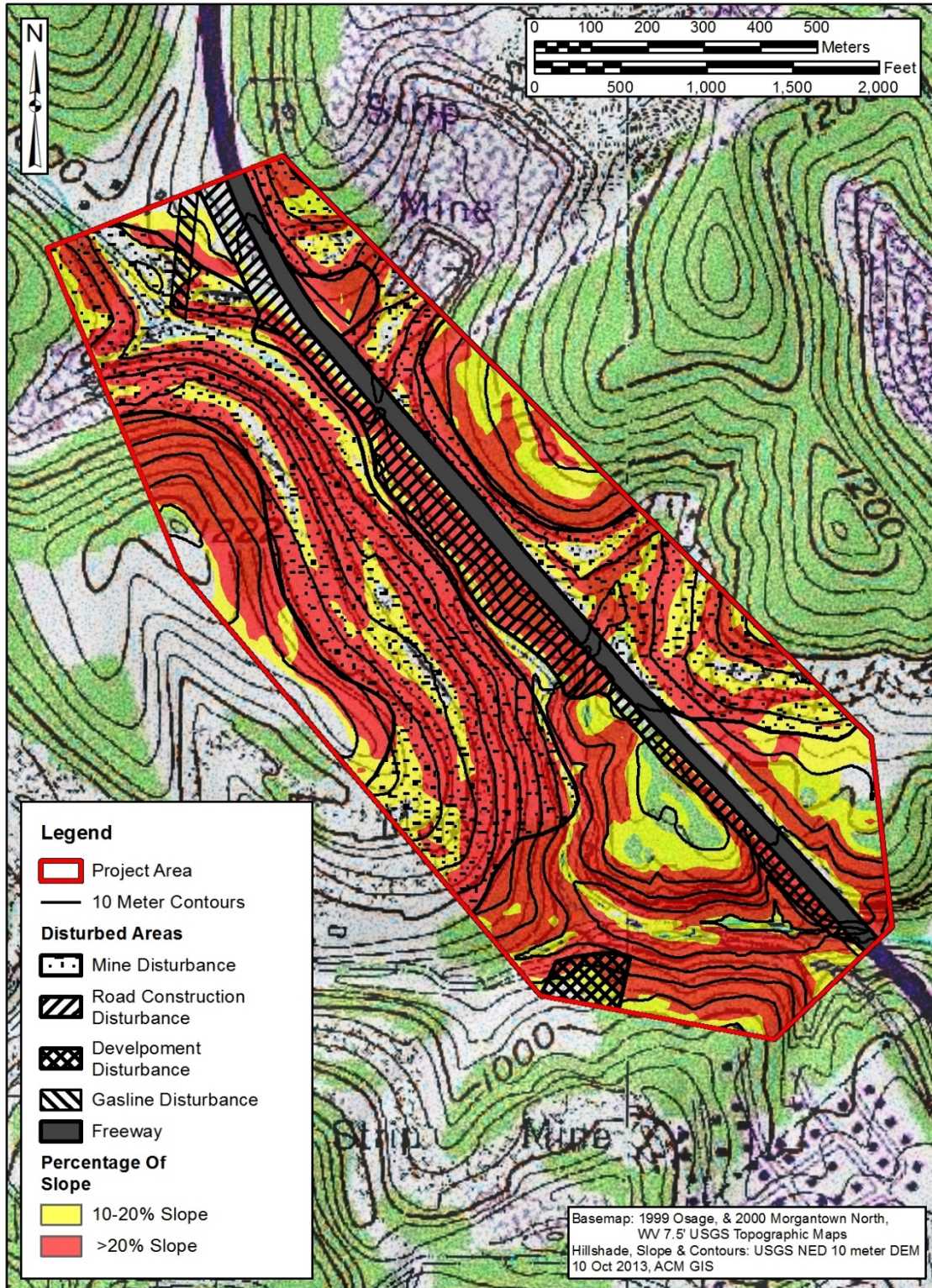


Figure 11. A section of the 1999 Osage and 2000 Morgantown North quadrangles (7.5' topographic maps) showing the location of the APE, slope within the APE, and disturbances.

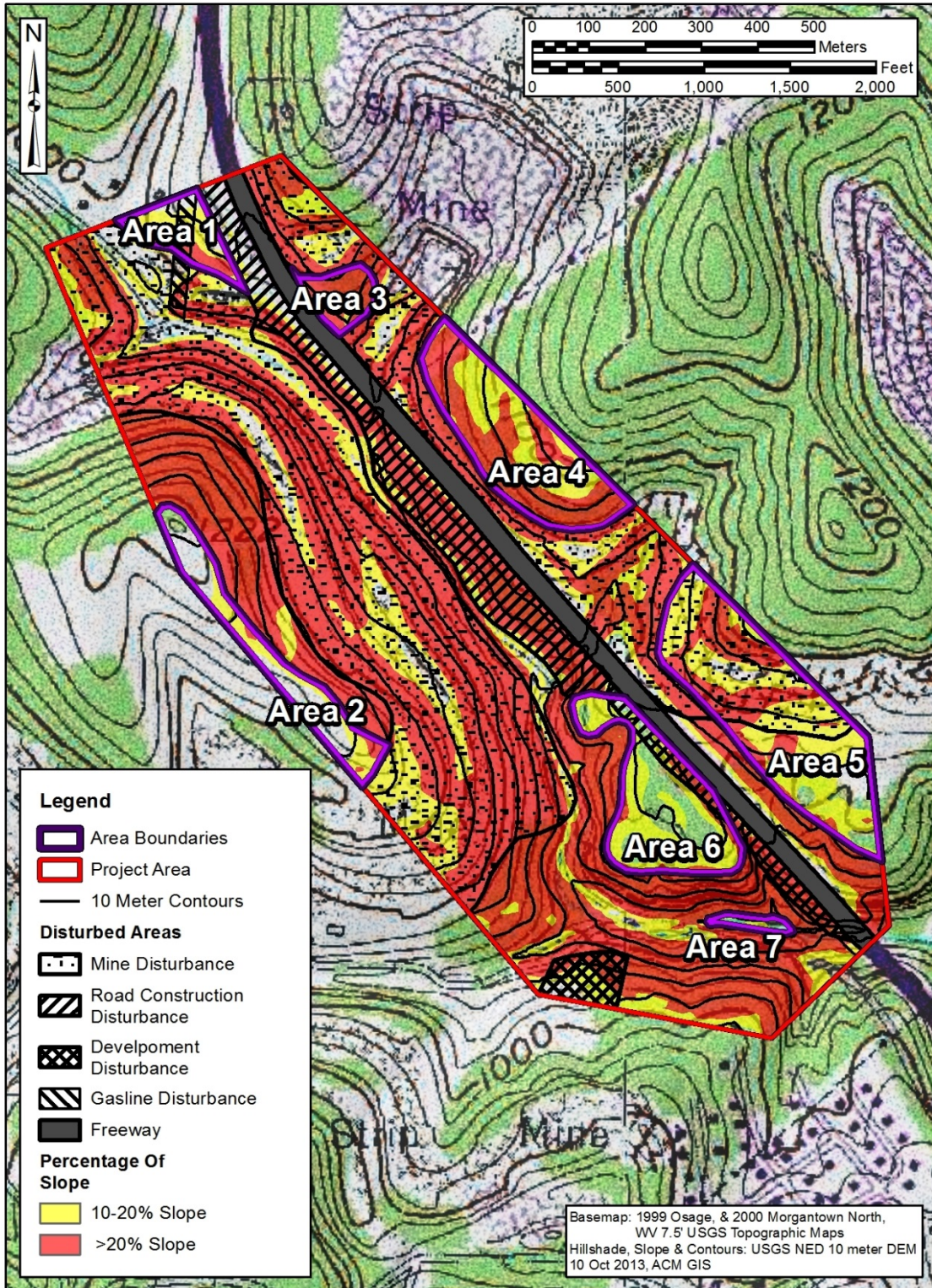


Figure 12. A section of the USGS 1999 Osage and 2000 Morgantown North quadrangle (7.5' topographic map) showing the location of the APE, slope within the APE, disturbances, and survey areas.

Area 1

This area is located near the northern border of the APE and west of I-79 (Figure 12). Visual examination of this area indicated that the ground cover consisted of high weeds and secondary undergrowth with sparse trees (Plate 11). Surface visibility was 0 percent. The terrain consisted of a gradual to moderate slope.

Because of the nonexistent surface visibility, shovel probes (n=7) were excavated (Figure 13). All of the shovel probes were negative and no subsurface in situ archaeological deposits were encountered. An examination of the soil profiles indicated that the area has been moderately disturbed from the construction of a gas pipeline and previous mining activities (Table 1).

Table 1. Soil profiles documented in Area 1.			
Provenience	Soil Profile		Comment
Transect 1 Probe 1	0 to 11 cm Brown (10YR4/3) silt loam with rock	11 cm to 23 cm Yellow (10YR7/6) clay and rock	Moderately eroded
Transect 1 Probe 2	0 to 7 cm Brown (10YR4/3) silt loam with rock	7 cm to 14 cm Yellow (10YR7/6) clay and rock	Moderately eroded
Transect 1 Probe 3	0 to 10 cm Brown (10YR4/3) silt loam with rock and coal fragments	10 cm to 20 cm Yellow (10YR7/6) clay and rock	Moderately eroded
Transect 1 Probe 4	0 to 13 cm Yellow Brown (10YR5/4) silt loam with rock	13 cm to 20 cm Yellow (10YR7/6) clay and rock	Moderately eroded
Transect 2 Probe 1	0 to 11 cm humus with coal fragments and rock	11 cm to 26 cm Light Red (2.5Y6/6) clay with rock	Moderately disturbed
Transect 2 Probe 2	0 to 10 cm humus with rock and coal fragments	10 cm to 20 cm Light Red (2.5Y6/6) clay and rock	Moderately disturbed
Transect 2 Probe 3	0 to 14 cm humus with rock	14 cm to 25 cm Yellow (10YR7/6) clay and rock	Moderately disturbed

Since all of the shovel probes were negative, no sites were inventoried in Area 1.

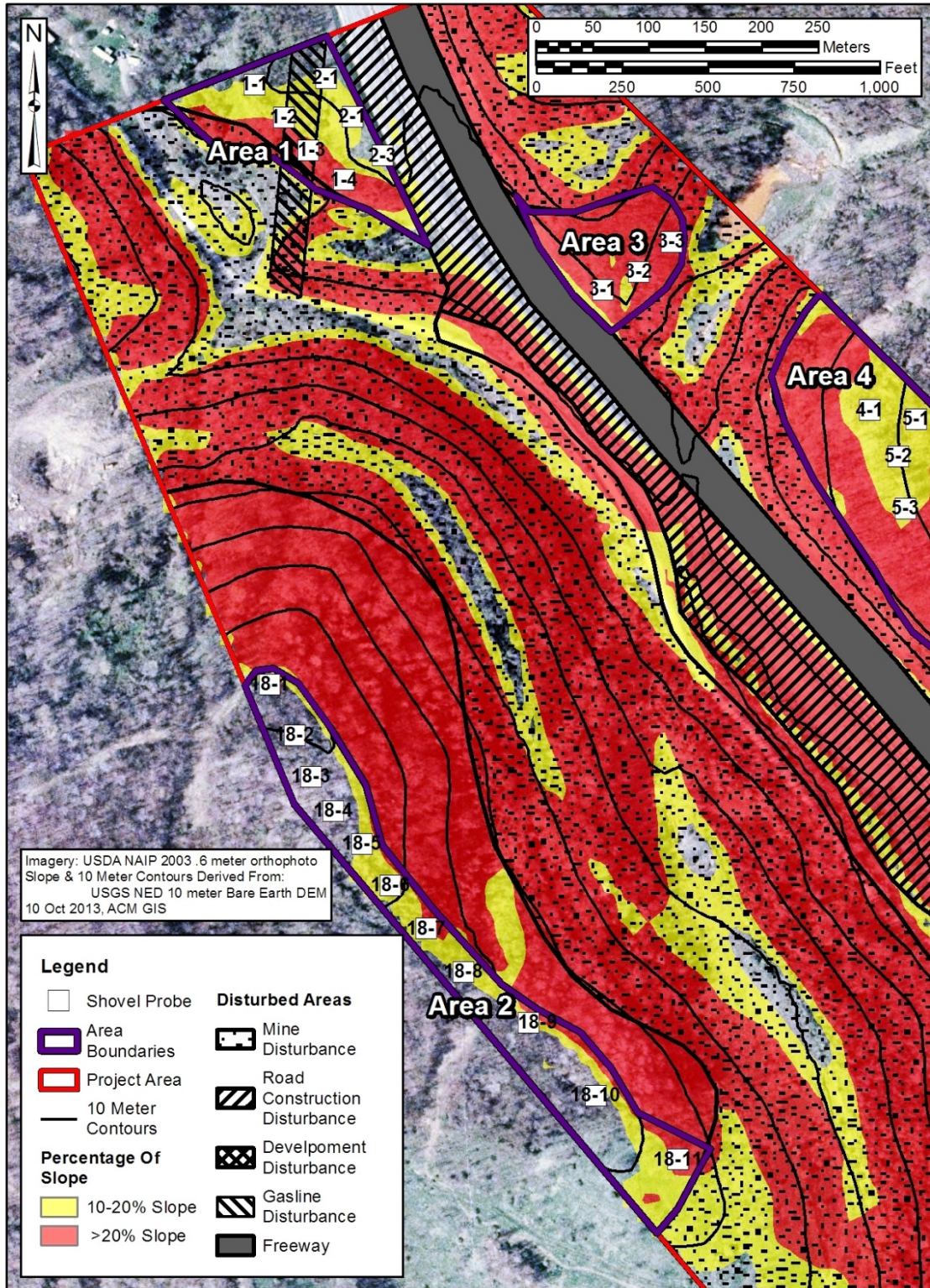


Figure 13. Aerial map showing the location of the northern half of the APE, slope in the APE, disturbances, Areas 1 to 4, and shovel probes.

Area 2

This area is situated along the western border of the APE and south of Area 1 (Figure 12). The vegetation in Area 2 consisted of trees with 0 percent surface visibility (Plate 6). The topography consisted of a narrow ridge.

Because of the lack of surface visibility, shovel probes (n=11) were excavated with all of them negative and no subsurface in situ archaeological deposits encountered (Figure 13). An examination of the soil profiles indicated that this area has been disturbed from previous mining activities and heavily eroded (Figure 14; Table 2).

Table 2. Soil profiles documented in Area 2.			
Provenience	Soil Profile		Comment
Transect 18 Probe 1	0 to 9 cm humus and rock	9 cm to 16 Olive Brown (2.5Y8/3) clay intermixed with rock	Disturbed and eroded
Transect 18 Probe 2	0 to 5 cm humus and rock	5 cm to 13 Olive Brown (2.5Y8/3) clay intermixed with rock	Disturbed and eroded
Transect 18 Probe 3	0 to 11 cm humus and rock	11 cm to 19 Olive Brown (2.5Y8/3) clay intermixed with rock	Disturbed and eroded
Transect 18 Probe 4	0 to 8 cm humus and rock	8 cm to 18 Olive Brown (2.5Y8/3) clay intermixed with rock	Disturbed and eroded
Transect 18 Probe 5	0 to 12 cm humus and rock	12 cm to 25 cm Olive Brown (2.5Y8/3) clay intermixed with rock	Disturbed and eroded
Transect 18 Probe 6	0 to 9 cm humus and rock	9 cm to 20 Olive Brown (2.5Y8/3) clay intermixed with rock	Disturbed and eroded
Transect 18 Probe 7	0 to 11 cm humus and rock	11 cm to 20 Olive Brown (2.5Y8/3) clay intermixed with rock	Disturbed and eroded
Transect 18 Probe 8	0 to 6 cm humus and rock	6 cm to 16 Olive Brown (2.5Y8/3) clay intermixed with rock	Disturbed and eroded
Transect 18 Probe 9	0 to 8 cm humus and rock	8 cm to 17 Olive Brown (2.5Y8/3) clay intermixed with rock	Disturbed and eroded
Transect 18 Probe 10	0 to 9 cm humus and rock	9 cm to 18 Olive Brown (2.5Y8/3) clay intermixed with rock	Disturbed and eroded

Table 2. Soil profiles documented in Area 2.			
Provenience	Soil Profile		Comment
Transect 18 Probe 11	0 to 11 cm humus and rock	11 cm to 19 Olive Brown (2.5Y8/3) clay intermixed with rock	Disturbed and eroded

Because all of the shovel probes were negative, no sites were recorded in Area 2.

Area 3

This survey area is located east of I-79 and east-southeast of Area 1 (Figure 12). The ground cover consisted of trees with 0 percent surface visibility. The terrain consisted of moderate to steep slope.

As a result of the nonexistent surface visibility, shovel probes (n=3) were excavated (Figure 13). All of the shovel probes were negative and no subsurface in situ archaeological deposits were encountered. An examination of the soil profiles indicated that the area has been disturbed from previous mining activities (Figure 14; Table 3).

Table 3. Soil profiles documented in Area 3.			
Provenience	Soil Profile		Comment
Transect 3 Probe 1	0 to 7 cm humus with rock and coal	7 cm to 25 cm Olive Yellow (2.5Y6/6) clay loam and rock	Moderately disturbed
Transect 3 Probe 2	0 to 10 cm humus with rock and coal	10 cm to 20 cm Olive Yellow (2.5Y6/6) clay loam and rock	Moderately disturbed
Transect 3 Probe 3	0 to 11 cm humus with rock and coal	11 cm to 18 cm Olive Yellow (2.5Y6/6) clay loam and rock	Moderately disturbed

Because all of the shovel probes were negative, no sites were inventoried in Area 3.

Area 4

This survey area is situated east of I-79 and along the eastern boundary of the APE (Figure 12). Visual examination of this area indicated that the vegetation consisted of a woodlot with a fallow area; surface visibility was 0 percent. The topography consisted of a gradual to moderate slope and slope bench.

Due to the lack of surface visibility, shovel probes (n=8) were excavated (Figures 13 and 15). All of the shovel probes were negative and no subsurface in situ archaeological deposits were encountered. An examination of the soil profiles indicated that this area has been previously mined (Table 4).

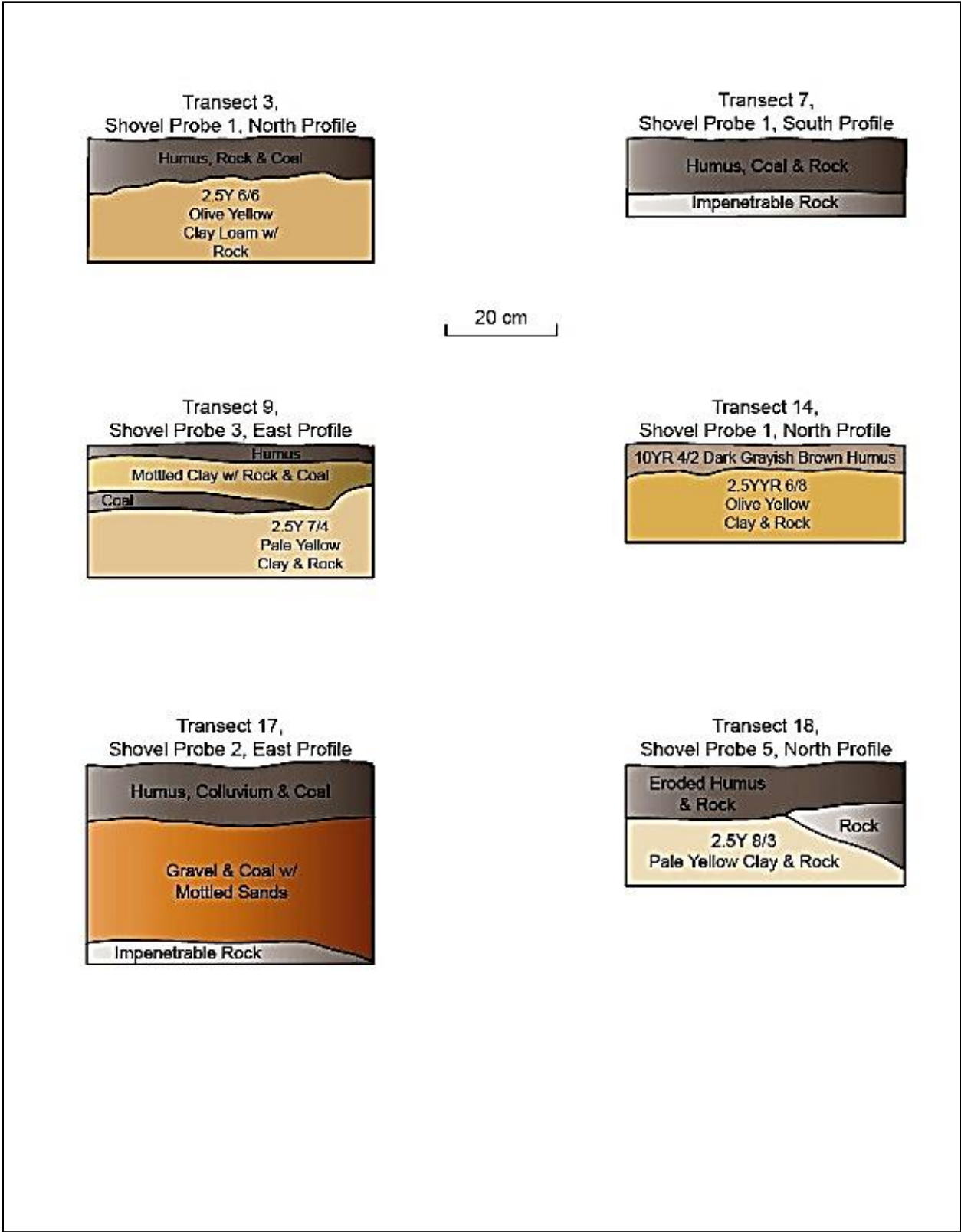


Figure 14. Soil profiles documented in the APE.

Due to all of the shovel probes being negative, no sites were documented in Area 4.

Table 4. Soil profile documented in Area 4.			
Provenience	Soil Profile		Comment
Transect 4 Probe 1	0 to 13 cm Rock and coal	13 cm to 17 cm Rock and coal fragments	Heavily disturbed
Transect 5 Probe 1	0 to 6 cm humus	6 cm to 20 cm Coal fragments with Impenetrable rock	Previously mined soils
Transect 5 Probe 2	0 to 10 cm Rock and coal	10 cm to 20 cm Rock and coal fragments	Previously mined soils
Transect 5 Probe 3	0 to 4 cm humus	4 cm to 12 cm Coal fragments with Impenetrable rock	Previously mined soils
Transect 6 Probe 1	0 to 14 cm Coal fragments	14 cm to 22 cm Mottled clay and Impenetrable rock	Previously mined soils
Transect 6 Probe 2	0 to 9 cm humus	9 cm to 13 cm Coal fragments with Impenetrable rock	Previously mined soils
Transect 6 Probe 3	0 to 12 cm humus and coal	12 cm to 19 cm Coal fragments with Impenetrable rock	Previously mined soils
Transect 6 Probe 4	0 to 14 cm humus and mottled clay	14 cm to 20 cm Coal fragments with Impenetrable rock	Previously mined soils

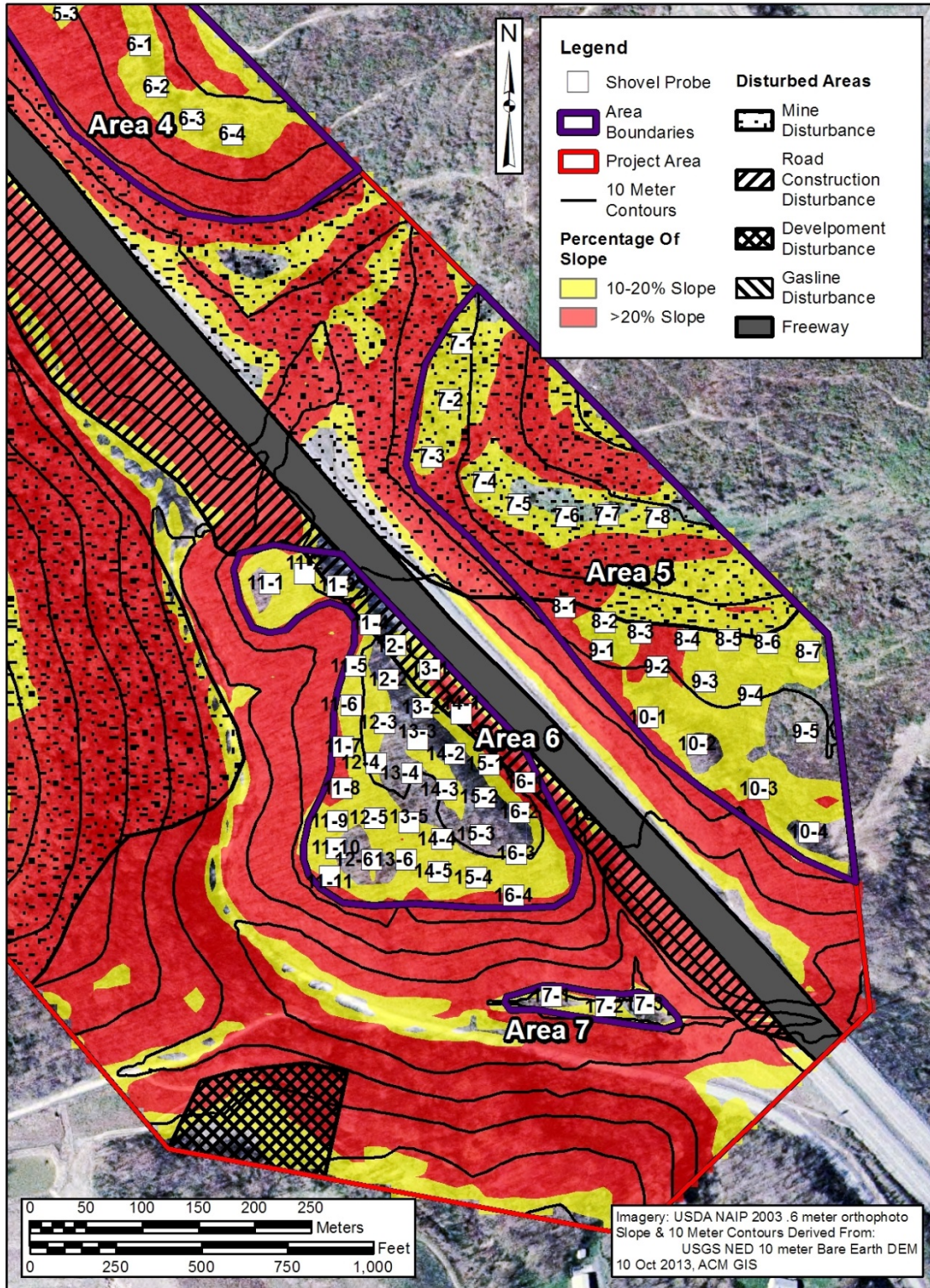


Figure 15. Aerial map showing the southern section of the APE, slope in the APE, disturbances, Areas 4 to 7, and shovel probes.

Area 5

This area is located east of I-79 and in the southern section of the APE (Figure 12). The vegetation consisted of woodlot with 0 percent surface visibility (Plates 4 and 9). Mining disturbances were observed in this survey area. The topography consisted of gradual to moderate slope, benches, and toe ridges.

As a result of the nonexistent surface visibility, shovel probes (n=24) were excavated (Figure 15). All of the shovel probes were negative and no subsurface in situ archaeological deposits were encountered. An examination of the soil profiles indicated that the area has been heavily disturbed from previous mining activities (Figure 14; Table 5).

Because all of the shovel probes were negative, no sites were recorded in Area 5.

Table 5. Soil profiles documented in Area 5.

Provenience	Soil Profile		Comment
Transect 7 Probe 1	0 to 8 cm humus, coal and rock	8 cm to 18 cm Impenetrable rock	Previously mined soils
Transect 7 Probe 2	0 to 11 cm humus, coal and rock	11 cm to 15 cm Coal fragments with Impenetrable rock	Previously mined soils
Transect 7 Probe 3	0 to 4 cm humus	4 cm to 12 cm Coal fragments with Impenetrable rock	Previously mined soils
Transect 7 Probe 4	0 to 8 cm humus	8 cm to 15 cm Coal fragments with Impenetrable rock	Previously mined soils
Transect 7 Probe 5	0 to 11 cm humus and mottled clay	11 cm to 17 cm Coal fragments with Impenetrable rock	Previously mined soils
Transect 7 Probe 6	0 to 9 cm humus	9 cm to 13 cm Coal fragments with Impenetrable rock	Previously mined soils
Transect 7 Probe 7	0 to 12 cm humus and mottled clay with coal fragments	12 cm to 20 cm Coal fragments with Impenetrable rock	Previously mined soils
Transect 7 Probe 8	0 to 14 cm Mottled clay	14 cm to 23 cm Coal fragments with Impenetrable rock	Previously mined soils
Transect 8 Probe 1	0 to 7 cm humus and coal	7 cm to 20 cm Rock and coal	Heavily disturbed
Transect 8 Probe 2	0 to 12 cm humus and coal	12 cm to 20 cm Rock and coal	Heavily disturbed
Transect 8 Probe 3	0 to 11 cm humus and coal	11 cm to 17 cm Rock and coal	Heavily disturbed

Provenience	Soil Profile		Comment
Transect 8 Probe 4	0 to 9 cm humus and coal	9 cm to 20 cm Rock and coal	Heavily disturbed
Transect 8 Probe 5	0 to 7 cm humus and coal	7 cm to 23 cm Rock and coal	Heavily disturbed
Transect 8 Probe 6	0 to 7 cm humus and coal	7 cm to 14 cm Rock and coal	Heavily disturbed
Transect 8 Probe 7	0 to 10 cm humus and coal	10 cm to 21 cm Rock and coal	Heavily disturbed
Transect 9 Probe 1	0 to 11 cm humus with mottled clay	11 cm to 24 cm Mottled clay, rock and coal fragments	Heavily disturbed
Transect 9 Probe 2	0 to 14 cm humus with mottled clay and coal	14 cm to 20 cm Mottled clay, rock and coal fragments	Heavily disturbed
Transect 9 Probe 3	0 to 4 cm humus	4 cm to 15 cm Mottled clay, rock and coal fragments	15 cm to 28 cm Light Red Brown (2.5YR7/4) clay and rock
Transect 9 Probe 4	0 to 8 cm humus with mottled clay	8 cm to 14 cm Mottled clay and rock	Heavily disturbed
Transect 9 Probe 5	0 to 11 cm Mottled clay	11 cm to 20 cm Mottled clay, rock and coal fragments	Heavily disturbed
Transect 10 Probe 1	0 to 5 cm humus and coal	5 cm to 13 cm Coal and rock	Previously mined soils
Transect 10 Probe 2	0 to 15 cm humus and coal	15 cm to 23 cm Coal and rock	Previously mined soils
Transect 10 Probe 3	0 to 11 cm humus and coal	11 cm to 16 cm Coal and rock	Previously mined soils
Transect 10 Probe 4	0 to 8 cm humus and coal	8 cm to 13 cm Coal and rock	Previously mined soils

Area 6

This area is situated west of I-79 and Area 5 (Figure 12). The vegetation in Area 6 consisted of a woodlot with 0 percent surface visibility (Plate 15). The terrain consisted of a ridge, benches, and gradual slope.

As a result of the lack of surface visibility, shovel probes (n=37) were excavated (Figure 15). All of the shovel probes were negative and no subsurface in situ archaeological deposits were encountered. The soil profile encountered in these shovel probes consisted of either a light olive brown (2.5Y5/3) silt loam A-horizon that was followed by an olive yellow (2.5Y6/6 or 2.5Y6/8) clay intermixed with rock (Figure 14), or a dark gray brown (10YR4/2) humus

overlying an olive yellow (2.5Y6/8) clay intermixed with rock (Table 6). Based on either the lack of or thinness of the A-horizon, it can be determined that this section of the APE has been heavily eroded.

Since all of the shovel probes were negative, no sites were inventoried in Area 6.

Table 6. Soil profiles documented in Area 6.

Provenience	Soil Profile		Comment
Transect 11 Probe 1	0 to 13 cm Light Olive Brown (2.5Y5/3) silt loam	13 cm to 20 cm Olive Yellow (2.5Y6/6) clay and rock	Moderately eroded soils
Transect 11 Probe 2	0 to 10 cm Light Olive Brown (2.5Y5/3) silt loam	10 cm to 24 cm Olive Yellow (2.5Y6/6) clay and rock	Moderately eroded soils
Transect 11 Probe 3	0 to 11 cm Light Olive Brown (2.5Y5/3) silt loam with rock	11 cm to 18 cm Olive Yellow (2.5Y6/6) clay and rock	Moderately eroded soils
Transect 11 Probe 4	0 to 9 cm Light Olive Brown (2.5Y5/3) silt loam	9 cm to 21 cm Olive Yellow (2.5Y6/6) clay and rock	Heavily eroded soils
Transect 11 Probe 5	0 to 10 cm Light Olive Brown (2.5Y5/3) silt loam	10 cm to 19 cm Olive Yellow (2.5Y6/6) clay and rock	Moderately eroded soils
Transect 11 Probe 6	0 to 8 cm Light Olive Brown (2.5Y5/3) silt loam with rock	8 cm to 20 cm Olive Yellow (2.5Y6/6) clay and rock	Heavily eroded soils
Transect 11 Probe 7	0 to 10 cm Light Olive Brown (2.5Y5/3) silt loam	10 cm to 20 cm Olive Yellow (2.5Y6/6) clay and rock	Moderately eroded soils
Transect 11 Probe 8	0 to 10 cm Light Olive Brown (2.5Y5/3) silt loam	10 cm to 23 cm Olive Yellow (2.5Y6/6) clay and rock	Moderately eroded soils
Transect 11 Probe 9	0 to 6 cm Light Olive Brown (2.5Y5/3) silt loam with rock	6 cm to 17 cm Olive Yellow (2.5Y6/6) clay and rock	Heavily eroded soils
Transect 11 Probe 10	0 to 11 cm Light Olive Brown (2.5Y5/3) silt loam	11 cm to 20 cm Olive Yellow (2.5Y6/6) clay and rock	Moderately eroded soils
Transect 11 Probe 11	0 to 7 cm Light Olive Brown (2.5Y5/3) silt loam with rock	7 cm to 21 cm Olive Yellow (2.5Y6/6) clay and rock	Heavily eroded soils
Transect 12 Probe 1	0 to 10 cm Light Olive Brown (2.5Y5/3) silt loam	10 cm to 24 cm Olive Yellow (2.5Y6/6) clay and rock	Moderately eroded soils

Table 6. Soil profiles documented in Area 6.

Provenience	Soil Profile		Comment
Transect 12 Probe 2	0 to 11 cm Light Olive Brown (2.5Y5/3) silt loam	11 cm to 21 cm Olive Yellow (2.5Y6/6) clay and rock	Moderately eroded soils
Transect 12 Probe 3	0 to 9 cm Light Olive Brown (2.5Y5/3) silt loam	9 cm to 22 cm Olive Yellow (2.5Y6/6) clay and rock	Moderately eroded soils
Transect 12 Probe 4	0 to 10 cm Light Olive Brown (2.5Y5/3) silt loam	10 cm to 20 cm Olive Yellow (2.5Y6/6) clay and rock	Moderately eroded soils
Transect 12 Probe 5	0 to 13 cm Light Olive Brown (2.5Y5/3) silt loam	13 cm to 23 cm Olive Yellow (2.5Y6/6) clay and rock	Moderately eroded soils
Transect 12 Probe 6	0 to 9 cm Light Olive Brown (2.5Y5/3) silt loam with rock	9 cm to 16 cm Olive Yellow (2.5Y6/6) clay and rock	Moderately eroded soils
Transect 13 Probe 1	0 to 6 cm Light Olive Brown (2.5Y5/3) silt loam with rock	6 cm to 16 cm Olive Yellow (2.5Y6/8) clay and rock	Heavily eroded soils
Transect 13 Probe 2	0 to 10 cm Light Olive Brown (2.5Y5/3) silt loam with rock	10 cm to 18 cm Olive Yellow (2.5Y6/8) clay and rock	Heavily eroded soils
Transect 13 Probe 3	0 to 5 cm Dark Gray Brown (10YR4/2) humus	5 cm to 17 cm Olive Yellow (2.5Y6/8) clay and rock	Heavily eroded soils
Transect 13 Probe 4	0 to 9 cm Dark Gray Brown (10YR4/2) humus	9 cm to 17 cm Olive Yellow (2.5Y6/8) clay and rock	Heavily eroded soils
Transect 13 Probe 5	0 to 9 cm Dark Gray Brown (10YR4/2) humus with rock	9 cm to 19 cm Olive Yellow (2.5Y6/8) clay and rock	Heavily eroded soils
Transect 13 Probe 6	0 to 6 cm Dark Gray Brown (10YR4/2) humus	6 cm to 16 cm Olive Yellow (2.5Y6/8) clay and rock	Heavily eroded soils
Transect 14 Probe 1	0 to 7 cm Dark Gray Brown (10YR4/2) humus	7 cm to 20 cm Olive Yellow (2.5Y6/8) clay and rock	Heavily eroded soils
Transect 14 Probe 2	0 to 9 cm Dark Gray Brown (10YR4/2) humus	9 cm to 23 cm Olive Yellow (2.5Y6/8) clay and rock	Heavily eroded soils
Transect 14 Probe 3	0 to 5 cm Dark Gray Brown (10YR4/2) humus	5 cm to 12 cm Olive Yellow (2.5Y6/8) clay and rock	Heavily eroded soils

Table 6. Soil profiles documented in Area 6.			
Provenience	Soil Profile		Comment
Transect 14 Probe 4	0 to 7 cm Dark Gray Brown (10YR4/2) humus	7 cm to 16 cm Olive Yellow (2.5Y6/8) clay and rock	Heavily eroded soils
Transect 15 Probe 1	0 to 13 humus and rock	13 cm to 20 cm Olive Yellow (2.5Y6/8) clay and rock	Heavily eroded soils
Transect 15 Probe 2	0 to 10 humus and rock	10 cm to 23 cm Olive Yellow (2.5Y6/8) clay and rock	Heavily eroded soils
Transect 15 Probe 3	0 to 10 humus and rock	10 cm to 21 cm Olive Yellow (2.5Y6/8) clay and rock	Heavily eroded soils
Transect 15 Probe 4	0 to 9 cm humus and rock	9 cm to 16 cm Olive Yellow (2.5Y6/8) clay and rock	Heavily eroded soils
Transect 1 Probe 5	0-9 cm humus and rock	9-17 cm Olive Yellow (2.5Y6/8) clay and rock	Heavily eroded soils
Transect 16 Probe 1	0 to 6 cm humus and rock	6 cm to 14 cm Olive Yellow (2.5Y6/8) clay and rock	Heavily eroded soils
Transect 16 Probe 2	0 to 8 cm humus and rock	8 cm to 16 cm Olive Yellow (2.5Y6/8) clay and rock	Heavily eroded soils
Transect 16 Probe 3	0 to 10 cm humus and rock	10 cm to 19 cm Olive Yellow (2.5Y6/8) clay and rock	Heavily eroded soils
Transect 16 Probe 4	0 to 8 cm humus and rock	8 cm to 19 cm Olive Yellow (2.5Y6/8) clay and rock	Heavily eroded soils

Area 7

This area is located west of I-79 and southeast of Area 6 (Figure 12). Visual inspection of Area 7 indicated that the vegetation consisted of a woodlot with 0 percent surface visibility (Plate 16). The terrain consisted of moderate to steep slopes and a bench.

Because of the nonexistent surface visibility, shovel probes (n=3) were excavated (Figure 15). All of the shovel probes were negative and no subsurface in situ archaeological deposits were encountered. An inspection of the soil profiles indicated that the area has been disturbed from previous mining activities (Figure 14; Table 7). Evidence of a gravel bar was encountered in Probes 1 and 3 in this area.

Since none of the shovel probes were positive with archaeological material, no sites were recorded in Area 7.

Table 7. Soil profile documented in Area 7.			
Provenience	Soil Profile		Comment
Transect 17 Probe 1	0 to 18 cm humus with colluvium and coal fragments	18cm to 48 cm gravels, coal fragments and mottled sands	Gravel bar
Transect 17 Probe 2	0 to 12 cm humus with colluvium and coal fragments	12cm to 40 cm gravels, coal fragments and mottled sands	40 cm + Impenetrable rock
Transect 17 Probe 3	0 to 24 cm humus with colluvium	24 cm to 53 cm gravels, coal fragments and mottled sands	Gravel bar

During the viewshed study for this project, a small rural family cemetery was documented (site 46MG304). The cemetery, which is located in a woodlot northwest of Area 6 (Figure 16), is not currently maintained. An examination of the headstones, as well as historic research, indicated that it is a small rural family cemetery with the predominant surname being Breakiron. A more detailed description of the cemetery, its history, and the history of the people interred in it can be found in the Viewshed Study report for this project (Jackson 2013). A copy of the cemetery survey form has been submitted to DCH.

SUMMARY AND CONCLUSIONS

In May 2013, Burgess & Niple contracted Archaeological Consultants of the Midwest to conduct a Phase I archaeological literature review and reconnaissance survey for a proposed new interchange on I-79 interchange near Morgantown in Monongalia County, West Virginia. Specifically, the new interchange will be located between the Westover and Star City interchanges. The zone of study for the new interchange is approximately 281 acres in area.

The APE is situated on gradual to moderate slopes, ridge tops, small ravines, benches, and previously mined areas. The ground cover consists of mine spoil, immature wooded areas, and previously disturbed areas.

An examination of the records maintained by DCH indicated that no archaeological sites have been inventoried and no professional investigations have been undertaken in the APE; however, five professional investigations have been conducted, as well as one site and three cemeteries have been recorded in the study area. No NRHP properties or cemeteries have been recorded in the APE. A review of the USGS 1904 Blacksville and 1931 Morgantown quadrangles (15' topographic maps) indicated that no buildings and/or structures were noted in the APE. It was also determined from an examination of the USGS 1999 Osage and 2000

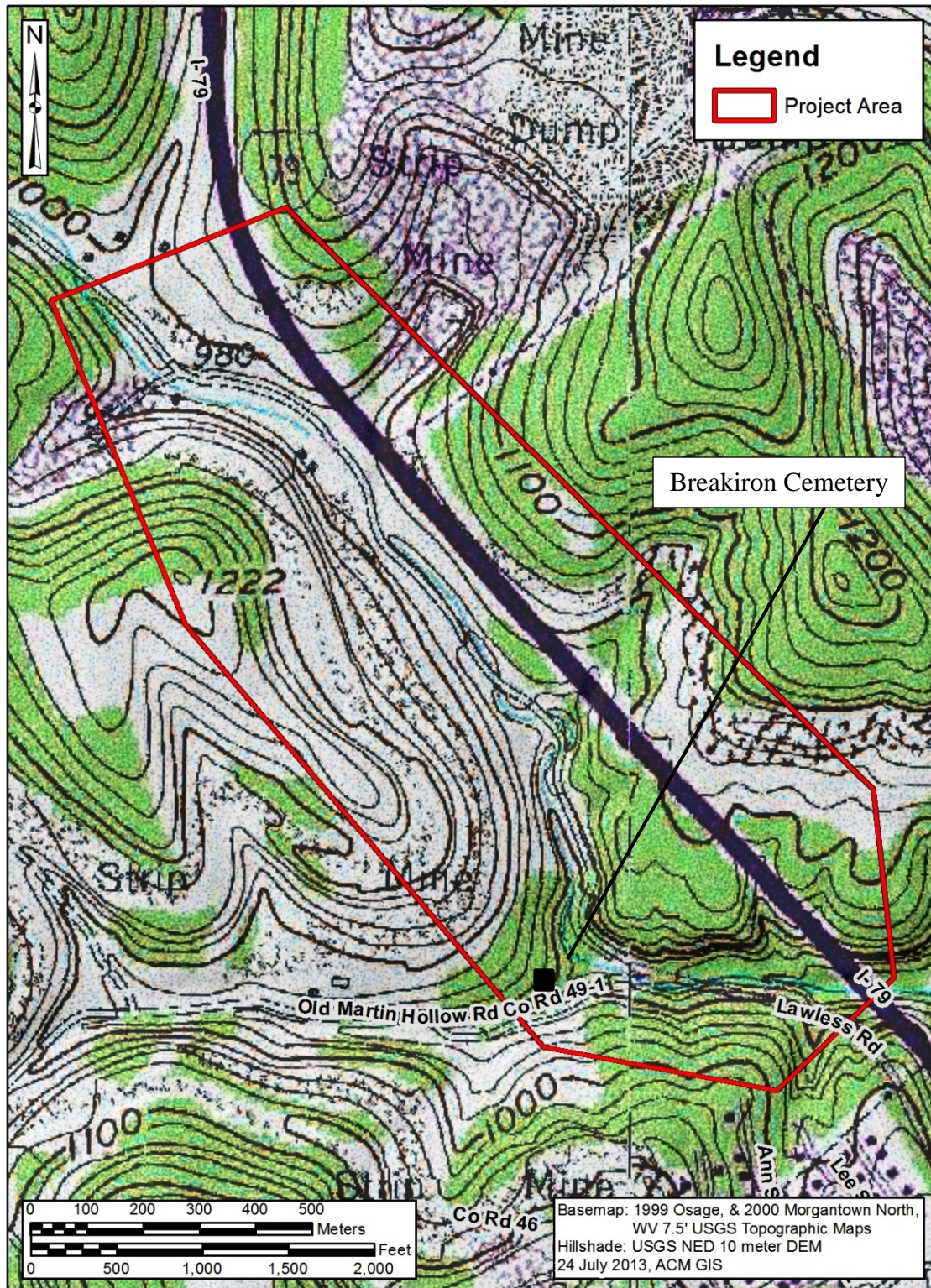


Figure 16. A section of the USGS 1999 Osage and 2000 Morgantown North quadrangles showing the location of the APE and the Breakiron Cemetery.

Morgantown North quadrangles (7.5' topographic maps) that a great deal of the APE has been disturbed from mining activities.

The fieldwork confirmed that large parts of the APE have been disturbed from previous mining activities, as well as from gas pipelines. In those sections of the APE that were visually undisturbed and had landforms with the potential for archaeological resources, shovel probes were excavated. A review of the soil profiles indicated all of the shovel probed areas have been previously disturbed and/or heavily eroded. Although no archaeological sites were inventoried, one historic cemetery (Breakiron Cemetery/site 46MG304) was documented by this investigation.

Because the cemetery will be avoided by the proposed project, no archaeological sites were recorded, and the data collected from the shovel probes indicated that the visually undisturbed sections of the APE have been disturbed and/or heavily eroded, it can be determined that the proposed project will have *no effect* on any archaeological resources that are eligible for inclusion on the NRHP under Criterion D.

No further work is recommended within the proposed APE.

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APPENDIX A
Project Documentation



July 16, 2013

RECEIVED

JUL 18 2013

ENGINEERING DIVISION
WV DOH

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

Randall Reid-Smith, Commissioner

Phone 304.558.0220 • www.wvculture.org
Fax 304.558.2779 • TDD 304.558.3562

EEO/AA Employer

Mr. Ben Hark
WVDOH
1900 Kanawha Blvd., E
Building Five, Room 110
Charleston, WV 25305

Re: New I-79 Interchange Between Westover and Star City Interchanges
State Project U331-79-153.30; Federal Project NHPP-0793(238)
FR#: 13-757-MG

Dear Mr. Hark:

We have reviewed the above referenced project to determine potential effects to cultural resources. As required by Section 106 of the National Historic Preservation Act, as amended, and its implementing regulations, 36 CFR 800: "Protection of Historic Properties," we submit our comments.

Based on the submitted materials, NEPA studies have been initiated for the above referenced project, which consists of providing a new interchange on I-79 approximately halfway between I-79 Exits 152 and 155. The proposed project will tie the interchange into two new frontage roads, connecting a relocated County Route 46/3 and an extension of University Town Centre Drive. At this time, we ask that you clarify how you will ensure that the Section 106 process is completed as well.

Architectural Resources:

We have no immediate concerns regarding the proposed project. However, USGS topographic maps indicate that there are numerous buildings and/or structures within close proximity to the proposed project. An assessment of eligibility of all resources within the direct and indirect area of potential effect (APE) must occur before we can provide additional comments. An assessment of effects may need to be completed once the assessment of eligibility occurs and once you have received feedback from this office regarding that document. We will provide additional comments upon receipt of the assessment of eligibility report. Please note that this report must be completed by an individual meeting the professional qualification standards for an architectural historian as defined in 36 CFR 61.

Archaeological Resources:

We have no immediate concerns regarding the proposed project. We will provide further comment upon initiation of the Section 106 Process and/or receipt of information pertaining to archaeological studies proposed for the project.

We appreciate the opportunity to be of service. *If you have questions regarding our comments or the review process, please contact Shirley Stewart Burns, Structural Historian, or Lora A Lamarre-DeMott, Senior Archaeologist, at (304) 558-0240.*

Sincerely,

A handwritten signature in cursive script that reads "Susan M. Pierce".

Susan M. Pierce
Deputy State Historic Preservation Officer

SMP/SSB/LLD

APPENDIX B

**Copy of the Cultural Resources Files and Library User Registration and
Research Record Form**

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: 05-09-2013

Name (s) Brittany Vance

Organization or Company: Archaeological Consultants of the Midwest

Address: 535 Fulton St.

Wheeling, WV 26003 Phone 304/242-3155

FR Number (if known) _____

II MATERIALS UTILIZED

ARCHAEOLOGY:

USGS QUAD MAP NAMES:

Osage Morgantown South

Rivesville

Morgantown North

ARCHAEOLOGY SITE FORM #s

46-MG-147 46-MG-185 46-MG-224

46-MG-156 46-MG-186 46-MG-95
46-MG-89

46-MG-184 46-MG-223 46-MG-14
46-MG-13

CRM Reports/Publications

00-474-MG 01-139-MG 90-1203-MG

10-1372-MG

<u>08-973-MG</u>	<u>96-759-MG-1</u>	<u>04-409-MG</u>
<u>97-905-MG</u>	<u>91-448-MG</u>	<u>92-526-MG</u>
<u>07-1095-Multi-19</u>	<u>92-1631-Multi</u>	<u>RR-1-Multi</u>

SURVEY AND NATIONAL REGISTER:

County Survey Files

<u>N/A</u>	_____	_____
_____	_____	_____
_____	_____	_____

National Register Files

<u>N/A</u>	_____	_____
_____	_____	_____
_____	_____	_____

Other Materials

<u>N/A</u>	_____	_____
_____	_____	_____
_____	_____	_____

III MATERIALS RETURNED IN GOOD ORDER

DATE: _____ # Photocopies _____ \$ _____

USER NAME: _____

SHPO STAFF SIGNATURE: Carly R. K...

(Signature assures that materials have been returned to file)

APPENDIX C

Vitae of Appropriate Staff

CURRICULUM VITAE
for
JAMIE VOSVICK

CURRENT POSITION:

Assistant Field and Laboratory Supervisor, Office Manager of West Virginia office
Archaeological Consultants of the Midwest, Inc.
P.O. Box 6005
Wheeling West Virginia 26003
(304) 242-3155

ACADEMIC BACKGROUND:

West Liberty State College, 1987-1988
Marshall University, 1988-1991

EXPERIENCE:

Areas of expertise include: Archaeological Field Methods and Archival and Historic Background Research. Assisted and directed Phase I, II, and III projects, as well as written numerous CRM reports. Other skills include laboratory artifact analysis, geomorphology training, and with GPS systems. Worked in Illinois, Indiana, Kentucky, Missouri, Ohio, Pennsylvania, Tennessee, and West Virginia.

EMPLOYMENT HISTORY:

2003-present	Assistant Field and Laboratory Supervisor, and Office Manager of West Virginia office, Archaeological Consultants of the Midwest, Inc.
1992-2002	Field Supervisor, ASC Group, Inc.
1991-1992	Crew Chief/Field Technician, Cultural Resource Analysts, Inc.
1990-1991	Field Technician, GAI Engineering

CULTURAL RESOURCE MANAGEMENT REPORTS (sample):

2004	<i>Phase I Archaeological Literature Review and Reconnaissance Survey for the Sewer and Water Upgrade in and Adjacent to the West Virginia Penitentiary, Moundsville, Marshall County, West Virginia.</i> Co-authored with Christopher Jackson. Archaeological Consultants of the Midwest Inc, Wheeling West Virginia. Submitted to the City of Moundsville, West Virginia and the Environmental Protection Agency.
2005	<i>Phase I Archaeological Literature Review and Reconnaissance Survey for the Wastewater Line Upgrade in West Liberty, Ohio County, West Virginia.</i> Archaeological Consultants of the Midwest, Inc, Wheeling, West Virginia. Submitted to Belomar Regional Council Wheeling, West Virginia and the Ohio County Public Service District, Wheeling, West Virginia.

- 2005 *Phase I Archaeological Literature Review and Reconnaissance Survey, and Deep Testing Investigation for the Proposed Wheeling Island Fire Station in Wheeling, Ohio County, West Virginia.* Co-authored with Christopher Jackson. Archaeological Consultants of the Midwest, Inc., Wheeling, West Virginia. Submitted to the City of Wheeling Economic and Development Department, Wheeling, West Virginia.
- 2007 *A Phase I Archaeological Literature Review and Reconnaissance Survey for a Proposed Waterline in Wood County, West Virginia.* Archaeological Consultants of the Midwest, Inc. Submitted to Lubeck, P.S.D., Washington, West Virginia.
- 2007 *A Phase I Archaeological Literature Review and Reconnaissance Survey for the Proposed Drainage Pattern Changes for Hardin Run within New Cumberland Park, New Cumberland, Hancock County, West Virginia.* Archaeological Consultants of the Midwest, Inc. Submitted to West Virginia Conservation Service, Oak Hill, West Virginia.
- 2007 *A Phase I Archaeological Literature Review and Reconnaissance Survey, as well as a Deep Testing Investigation for the Proposed Sewer Separation Improvements in Center and South Wheeling, Ohio County, West Virginia.* Archaeological Consultants of the Midwest, Inc. Submitted to City of Wheeling Economic and Community Development Department.
- 2007 *A Phase I Archaeological Literature Review, Reconnaissance Survey, and Augering for the Proposed Water Systems Improvements for the Town of Friendly, Tyler County, West Virginia.* Archaeological Consultants of the Midwest, Inc. Submitted to Cerrone Associates, Wheeling.
- 2007 *A Phase I Archaeological Literature Review and Reconnaissance Survey for the Proposed Mason County Public Service District Capacity Enhancement Project, Ashton, Mason County, West Virginia.* Co-authored with Emily Vosvick. Archaeological Consultants of the Midwest, Inc. Submitted to Cerrone Associates, Wheeling.
- 2008 *A Phase I Archaeological Literature Review and Reconnaissance Survey for the Proposed Phase II Wastewater Collection System Extension Project for the Town of Oceana, Wyoming County, West Virginia.* Archaeological Consultants of the Midwest, Inc. Submitted to Region 1 Planning & Development Council, Princeton, West Virginia.
- 2008 *A Phase I Archaeological Literature Review and Reconnaissance Survey for the Proposed Sanitary Sewer System Improvements Project near the Grant Street and 12th Street vicinity, Moundsville, Marshall County, West Virginia.* Archaeological Consultants of the Midwest, Inc. Submitted to Burgess & Niple, Parkersburg, West Virginia.
- 2008 *A Phase I Archaeological Literature Review and Reconnaissance Survey for the Proposed New England Ridge-Bonner Waterline Project near the Town of New England, Wood County, West Virginia.* Archaeological Consultants of the Midwest, Inc. Submitted to Lubeck Public Service District, Washington, West Virginia.

- 2008 *A Phase I Archaeological Literature Review and Reconnaissance Survey for the Proposed Paw Paw Trailhead Project in the Town of Paw Paw, Morgan County, West Virginia.* Archaeological Consultants of the Midwest, Inc. Submitted to the Town of Paw Paw, West Virginia.
- 2008 *A Phase I Archaeological Literature Review and Reconnaissance Survey for the Proposed Wetland Mitigation Project on Middle Wheeling Creek near the Town of Triadelphia, Ohio County, West Virginia.* Archaeological Consultants of the Midwest, Inc. Submitted to Ohio County Development Authority, Wheeling, West Virginia.
- 2008 *A Phase I Archaeological Literature Review and Reconnaissance Survey for the Proposed Terra Alta Park Trail in the Town of Terra Alta, Preston County, West Virginia.* Archaeological Consultants of the Midwest, Inc. Submitted to Terra Alta Betterment, Inc., Terra Alta, West Virginia.
- 2008 *A Phase I Archaeological Literature Review and Reconnaissance Survey for the Proposed Wetland Mitigation and Floodplain Creation Project on Middle Wheeling Creek near the Town of Triadelphia, Ohio County, West Virginia.* Archaeological Consultants of the Midwest, Inc. Submitted to Ohio County Development Authority, Wheeling, West Virginia.
- 2008 *A Phase I Archaeological Literature Review and Reconnaissance Survey for the Logan County P.S.D. for the Proposed Anchor Road Waterline Extension and Storage Tank Site Project in Boone County, West Virginia.* Archaeological Consultants of the Midwest, Inc. Submitted to Stafford Consultants, Inc., Princeton, West Virginia.
- 2008 *An Investigation of a Historic Cemetery Situated within the White Oaks Phase II Development Located in the Clay District, Harrison County, West Virginia.* Co-authored with Christopher Jackson. Archaeological Consultants of the Midwest, Inc. Submitted to Thrasher Engineering, Inc., Clarksburg, West Virginia.
- 2008 *An Addendum to the Phase I Archaeological Literature Review and Reconnaissance Survey for the Logan County P.S.D. for the Proposed Anchor Road Waterline Extension and Storage Tank Site Project in Boone County, West Virginia.* Archaeological Consultants of the Midwest, Inc. Submitted to Stafford Consultants, Inc., Princeton, West Virginia.
- 2008 *A Phase I Archaeological Literature Review and Reconnaissance Survey for the Proposed Wadesville Waterline Project in and adjacent to the Town of Wadesville, Wood County, West Virginia.* Archaeological Consultants of the Midwest, Inc. Submitted to Lubeck Public Service District, Washington, West Virginia.
- 2008 *A Phase I Archaeological Literature Review and Reconnaissance Survey for the Proposed Valley Fill and Quarry Expansion Project (Permit No. Q-2005-87), Near Spruce Run, Randolph County, West Virginia.* Archaeological Consultants of the Midwest, Inc. Submitted to Potesta and Associates, Charleston, West Virginia.

- 2009 *A Phase I Archaeological Literature Review and Reconnaissance Survey for the Proposed Upgrades to the Greater Harrison County PSD Sanitary Sewer System Expansion (Route 73 Area) Project near the Town of Boothsville, Marion County and adjacent Harrison and Taylor Counties, West Virginia.* Archaeological Consultants of the Midwest, Inc. Submitted to Thrasher Engineering, Clarksburg, West Virginia.
- 2009 *A Phase I Archaeological Literature Review and Reconnaissance Survey for the Proposed Mountain Top Public Service District Water Systems Improvement and Extension Project near the Town of Bayard, Grant County, West Virginia.* Archaeological Consultants of the Midwest, Inc. Submitted to Thrasher Engineering, Clarksburg, West Virginia.
- 2009 *A Phase I Archaeological Literature Review and Reconnaissance Survey for the Proposed Tunnel Ridge Beltline Project (IBR #4, Permit U200805) in Ohio County, West Virginia.* Archaeological Consultants of the Midwest, Inc. Submitted to Tunnel Ridge, Triadelphia, West Virginia.
- 2009 *A Phase I Archaeological Literature Review and Reconnaissance Survey for the Proposed New Hill West Surface Mine in Monongalia County, West Virginia.* Archaeological Consultants of the Midwest, Inc. Submitted to Patriot Mining, Morgantown, West Virginia.
- 2009 *A Phase I Archaeological Literature Review and Reconnaissance Survey for the Proposed Cowen-Upper Glades Wastewater Treatment Plant, Webster County, West Virginia.* Co-authored with Emily Vosvick. Archaeological Consultants of the Midwest, Inc. Submitted to Thrasher Engineering, Charles Town, West Virginia.
- 2010 *A Phase I Archaeological Literature Review, Reconnaissance Survey, and Deep Testing for the Proposed Moundsville Recreational Vehicle Park in Marshall County, West Virginia.* Archaeological Consultants of the Midwest, Inc. Submitted to the City of Moundsville, Moundsville, West Virginia.
- 2010 *A Phase I Archaeological Literature Review and Reconnaissance Survey for the Proposed Installation of a Transmitter/Antenna near South Charleston, Kanawha County, West Virginia.* Archaeological Consultants of the Midwest, Inc. Submitted to St. Paul Radio Company, Charleston, West Virginia.
- 2010 *A Phase I Archaeological Literature Review and Reconnaissance Survey for the Proposed Installation of a Natural Gas Line at the Huttonsville Correctional Facility, Randolph County, West Virginia.* Archaeological Consultants of the Midwest, Inc. Submitted to Mountaineer Gas Company, Charleston, West Virginia.
- 2010 *A Phase I Management Summary for the Proposed Quarry Modification Project (Permit Number Q200698), Pocahontas County, West Virginia.* Co-authored with Christopher Jackson. Archaeological Consultants of the Midwest, Inc. Submitted to Boxley Aggregates of West Virginia, Roanoke, Virginia.

- 2011 *A Phase I Archaeological Literature Review, Reconnaissance Survey, and Viewshed Survey for the Proposed Fairview Waterline Extension Project in Marion and Monongalia Counties, West Virginia.* Co-authored with Christopher Jackson. Archaeological Consultants of the Midwest, Inc. Submitted to Region VI Planning and Development Council, White Hall, West Virginia.
- 2011 *A Phase I Archaeological Literature Review and Reconnaissance Survey for the Proposed Lubeck Public Service District-Wadesville Water Main Extension Project (Change Order No. 1), Wood County, West Virginia.* Archaeological Consultants of the Midwest, Inc. Submitted to Lubeck Public Service District, Washington, West Virginia.
- 2011 *A Phase I Archaeological Literature Review and Reconnaissance Survey for the Proposed Sugar Creek Public Service District Wilsie-Rosedale Waterline Extension (Phase I) Project, Braxton County, West Virginia.* Co-authored with Seth Cooper. Archaeological Consultants of the Midwest, Inc. Submitted to Dunn Engineers, Charleston, West Virginia.
- 2011 *A Phase I Archaeological Literature Review and Reconnaissance Survey for the Proposed Tunnel Ridge Deep Mine, Groux Farm Bleeder Shaft (IBR Revision No. 8) Project, (Permit No. U-2008-05), near the Community of Valley Grove, Ohio County, West Virginia.* Co-authored with Christopher Jackson. Archaeological Consultants of the Midwest, Inc. Submitted to Tunnel Ridge, Triadelphia, West Virginia.
- 2011 *A Phase I Archaeological Literature Review and Reconnaissance Survey for the Proposed East Panels Degas Holes (Permit Number U-104-83; IBR Number 68) Project for the Robinson Run Mine, Marion County, West Virginia.* Co-authored with Christopher Jackson and Seth Cooper. Archaeological Consultants of the Midwest, Inc. Submitted to Alliance Consulting, Beaver, West Virginia.
- 2012 *A Phase I Archaeological Literature Review and Reconnaissance Survey for the Proposed Mid Vol Coal Sales, Inc., Blue Falcon Surface Mine near the Communities of Anawalt, Pageton, and Skygusty, McDowell County, West Virginia.* Co-authored with Christopher Jackson and Jon Walker. Archaeological Consultants of the Midwest, Inc. Submitted to True Line, Thorpe, West Virginia.

CURRICULUM VITAE
for
CHRISTOPHER JACKSON

CURRENT POSITION:

President
Archaeological Consultants of the Midwest, Inc.
P.O. Box 39146
Indianapolis, Indiana 46239
(317) 862-2002

ACADEMIC BACKGROUND:

M.S. in History, Indiana State University, 1989.
B.A. in Anthropology and History, Indiana State University, 1987.

EXPERIENCE:

Areas of expertise include: Archaeological Field Methods and Archival and Historic Background Research. Assisted and directed Phase I, II, and III projects, as well as written numerous CRM reports. Other skills include historic research, archival research, deed and title research, and mapping. Worked in California, Indiana, Louisiana, Ohio, Pennsylvania, Tennessee, Virginia, and West Virginia.

SHPO CERTIFICATION:

2004-Present	Principal Investigator (Archaeology, Architectural History, History), West Virginia State Historic Preservation Office.
2007-Present	Principal Investigator (Archaeology, History, Architectural History), Indiana State Historic Preservation Office
2007-Present	Principal Investigator (Archaeology), Pennsylvania State Historic Preservation Office

PROFESSIONAL CERTIFICATION:

1998-present	Registered Professional Archaeologist (RPA).
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EMPLOYMENT HISTORY:

2000-present	President, Archaeological Consultants of the Midwest, Inc.
1993-2000	Field Director, ASC Group, Inc.
1993	Field Technician, Skelly and Loy, Inc.
1989-93	Field Technician/Assistant Historian, Gray and Pape, Inc.

ACADEMIC GRANTS/SCHOLARSHIPS/HONORS:

Bertha Baldwin Endowment Scholarship
Dean's List
Indiana State University Archaeological Scholarship
Indiana State University Graduate Fellowship
Indiana State University Summer Honors Talent Grant
Joan Brumeister Romine Memorial Scholarship
Marion M. Biel Scholarship
National Collegiate History Award
Portland Foundation Scholarship

PRESENTATIONS:

1985 (with Robert E. Pace). Test Excavations of the Smith Site (12 Vi 86) for 1985, Vigo County, Indiana. Presented at the 1985 Fall Meeting of the Indiana Academy of Science, Bloomington.

2008 (with Christopher Koepfel). Preliminary Results of the Archaeological Investigations at the Ana Lynn Site (12Ws284). Presented at the 2008 National Center for Great Lakes Native American Culture Academic Conference, Portland, Indiana.

CULTURAL RESOURCE MANAGEMENT REPORTS (sample):

1992 *Phase I Archaeological Investigations of Columbia Gas Transmission Corporation's Proposed 1,014-Foot Realignment of Line SL-1138 in Lexington County, Kentucky, and Wayne County, West Virginia, and a 3940-Foot Realignment of Line SL-1014 in Boyd County, Kentucky and Wayne County, West Virginia.* Gray and Pape, Inc., Cincinnati, Ohio. Submitted to Columbia Gas Transmission Company, Charleston, West Virginia.

1992 *Phase I Cultural Resources Investigation of Columbia Gas Transmission Corporation's Proposed 4-Mile Realignment of Line KA in Mercer and Summers Counties, West Virginia.* Co-authored with E. Jeanne Harris. Gray and Pape, Inc., Cincinnati, Ohio. Submitted to Columbia Gas Transmission Company, Charleston, West Virginia.

1992 *Phase I Archaeological Investigations of Columbia Gas Transmission Corporation's Proposed 1,014-Foot Realignment of Line SL-1138 in Lexington County, Kentucky, and Wayne County, West Virginia, and a 3,940-Foot Realignment of Line SL-1014 in Boyd County, Kentucky, and Wayne County, West Virginia.* Gray and Pape, Inc., Cincinnati, Ohio. Submitted to Columbia Gas Transmission Company, Charleston, West Virginia.

1992 *Phase I Archaeological Investigations of the Proposed 8,186-Foot Pipeline Replacement of Line 14 and Site 46 Mr 103 in Washington District, Marshall County, West Virginia.* Co-authored with E. Jeanne Harris and Elizabeth H. Tuttle. Gray and Pape, Inc., Cincinnati, Ohio. Submitted to Columbia Gas Transmission Company, Charleston, West Virginia.

2005 *Phase I Archaeological Literature Review and Reconnaissance Survey, and Deep Testing Investigation for the Proposed Wheeling Island Fire Station in Wheeling, Ohio County, West Virginia.* Co-authored with Jamie Vosvick. Archaeological Consultants of the Midwest, Inc., Wheeling, West Virginia. Submitted to the City of Wheeling Economic and Development Department,

Wheeling, West Virginia.

- 2006 *A Phase III Archaeological Mitigation for a Proposed Drainage System for the House at the James Kinney Farmstead, Smith Township, Belmont County, Ohio.* Co-authored with Jamie Vosvick. Archaeological Consultants of the Midwest, Inc. Submitted to Heritage Architectural Associates, Wheeling, West Virginia.
- 2008 *An Investigation of a Historic Cemetery Situated within the White Oaks Phase II Development Located in the Clay District, Harrison County, West Virginia.* (co-authored with Jamie Vosvick). Archaeological Consultants of the Midwest, Inc. Submitted to Thrasher Engineering, Clarksburg, West Virginia.
- 2009 *A Phase I Literature Review and Reconnaissance Survey for the Proposed Mason County Public Service District Lakin-Camp Conley-Sand Hill Sewer Study, Mason County, West Virginia.* (co-authored with Olivia A. Jones). Archaeological Consultants of the Midwest, Inc. Submitted to Cerrone Associates, Wheeling, West Virginia.
- 2009 *A Phase II Archaeological Investigation of Sites 46Pu169 and 46Pu170 for the Proposed Buffalo High School Project, Putnam County, West Virginia.* (co-authored with Jamie Vosvick). Archaeological Consultants of the Midwest, Inc. Submitted to Putnam County Board of Education, Winfield, West Virginia.
- 2009 *A Phase I Archaeological Literature Review and Reconnaissance Survey for the Proposed Lincoln County Public Service District, Griffithsville Waterline Extension Project, Lincoln County, West Virginia.* Archaeological Consultants of the Midwest, Inc. Submitted to Thrasher Engineering, Clarksburg, West Virginia.
- 2010 *A National Register Evaluation of Four Historic Cemeteries (46Mg264, 46Mg270, 46Mg271 and the Liming Cemetery) for the Proposed New Hill West Surface Mine in Monongalia County, West Virginia.* (co-authored with Jamie Vosvick and Jennifer Carroll). Archaeological Consultants of the Midwest, Inc. Submitted to Patriot Mining, Morgantown, West Virginia.
- 2010 *A Phase I Management Summary for the Proposed Quarry Modification Project (Permit Number Q200698), Pocahontas County, West Virginia.* Archaeological Consultants of the Midwest, Inc. Submitted to Boxley Aggregates of West Virginia, Roanoke, Virginia.
- 2010 *A Phase I Archaeological Literature Review and Reconnaissance Survey for the Proposed Quarry Modification Project (Permit Number Q200698) near the Community of Hillsboro, and the Phase II Investigation of Sites 46Ph763 and 46Ph764, Pocahontas County, West Virginia.* (co-authored with Jamie Vosvick and Jennifer Carroll). Archaeological Consultants of the Midwest, Inc. Submitted to Boxley Aggregates of West Virginia, Roanoke, Virginia.

MEMBERSHIPS/AFFILIATIONS:

Society of American Archaeology