
Figure 29. Fieldwork results and photo orientations for Sheet 18.


Figure 30. Fieldwork results and photo orientations for Sheet 19.

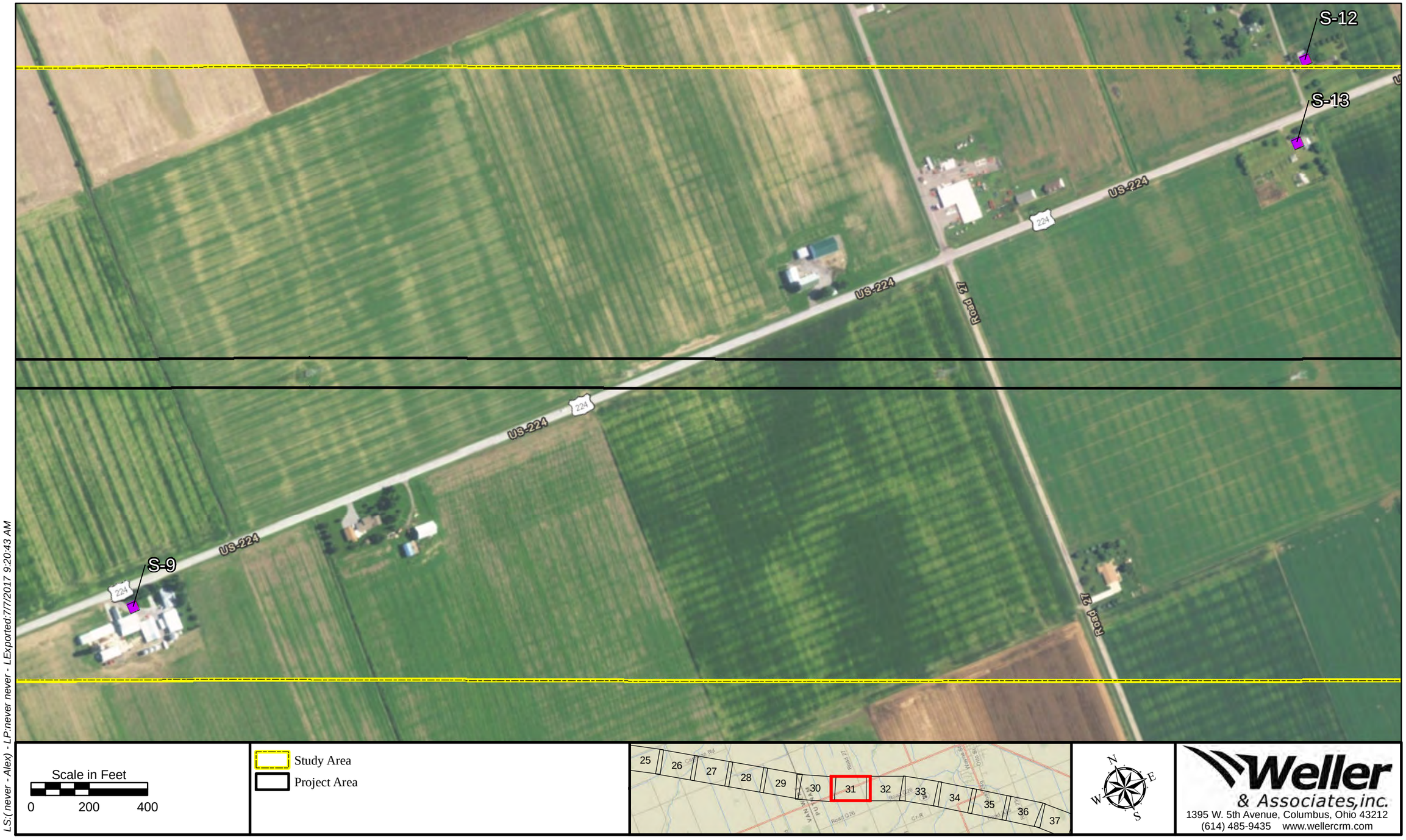



Figure 31. Fieldwork results and photo orientations for Sheet 20.

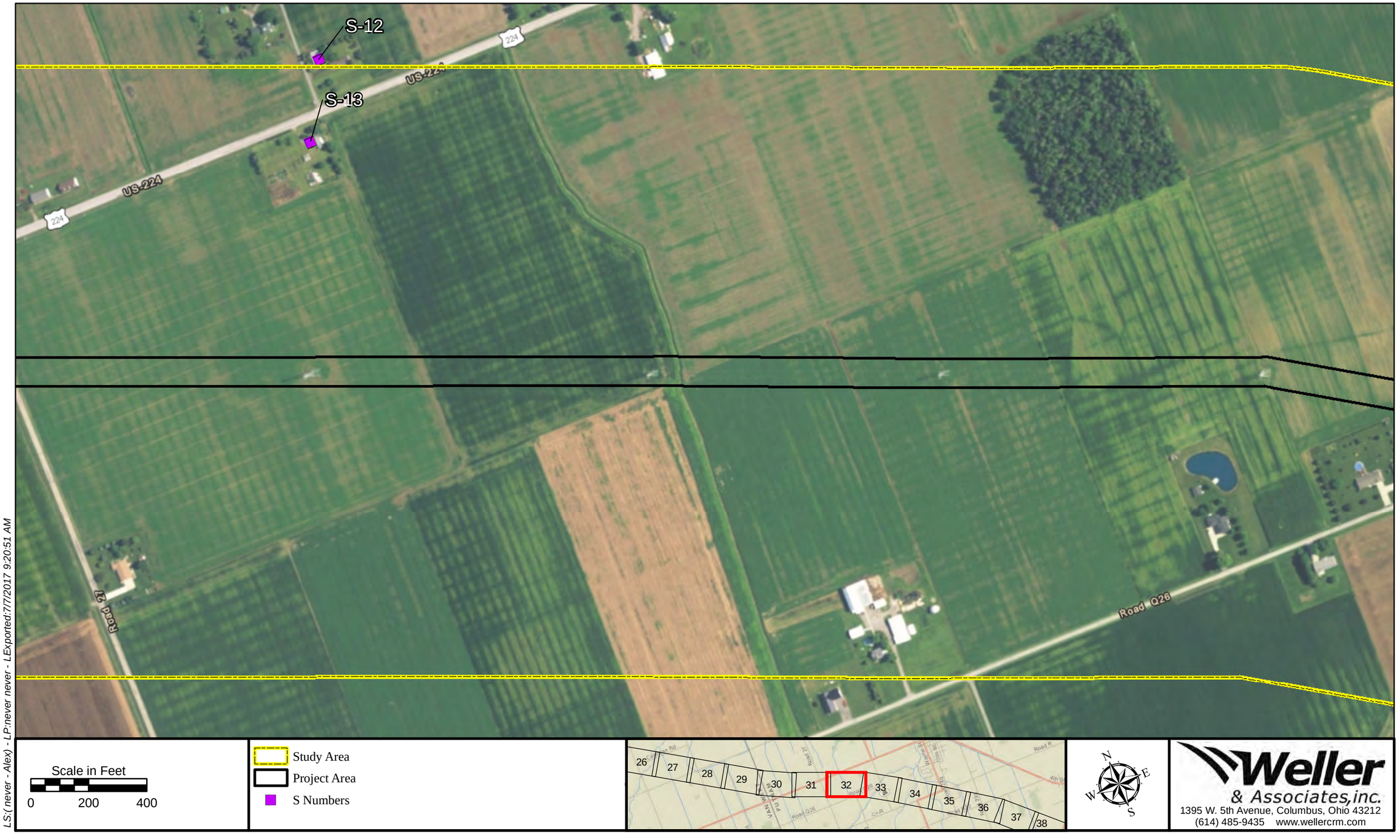



Figure 32. Fieldwork results and photo orientations for Sheet 21.


Figure 33. Fieldwork results and photo orientations for Sheet 22.


Figure 34. Fieldwork results and photo orientations for Sheet 23.

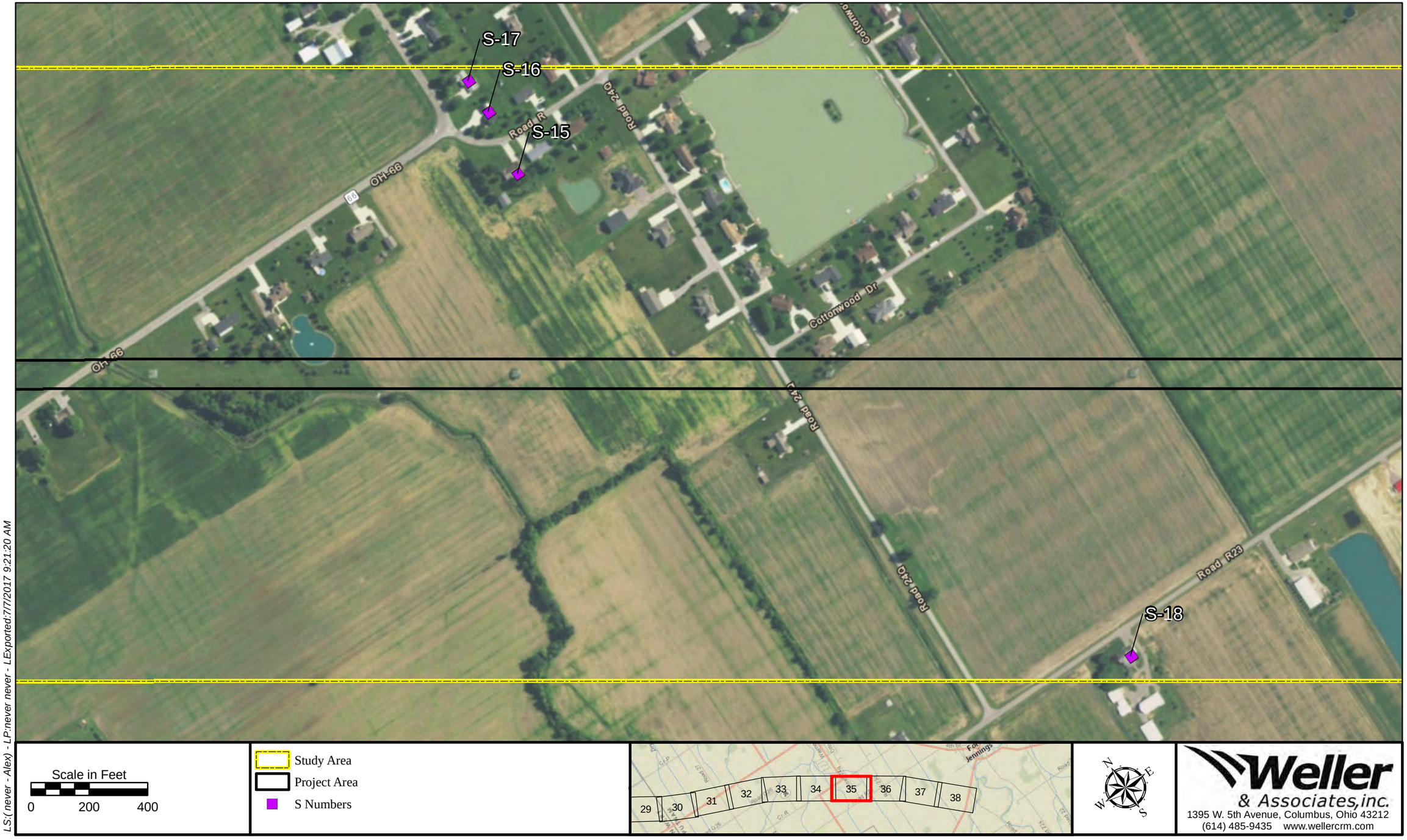



Figure 35. Fieldwork results and photo orientations for Sheet 24.

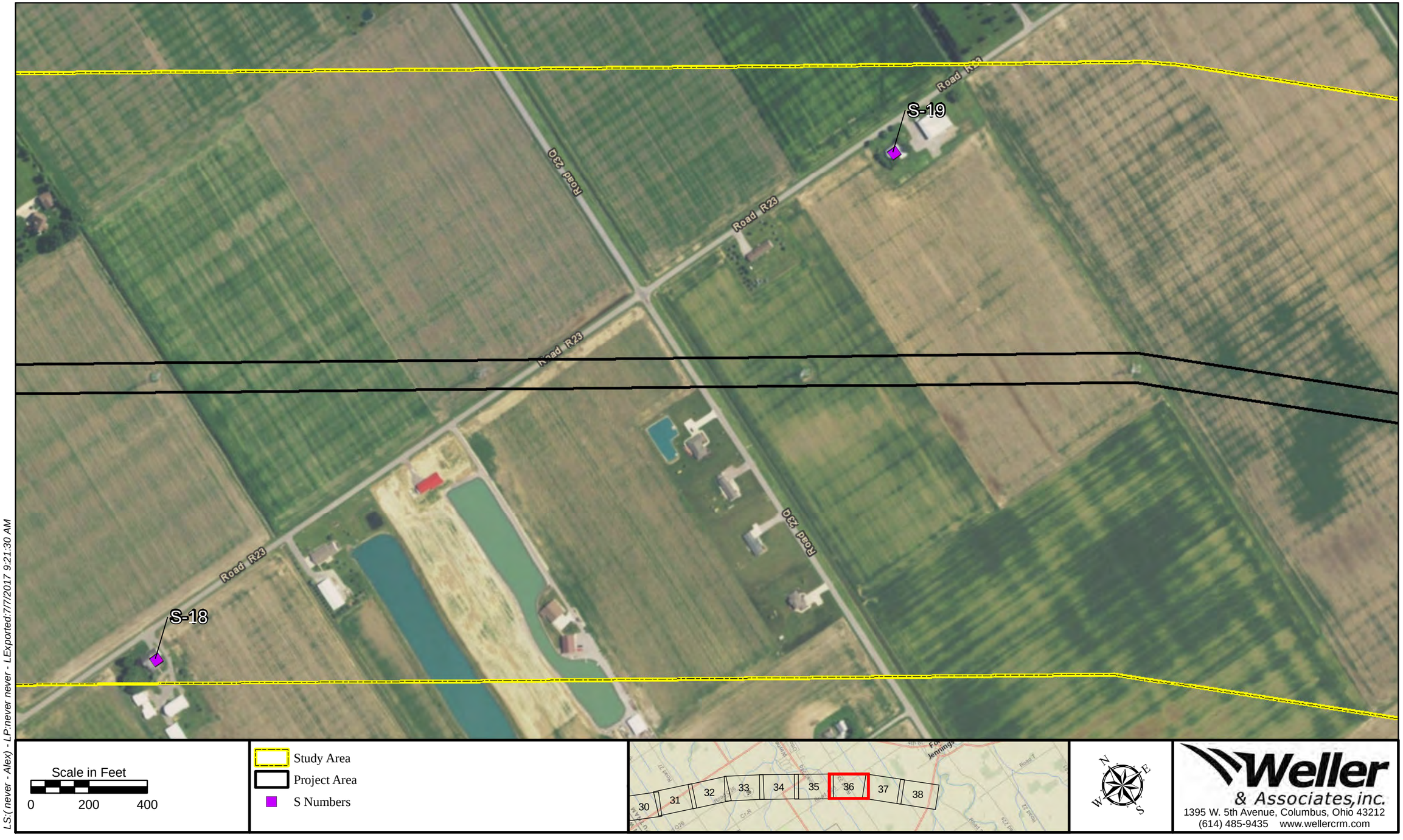



Figure 36. Fieldwork results and photo orientations for Sheet 25.

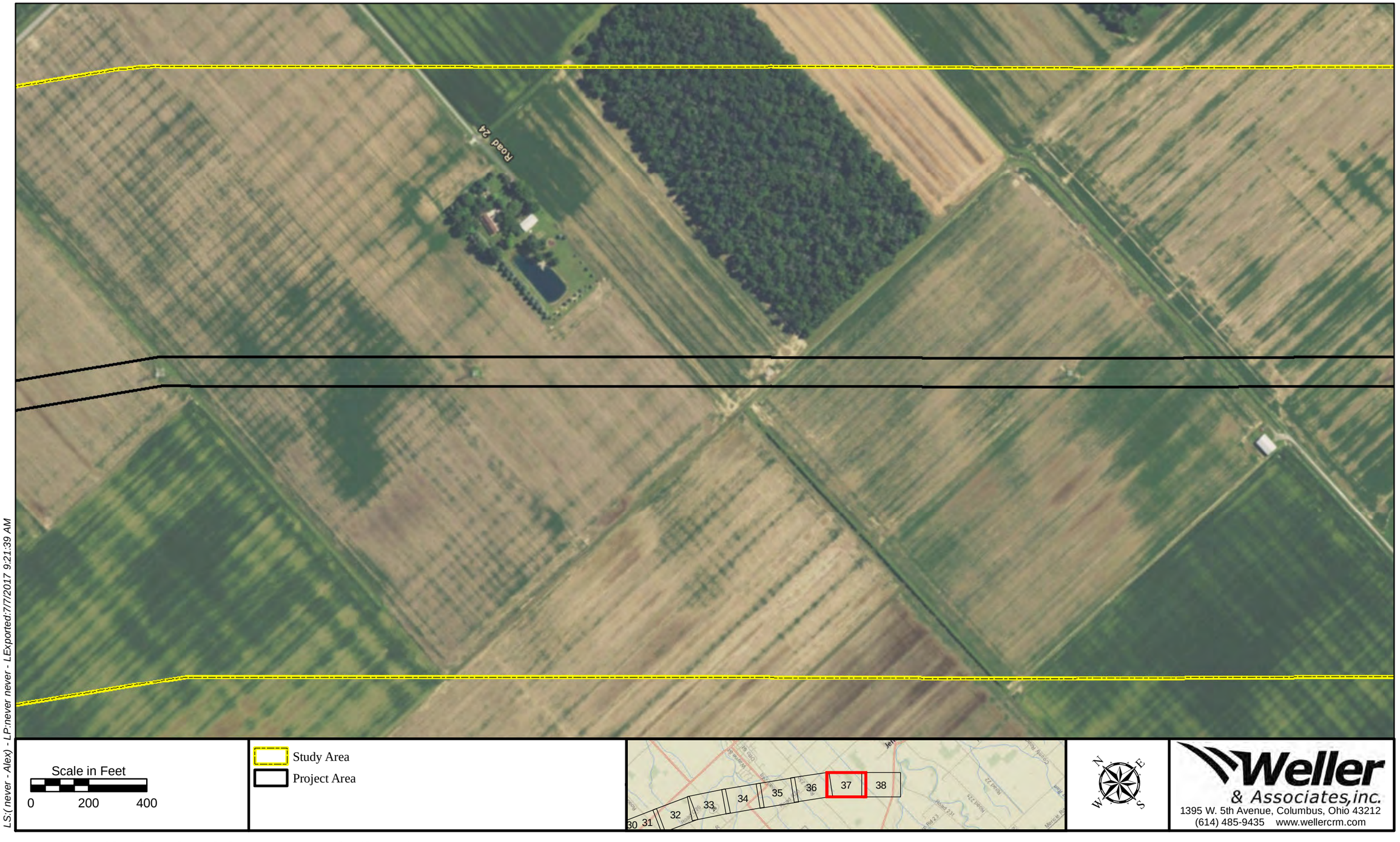
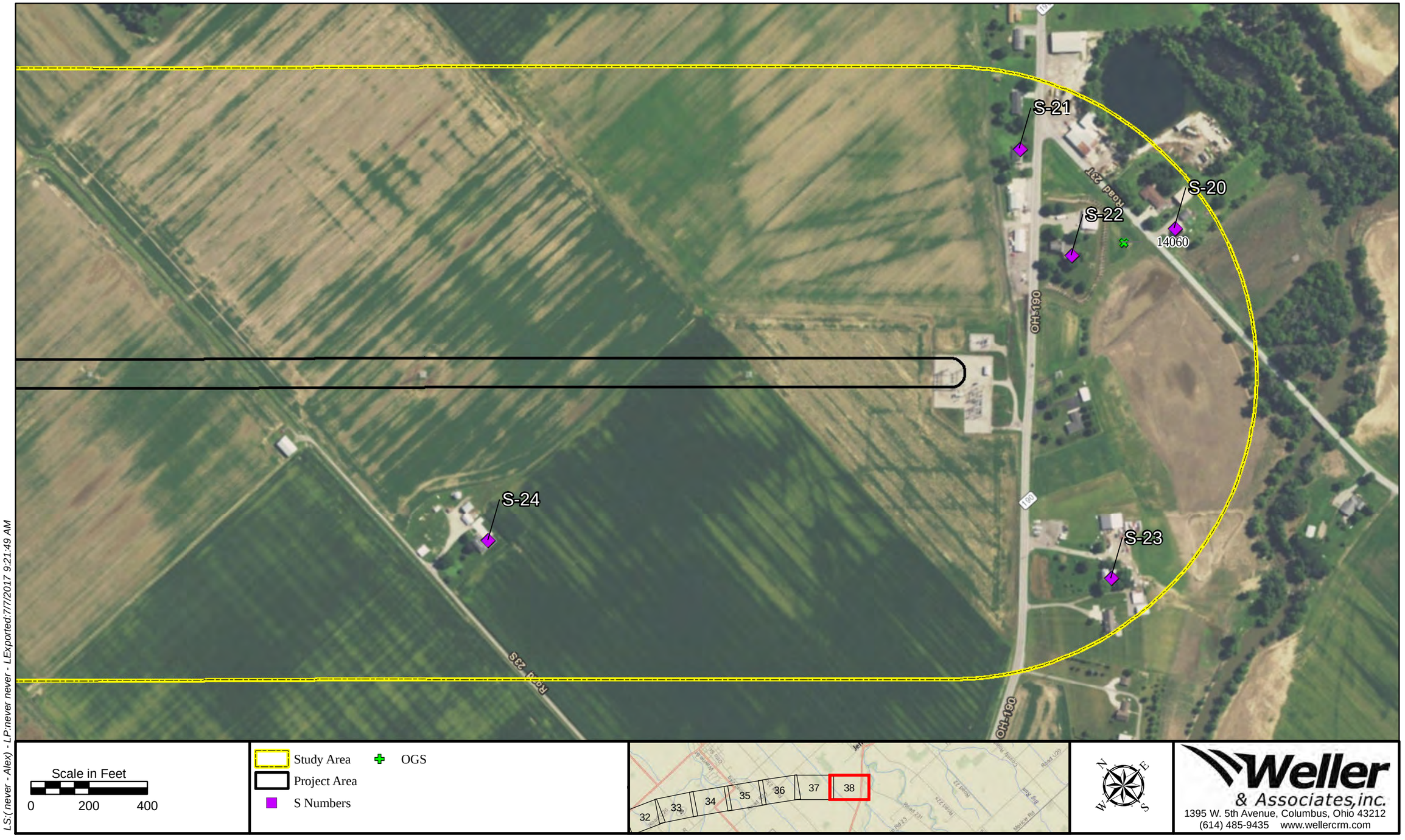



Figure 37. Fieldwork results and photo orientations for Sheet 26.

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# Phase I Archaeological Investigations for the Approximately 27.4 km (17 mi) Haviland-North Delphos 138kV Line Rebuild Project in Paulding, Putnam, and Van Wert Counties, Ohio

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# Phase I Archaeological Investigations for the Approximately 27.4 km (17 mi) Haviland-North Delphos 138kV Line Rebuild Project in Paulding, Putnam, and Van Wert Counties, Ohio

**By**

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**July 7, 2017**

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W-2111

# Abstract

In June and July of 2017, Weller & Associates, Inc. conducted Phase I Archaeological Investigations for the Approximately 27.4 km (17 mi) Haviland-North Delphos 138kV Line Rebuild Project in Paulding, Putnam, and Van Wert Counties, Ohio. These investigations were conducted for American Electric Power for submittal to the Ohio Power Siting Board. These investigations involved intensive surface collection methods and visual inspection. A cultural resources management (CRM) survey was conducted in a manner that is reflective to Section 106 of the National Historic Preservation Act to identify any sites or properties relative to this undertaking and to evaluate them for the National Register of Historic Places (NRHP). The work involved a literature review and field investigations. There were no cultural materials identified during these archaeological investigations.

The project will include the rebuild/replacement of the structures along the existing Haviland-North Delphos 138kV line. The line has an existing right-of-way (ROW) extending from just east of the Community of Haviland in Paulding County, in a southeasterly direction through farm fields to the vicinity of Ft. Jennings in Putnam County. The surveyed corridor extends through what is largely Lake Plain, former lacustrine conditions where the terrain is nearly flat. The only relief that was identified during these investigations was nearer streams. Nearly the entire project corridor was contained in agricultural fields that were immature and suitable for surface collection methods. The only impediments were the occasional ditches and streams that were intercepted. The project corridor is considered to be the 30.5 m (100 ft) wide easement.

A literature review conducted prior to the field investigations determined that there are few sites recorded in the region, but there are several recorded resources in the vicinity. There are five archaeological sites in the study area with two (i.e., 33PU0048 and 33VW0117) indicated within the project corridor. The project does overlap with some previous investigations (Weller 2015; Weller and Ledezma 2015). There is only one architectural resource in the study area, it is not near the project. There are no recorded significant resources in the study area or project area.

These investigations did not identify any archaeological sites and did not relocate any previously identified sites. This project is not considered to have any effects to any historic properties or landmarks regarding the archaeological component of the cultural resource investigations. No further work is deemed necessary for this project.

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# Introduction

In June and July of 2017, Weller & Associates, Inc. conducted Phase I Archaeological Investigations for the Approximately 27.4 km (17 mi) Haviland-North Delphos 138kV Line Rebuild Project in Paulding, Van Wert, and Putnam Counties, Ohio (Figures 1-9). These investigations were conducted for submittal to the Ohio Power Siting Board (OPSB) as this is a 138kV line and to abide by their guidelines. The survey is to identify any sites or properties and to evaluate them similar to how they are examined for the National Register of Historic Places (NRHP) and in a manner that is reflective of Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C. 470 [36 CFR 800]). This report summarizes the results of the archaeological fieldwork and literature review. The report format and design are similar to that established in *Archaeology Guidelines* (Ohio Historic Preservation Office [OHPO] 1994). The work includes a literature review and background documentation, archaeological field investigations, and visual inspection of the Area of Potential Effects (APE). The architectural component of these investigations was prepared in a separate and stand-alone document.

Chad Porter completed the literature review in June of 2017. The field investigations for this project were conducted in from June to early July. The field crew included Justin Fryer, Ryan Weller, Seth Cooper, Brittany Vance, Dakota Martinez, and Josh Engle. Ryan Weller served as the Principal Investigator and Chad Porter was the Project Manager. Alex Thomas completed the figures for this report.

### *Project Description*

The project will include the rebuild/replacement of the structures along the existing Haviland-North Delphos 138kV electric line in Jennings/Monterey Townships, Putnam County, Latty/Blue Creek Townships, Paulding County, and Jackson/Hoaglin Townships, Van Wert County, Ohio. The line has an existing right-of-way (ROW) extending from just east of the Community of Haviland in a southeasterly direction through farm fields to the vicinity of Ft. Jennings in Putnam County. The existing structures will be replaced with steel monopole structures. The project corridor is 30.5 m (100 ft) wide. The project will likely require two mobilizations to address the existing electric line ROW and the access corridors. The electric line is about 27.4 km (17 mi) long. The history/architectural document will be compiled in a separate and stand-alone report.

# Environmental Setting

### *Climate*

Van Wert, Paulding, and Putnam Counties, like all of Ohio, have a continental climate with hot and humid summers and cold winters. Van Wert County accumulates about 91 cm (36 in) of precipitation yearly. The average monthly precipitation is 7.6 cm (3 in). January and February are the driest months, while June is the wettest month for

Van Wert County [United States Department of Agriculture, Soil Conservation Service (USDA, SCS) 1972 (2017c)]. Paulding and Putnam Counties have similar climactic statistics.

### *Physiography, Relief, and Drainage*

The project corridor is within the Maumee Lake Plains and Paulding Clay Basin physiographic regions. The Maumee Lake Plain is described as "Flat-lying Ice-Age lake basin with beach ridges, bars, dunes, deltas, and clay flats; contained the former Black Swamp; slightly dissected by modern streams"; the Paulding Clay Basin pertains to "Nearly flat lacustrine plain; most clayey of all Lake Plain subregions; low-gradient, highly meandering streams; easily ponded soils" (Brockman 1998). The project area is contained in nearly level to flat terrain that is not well drained without facilitative assistance (i.e., tiling, ditches). The project is drained by numerous small and shallow drainages. Named drainages that are intercepted by this project include: Prairie Creek, Dry Creek, Hagerman Creek, Hoaglin Creek, Maddox Creek, Town Creek, Big Run, Little Auglaize River, Dog Creek, and Jennings Creek. The eastern part approaches the Auglaize River. The project is contained within the Auglaize-Maumee River watershed.

### *Geology*

The underlying bedrock in the western part of the corridor is relative to the Devonian era. The bedrock in the eastern part is of the Silurian era (Brockman 1998). The Silurian System consists of sedimentary rocks, mainly of dolomite, anhydrite, gypsum, salt, and shale.

### *Soils*

The project area is located in the Lake Plain aspects of Paulding, Van Wert, and Putnam Counties. This is a very homogeneous setting that is within the Lake Plain physiographic region. This is reflected by the involved soil series types that predominately lack slope/relief and are mostly silty clay or silty clay loam types (USDA, SCS 2017a, 2017b, 2017c). Slight rises or elevations in this setting are frequently represented by soil series with greater than two percent slope. There are no deep alluvial situations present within the project area.

**Table 1. Soils in the Project.**

| **Paulding County Soils** | | | |
|---|---|---|---|
| **Soil Symbol** | **Soil Name** | **% Slope** | **Location** |
| Lc | Latty silty clay | 0-1 | Lake Plains, flats |
| NpA | Nappanee silty clay loam | 0-2 | Lake plain sl. rises |
| To | Toledo silty clay | 0-1 | Lake Plains, flats |
| Uc | Udorthents | n/a | Disturbed area |
| Wb | Wabasha silty clay loam | 0 | Lake Plains, flats |
| **Putnam County Soils** | | | |
| Df | Defiance silty clay loam | 0 | Lake Plains, flats |
| HcA | Hoytville silty clay loam | 0-1 | Lake Plains, flats |
| HtA | Hoytville silty clay | 0-1 | Lake Plains, flats |

| | | | |
|---|---|---|---|
| Mf | Millgrove loam | 0 | Lake plain flats |
| Mg | Millgrove silty clay loam | 0 | Lake Plains, flats |
| NaB | Nappanee loam | 2-6 | Lake plain, sl. rises |
| NpA | Nappanee silt loam | 0-2 | Lake plain, sl. rises |
| NtA | Nappanee silty clay loam | 0-2 | Lake plain, sl. rises |
| SaB | St. Clair loam | 2-6 | Lake plain, sl. rises |
| ScB | St. Clair silt loam | 2-6 | Lake plain, sl. rises |
| ScD2 | St. Clair silt loam | 12-18 | Lake plains, slope margins |
| Tt | Toledo silty clay | 0-1 | Lake Plains, flats |
| Wa | Wabasha silty clay | 0 | Lake Plains, flats |
| **Van Wert County Soils** | | | |
| HcA | Hoytville silty clay loam | 0-1 | Lake Plains, flats |
| HtA | Hoytville silty clay | 0-1 | Lake Plains, flats |
| La | Latty silty clay loam | 0 | Lake Plains, flats |
| Lb | Latty silty clay | 0-1 | Lake Plains, flats |
| NpA | Nappanee silt loam | 0-2 | Lake plain, sl. rises |
| NpB | Nappanee silt loam | 2-6 | Lake plain, sl. rises |
| NtA | Nappanee silty clay loam | 0-2 | Lake plain, sl. rises |
| NtB | Nappanee silty clay loam | 2-6 | Lake plain, sl. rises |
| Wa | Wabasha silty clay loam | 0 | Lake Plains, flats |
| Wh | Wabasha silty clay | 0 | Lake Plains, flats |

## *Flora*

There was, and continues to be, great floral diversity in Ohio. This diversity is relative to the soils and the terrain that generally includes the till plain, lake plain, terminal glacial margins, and unglaciated plateau (Forsyth 1970). Three major glacial advances, including the Kansan, Illinoisan, and Wisconsinan, have affected the landscape of Ohio. The effects of the Wisconsin glaciation are most pronounced and have affected more than half of the state (Pavey et al. 1999). The following is to provide comparison of the different floral regions of Ohio relative to this project.

The least diverse part of Ohio extends in a belt from the northeast below the lake-affected areas through most of western Ohio (Gordon 1966). These areas are part of the late Wisconsin ground moraine and lateral end moraines. It is positioned between the lake plains region and the terminal glacial moraines. This area included broad forested areas of beech maple forests interspersed with mixed oak forests in elevated terrain or where relief is greater (Forsyth 1970; Gordon 1966). Prairie environments such as those in Wyandot and Marion County areas would contain islands of forests, but were mostly expansive open terrain dominated by grasses.

The northwestern Ohio terrain is nearly flat because of ancient glacial lakes and glaciation, which affected the flora. However, the vegetation was more diverse than the till plain to the south and east because of the variety of factors that contributed to its terrain. Forests within the Black Swamp were generally comprised of elm/ash stands; however, dissected areas along drainages and drier, elevated areas from beach deposits would contain mixed forests of oak and hickory (Gordon 1966, 1969). There was little upland floral diversity in the lake plains (Black Swamp region) except for the occasional

patches of oak and hickory. Floral variety was most evident in narrow sleeves along larger stream valleys where there is relief.

The most biological diversity in Ohio is contained within the Allegheny Plateau, which encompasses the southeastern two-thirds of the state (Sheaffer and Rose 1998). Because this area is higher and has drier conditions, it is dominated by mixed oak forests. Some locations within the central part of this area contain beech and mixed mesophytic forests. There are large patches of oak and sugar maple forests to the south of the terminal moraine from Richland to Mahoning County (Gordon 1966).

Southwestern Ohio from about Cincinnati to Bellefontaine east to the Scioto River historically contained a very diverse floral landscape. This is an area where moraines from three glacial episodes are prevalent (Pavey et al. 1999). Forests in this area include elm-ash swamp, beech, oak-sugar maple, mixed mesophytic, prairie grasslands, mixed oak, and bottomland hardwoods (Core 1966; Gordon 1966, 1969). These forests types are intermingled with prairies being limited to the northern limits of this area mostly in Clark and Madison Counties.

Generally, beech forests are the most common variety through Ohio and could be found in all regions. Oak and hickory forests dominated the southeastern Ohio terrain and were found with patchy frequency across most of northern Ohio. Areas that were formerly open prairies and grasslands are in glacial areas, but are still patchy. These are in the west central part of the state. Oak and sugar maple forests occur predominantly along the glacial terminal moraine. Elm-ash swamp forests are prevalent in glaciated areas including the northern and western parts of Ohio (Gordon 1966; Pavey et al. 1999).

The project area is generally within what is considered to be a mixed meso-phytic and beech forestation area (Gordon 1966).

### *Fauna*

The upland forest zone offered a diversity of mammals to the prehistoric diet. This food source consisted of white-tailed deer, black bear, Eastern cottontail rabbit, opossum, a variety of squirrels, as well as other less economically important mammals. Several avian species were a part of the upland prehistoric diet as well (i.e. wild turkey, quail, ruffed grouse, passenger pigeon, etc.). The lowland zone offered significant species as well. Raccoon, beaver, and muskrat were a few of the mammals, while wood duck and wild goose were the economically important birds. Fishes and shellfish were also an integral part of the prehistoric diet. Ohio muskellunge, yellow perch, white crappie, long nose gar, channel catfish, pike, and sturgeon were several of the fish, whereas, the Ohio naiad mollusc, butterfly's shell, long solid, common bullhead, knob rockshell, and cod shell were the major varieties of shellfish. Reptiles and amphibians, such as several varieties of snakes, frogs, and turtles, were also part of the prehistoric diet (Trautman 1981; Lafferty 1979; Mahr 1949).

## Cultural Setting

The first inhabitants of Ohio were probably unable to enter this land until the ice sheets of the Wisconsin glacier melted around 14,000 B.C. Paleoindian sites are considered rare due to the age of the sites and the effects of land altering activities such as erosion. Such sites were mostly used temporarily and thus lack the accumulation of human occupational deposits that would have been created by frequent visitation. Paleoindian artifact assemblages are characteristic of transient hunter-gatherer foraging activity and subsistence patterns. In Ohio, major Paleoindian sites have been documented along large river systems and near flint outcrops in the Unglaciated Plateau (Cunningham 1973). Otherwise, Paleoindian sites in the glaciated portions of Ohio are encountered infrequently and are usually represented by isolated finds or open-air scatters.

The Paleoindian period is characterized by tool kits and gear utilized in hunting Late Pleistocene megafauna and other herding animals including but not limited to short-faced bear, barren ground caribou, flat-headed peccary, bison, mastodon, giant beaver (Bamforth 1988; Brose 1994; McDonald 1994). Groups have been depicted as being mobile and nomadic (Tankersley 1989); artifacts include projectile points, multi-purpose unifacial tools, burins, gravers, and spokeshaves (Tankersley 1994). The most diagnostic artifacts associated with this period are fluted points that exhibit a groove or channel positioned at the base to facilitate hafting. The projectiles dating from the late Paleoindian period generally lack this trait; however, the lance form of the blade is retained and is often distinctive from the following Early Archaic period (Justice 1987).

The Archaic period has been broken down into three sub-categories, including the Early, Middle, and Late Archaic. During the Early Archaic period (ca. 10,000-8000 B.P.), the environment was becoming increasingly arid as indicated by the canopy (Shane 1987). This period of dryness allowed for the exploitation of areas that were previously inaccessible or undesirable. The Early Archaic period does not diverge greatly from the Paleoindian regarding the type of settlement. Societies still appear to be largely mobile with reliance on herding animals (Fitting 1963). For these reasons, Early Archaic artifacts can be encountered in nearly all settings throughout Ohio. Tool diversity increased at this time including hafted knives that are often re-sharpened by the process of beveling the utilized blade edge and intense basal grinding (Justice 1987). There is a basic transition from lance-shaped points to those with blades that are triangular. Notching becomes a common hafting trait. Another characteristic trait occurring almost exclusively in the Early and Middle Archaic periods is basal bifurcation and large blade serrations. Tool forms begin to vary more and may be a reflection of differential resource exploitation. Finished tools from this period can include bifacial knives, points, drills/perforators, utilized flakes, and scrapers.

The Middle Archaic period (8000-6000 B.P.) is poorly known or understood in archaeological contexts within Ohio. Some (e.g., Justice 1987) regard small bifurcate points as being indicative of this period. Ground stone artifacts become more prevalent at this time. Other hafted bifaces exhibit large side notches with squared bases, but this same trait can extend back to the Paleoindian period. The climate at this time is much

like that of the modern era. Middle Archaic period subsistence tended to be associated with small patch foraging that involved a consistent need for mobility with a shift towards stream valleys (Stafford 1994). Sites encountered from this time period throughout most of Ohio tend to be lithic scatters or isolated finds. The initial appearance of regional traits may be apparent at this time.

The Late Archaic period in Ohio (ca 6000-3000 B.P.) diverges from the previous periods in many ways. Preferred locations within a regional setting appear to have been repeatedly occupied. The more intensive and repeated occupations often resulted in the creation of greater social and material culture complexity. The environment at this time is warmer and drier. Most elevated landforms in northeastern Ohio have yielded Archaic artifacts (Prufer and Long 1986: 7), and the same can be stated for the remainder of Ohio.

Various artifacts are diagnostic of the Late Archaic period. Often, burial goods provide evidence that there was some long-distance movement of materials, while lithic materials used in utilitarian assemblages are often from a local chert outcrop. There is increased variation in projectile point styles that may reflect regionalism. Slate was often used in the production of ornamental artifacts. Ground and polished stone artifacts reached a high level of development. This is evident in such artifacts as grooved axes, celts, bannerstones, and other slate artifacts.

It is during the Terminal Archaic period (ca 3500-2500 B.P.) that extensive and deep burials are encountered. Cultural regionalism within Ohio is evident in the presence of Crab Orchard (southwest), Glacial Kame (northern), and Meadowood (central to Northeastern). Along the Ohio River, intensive occupations have been placed within the Riverton phase. Pottery makes its first appearance during the Terminal Late Archaic.

The Early Woodland period (ca 3000-2100 B.P.) in Ohio is often associated with the Adena culture and the early mound builders (Dragoo 1976). Early and comparably simple geometric earthworks first appear with mounds more spread across the landscape. Pottery at this time is thick and tempered with grit, grog, or limestone; however, it becomes noticeably thinner towards the end of the period. There is increased emphasis on gathered plant resources, including maygrass, chenopodium, sunflower, and squash. Habitation sites have been documented that include structural evidence. Houses that were constructed during this period were circular, having a diameter of up to 18.3 m (Webb and Baby 1963) and often with paired posts (Cramer 1989). Artifacts dating from this period include leaf-shaped blades with parallel to lobate hafting elements, drilled slate pieces, ground stone, thick pottery, and increased use of copper. Early Woodland artifacts can be recovered from every region of Ohio.

In northwest and north-central Ohio, there are not very many mounds or village sites that indicate an Early Woodland occupation. Artifacts from these areas often are reflective of seasonal hunting excursions. Adena-like bifaces and tools are commonly found in river and stream valleys that drain into Lake Erie as well as in the uplands. It is assumed that Early Woodland inhabitants used these areas for little more than a transient hunting-collecting subsistence. One of the best-known Early Woodland sites is the

Leimbach site. This site is located where the Huron River empties into Lake Erie (Shane 1975). Early Woodland ceramics and lugged vessels have been recovered from this site. Evidence of Early Woodland activity, such as ceramics, has been encountered infrequently at locations across north-central and northwestern Ohio.

The Middle Woodland period (ca 2200-1600 B.P.) is often considered to be equivalent with the Hopewell culture. The largest earthworks in Ohio date from this period. There is dramatic increase in the appearance of exotic materials that appear most often in association with earthworks and burials. Artifacts representative of this period include thinner, grit-tempered pottery, dart-sized projectile points (Lowe Flared, Steuben, Snyders, and Chesser) [Justice 1987], exotic materials (mica, obsidian, and marine shell, etc.). The points are often thin, bifacially beveled, and have flat cross sections. There seems to have been a marked increase in the population as well as increased levels of social organization. Middle Woodland sites seem to reflect a seasonal exploitation of the environment. There is a notable increase in the amount of Eastern Agricultural Complex plant cultigens, including chenopodium, knotweed, sumpweed, and little barley. This seasonal exploitation may have followed a scheduled resource extraction year in which the populations moved camp several times per year, stopping at known resource extraction loci. Middle Woodland land use appears to center on the regions surrounding earthworks (Dancey 1992; Pacheco 1996); however, there is evidence of repeated occupation away from earthworks (Weller 2005). Household structures at this time vary with many of them being squares with rounded corners (Weller 2005). Exotic goods are often attributed to funerary activities associated with mounds and earthworks. Utilitarian items are more frequently encountered outside of funerary/ritual contexts. The artifact most diagnostic of this period is the bladelet, a prismatic and thin razor-like tool, and bladelet cores. Middle Woodland remains are more commonly recovered from central Ohio south and lacking from most areas in the northern and southeastern part of the state.

Little information is known about the Middle Woodland period of western and northwestern Ohio. This may be due to a poor representation of artifacts from this period or because the area is not directly associated with the Hopewell culture. The loosely associated patterns of earthworks to habitation sites that have been identified in central and southern Ohio areas are not present in this region. Sites associated with this period have been identified along the south and western shores of Lake Erie, but they are not common (Stothers et al. 1979; Stothers 1986).

The Late Woodland period (ca A.D. 400-900) is distinct from the previous period in several ways. There appears to be a population increase and a more noticeable aggregation of groups into formative villages. The villages are often positioned along large streams, on terraces, and were likely seasonally occupied (Cowan 1987). This increased sedentism was due in part to a greater reliance on horticultural garden plots, much more so than in the preceding Middle Woodland period. The early Late Woodland groups were growing a wide variety of crop plants that are collectively referred to as the Eastern Agricultural Complex. These crops included maygrass, sunflower, and domesticated forms of goosefoot and sumpweed. This starch and protein diet was supplemented with wild plants and animals. Circa A.D. 800 to 1000, populations adopted

maize agriculture, and around this same time, shell-tempered ceramics appear. Other technological innovations and changes during this time period included the bow and arrow and changes in ceramic vessel forms.

Evidence suggests that the Late Woodland occupations in northern Ohio developed from the Western Basin Middle Woodland tradition. The Late Woodland period in northern Ohio is best defined by ceramic traditions. Western Basin Late Woodland sites have been identified in most of the river valleys in northwestern Ohio such as the Maumee, Auglaize, and the Sandusky Rivers. Radiocarbon dating establishes this Late Woodland occupation at the first century B.C. to A.D. 500 (Pratt and Bush 1981: 88). The Western Basin tradition consists of three primary phases, which include the Riviere au Vase, the Younge (Fitting 1965), and the Springwells phase. Influence from the Cole complex may extend into the area from the south, but this remains theoretical and not well researched.

The Late Prehistoric period in northwest and northern Ohio is often associated with an intensification of the use of plant resources, the presence of large villages, and a steady population increase. Permanent villages were associated with a heavy dependence on farming. These villages were often located on the meander belt zones of river valleys (Stothers et al. 1984: 6). Subsistence of these farming communities relied upon maize, beans, and squash as the major cultigens. Villages were often strategically located on bluff tops. There is a change in social structure to a chiefdom-based society. The Late Prehistoric period in northwest Ohio has been segregated into the Sandusky tradition and smaller phases based largely on age and ceramic assemblage traits.

The Sandusky tradition has been broken up into four phases. These phases are identified (in chronological order) as Eiden, Wolf, Fort Meigs, and Indian Hills. These are often associated with a style of ceramic referred to as Mixter Tool Impressed, Mixter Dentate, Mixter Cordmarked, and Parker Festooned. The Eiden and Wolf phases show a dependence upon fishing, and villages are usually associated with large cemeteries (Schneider 2000; Shane 1967).

The Fort Meigs and Indian Hills phases occur late in the Late Prehistoric period. The Fort Meigs phase may be related to the Wolf phase in that the pottery is similar. Fort Meigs phase occupations are identified by specific rim and neck motifs that are applied to their pottery. The Indian Hills phase is associated with shell-tempered pottery. Some villages show evidence of defensive features such as stockade lines, ditches, or earthen walls (Pratt and Bush 1981: 155). There is little evidence to support inter-village relationships, such as trade; this lack may have been due to competition for localized resources.

### *Protohistoric to Settlement*

By the mid-1600s, French explorers traveled through the Ohio country as trappers, traders, and missionaries. They kept journals about their encounters and details of their travels. These journals are often the only resource historians have regarding the

early occupants of seventeenth century Ohio. The earliest village encountered by the explorers in 1652 was a Tionontati village located along the banks of Lake Erie and the Maumee River. Around 1670, it is known that three Shawnee villages were located along the confluence of the Ohio River and. the Little Miami River. Because of the Iroquois Wars, which continued from 1641-1701, explorers did not spend much time in the Ohio region, and little else is known about the natives of Ohio during the 1600s. Although the Native American tribes of Ohio may have been affected by the outcome of the Iroquois Wars, no battles occurred in Ohio (Tanner 1987).

French explorers traveled extensively through the Ohio region from 1720-1761. During these expeditions, the locations of many Native American villages were documented. In 1751, a Delaware village known as Maguck existed near present-day Chillicothe. In 1758, a Shawnee town known as 'Lower Shawnee 2' existed at the same location. The French also documented the locations of trading posts and forts, which were typically established along the banks of Lake Erie or the Ohio River (Tanner 1987).

While the French were establishing a claim to the Ohio country, many Native Americans were also entering new claims to the region. The Shawnee were being forced out of Pennsylvania because of English settlement along the eastern coast. The Shawnee created a new headquarters at Shawnee Town, which was located at the mouth of the Scioto River. This headquarters served as a way to pull together many of the tribes which had been dispersed because of the Iroquois Wars (Tanner 1987).

Warfare was bound to break out as the British also began to stake claims in the Ohio region by the mid-1700s. The French and Indian War (1754-1760) affected many Ohio Native Americans; however, no battles were recorded in Ohio (Tanner 1987). Although the French and Indian War ended in 1760, the Native Americans continued to fight against the British explorers. In 1764, Colonel Henry Bouquet led a British troop from Fort Pitt, Pennsylvania to near Zanesville, Ohio.

In 1763, the Seven Years' War fought between France and Britain, also known as the French and Indian War ended with The Treaty of Paris. In this Peace of Paris, the French ceded their claims in the entire Ohio region to the British. When the American Revolution ended with the Second Treaty of Paris in 1783, the Americans gained the entire Ohio region from the British; however, they designated Ohio as Indian Territory. Native Americans were not to move south of the Ohio River but Americans were encouraged westward into the newly acquired land to occupy and govern (Tanner 1987).

By 1783, Native Americans had established fairly distinct boundaries throughout Ohio. The Shawnee tribes generally occupied southwest Ohio, while the Delaware tribes stayed in the eastern half of the state. Wyandot tribes were located in north-central Ohio, and Ottawa tribes were restricted to northeast Ohio. There was also a small band of Mingo tribes in eastern Ohio along the Ohio River, and there was a band of Mississauga tribes in northeastern Ohio along Lake Erie. The Shawnee people had several villages within Ross County along the Scioto River (Tanner 1987). Although warfare between

tribes continued, it was not as intense as it had been in previous years. Conflicts were contained because boundaries and provisions had been created by earlier treaties.

In 1795, the Treaty of Greenville was signed as a result of the American forces defeat of the Native American forces at the Battle of Fallen Timbers. This allocated the northern portion of Ohio to the Native Americans, while the southern portion was opened for Euro-American settlement. Although most of the battles which led up to this treaty did not occur in Ohio, the outcome resulted in dramatic fluctuations in the Ohio region. The Greenville Treaty line was established, confining all Ohio Native Americans to northern Ohio, west of the Tuscarawas River (Tanner 1987).

Ohio Native Americans were again involved with the Americans and the British in the War of 1812. Unlike the previous wars, many battles were fought in the Ohio country during the War of 1812. By 1815, peace treaties began to be established between the Americans, British, and Native Americans. The Native Americans lost more and more of their territory in Ohio. By 1830, the Shawnee, Ottawa, Wyandot, and Seneca were the only tribes remaining in Ohio. These tribes were contained on reservations in northwest Ohio. By the middle 1800s, the last of the Ohio Native Americans signed treaties and were removed from the Ohio region.

### *Paulding County History*

Paulding County was formed on April 1, 1820. The county was named after John Paulding, one of the men who captured Major John Andre during the Revolutionary War. The area was previously known as the South and East of the First Principle Meridian land subdivision of Ohio. It is located in the Huron-Erie Lake Plains, more specifically, the Maumee Lake Plains and Paulding Clay Bottom Physiographic Regions of Ohio. It is within what was once the Black Swamp and is nearly level, but has since been drained. The county is drained by the Maumee and Auglaize Rivers and once was home to both the Miami and Erie and the Wabash and Erie Canals.

Paulding County was one of the last to be organized in Ohio circa 1839. This was due to its late settlement relative to its location within the Black Swamp. The county's namesake is John Paulding, a Revolutionary War hero that, with Van Wert and Putnam, were integral in the capture of Benedict Arnold. The initial settlement of the county was stymied by the inhospitable conditions with the swamp and the presence of Native Americans in the area. American settlers began to arrive in the county after much of the lands were ceded by the Native Americans in 1817; however, some of the early trade was conducted with those that were soon removed from the region. The Black Swamp covered most of the county, hindering settlement and forcing most of ht early settlers to live along the Maumee and Auglaize Rivers. The Town of Paulding became the permanent County Seat in 1850 and prior to that it was located in the now defunct community of Charloe (Morrow and Bashore 1892; Knapp 1872). Charloe was named after Chief Charloe and was formerly near the center of the Oquanoxa Indian

Reservation. This reservation was abandoned as of the Treaty of 1831 and the prospective village was supposedly located in the southeastern corner of the reservation (Royce 1899).

These early immigrants relied on subsistence farming and the sale of furs. The earliest grist mills were built in the 1850s, but agriculture continued to be insignificant except for subsistence. The Black Swamp prevented large tracts of crops from being cultivated until it could be effectively drained. Until that time, the primary industry that developed was affiliated with timber. Vast forest covered the county in the early days. Internally, these woods were used for stave manufacture, canal locks, railroad ties, and ship construction. The Maumee and Auglaize Rivers were the primary means of transportation from the 1820s- 1830s. This was supplemented by Wabash and Erie Canal in 1843 along the Maumee River and the Miami Canal in 1845 along the Auglaize River. The local residents utilized the canals to export lumber. The first railroad was the Toledo, Wabash & Western and was built in 1855. Several other lines passed through the county by the late 1800s. The efficient transportation systems stimulated the lumber business. In 1864-1865 two blast furnaces (Paulding and Antwerp) were build in the county because of the abundance of wood charcoal. Iron ore was shipped to these furnaces from Toledo and Michigan. The blast furnaces were in service until the 1880s. Stave and wood related factories were developed in Paulding around 1880, Holcombe in 1886, and Antwerp in 1873. In 1892, the Holcombe factory was reported to have produced 16 million staves cut per annum (Morrow and Bashore 1892). The extensive use of Paulding County's timber resources for charcoal and lumber devastated the county's virgin forests, which were largely gone by the 1890s. With the loss of this industry and the increased drainage of the swamp by the canal and other means, tiling, the county's agriculture began to take hold.

The majority of Paulding County is affiliated with agricultural activity. By the 1890sk, most of the county has been cleared of its forests and the swamps were drained, leaving tillable fields with excellent, organic-rich soils. However, these soils were very clayey. Agriculture was the dominant means of income by the twentieth century. Other minor industries included oil wells, limestone quarries, and ceramic tile industries (Morrow and Bashore 1892). The tile industries of the region benefitted from dense topsoil clay and the necessity of tiling the fields for drainage. Agriculture and the tiling industry are complementary to one another in this area.

Little has changed in Paulding County stemming from the twentieth century. The county still has a low population and it is largely reliant upon agriculture. The tiling industry still prospers, though there has been a shift from clay to corrugated plastic. Roads are typically lined with deep ditches, which are still necessary for drainage. Aspects of the former swamp are still perceivable in the remnant woods that are scattered about the county.

### *Latty Township History (Paulding County)*

Latty Township is one of twelve townships in Paulding County and lies in the southeast portion of the county. The community of Latty is located in Blue Creek Township. Blue Creek is the main drainage tributary in the township, Prairie Creek and Hagerman Creek also run through the township. Industries in and around Latty have been tile manufacturing, grain and timber mills. The nearby town of Dague was a lumber yard and was abandoned due to the timber running out. The Village of Grover Hill is located in southeastern Latty Township and was a rising town created as a stop along the railroad. A restaurant "The Depot" pays tribute to the towns beginnings (Morrow and Bashore 1892).

### *Blue Creek Township History (Paulding County)*

Blue Creek Township is located in southern Paulding County along the border with Van Wert County. The township contains the villages of Haviland and Scott. The terrain is generally flat, being located in the Maumee Lake Plains Physiographic Region. The area is drained by Blue and Prairie Creeks, both tributaries of the Auglaize River. The Penn Central Railroad once extended to Haviland from Paulding, but is longer in use. The township is bisected by St Rt. 114 and U.S. 127 which intersect near Haviland. Agriculture is the foremost industry in the township with very little residential, commercial, or industrial development (Slocum 1905; Morrow and Bashore 1892).

### *Van Wert County History*

April 1, 1820 is the date of record for Van Wert County though commissioners had not met to organize it until 1835 (Gilliland 1906). At the Treaty of Wapakoneta in 1818, the U. S. government purchased lands from the Indians. It was out of these "Indiana lands" that Van Wert emerged. The county bears the name of Isaac Van Wert, a hero of the War for Independence (Sutton 1882; Winter 1917). Captain James Riley was the first settler to move into the county in 1821 and he later laid out the town of Willshire. In 1834, Peter Aughenbaugh, George Marsh, and James Watson Riley bought land and platted Van Wert city in the center of the county. In only four years, Van Wert asserted its superiority by gaining the county seat from Willshire.

Because of the richness of the soil in Van Wert County, agriculture has been its mainstay. Besides the usual staple crops, fruit flourished in this dark soil. Oliver Stacy was an early settler who had large orchards including apples, crab apples, peaches, and pears. Wild plums reportedly grew throughout the region (Gilliland 1906).

There have been several advances that have improved local agriculture thereby increasing the profitability and respect of Van Wert's farming community. Agriculture greatly benefited from the growth of the tile mill industry. Clay tile mills sprang up in Van Wert and in neighboring counties producing field tiles to help drain the saturated soils of the Black Swamp. This advance allowed farming to spread to formerly impossible locations. A second advancement was the formation of the grange in the

autumn of 1873 and a farmers' institute later on. This gave Van Wert County farmers a venue to share ideas and challenge each other to increased efficiency (Gilliland 1906; Sutton 1882).

Farms were not the only scenes of development however. Schools appeared early. A county infirmary began treating the community in 1867. Government and justice presided and grew from the time of county organization as well. The Pittsburg, Fort Wayne, and Chicago Railroad was the first rail to pass through Van Wert in 1854. The name changed to the Indiana and Ohio Railroad later on and still later sold to Conrail (Gilliland 1906; O'Daffer 1990; Sutton 1882; Winter 1917). Presently, the economy of Van Wert County still shows agriculture strong, but manufacturing and service industries are beginning to surge as well.

### *Jackson Township History (Van Wert County)*

Jackson Township was organized around the year 1820. It is located in the northwestern portion of Van Vert County. Neighboring townships include Washington to the north, Monterey to the east Washington to the south and Hoagilin to the west. The topography in Jackson Township is primarily level with little to no rolling or hilly areas. Because the soil's density, it will not absorb water making it hard to get successful crops (Howe 1854). Before the arrival of European influence, the area was populated with dense forests. Thousands of acres were cleared during the early years of settlement for agricultural and construction purposes. The timber was used to build homes, barns, shops, schoolhouses and churches. Many of the European settlers immigrated from surrounding states and counties (Howe 1854).

During the infancy of the township, populations were low creating the need for communities to work together in order to be successful. Agriculture was the leading industry in Jackson Township. The main products were corn, wheat and potatoes. Children were essential to the success of crops. Students would often stay home from school in order to help their families (Winter 1917).

Schoolhouses during the early settlement were typically one-room log constructions with a fireplace implemented for winter sessions. Due to budgetary restrictions, early in the Township's formation schools also served a place of worship. Religion played a vital role within the culture of Jackson Township. The primary denomination is Baptist. Gatherings at the church gave residents the opportunity to worship, discuss local issues and organize community events (Winter 1917).

### *Hoaglin Township History (Van Wert County)*

Hoaglin Township takes its name from the family which first settled there. Enoch and Aaron came in May of 1839. Later that year, and in the following year, L. J. Mitchell, John Speeler, Adley Calhoun, Elias Beamer, David Tolan, Jacob Shaffer, Joshua Shaffer, William Hagerman, Henry Blythe, Jacob Stripe, John Clayton, Henry Taylor, Frederick Taylor, Andrew Hattery and Andrew Hattery, Jr., became their

neighbors (Gilliland 1906; O'Daffer 1990; Sutton 1882; Van Wert County Historical Society 1981).

Township organization followed on the heels of these pioneers in 1840. At the first vote, both Hoaglin patriarchs were elected to public office and the family honored by the name of the township. Enoch hosted the first religious services in his home organizing a Methodist Episcopal Church in 1842. He also taught the first school and Sunday School (Van Wert County Historical Society 1981).

The earliest industry of the township arrived in the form of a tile mill under the direction of one Mr. Griffin. Otherwise, nothing of economic interest exists beyond the farms of the township. These were aided by the organization of the Hoaglin Grange in 1880. There is no railroad in this township, and no town; undoubtedly, their absences are interrelated (Van Wert County Historical Society 1981).

### *Putnam County History*

The county was formed on April 1, 1820, but was not formally organized until 1834. David Murphy was one of the first settlers in the area who arrived circa 1824. He settled along the Auglaize River in an area referred to as "The Bayou". The first town in the county was that of Kalida and was platted in 1834. It was the county seat until 1866 when it was moved to Ottawa since it was more centrally located within the county. The comparably late settlement of Putnam County and its neighboring counties was due to its position within the Black Swamp. There were two Native American villages known in the county including Upper and Lower Tawa Towns (Howe 1888). These were located near Ottawa.

The primary economy of Putnam County is associated with agricultural pursuits. Stock raising and crop farming is the mainstay of every community (Kinder 1915; Sommers 1934). Many of the early settlers to the area were of Welsh descent and arrived from Cincinnati. The southeastern part of the county got an influx of Swiss Mennonites who arrived from 1830-1870. These immigrated either directly from Switzerland or from Wayne County, Ohio. They built two of the largest churches in the county: Grace Church and St. John Church (Calvin 1981 and 1989). Today, the population is largely dominated by German Catholics. Nearly every community has a Catholic steeple that can be seen for some distance due to the flat nature of the terrain.

In 1845, the Miami & Erie Canal was completed through Monterey Township. This was an important economic boon to the region and the county as it allowed for the local goods to be available in the market economy. However, the canal was short-lived as it gave way to the railroads. The Baltimore & Ohio was the first railroad built in the county around 1856. A few years later the Dayton Michigan Railroad was completed. The Lima-Defiance Traction extended through the communities of Rice, Continental, and Kalida but did not last long due to financial difficulties (Kinder 1915).

Just like the nineteenth century, modern Putnam County remains primarily affiliated with agriculture. There are small communities scattered throughout the area and the larger ones tend to have granaries. Much of the population is rural and occupies isolated farmsteads that dot the landscape.

### *Jennings Township History (Putnam County)*

Jennings Township was organized in the 1830's and received its name from Colonel Jennings. It is located in the south-western portion of Putnam County. Neighboring townships include Jackson to the north, Sugar Creek to the east, Marion and Allen to the south and Monterey to the west. The topography in Jennings Township is primarily level with little to no rolling or hilly areas. Located in a swamp region, the soil is mostly damp but produces an excellent crop when drained (Howe 1854).

Before the arrival of European influence, Jennings Township was heavily populated with old growth forests. Many of the early settlers came from eastern Ohio and were of German, French, British and Irish. The early immigrants cut down thousands of acres of forest for agricultural and construction purposes. The timber was used to build homes, barns, schoolhouses and for other various crafting. The first European settler was a man named Samuel Washburn who came to the township in 1828. It was here he established two farms which were later sold to Isaiah Clawson (Kinder 1915).

The production of corn whiskey was Jennings earliest industry. It wasn't until the canal was implemented and drained the swamp that the soil became fertile (Kinder 1915). Agriculture was a leading source of economic success during the infancy of Jennings Township. The main crops included corn, wheat, rye, potatoes and barley. Children were essential to the production of goods. Often times they would stay home from school in order to assist with household duties. Schoolhouses were typically one room log constructions with a single fireplace implemented for winter sessions (Howe 1854). The economy was booming in the town of Fort. Jennings in 1852. A multitude of mills opened up along with a variation of businesses. It was a very progressive location at the time in comparison to other towns in the area (Kinder 1915).

### *Monterey Township History (Putnam County)*

Monterey Township was organized in the year 1849. It is located in the south-western portion of Putnam County. Neighboring townships include Jackson to the northeast, Jennings to the southeast, Washington to the south west and Jackson to the west. The topography in Monterey Township is primarily level with little to no rolling or hilly areas (Howe 1854). Lush forests covered the majority of the township prior to the arrival of European immigrants. The forests were removed during the infancy of the township and were used for agriculture and construction (Howe 1854). The majority of settlers came from surroundings areas and were of German heritage. Roman Catholicism was the leading religious doctrine throughout Monterey Township. It was the backbone of their culture in when it came to public policy, rule of law and everyday living.

Gatherings at the church allowed the residents to seek solace, discuss local issues and organize community events (Kinder 1915).

Like many of the surrounding townships, Monterey's soil is fertile and produces an excellent crop. The staple products were corn, wheat, rye and potatoes (Howe 1854). The community relied solely upon the farming community until the town of Ottoville started to boom. Ottoville is home to a variation of mills, businesses and beautiful architecture. One example is St. Mary's Immaculate Conception Church. Ottoville was a successful farming town with exceptional roads and educational funding (Kinder 1915).

## Research Design

The purpose of this Phase I survey is to locate and identify cultural resources that will be affected by the planned construction activities. This includes archaeological deposits as well as architectural properties that are older than 50 years regarded as being in the APE. Once these resources are identified, they are evaluated for their eligibility to the NRHP. The literature review aspect of these investigations is to answer or address the following questions:

1) Did the literature review reveal anything that suggests the project area had been previously surveyed, and what is the relationship of previously recorded properties to the project area?
2) Are cultural resources likely to be identified in the project area?

### *Archaeological Field Methods*

The survey conducted for this project used surface collection and visual inspection sampling/testing to identify and evaluate cultural resources. Aspects of the project were photographically documented to demonstrate conditions. The following describes the survey methods:

*Surface Collection*. Portions of the access corridors are suitable for surface collection strategies. The bare ground visibility in these areas is greater than 50 percent. Pedestrian transects are spaced at 7.5 m intervals through these applicable areas. If artifacts are identified during this survey, they are flagged and plotted using a Trimble GeoXT global positioning system for the purposes of demonstrating distribution and for GIS layering.

*Visual inspection*. This method is conducted to document the nature of the project area and its conditions, disturbed setting, general nature of the area, and presence of any unmarked buildings. This method is used to verify the absence or likelihood of any cultural resources within and around the project area to assist in defining the APE.

The application of the resulting field survey methods was documented in field notes, field maps, and project plan maps.

### *Curation*

There were no cultural materials identified during these investigations. Notes and maps affiliated with this project will be maintained at Weller & Associates, Inc. files.

## Literature Review

The literature review study area is defined as a 305 m (1,000 ft) area extending from the centerline of the project area (Figures 2-11). In conducting the literature review, the following resources were consulted at the Ohio State Historic Preservation Office (SHPO) and the State Library of Ohio:

1) *Archeological Atlas of Ohio* (Mills 1914);
2) SHPO United States Geological Survey (USGS) 7.5' series topographic maps;
3) Ohio Archaeological Inventory (OAI) files;
4) Ohio Historic Inventory (OHI) files;
5) National Register of Historic Places (NRHP) files;
6) SHPO consensus Determinations of Eligibility (DOE) files;
7) SHPO CRM/contract archaeology files;
8) County atlases, histories, historic USGS 15'series topographic map(s), and current USGS 7.5' series topographic map(s); and
9) Online and genealogical and cemetery resource data.

A review of the *Atlas* (Mills 1914) was conducted. There are no resources indicated within the project or it's study area.

There are few recorded archaeological sites throughout most of northwest Ohio and the same can be stated for surveyed area/study area. There are five previously recorded sites indicated within the study area for this project (Table 2). These were all identified in upland situations in nearly level topographic settings. The sites consist of unassigned prehistoric period components (n=4) and historic period components (n=2); one site has both prehistoric and historic period materials. Despite there being few sites recorded in the study area, two of these sites are indicated as being within the project (Appendix A).

Site 33VW0117 is a temporally unassigned prehistoric period component that consists of a stemmed point, a broken biface, and four flakes. The site is located on the east side of Town Creek (Figure 22).

Site 33PU0048 is a prehistoric period component that consisted of a flake and a fragment; it was recorded for a pipeline corridor survey and is located along an unnamed tributary of the Little Auglaize River (Figure 33). It is to the southwest of Ottoville.

| Table 2. Previously Recorded Archaeological Sites Located in the Study Area. | | | |
|---|---|---|---|
| **Site Number** | **Site Type** | **Temporal Association** | **Landform** |
| PA0233 | Unknown | Historic, non-aboriginal | Upland, lake plain |
| PA0234 | Unknown | Unassigned Prehistoric | Upland, lake plain |
| VW0280 | Unknown | Unassigned Prehistoric; non-aboriginal | Upland, lake plain |
| VW0117 | Unknown | Unassigned Prehistoric | Upland, lake plain |
| PU0048 | Unknown | Unassigned Prehistoric | Upland, lake plain |

The OHI files indicated one previously recorded OHI property located in the study area (Table 3). The resource is near Haviland, and the western end of the project area (Figure 12). This resource was found to be destroyed, and no longer exists. It is not within or immediately adjacent to this project.

| Table 3. Previously Recorded OHIs within the Study Area. | | | | | |
|---|---|---|---|---|---|
| **OHI Number** | **Present Name** | **Other Name** | **Address** | **Architectural Style** | **Date** |
| PAU0000409 | Alfred & Henry Sherer House | | Scott Rd S of SR 114 | Vernacular | 1880 |

A review of the NRHP files and SHPO consensus DOE files was conducted. There are no such resources located in the study area.

A review of the CRM/contract files does not indicate that there have been any surveys conducted in the study area. However, Weller had completed investigations for electric line based surveys and a wind turbine farm area that was intercepted by the project (Weller 2015; Weller and Ledezma 2015). These surveys did not identify any sites that are directly involved with the current area of investigation.

Historical atlases were reviewed for this project. The USGS *1909 Continental, 1914 Van Wert, 1914 Paulding, and 1911 Delphos, Ohio 15 Minute Series (Topographic)* maps indicate that there are buildings/structures located near the project, which was expected since the project corridor is crosses many roads (Figures 10 and 11). There were no communities indicated as being involved in this project's corridor. Inspection of the *USGS 1974 Latty, 1972 Wetsel, 1973 Ottoville, 1973 Wood, 1983 Scott, and 1974 Payne, Ohio 7.5 Minute Series (Topographic) maps* depict similar results of resources in the vicinity of the project area. Buildings/residences tend to be located along roads where there are ditches and an adequate means of drainage.

There is one cemetery, Meyers, located in the study area. This is not located within or near the project's corridor.

### *Evaluation of Research Questions 1 and 2*

There were two questions presented in the research design that will be addressed at this point. These are:

1) Did the literature review reveal anything that suggests the project area had been previously surveyed?
2) Are cultural resources likely to be identified in the project area?

The literature review for this project did not identify many cultural resources in the vicinity of the project area. This is partially a byproduct of the project's location in a rural and largely agricultural setting where there have been few CRM surveys and the overall lack of any topographic relief in the area. The project extends across the lake plain environment and intercepts numerous small, upland drainages. However, the drainages are slight with little differentiation from the abutting setting. Despite the identification of a couple sites in the study area, cultural materials (if identified) are only anticipated on the subtle valley margins that line the streams. However, none of the sites are expected to be dense deposits.

## Fieldwork Results

The Phase I field investigations for this project were conducted from June to July 3, 2017 (Figures 12-66). The weather at the time of survey was not a hindrance as it was typical of late spring/early summer conditions. The survey was conducted with unusually drier conditions prevailing and before the row crops were too mature to allow for surface collection methods to be utilized. The temperatures were in the mid-70s to 80s, and the ground was not hardened from the summer heat. The field investigations involved surface collection and visual inspection with conditions being consistently photographed to document and justify the field strategy. The project corridor is located predominately in agricultural fields and surface collection was suitable in all situations. These investigations were conducted within the project's electric line easement, which is 30.5 m (100 ft) relative to their proposed areas of ground utilization and disturbance. The field investigations did not result in the identification of any cultural materials.

This work was conducted in an upland glaciated/lake plain settings that are prevalent in this part of the state. The terrain is best described as flat, homogeneous, and undifferentiated. The only topographic relief for this corridor is nearer drainages and often limited to the drainage channel as the valley sides are discrete. Drainage is or was poor in this area and agriculture was only accomplished through effective tiling and ditch excavations. Nearly all of the fields have been tiled and the streams were dredged to facilitate runoff. Ditches are present along every roadway as these continue to be the receptacle of runoff from tiled fields and the most effective means of eliminating surface water.

Aspects of the project area were found to be severely disturbed, but these were minimal parts of the overall project. Disturbances were identified along road rights-of-

way where construction for the road and underground utilities are typically present. Occasionally, there was a gas line that ran concurrently with the electric line corridor. Areas along streams were disturbed by late twentieth century dredging activity. Stream channels were dredged with the fill being used for embankments and lining along the stream. This typically affected about 10 m (at least) on each side of the stream. The immediate area surrounding the existing substations and a switch were found to be disturbed from their construction. Still, the vast majority of the project was suitable for field investigations as it was contained in agricultural fields.

Surface collection methods were the primary means of archaeological sampling that was accomplished during these investigations. These investigations were conducted in the early part of the planting season, which benefitted the work greatly as it allowed for suitable surface visibility for reliable field investigation results. At the time of survey, the project corridor involved four basic conditions including: tilled, immature soybeans, immature corn, and wheat. The bare ground surface visibility varied in each of these fields conditions. In the tilled fields, the surface visibility ranged from 90-100 percent. It was from 50-90 percent in the soybean fields, about 75 percent in the cornfields, and 50 percent in the wheat fields. Soybean fields in the western part of the project corridor tended to have higher visibility as they were either planted later or they are poorly drained with bad, clayey soils. Winter wheat field visibility was better only because these fields had ripe crops where the foliage was not inhibiting surface visibility. Pedestrian transects were spaced at 7.5 m intervals throughout the project corridor. The surface collection was intensified on landforms along valley sides or terraces in an attempt to locate any cultural materials, as these are regarded as being the mostly likely locations to identify such remains. There were no sites identified during the surface collection.

There were two archaeological sites, 33VW0117 and 33PU0048, identified in the project corridor. These sites both date from the prehistoric period and consist of two and six artifacts each. The location of these sites was known in the field and attempts were made to relocate them. Despite reducing the pedestrian transects to 2 m for an area of 30 m within the project corridor, these sites were not relocated. Given the small size and few artifacts, this does not seem surprising.

Visual inspection and photographic documentation of the conditions within the project's construction was completed. This method documented and verified the extent and types of disturbances that were involved in the project. Photographic documentation of these areas was accomplished to demonstrate the conditions. Surface collection methods were conducted in combination with visual inspection in some areas.

## Fieldwork Summary

The field investigations were justifiably reliant upon the results of surface collection field methods and visual inspection. The field conditions were excellent in consideration of finding cultural materials. Fields had been recently tilled and planted, which allowed for good to excellent conditions for survey. However, the field

investigations did not identify any cultural materials. Typically, the most optimal locations to identify cultural materials in northwestern Ohio is more predictable than other regions. Beach ridges, elevated landforms, terraces, and bluffs/landforms abutting stream valleys are the locations that appear to be the most apt for site location/identification. The project's corridor crosses terrain that intercepts streams periodically, but in areas that are non-descript and without any unique or defining attributes. There were no beach deposits encountered and the terrain is very flat; this is not the type of setting one would expect to identify any dense cultural materials and would have been expectedly undesirable during the prehistoric period due to poor drainage and standing water (i.e., Black Swamp). Weller had conducted previous investigations in the vicinity for a wind turbine farm and identified very few sites and artifacts from a similar setting. The lack of cultural materials being identified during these investigations was not unexpected or surprising.

## APE Definition and NRHP Determination

The APE is a term that must be applied on an individual project basis. The nature of the project or undertaking is considered in determining the APE. This may include areas that are off the property or outside of the actual project's boundaries to account for possible visual impacts. For example, when the construction is limited to underground activity, the APE may be contained within the footprint of the project. The APE for this project includes the electric line corridor which is regarded as being 30.5 m (100 ft) wide and extends for about 27.4 km (17.0 mi) in a general east-west manner Haviland to the south side of Fort Jennings. The APE for these archaeological investigations is limited to the footprint of the project corridor's easement; the limits of construction. The work involves structure replacement the rebuilding of an existing line. The surveyed area involves existing electric line right-of-way.

The project corridor extends in an east-west manner through agricultural lands from Haviland Station to the North Delphos Station. The terrain is nearly level and it crosses many creeks and the Little Auglaize River. Floodplains are typically avoided as it is not practical to construct electric structures on landforms that are prone to flooding.

These investigations were benefitted by the availability of agricultural fields that were suitable for surface collection. However, there were no cultural materials identified despite the excellent to near excellent conditions. The archaeological aspect of this project is not considered to involve any significant resources or landmarks.

## Recommendations

In June and July of 2017, Weller & Associates, Inc. conducted Phase I Archaeological Investigations for the Approximately 27.4 km (17 mi) Haviland-North Delphos 138kV Line Rebuild Project in Paulding, Putnam, and Van Wert Counties, Ohio. The archaeological fieldwork was largely reliant upon the intensive surface collection methods that were employed as well as visual inspection and photographic documentation. The work was conducted in a Lake Plain setting that is southern

Paulding and Putnam Counties and northern Van Wert County. This area is not well drained for the most part as it is nearly flat to very gently undulating. There was no previously unrecorded archaeological site identified during these investigations. There were no previously identified resources relocated during this testing. These investigations will not impact or involve any archaeological resources that could be considered landmarks or significant. No further archaeological work is deemed necessary for this project.

# References Cited


Bamforth, D.
1988 *Ecology and Human Organization on the Great Plains.* Plenum, New York.

Brose, D. S.
1994 "Archaeological Investigations at the Paleo Crossing Site, a Paleoindian Occupation in Medina County, Ohio." In: *The First Discovery of America: Archaeological Evidence of the Early Ohio Area*, edited by W. S. Dancey, pp. 61-76. The Ohio Archaeological Council, Columbus.

Calvin, M.
1981 *People and Places: Putnam County, Ohio 1800-1900*. Hubbard Company, Defiance, Ohio.

1989 *The Welsh in Putnam County 1880*. Putnam County District Library, Ottawa, Ohio.

Converse, R.
1994 *Ohio Flint Types*. The Archaeological Society of Ohio, Columbus.

Cowan, W. C.
1987 *First Farmers of the Middle Ohio Valley: Fort Ancient Societies, A.D. 1000-1670*. The Cincinnati Museum of Natural History, Cincinnati.

Cramer, A.
1989 *The Dominion Land Company Site: An Early Adena Mortuary Manifestation in Franklin County, Ohio.* M.A. Thesis, Kent State University, Kent, Ohio.

Cunningham, R. M.
1973 "Paleo Hunters along the Ohio River." In: *Archaeology of Eastern North America* 1(1): 116-118. Eastern States Archeological Federation, Bethlehem, Connecticut.

Dancey, W. S.
1992 "Village Origins in Central Ohio: The Results and Implications of Recent Middle and Late Woodland Research." In: *Cultural Variability in Context: Woodland Settlements of the Mid-Ohio Valley*, edited by M. F. Seeman, pp. 24-29. Special Papers 7, *Midcontinental Journal of Archaeology*, Kent State University Press, Kent, Ohio.

Dragoo, D.
1976 "Some Aspects of Eastern North American Prehistory: A Review 1975." In: *American Antiquity* 41(1):3-27. The Society for American Archaeology, Washington, DC.

Fitting, J. E.
1965 "Late Woodland Culture in Southeastern Michigan." In: *Anthropological Papers, the Museum of Anthropology,* No. 24, University of Michigan, Ann Arbor.

1963 "The Hi-Lo Site: A Paleo-Indian Site in Western Michigan." In: *Wisconsin Archaeologist* 44:87-96. Wisconsin Historical Society, Madison, Wisconsin.

Fuller, J.
1981 "Developmental Change in Prehistoric Community Patterns: The Development of Nucleated Village Communities in Northern West Virginia." Unpublished Ph.D. Dissertation, Department of Anthropology, University of Washington, Seattle.

Gilliand, T. S., ed.
1906 *History of Van Wert County, Ohio and Representative Citizens*. Richmond and Arnold, Chicago.

Howe, H.
1888 *Historical Collections of Ohio, Vol. I.* H. Howe & Son, Columbus.

1854 *Historical Collections of Ohio.* E. Morgan & Co's. Cincinnati.

Justice, N.
1987 *Stone Age Spears and Arrow Points of the Midcontinental and Eastern United States*. Indiana University Press, Bloomington and Indianapolis.

Kinder, G.
1915 *History of Putnam County Ohio*. B.F Bowen & Company, Inc. Indianapolis, IN.

Knapp, H. S.
1872 *History of the Maumee Valley: Commencing with its Occupation by the French in 1680*. Slade Mammoth Printing and Publishing House, Toledo, Ohio.

McDonald, H.
1994 "The Late Pleistocene Vertebrate Fauna in Ohio: Coinhabitants with Ohio's Paleoindians." In: *The First Discovery of America: Archaeological Evidence of the Early Ohio Area,* edited by W. S. Dancey, pp. 23-41. The Ohio Archaeological Council, Columbus.

Morrow, O. and F. W. Bashore
1892 *Historical Atlas of Paulding County, Ohio*. The Western Publishing Company. Madison, Wisconsin.

O'Daffer, F. C.
1990 *History of Van Wert County*. Fairway Press, Lima, Ohio.

Pacheco, P.
1996 "Ohio Hopewell Regional Settlement Patterns." In: *A View From The Core: A Synthesis of Ohio Hopewell Archaeology,* edited by P. Pacheco, pp. 16-35. The Ohio Archaeological Council, Columbus.

Pollack, D. and A. Henderson
2000 "Insights into Fort Ancient Culture Change: A View from South of the Ohio River." In: *Cultures Before Contact: The Late Prehistory of Ohio and Surrounding Regions*, edited by R. Genheimer, pp. 194-227. The Ohio Archaeological Council, Columbus.

Pratt, G. M., and D. R. Bush
1981 *Archaeological Resource Management in Ohio: A State Plan for Archaeology (Draft).* Copy available for review at the Ohio Historic Preservation Office, Columbus.

Prufer, O. H., and D. A. Long
1986 "The Archaic of Northeastern Ohio." In: *Kent Research Papers in Archaeology, No. 6,* Kent State University Press, Kent, Ohio.

Royce, C. C.
1899 *Indian Land Cessions in the United States (Eighteenth Annual Report of the Bureau of American Ethnology to the Secretary of the Smithsonian Institution, 1896 – 97*. Edited by J. W. Powell. Government Printing Office, 1st Edition 1899.

Slocum, C. E.
1905 *History of the Maumee River Basin: from the earliest account to its organization into counties*. Bowen & Slocum, Indianapolis & Toledo.

Schneider, A. M.
2000 "Archaeological Reflections of the Western Basin Tradition in the Maumee River Valley of Western Lake Erie, with Special Emphasis on Ceramic Analysis." Unpublished master's thesis, The University of Toledo, Toledo, Ohio.

Shane, L.
1987 "Late-glacial Vegetational and Climatic History of the Allegheny Plateau and the Till Plains of Ohio and Indiana, U.S.A." In: *Boreas* 16:1-20. The Boreas Collegium, Blackwell Publishing Ltd., Edinburgh.

Shane, O. C., III
1975 "The Mixter Site: A Multicomponent Locality in Erie County, Ohio." In: *Studies in Ohio Archaeology* (rev. ed.), edited by O. H. Prufer. Kent State University Press, Kent, Ohio.

1967 "The Leimbach Site." In: *Studies in Ohio Archaeology*, edited by O. H. Prufer, pp. 98-120. The Press of Western Reserve University, Cleveland.

Slocum, C. E.
1905 *History of the Maumee River Basin: from the earliest account to its organization into counties*. Bowen & Slocum, Indianapolis & Toledo.

Sommers, E.
1934 *Centennial Celebration of Putnam County, Ohio, U.S.A.* Putnam County Centennial Committee, Ohio.

Stafford, R.
1994 "Structural Changes in Archaic Landscape Use in the Dissected Uplands of Southwestern Indiana." In: *American Antiquity,* 59:219-237. The Society for American Archaeology, Washington, DC.

Stothers, D.
1986 "The Western Basin Middle Woodland: Fact or Fiction?" Paper presented at the Midwest Archaeological Conference, Columbus.

Stothers, D., G. Pratt and O. C. Shane III
1979 "The Western Basin Middle Woodland." In: *Hopewell Archaeology,* edited by D. Brose and N. Greber. The Kent State University Press, Kent, Ohio.

Stothers, D. M., J. R. Graves, and B. G. Redmond
1984 "The Sandusky and Western Basin Traditions: A Comparative Analysis of Settlement-Subsistence Systems." In: *Toledo Area Aboriginal Research Society Bulletin 7* (1&2): 1-73. Toledo Area Aboriginal Research Society, Toledo, Ohio.

Sutton, R.
1882 *History of Van Wert and Mercer Counties, Ohio*. R. Sutton and Company, Wapakoneta, Ohio.

Tankersley, K.
1994 "Was Clovis a Colonizing Population in Eastern North America?" In: *The First Discovery of America: Archaeological Evidence of the Early Ohio Area,* edited by W. S. Dancey, pp. 95-116. The Ohio Archaeological Council, Columbus.

1989 "Late Pleistocene Lithic Exploitation and Human Settlement Patterns in the Midwestern United States." Unpublished Ph.D. dissertation, Department of Anthropology, Indiana University, Bloomington.

Tanner, H.
1987 *Atlas of Great Lakes Indian History*. University of Oklahoma Press, Norman.

United States Department of Agriculture, Soil Conservation Service
2017a *Soil Survey of Paulding County, Ohio*. Soil Conservation Service, U. S. Department of Agriculture, Washington, D. C. in cooperation with the Ohio Department of Natural Resources, Division of Lands and Soils, and the Ohio Agricultural Research and Development Center, Columbus.

2017b *Soil Survey of Putnam County, Ohio*. Soil Conservation Service, U. S. Department of Agriculture, Washington, D. C. in cooperation with the Ohio Department of Natural Resources, Division of Lands and Soils, and the Ohio Agricultural Research and Development Center, Columbus.

2017c *Soil Survey of Van Wert County, Ohio*. Soil Conservation Service, U. S. Department of Agriculture, Washington, D. C. in cooperation with the Ohio Department of Natural Resources, Division of Lands and Soils, and the Ohio Agricultural Research and Development Center, Columbus.

Webb, W. S., and R. S. Baby
1963 *The Adena People No. 2*. The Ohio Historical Society, The Ohio State University Press, Columbus.

Weller, R. J.
2015 *Phase I Archaeological Investigations for the Northwest Ohio Wind Company 10.5 ha (26 ac) Substation in Blue Creek Township, Paulding County, Ohio*. Weller & Associates, Inc. Copy available for review from Ohio History Connection.

2013 *Phase I Archaeological Investigations for the Northwest Ohio Wind Company Turbine Farm in Latty and Blue Creek Townships, Paulding County, Ohio*. Weller & Associates, Inc. Copy available for review from Ohio History Central.

2005 *Data Recovery at the Haven Site (33DL1448) Located in Liberty Township, Delaware County, Ohio*. Weller & Associates, Inc. Submitted to the Delaware County Sanitary Engineer's Office. Copy available for review at Ohio History Connection.

Weller, R. J. and A. Ledezma
2015 *Phase I Archaeological Investigations for American Electric Power's Approximately 17.7 km (11 mi) Timber Switch to Haviland 138kV Line Rebuild Project in Benton and Blue Creek Townships, Paulding County, Ohio*. Weller & Associates, Inc. Copy available for review at Ohio History Connection.

Winter, N. O.
1917 *A History of Northwest Ohio: Narrative Account of Its Historical Progress and Development from the First European Exploration of the Maumee and Sandusky Valleys and the Adjacent Shores of Lake Erie, down to the Present Time*. The Lewis Publishing Company, Chicago and New York.

# Figures

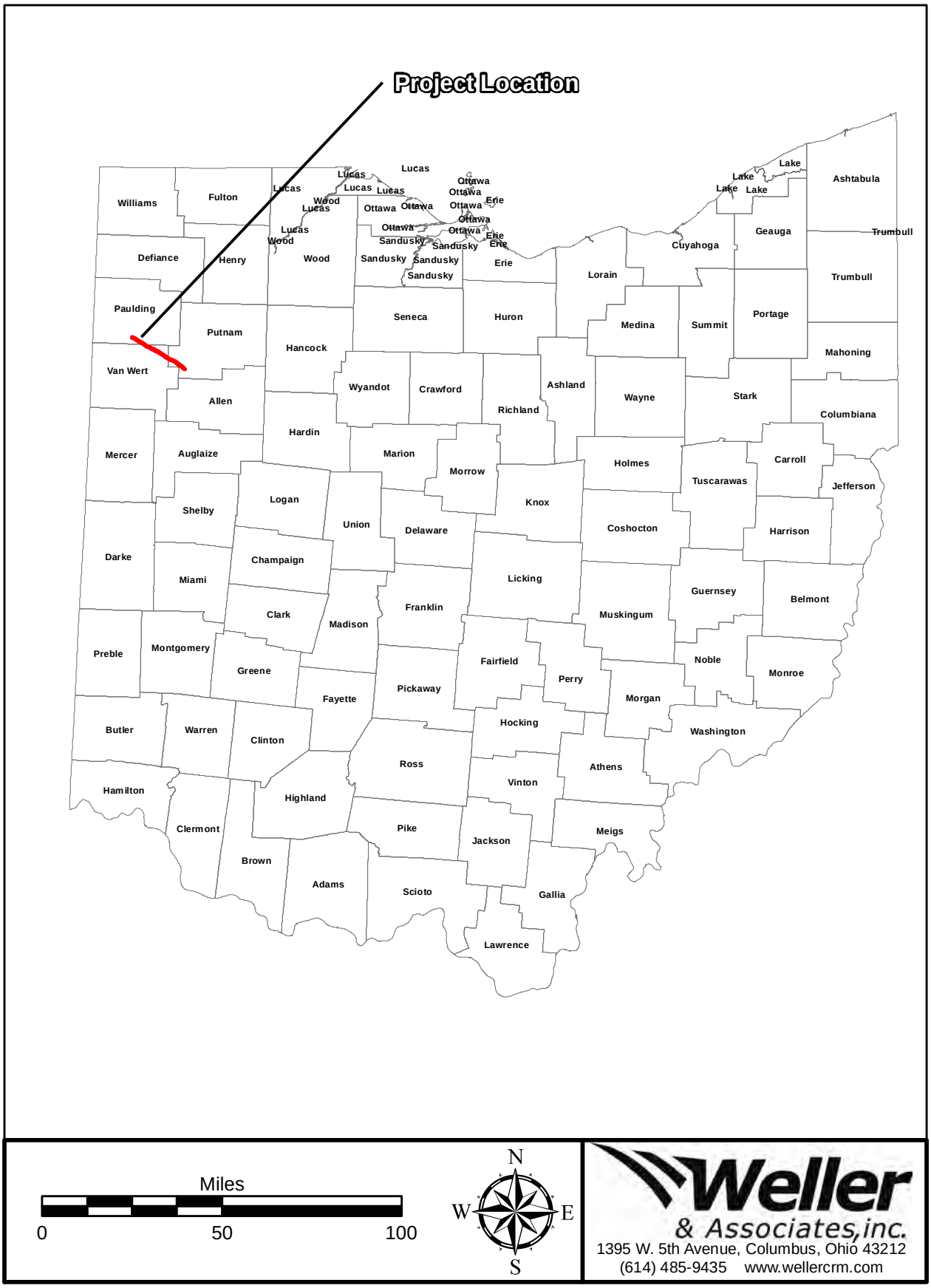


Figure 1. Political map of Ohio showing the approximate location of the project.

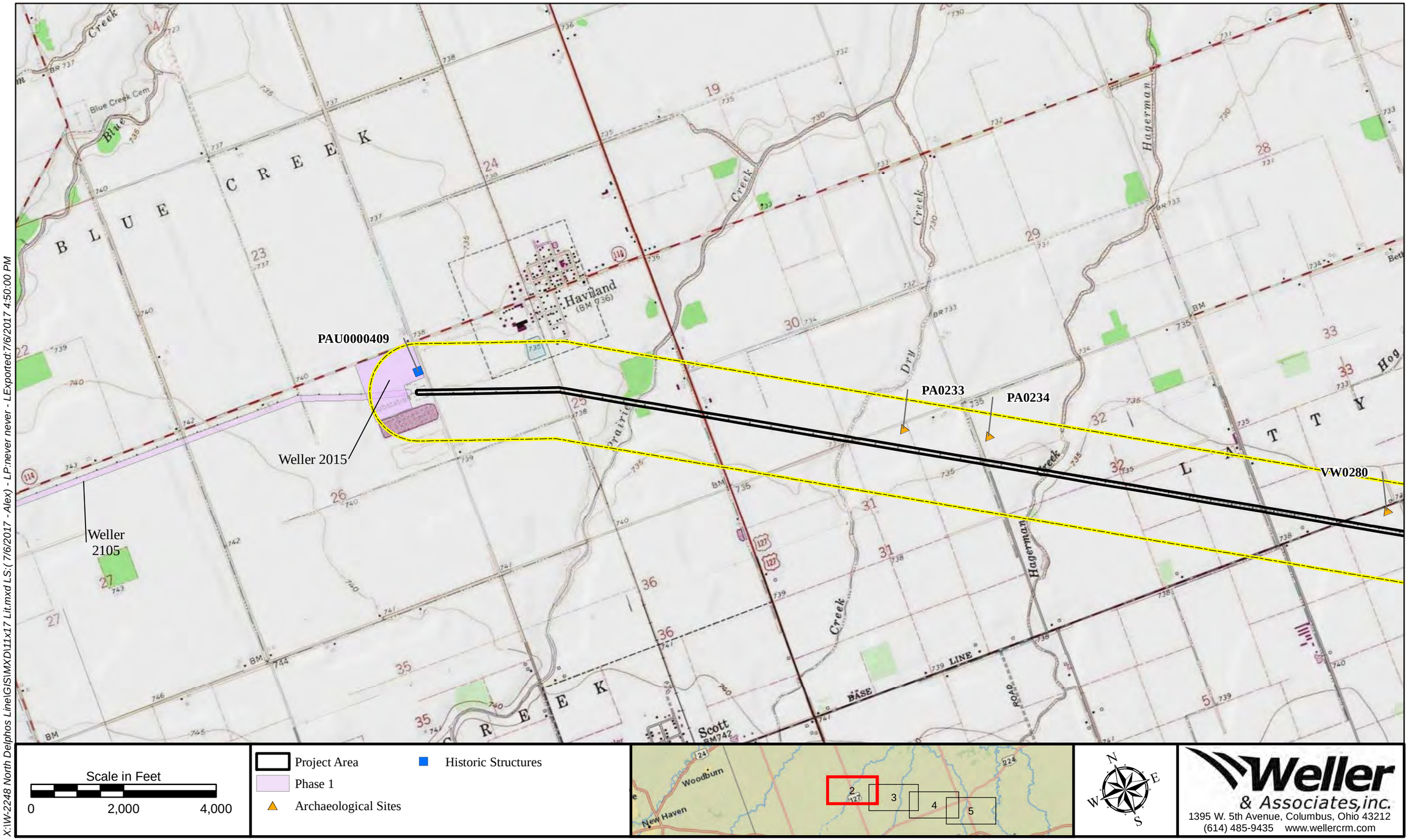


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Figure 2. Portions of the USGS *1974 Payne, 1974 Latty, and 1983 Scott, Ohio 7.5 Minute Series (Topographic)* maps indicating the location of the project and previously recorded resources in the study area.

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Summary: Letter of Notification electronically filed by Ms. Christen M. Blend on behalf of AEP Ohio Transmission Power Company, Inc.