Phase I Cultural Resource Management Investigations for a 2,591 m (8,500 ft) Long Columbia Gas Pipeline in New Haven Township, Huron County, Ohio

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Ohio Power Siting Board

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Abstract

In November 2017, Weller & Associates, Inc. conducted a Phase I Cultural Resource Management Investigations for a 2,591 m (8,500 ft) Long Columbia Gas Pipeline in New Haven Township, Huron County, Ohio. This investigation was performed under contract with Stantec Consulting Services, Inc. for submittal to the Ohio Power Siting Board (OPSB). The cultural resources work was focused on the archaeological aspect since this is a replacement for an existing underground gas pipeline. The fieldwork involved surface collection and subsurface testing methods. This resulted in the identification of three previously unrecorded archaeological sites, 33HU0533-535.

The project involves a proposed gas line corridor that is located in the southern part of Huron County with the southernmost terminus of the area being at the Richland County Line. This is a comparably flat area that is to the southwest of New Haven and the southeast of Celeryville. It is just within the Connecticut Western Reserve tract. The survey corridor is considered to be 30.5 m (100 ft) wide and it extends from Country Line Road (south) to May Road (north). This is an area that is rural and dominated by agricultural activity. The project plans are to replace an extant pipeline, much of what was surveyed was just west of the existing pipeline.

The literature review that was conducted for the project did not identify any recorded cultural resources within or near it. The project has not been the subject of any previous surveys. There are buildings and an archaeological site recorded in the study area, but these are not near the project. The archaeological site was recorded on a promontory that overlooks the project corridor and an interior former lake basin.

Fieldwork was completed on November 3rd, 2017. After performing the literature review and fieldwork, no further work is deemed necessary for this project. Subsurface testing, surface collection, and visual inspection were utilized to survey the project corridor. There were three prehistoric period archaeological sites identified, 33HU533-535, and these sites are not considered to be significant; they are not landmarks. No further cultural resource management work is considered to be necessary for this project.

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Introduction

Weller & Associates, Inc. conducted a Phase I Cultural Resource Management Investigations for a 2,591 m (8,500 ft) Long Columbia Gas Pipeline in New Haven Township, Huron County, Ohio (Figures 1-4). The report was prepared for the Stantec Consultants, Inc. as a preliminary review to identify any cultural resources that are within/near the current project areas as well as those that might be anticipated from the area. This document will be submitted to the Ohio Power Siting Board as part of a Letter of Notification (LON). This document is to provide background information regarding previously recorded cultural resources in the vicinity of the projects. This report summarizes the result of the literature review and inspection of cartographic resources. Recommendations regarding any need for additional work is provided at the end of the textual aspect of this document. The project plans are to place an underground utility corridor through this area.

Chad Porter conducted the literature review on August 1, 2017 and was responsible for the figures for this document. The field investigations were completed by Josh Engle, Brittany Vance, Seth Cooper, and Chris Goodrich. Ryan Weller and Josh served as the Principal Investigators. Ryan Weller was responsible for the text with Alex Thomas and Chad Porter completing the figures for this document.

Environmental Setting

Climate

Like all of Ohio, Huron County has a continental climate, with hot and humid summers and cold winters. About 84 cm (33 in) of precipitation fall annually on the counties. Mid-winter tends to be the driest time of the year, while April to September tends to be the wettest period for this area [United States Department of Agriculture, Soil Conservation Service (USDA, SCS) 1980:1-2].

Physiography, Relief and Drainage

Huron County is contained within the Central Lowland Physiographic Province (USDA, SCS 1994:2) and is part of the Central Ohio clayey Till Plain (Brockman 1998). The relief in this area is flat to very gently undulating as the project corridor is located within a lake basin/deposits outside Huron-Erie Lake Plains. This is a relatively flat to depressed area that is surrounded by till plain conditions (Brockman 1998). The project corridor is within the Huron River basin and is drained by an unnamed tributary of Marsh Run, which flows into the West Branch Huron River and eventually empties into Lake Erie.

Geology

The project is situated in the north central part of Ohio. The eastern part of the area has underlying bedrock that dates from the Mississippian era including the Waverly

Formation shales and sandstone. The western part contains bedrock that dates from the Devonian era including the Niagara, Monroe, Delaware, and Columbus formations (Brockman 1998; USDA, SCS 1980:2).

Soils

The project is located in the Colwood-Lenawee-Linwood Soil Association. This association includes soil types that are prevalent in upland, interior ancient lake plain conditions as well as glacial ground moraine (USDA, SCS 1994). There are 10 specific soil types in the project area and these are indicative of gently undulating conditions with beach-like deposition in areas where Tuscola and Haskins series soils are present. There are no deep soil or alluvial situations present in the project based on the soils data.

Table 1. Soils within the project area.

Soil Type	Drainage Class	Landform
Bennington silt loam, 0-2% slope, (BgA)	Moderately well drained	Upland, sl. elevations
Bennington silt loam, 2-6% slope (BgB)	Moderately well drained	Upland, sl. elevations
Chili loam, 6-12% slope (ChC)	Moderately well drained	Upland, Outwash
Cardington silt loam, 2-6% slope, (CdB)	Moderately well drained	Upland, sl. rises
Colwood silty clay loam, flat, (Cm)	Poorly drained	Upland low areas
Lenawee silty clay loam, flat (Le)	Poorly drained	Upland low areas
Haskins loam, 0-3% slope, (HkA)	Somewhat well drained	Slight elevations
Tuscola fine sandy loam, 2-6% slope, (TuB)	Somewhat well drained	Slight elevations
Jimtown loam, 0-3% slope, (JtA)	Somewhat well drained	Slight elevations
Kibbie loam, 0-3% slope, (KbA)	Somewhat well drained	Slight elevations

Flora

There is, or at least was, 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 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 corridors generally within what is considered to be a beech forest 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 to head west into the newly acquired land to occupy and govern it (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.

Huron County History

Huron County was made up of the “Firelands” district of the Connecticut Western Reserve. It was legally formed in February of 1809, but was attached to Portage and Geauga until it could govern itself. Huron finally had enough settlers to organize and detach from its neighbors in January 1815. At that time, it included the land of Erie County as well. The northern portion detached as Erie County in 1838. Connecticut land speculators and war victims had been surveying and inspecting the lands of Huron County since the beginning of Ohio statehood. Permanent settlement began with Nathan

S. Comstock in 1809. His father Thomas had become an owner of two large tracts of the Firelands. Nathan had come to examine the land in 1806 and finding nothing but unbroken wilderness, was unable to locate the tracts. By 1809, the land had at least been surveyed correctly, and upon his return with the aid of Darius Ferris and Elijah Hoyt, he did locate the properties and made his settlement, the first in the county (Baughman 1909; Duff 1931; Howe 1888; Williams 1879).

Upon the organization of the county in 1815, the county seat was temporarily held at a farmstead that is in modern Erie County. The following year, the proprietors of Norwalk came to the new county and determined to establish a town on their lands and to have it become the county seat. This they accomplished. These men were Platt Benedict, Elisha Whittlesey, M. B. Whittlesey, and E. M. White. Platt Benedict was the first to build in the measured area in 1817, and by the spring of 1818, Norwalk was the county seat with all the necessary buildings of local government built in their first form that year, Benedict serving as the first mayor. Norwalk's post office is as old as the town itself, operating out of a farmstead before the town was built, Platt Benedict, again was the pioneer of this frontier necessity. He is also mentioned as hosting the first religious meetings of the county (Duff 1931). He was also on the board of trustees for the Norwalk Academy which opened in 1826. The academy was the pride of the town and was worthy of such, having been established by a well-educated class of New Englander whom had the intimate knowledge of the Ivy Leagues as their president. This being so, Norwalk was considered an educational center until the railroads came to it in the early 1850s (Howe 1888). With the arrival of the railroads, Norwalk was opened up for manufacturing which stimulated the local economy and encouraged immigration. Its growth was substantial, and the New England influence was seen again in the many mansions that were built along maple-lined Main Street (Baughman 1909; Duff 1931; Howe 1888).

Willard is another city in Huron County. The railroad is entirely responsible for the existence of this place. In 1875, the B. & O. built three divisions of their track there, and necessarily, soon after, stores, and residences appeared at this intersection and depot. Originally it was called Chicago or Chicago Junction and it was incorporated as such in 1882 (Baughman 1909; Duff 1931; Howe 1888).

Bellevue is in the northwest corner of the county and crosses into Seneca, Sandusky, and Erie Counties. Mark Hopkins originally lived on the land in 1815, but it was a company of men who laid out the town in 1835. F. Chapman, James Hollister, Josiah Hollister, Thomas G. Amsden, L. G. Harkness and Pickett Latimer bought the land of Gordon Williams and hired David Camp to survey their town. Four years later, the Mad River & Lake Erie Railroad arrived with typical affect. Bellevue grew and was incorporated in 1851 (Baughman 1909; Duff 1931; Howe 1888).

John Corey settled New London in 1816, but again it was the railroads that built the town in the 1850s. Monroeville is another town dating to 1817. Richard Burt had built a grist and sawmill operation there the year before its platting. Greenwich and

Wakeman are the other incorporated areas in the county, along with parts of Milan and Plymouth (Baughman 1909; Duff 1931; Howe 1888).

New Haven Township History

New Haven Township, named after New Haven, Connecticut, organized in August 1815. New Haven Township is located in southwestern Huron County south of Greenfield Township, west of Ripley Township, east of Richmond Township, and north of Richland County. The Huron River, the west branch of the Huron River, Rice Run, March River, and several unnamed tributaries flow through the township. The Willard City Reservoir is in the northern part of the township. Highways 224, 61, and 598 run through the township. The Baltimore & Ohio Railroad runs through the township. The township is mostly hilly woodland and farmland with some marshes (Baughman 1909; Williams 1879).

Senecas originally occupied the township and in the western part of the township there were once earthworks. Wyandots, Hurons, and Delawares were also known to travel to the township for hunting. In about 1810 Caleb Palmer of Horse Neck Connecticut became New Haven township's first settler and in the county. He was soon joined by Jonathan Chapman, also known as Johnny Appleseed. William Clark built the first saw mill and Caleb Palmer built the first grist mill in the township in 1816. Royal N. Powers built the first frame house and J.K. Partello built the first brick house in the township. Lemuel M. Powers and Martin Kellogg built a distillery at what became Plymouth in 1825. A north-south stage route was laid out in 1819. The first school was taught in 1815 by Sophia Barney. Stone was once quarried in the southern part of the township. The first sermon in the township was by Rev. James MacIntyre, a Methodist preacher, in a log house. Other congregations included Calvinist, Free Will Baptist, Baptist, Church of God, Universalist, and Presbyterian. Societies in the township included an Odd Fellows lodge (Baughman 1909; Williams 1879).

New Haven was the first town platted in the township and the county in April 1815. The town incorporated in about 1839 and held irregular elections. Royal N. Power, who platted the town along with David Powers, opened the first store. Martin M. Kellogg built a two-story log tavern in 1816. The town had a mail route as early as 1809 and as late as 1813 delivered by a man named Facer. Industries in the town included shoemaking, an iron foundry, tanning, a fanning mill and valve factory, cabinet shop, an ashery, and more. The town grew quickly and was rival to Norwalk and Mansfield but the completion of the Sandusky, Mansfield & Newark Railroad in 1844, the town soon declined. The town discouraged the new railroad line refusing to invest and the route bypassed New Haven to Plymouth instead. During the decline, the town stopped holding elections and lost its corporation. It then reincorporated in 1868. The house of Rouse Bly in New Haven was a part of the Underground Railroad starting in about 1840. From his house runaways would pass to Norwalk or Oberlin (Baughman 1909; Williams 1879).

Plymouth was platted between New Haven Township and Plymouth Township in Richland County in 1825 as the village of Paris by Abram Trux, Jonn Barney, and

Lemuel Powers. The lots sold out in two years and additions were made to the town. As a part of the plat, a small house was built as a community school and church house. Aaron B. Howe was the first school teacher. In 1830 McKelvey began a girl's school. The town incorporated in 1834 and the name changed to Plymouth. The name change reflected the town's growing move toward temperance. William Crall built the first frame house. James Drennan built the first tavern and Matthew McKelvey ran the first store. Industries in the town included a marble works, novelty works, machine works, wagon and carriage maker, corn planter manufacturing, and more. Churches in the town included Presbyterian, Lutheran, Baptist, Congregational, and Roman Catholic. Societies in the town included Odd Fellows, Masons, Knights of Honor, R.A.M., Plymouth Girls' Literary Society, and the Plymouth Agricultural Society (Williams 1879).

Chicago Junction formed in the spring of 1875 at the junction of the Chicago division of the Baltimore & Ohio Railroad and the Sandusky, Mansfield, & Newark Railroad. At the intersection the railroad built a roundhouse and repair shops. The local land owners quickly platted lots for the growing town. Samuel Bowleby built the first building, store, and hotel in the village. The post office was established in 1875 with W.B. Keefer as the postmaster. In December 1877 half of the town's businesses were destroyed in a fire. Several sequential fires destroyed most of the of the other business. By 1880, the town over inflated and the growth declined. The town lacked industry to increase business beyond the railroad. During the winter of 1881-1882 a small pox breakout proved fatal for six residents and to the town's growth. Chicago Junction incorporated in 1882 with a population of 800. In 1900 the Akron extension of the Baltimore and Ohio, the Akron & Chicago Junction, was completed in the town and new life came to the town. The agriculture surrounding the town engaged in celery growing. Due to the confusion with other Chicagoans, the town changed its name to Willard after the B&O President Daniel Willard in 1917. Willard became a city in 1960. The town once had a United Brethren, Methodist, Catholic, Presbyterian, and Free Methodist congregations (Baughman 1909; Williams 1879).

Research Design

The purpose of a Phase I survey is to locate and identify archaeological resources that will be affected by the planned safety fence installation. This includes archaeological deposits as well as architectural properties that are older than 50 years. Once these resources are identified and sampled, they are evaluated for their eligibility or potential eligibility to the NRHP. These investigations are directed 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 within the project area included surface collection, subsurface testing, and visual inspection. The following describes the survey methods in greater detail.

Shovel test unit excavation. Shovel test units were placed at 15-m intervals where adequate surface visibility was lacking. These measure 50 cm on a side and are excavated to 5 cm below the topsoil/subsoil interface. Individual shovel test units are documented regarding their depth, content and color (Munsell). Wherever sites are encountered, Munsell color readings are taken per shovel test unit. All of the undisturbed soil matrices from shovel test units are screened using .6 cm hardware mesh. When sites are identified, additional shovel test units will be excavated at 7.5 m intervals extending on grid and in the four cardinal directions from the positive locations.

Surface collection. This survey method was conducted in the agricultural field situations where there was at least 50 percent bare ground surface visibility. Pedestrian transects are spaced at 5-7.5 m intervals through these areas. All artifact locations are plotted using a global positioning system.

Visual inspection. Locations where cultural resources were not expected, such as disturbed areas and wet areas were walked over and visually inspected. This method was used to verify the absence or likelihood of any cultural resources being located in these areas. This method was also utilized to document the general terrain and the surrounding area.

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

Prehistoric Artifact Analysis

An artifact inventory was accomplished upon completion of the fieldwork. This involved identifying the functional attributes of individual artifacts, as well as the artifact cluster(s) or site assemblage collectively. The prehistoric artifact types and material were identified during the inventory process. The lithic artifact categories are modeled after Flenniken and Garrison (1975) and include the following:

Biface. A biface is defined as an artifact that has been culturally modified on two faces (ventral and dorsal). Complete and fragmentary preforms, manufacturing rejects, projectiles, or knives are included in this category.

Blocky Irregular. These are chunks and amorphous chert fragments that are produced during core reduction. These frequently occur during the creation of a striking platform or by accident. They represent a transitional core reduction stage similar to that of primary thinning.

Broken Flake. This flake type is common. Flakes for this investigation are considered broken when diagnostic attributes (e.g., flake scarring or platform) are absent from the artifact. Therefore, a flake that is broken in half and retains the platform is considered complete because the function can be ascertained regardless of its obvious fragmentary nature.

Celt. These artifacts are typically polished/ground stone pieces that are likely to have been used for cutting/dismembering/hammering. It is common for these to have a bit and poll end to serve as a duel function. They were often hafted and used like a modern hatchet.

Core. A core represents the initial stage of chert procurement and reduction. A core has evidence of flake removal or checking present to delineate that the object has been culturally modified. Cores can be recovered from bedded outcrops or gathered from alluvial and glacial deposits.

Potlid. These artifact types are reflective of accidental overheating of chert (Luedtke 1992). Small semi-circular fragments of chert pop off a flake or artifact during firing or through fortuitous deposition in a hearth. Potlids lack a striking platform but are indicative of thermal activity at a site. One should use caution when using these artifacts to interpret or recreate site formation processes because they can occur during post-depositional activities.

Pottery. This is typically recovered as fired clay sherds that are tempered with various materials. It is used for cooking vessels, storage, transport, or for serving. However, sherds are generally fragile and decompose with exposure and plowing.

Primary Decortication Flake. This flake type represents the initial reduction of a core. Generally, these flakes have a natural patina or cortex over most of the dorsal side and are void of other flake scars. Artifact assemblages with chert resources obtained from bedded resources usually do not have decortication flakes of any kind because there is no patina/cortex formation.

Primary Thinning Flake. This flake type represents a transitional mode of chert reduction. The intent of this reduction activity is to reduce a core to a crude biface. Flakes have a steep platform angle (i.e., >65°) and lack cortex. However, occasional small remnants of cortex are prevalent at this point, especially on the striking platform.

Secondary Decortication Flake. These flakes occur as a by-product of patina/cortex removal of a core. They are differentiated from the previous flake

type by a lesser amount of cortex evident on the dorsal side and at least one or part of one previous flake scar. These flakes have steep flake platform angles (>75°).

Secondary Thinning Flake. These flake types represent a reduction mode that is a direct result of the previous reduction activities (i.e., primary thinning). Soft, antler billet percussion and pressure flaking are used for this mode of reduction. At this point, the chert artifact being reduced or thinned is a biface rather than a core. The striking platform for this flake type is commonly represented by the edge of the biface. The platform angle is typically acute but can range from 30° to 65°. Previously removed flake scars are common on the dorsal side.

Sharpening Flake. These flake types are created during pressure flaking of a tool edge. The flakes are often very small with a tiny platform and are often conical. They are also created from reworking a tool edge after it has been dulled from use.

Shatter or Angular Shatter. These artifacts most frequently occur during percussion flake reduction of cores. These artifacts lack striking platforms, are thin, narrow, and triangular. They cannot be definitively associated with a specific functional category of chert reduction due to their ubiquity.

Uniface. A uniface only has evidence of use-wear on one side of the artifact. Unifacial artifacts include utilized flakes, end and side scrapers, and bladelets. However, bladelets are typically categorized as blades or lamellar flakes and are diagnostic of the Middle Woodland period.

Identification of the material type of individual artifacts is based on several attributes, including color, inclusions, and luster. Several resources were used to aid in the inventory of the material types, including Converse (1994), DeRegnaucourt and Georgiady (1998), and Stout and Schoenlaub (1945).

Curation

There were three archaeological sites identified. The landowners were in the process of being contacted to determine the disposition of these materials. If curated, they will be offered to the Ohio History Connection Warehouse Facility. 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 1.6 km (1.0 mile) radius from the stemming from the project limits. In conducting the literature review, the following resources were consulted at OHPO and the State Library of Ohio:

1) *An Archeological Atlas of Ohio* (Mills 1914);
2) OHPO 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) Determinations of Eligibility (DOE) files;
7) OHPO CRM/contract archaeology files; and
8) Huron County atlases, histories, historic USGS 15'series topographic map(s), and current USGS 7.5' series topographic map(s);
9) Online Genealogical and Cemetery records.

A review of *An Archeological Atlas of Ohio* (Mills 1914) was conducted and there are no pertinent resources indicated near the project areas.

The OHPO topographic maps indicated that there is one archaeological site located in the study area, 33HU0009. This is a prehistoric period site that has Middle Woodland and Late Woodland temporal components. The size of this site is 37 sq m and it is located on a prominent elevation to the east of the project corridor and SR 538 (Figure 2).

A review of the OHI files indicated that there are four resources located within the study area (Table 2). These resources are not located within or near the project area (Figure 2). One is a bridge and the others are residences/farms.

Table 2. Ohio Historic Inventory sites in the study area.

OHI #	Present Name	Address	Architectural Style	Arch Style II	Historic Use	Activity	Date
HUR0045208	Buckingham Road at March Canal Bridge	Buckingham Rd over marsh canal	Pratt Truss Bridge		Road Related	Original Construction	1880
RIC0010801	Fenner House	Fenner & Baseline Rd	Italianate	Element Present	Single Dwelling	Original Construction	1870
RIC0011001	Knaus House	SR 598 Sec 2	Italianate	Element Present	Single Dwelling	Original Construction	1850
RIC0011401	Hunter Farm	Fenner Rd at AC&Y RR	Italianate	Element Present	Single Dwelling	Original Construction	1870

A review of the NRHP/DOE files and determinations of eligibility files indicated that there are no pertinent resources located within the project or the study area.

The OHPO CRM/contract archaeology files were reviewed as part of this project. There have been no previous professional surveys conducted within the study or project area.

Historical atlases were reviewed for this project. Inspection of a late nineteenth century atlas indicates that the project corridor extends through the A. La Don, Jas. Ellis, Drennan & McDonough, and J. Skinner parcels. There are no residences indicated relative to the project at that time (Lake 1873). The USGS *1915 Norwalk* and *1915 Crestline, Ohio 15 Minute Series (Topographic)* maps indicate that there is a residence near the southern part of the project (Figure 4). The location of this residence, another building and an outbuilding are indicated on the USGS *1988 Shelby* and *1977 Williard, Ohio 7.5 Minute Series (Topographic)* map (Figure 2). There are no buildings associated with the project according to the modern mapping. Aerial imagery was inspected and the project corridor extends through farm fields and woods. There are no cemeteries identified in the project or its study area.

Fieldwork Results

The field investigations for this project were completed on November 3rd, 2017 (Figures 5-20). The weather was amiable for the completion of the fieldwork; it was humid, but temperatures ranged from 40-55 degrees Fahrenheit and it was overcast, but dry. This was not a factor in the completion of the work. The project area is located in a rural setting that is mostly associated with agricultural activity, particularly row crop farming. The conditions varied as did the survey methods. The field reconnaissance involved surface collection, visual inspection, and shovel testing. This includes agricultural fields, manicured lawn, scrubland, and wooded areas. Disturbed conditions were mostly affiliated with the presence of the extant gas line and its corridor. These investigations resulted in the identification of three sites, 33HU0533-535.

Subsurface methods of investigation were conducted in the south-central project area (Figures 6,7, and 11-13). The southernmost part of the project area cut through manicured lawn conditions for a small stint and this accounted for a small area where subsurface testing was conducted. Larger segments of the project corridor were subject to shovel testing that were in the central part of the surveyed corridor. This is an area that is contained in woods or scrub conditions, which are typically left fallow or wooded as they are in locations that do not drain well. The shovel testing identified shallow and deflated topsoil deposits. There were 21 shovel test units excavated during these investigations. The topsoil was identified as being dark grayish brown (10YR3/2) silt loam/silty clay loam. There was a clear, but wavy interface identified that was no deeper than 18 cm below ground surface. The underlying subsoil is silty clay loam that is dark yellowish brown (10YR4/6) and reflective of lake plain soil conditions (Figure 20). There were no cultural materials identified during the shovel testing for this project.

Surface collection efforts were conducted for the majority of the project area (Figures 17-20). Surface collection was conducted in a disked field where winter wheat had just been planted, soybean stubble, and corn stubble conditions. The bare ground

surface visibility that was encountered was greater than 50 percent throughout all of the surface collected areas. The disked and/or planted areas has surface visibility that was near 100 percent. The soybean and corn stubble fields had surface visibility that usually ranged from 60-70 percent. Pedestrian transects were spaced at 5 m intervals where surface collection methods were amiable. All of the sites that were identified during this survey were found during surface collection methods.

Severe disturbances and poorly drained conditions were identified in the project area through visual inspection. The northern terminus of the corridor is disturbed with residential utility lines and an extant residential dwelling with associated structures. The central portion of the project corridor contained a shovel tested residential lawn in addition to a retention pond that is wholly contained within the corridor. These conditions precluded archaeological examination.

The fieldwork resulted in the identification of three archaeological sites, 33HU0533-535. These sites all date from the prehistoric period and they are described in greater detail in the following text.

33HU0533

This site is low-density lithic scatter that was identified during surface collection of a corn stubble field (Figure 7). The bare ground surface visibility in the field was estimated to be at about 90 percent at the time of survey. Pedestrian transects were intensified to 2 m intervals in the area surrounding the artifacts and all that were observed were collected with their location being plotted with a GPS system. The artifacts were identified from the surface of the plowzone. This site is located on a slight elevation that is to the east of Ladlow Road and is south of May Road. This within a sub-region that is noticeably lower and flatter than the surrounding area. This area is drained by an unnamed tributary of Marsh Run, which flows into the West Branch Huron River and eventually to Lake Erie. The dimensions of the site are 9.6 m north-south by 1 m east-west; the site size is considered to be 9.6 sq m.

There were three artifacts identified from this site (Table 3). The material assemblage included Cedarville-Guelph and Pipe Creek chert. The functional attributes of the assemblage pertain to core reduction and biface reduction. These artifacts are not considered to be temporally diagnostic.

This site was evaluated for its eligibility for the NRHP. This site lacks integrity (Little et al. 2000:39-43; U.S. Department of the Interior, National Park Service [USDI, NPS] 1997:44-45) and the ability to yield further and important information regarding prehistory. The artifact assemblage is functionally and numerically limited, lacks temporal diagnostics, and was identified from plowzone contexts. This site is not considered to be eligible for inclusion into the NRHP, and further work at this site is not deemed necessary.

Table 3. Prehistoric Artifact Inventory for Sites 33HU0533-535.					
Site (33HU)	**Easting**	**Northing**	**Artifact**	**Material**	**Count**
533	356387.234	4539711.377	Primary thinning flake	Cedarville-Guelph	1
	356385.933	4539701.832	Secondary thinning flake	Cedarville-Guelph	1
	356385.933	4539701.832	Primary thinning flake	Pipe Creek	1
534	356480.42	4540932.979	Secondary thinning flake	Pipe Creek	1
535	356604.203	4541729.203	Biface midsection	Upper Mercer	1

33HU0534

This site is prehistoric period isolated find that was identified during surface collection of a tilled field (Figure 6). The bare ground surface visibility in the field was estimated to be at about 100 percent at the time of survey. Pedestrian transects were intensified to 2 m intervals in the area surrounding the artifacts and all that were observed were collected with their location being plotted with a GPS system. The artifact was identified from the surface of the plowzone. This site is located on a slight elevation that is to the east of Ladlow Road and is south of May Road. This within a sub-region that is noticeably lower and flatter than the surrounding area. This area is drained by an unnamed tributary of Marsh Run, which flows into the West Branch Huron River and eventually to Lake Erie. Isolated finds have a site size that are considered to be 1 sq m.

The artifact that was identified from this site is a flake of Pipe Creek chert (Table 3). This is functionally indicative of bifacial reduction activity. This artifact is not regarded as being temporally diagnostic.

This site was evaluated for its eligibility for the NRHP. This site lacks integrity (Little et al. 2000:39-43; U.S. Department of the Interior, National Park Service [USDI, NPS] 1997:44-45) and the ability to yield further and important information regarding prehistory. The artifact assemblage is functionally and numerically limited, lacks temporal diagnostics, and was identified from plowzone contexts. This site is not considered to be eligible for inclusion into the NRHP, and further work at this site is not deemed necessary.

33HU535

This site is prehistoric period isolated find that was identified during surface collection of a corn stubble field (Figure 5). The bare ground surface visibility in the field was estimated to be at about 60-70 percent at the time of survey. Pedestrian transects were intensified to 2 m intervals in the area surrounding the artifacts and all that were observed were collected with their location being plotted with a GPS system. The artifact was identified from the surface of the plowzone. This site is located on a slight elevation that is to the east of Ladlow Road and is south of May Road. This within a sub-region

that is noticeably lower and flatter than the surrounding area. This area is drained by an unnamed tributary of Marsh Run, which flows into the West Branch Huron River and eventually to Lake Erie. Isolated finds have a site size that are considered to be 1 sq m.

The artifact that was identified from this site is the midsection of a hafted biface (Table 3). This is made from Upper Mercer chert. There is one small part of the notch remaining that allowed for it to be determined as hafted. The remnant blade edges have been reworked and the cross-section is plano biconvex. This artifact would have likely functioned as a knife. This artifact is not regarded as being temporally diagnostic.

This site was evaluated for its eligibility for the NRHP. This site lacks integrity (Little et al. 2000:39-43; U.S. Department of the Interior, National Park Service [USDI, NPS] 1997:44-45) and the ability to yield further and important information regarding prehistory. The artifact assemblage is functionally and numerically limited, lacks temporal diagnostics, and was identified from plowzone contexts. This site is not considered to be eligible for inclusion into the NRHP, and further work at this site is not deemed necessary.

Fieldwork Summary

The fieldwork conducted for this project resulted in the identification of three prehistoric period sites (Figure 21). These sites represent land use that was not intensive through this area as they are functionally and numerically limited deposits. None of these artifacts are temporally diagnostic. The few artifacts and the scattered nature of these materials is reflective of what would be expected from this type of area, low-lying with occasional slight elevations. The material assemblage exhibited use of materials that are more locally available including Pipe Creek chert (aka, Prout chert) and Cedarville-Guelph (DeRegnaucourt and Georgiady 1996). The single Upper Mercer artifact is suggesting of more exotic material usage through trade or migration. The findings meet with what was expected during these investigations.

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. This project involves the replacement of an existing underground gas pipeline; Weller considers the APE to be limited to the footprint of the planned construction/installation. The pipeline corridor will not involve any buildings or structures and is 30.5 m (100 ft) wide and 2,591 m (8,500 ft) long. This pipeline corridor traverses a lowly populated area and it is largely contained within agricultural fields. The cultural resource work focused on the archaeological component of these investigations.

These investigations identified three archaeological sites, 33HU0533-535. These sites are not considered to be significant, they are temporally unassigned prehistoric period components that are low-density scatters or isolated find spots. These are low-

density prehistoric period sites that can be frequently identified in this region and they lack temporal affinity. There are no buildings present within the APE and the project will not involve any buildings or structures. These investigations identified three archaeological sites that are not considered to be significant. A finding of 'no historic properties' affected is deemed appropriate.

Recommendations

Weller & Associates, Inc. conducted a Phase I Cultural Resource Management Investigations for a 2,591 m (8,500 ft) Long Columbia Gas Pipeline in New Haven Township, Huron County, Ohio. These investigations were conducted for the replacement of an underground pipeline segment and will not involve any buildings or structures that are older than 50 years. The field investigations involved subsurface testing, but was largely reliant upon surface collection methods of survey. The archaeological fieldwork resulted in the identification of three previously unrecorded sites including 33HU0533-535. These all date from the prehistoric period and none of these sites are considered to be significant, they are not eligible for the National Register of Historic Places and they are not landmarks. No further cultural resource management work is considered to be necessary for this project.

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Figures

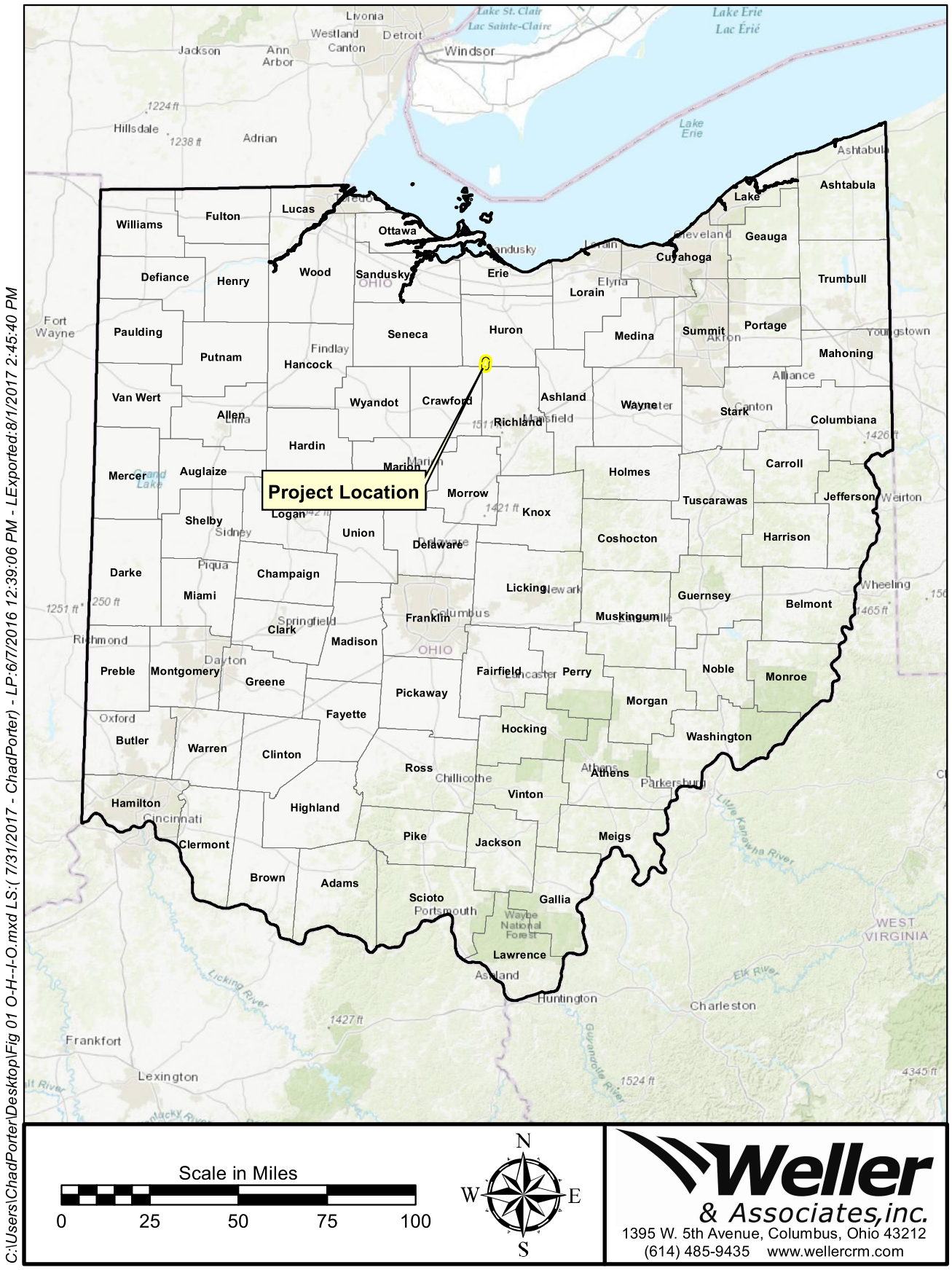

Figure 1. Political map of Ohio showing the approximate location of the project.

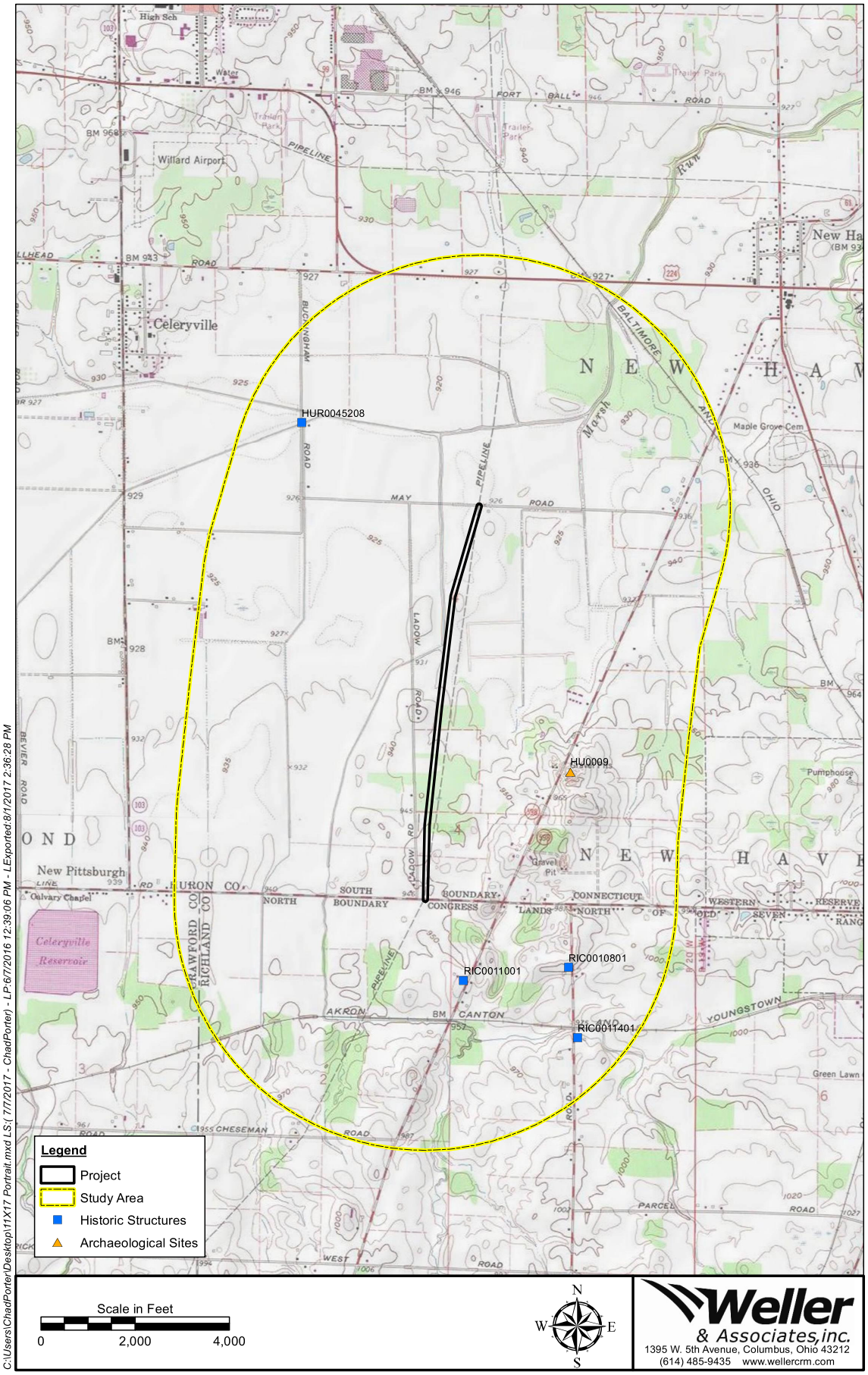

Figure 2. Portions of the USGS *1988 Shelby and 1977 Willard, Ohio 7.5 Minute Series (Topographic)* maps indicating the location of the project and previously recorded resources in the study area.

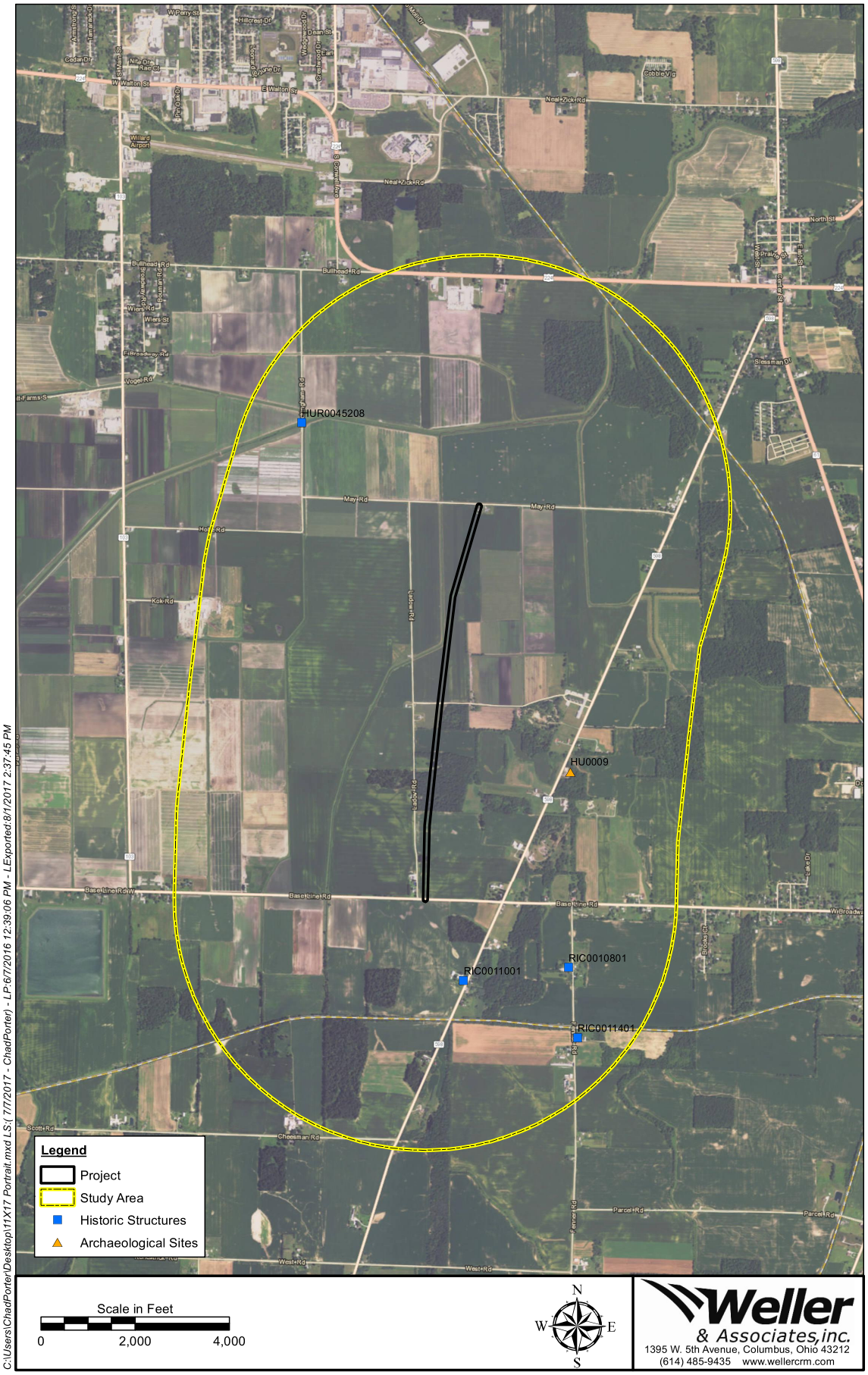

Figure 3. Aerial map indicating the location of the project and previously recorded resources in the study area.

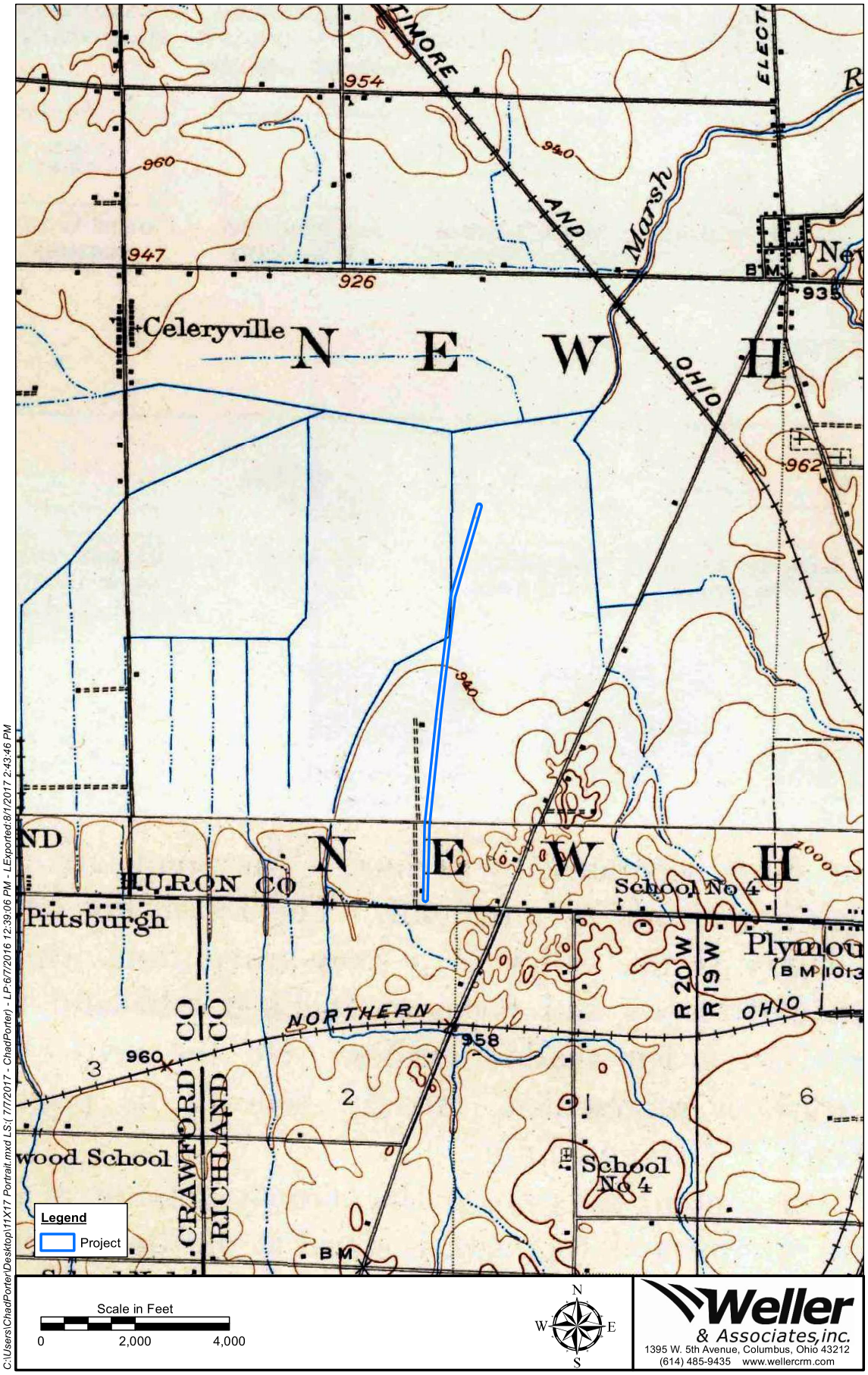

Figure 4. Portions of the USGS *1915 Norwalk, and 1915 Crestline, Ohio 15 Minute Series (Topographic)* maps indicating the location of the project and previously recorded resources in the study area.

Figure 5. Fieldwork results and photo orientations for Sheet 1.

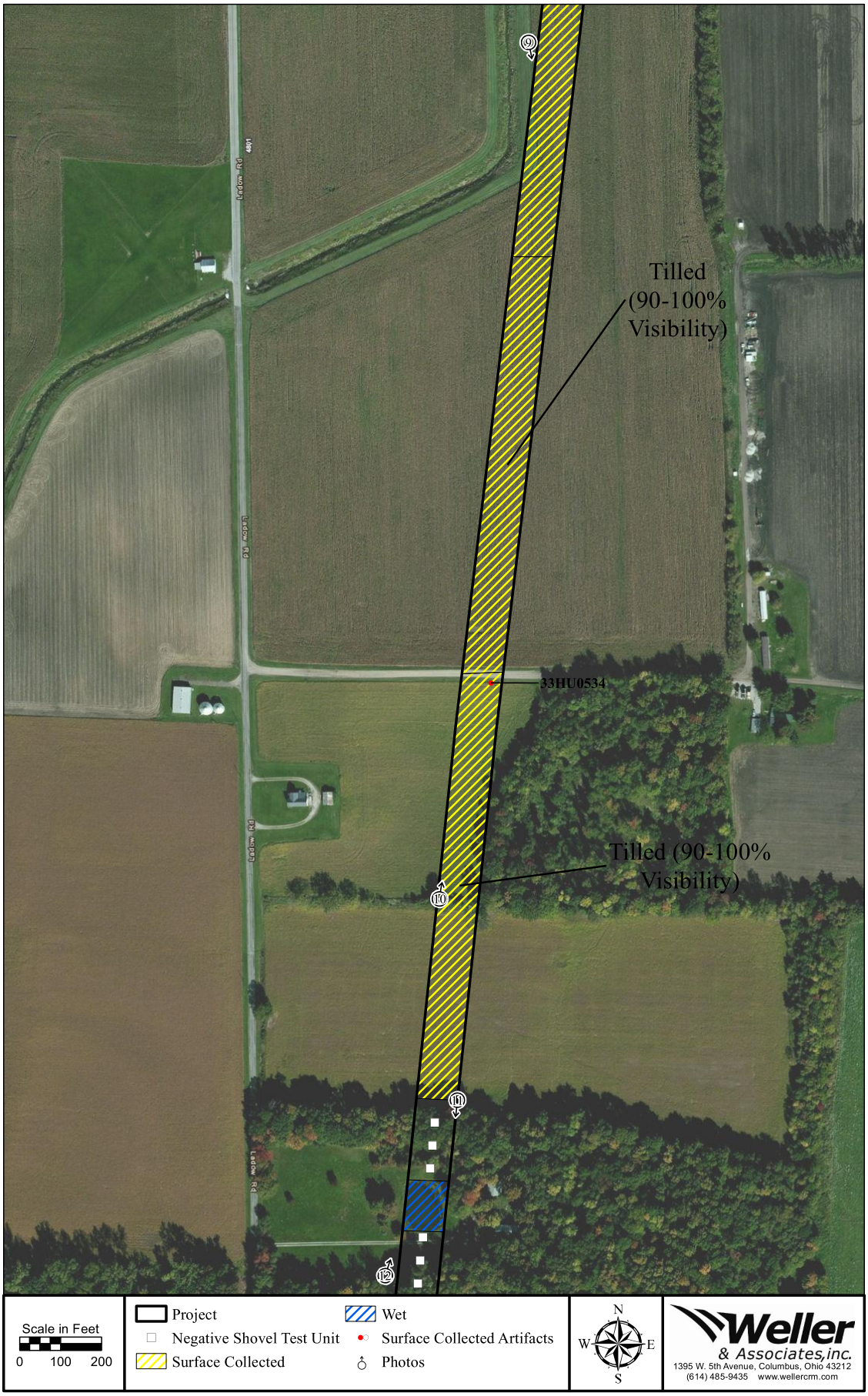

Figure 6. Fieldwork results and photo orientations for Sheet 2.

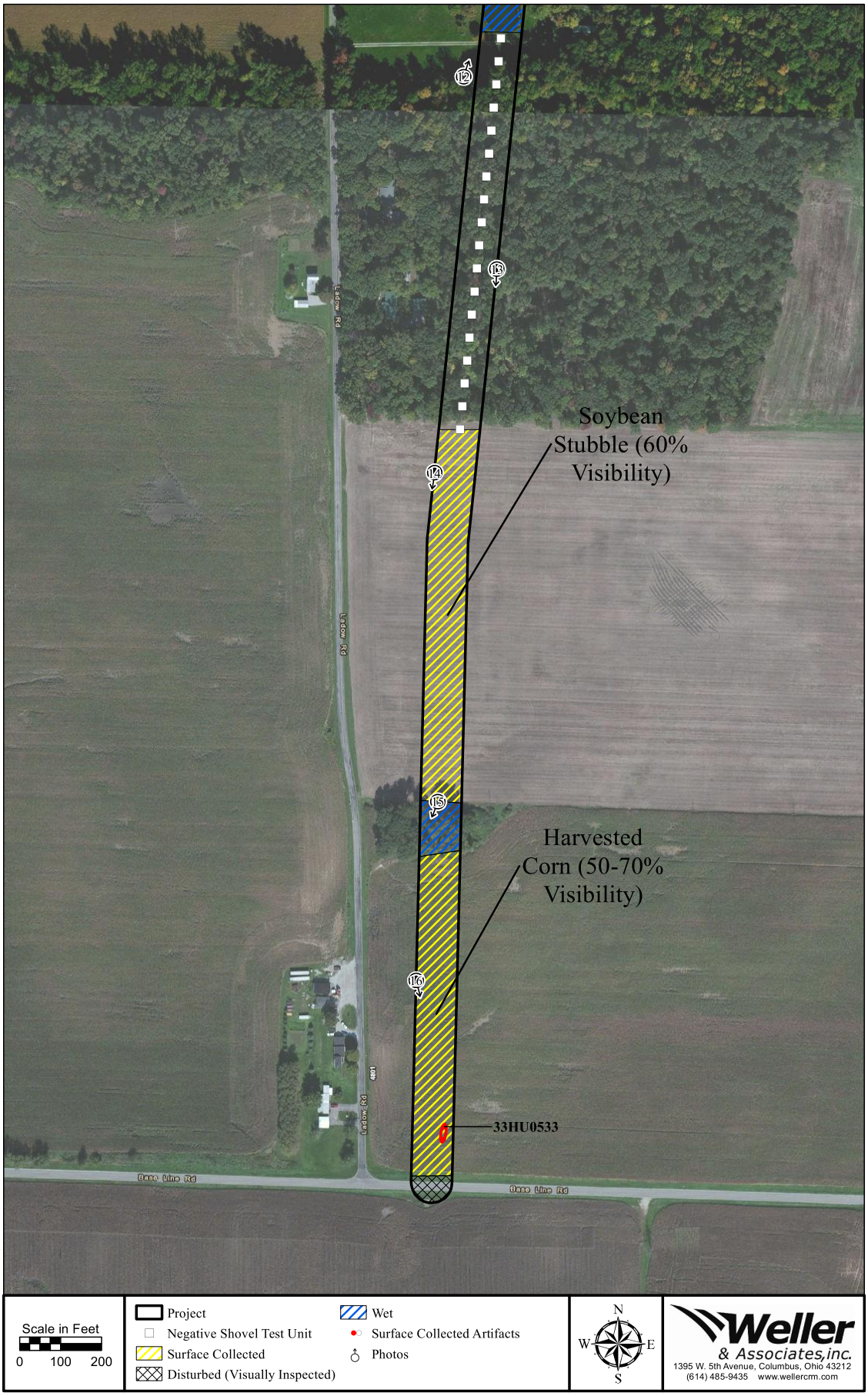

Figure 7. Fieldwork results and photo orientations for Sheet 3.

Figure 8. Disturbed conditions just south of May Road in the northern portion of the project.

Figure 9. View of the surface collected harvested corn field within the northern portion of the project.

Figure 10. View of the surface collected tilled field east of Ladow Road in the central portion of the project.

Figure 11. View of the shovel tested area within the central portion of the project east of Ladow Road.

Summary: Exhibit Appendix C Part 1 electronically filed by Cheryl A MacDonald on behalf of Columbia Gas of Ohio, Inc.