Jacobs

Phase I Archaeological Survey Report

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American Transmission Systems, Inc.



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Jacobs

Phase I Archaeological Survey Report

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Executive Summary

On behalf of American Transmission Systems, Inc. (ATSI), a FirstEnergy Corporation (FirstEnergy) Company, Jacobs of Cincinnati, Ohio conducted a Phase I archaeological reconnaissance for the Preferred Route of the Dowling-Fulton 345-kilovolt (kV) Transmission Line Tap to Melbourne Substation Project in Fulton County, Ohio (Project). ATSI plans to construct a new 345 kV four-breaker ring bus substation (Melbourne Substation) and a new 345 kV transmission line between ATSI's existing Dowling-Fulton 345 kV Transmission Line and the Melbourne Substation. ATSI also plans to construct two, approximately 0.5-mile-long, 345 kV tie lines to connect the existing, customer-owned Sydney Substation to the proposed Melbourne Substation.

The purpose of the Project is to provide a second 345 kV source to the proposed Melbourne Substation to enhance the electric service reliability for existing customers, add redundancy to the transmission network, and allow for future growth in the area. The Project will also alleviate a potential 300-megawatt (MW) load loss as a result of increased load on the transmission system.

The proposed Preferred Route for the 345 kV transmission line begins west of Swanton, Ohio along ATSI's existing Dowling-Fulton 345 kV Transmission Line and terminates at the proposed Melbourne Substation. The Preferred Route for the new transmission line is approximately 9.46 miles in length and will be constructed primarily on single steel monopoles. The new permanent right-of-way (ROW) required will range from 95 to 150 feet, dependent on the specific location due the Preferred Route being parallel to the existing Fulton-North Star Steel 345 kV Transmission Line and ROW for a portion of the Preferred Route.

The Project area is defined as the vertical and horizontal space that will be impacted by Project activities and corresponds to the 9.46-mile length of the tie line alignment. This also constitutes the Area of Potential Effects (APE). For architectural and historical resources, a maximum 305-meter (1,000-foot) buffer centered on the Preferred Route was used to evaluate the viewshed. The results of the architectural and historical resources study are presented in a separate report.

Jacobs conducted a Phase I archaeological reconnaissance survey for the Project in December 2022 and January 2023. This report presents the results of the Phase I archaeological reconnaissance survey for the new Preferred Route. This Phase I archaeological survey report details the background research, field strategy, and survey results for the currently planned Preferred Route.

Prior to the Phase I field reconnaissance, Jacobs conducted a literature review using the records available on the Ohio Historic Preservation Office (OHPO) online geographical information system (GIS) database (OHPO 2023). A 1.6-kilometer (1-mile) study area centered on the Project alignment was examined. The literature review identified the following sites and resources within the study area:

- 51 Ohio Archaeological Inventory -listed sites
- 16 Ohio Historic Inventory (OHI)-listed resources
- 5 Ohio Genealogical Society -listed cemeteries

One previously identified site, 33FU0235, and three OHI resources are directly adjacent to the APE. However, none of the previously inventoried cultural resources is located within the direct APE. In addition, 19 previous cultural resources surveys have been documented within the study area. Seven of these surveys covered portions of the current APE.

The Phase I archaeological reconnaissance survey for the tie line consisted of shovel testing and pedestrian survey. No new archaeological sites were identified during the field investigation, and no impacts are expected to existing archaeological sites. Therefore, Jacobs recommends that no additional archaeological work is necessary.

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Acronyms and Abbreviations

| APE | Area of Potential Effect |
|-------------|---|
| ATSI | American Transmission Systems, Inc., a Subsidiary of FirstEnergy Corporation |
| BCE | before the Common Era |
| BP | before present |
| ca. | circa |
| CE | Common Era |
| cm | centimeter(s) |
| CR-10 | County Road 10 |
| DOE | Determination of Eligibility |
| FirstEnergy | FirstEnergy Corporation |
| GIS | geographical information system |
| GLRA | Great Lakes Research Associates, Inc. |
| ha | hectare(s) |
| I-80/90 | Interstate Highway 80/90 |
| ID | identification |
| km | kilometer(s) |
| kV | kilovolt(s) |
| MW | megawatt(s) |
| NHL | National Historic Landmark |
| No. | number |
| NRCS | Natural Resources Conservation Service |
| NRHP | National Register of Historic Places |
| OAI | Ohio Archaeological Inventory |
| OGS | Ohio Genealogical Society |
| ОНІ | Ohio Historic Inventory |
| ОНРО | Ohio Historic Preservation Office |
| РРК | projectile point |
| Project | Dowling-North Star 345-kilovolt (kV) Transmission Line Project in Fulton County, Ohio |
| ROW | right-of-way |
| tie line | transmission line |
| U.S. | United States |
| WBT | Western Basin Tradition |
| | |

1. Introduction

On behalf of American Transmission Systems, Inc. (ATSI), a FirstEnergy Corporation (FirstEnergy) Company, Jacobs of Cincinnati, Ohio, conducted a Phase I archaeological reconnaissance for the Preferred Route of the Dowling-Fulton 345-kilovolt (kV) Transmission Line Tap to Melbourne Substation Project in Fulton County, Ohio (Project). ATSI plans to construct a new 345 kV four-breaker ring bus substation (Melbourne Substation) and a new 345 kV transmission line between ATSI's existing Dowling-Fulton 345 kV Transmission Line and the proposed Melbourne Substation. ATSI also plans to construct two, approximately 0.5-mile-long, 345 kV tie lines to connect the existing, customer-owned Sydney Substation to the proposed Melbourne Substation.

The purpose of the Project is to provide a second 345 kV source to the proposed Melbourne Substation to enhance the electric service reliability for existing customers, add redundancy to the transmission network, and allow for future growth in the area. The Project will also alleviate a potential 300-megawatt (MW) load loss as a result of increased load on the transmission system.

The Preferred Route, which spans from ATSI's existing Dowling-Fulton 345 kV Transmission Line to the proposed Melbourne Substation, is approximately 9.46 miles in length and will be constructed primarily on single steel monopoles (Figure 1). The Preferred Route begins along ATSI's existing Dowling-Fulton 345 kV transmission line directly south of Interstate Highway 80/90 (I-80/90) and runs west, paralleling I-80/90, for approximately 5.0 miles. At County Road 7-2, the route turns south and then runs west between the Delta Reservoir and Delta Motorsports Park before continuing to parallel I-80/90 for approximately 2.0 miles. Just east of County Road 10 (CR-10), the Preferred Route turns south and runs approximately 1.3 miles, paralleling ATSI's existing Fulton-NorthStar Steel 345 kV Transmission Line. The Preferred Route then crosses the Fulton-North Star 345 kV transmission line and continues south for 0.4 mile before turning west and terminating at the proposed Melbourne Substation.

The new permanent right-of-way (ROW) required will range from 95 to 150 feet, dependent on the specific location due the Preferred Route being parallel to the existing Fulton-North Star Steel 345 kV Transmission Line and ROW for a portion of the Preferred Route.

The Project area is defined as the vertical and horizontal space that will be impacted by Project activities and corresponds to the 9.46 miles in length tie line alignment. This also constitutes the Area of Potential Effects (APEs) (Figure 2). The field investigation surveyed the entire Preferred Route alignment, approximately 198 acres (80 hectares [ha]), aside from one parcel that was inaccessible at the time of survey.

For architectural and historical resources, a maximum 305-meter (1,000-foot) buffer centered on the Preferred Route was used to evaluate the viewshed. To identify cultural resources adjacent to the Project, a 1.6-kilometer (km) (1-mile) study area centered on the Project alignment was defined. The results of the architectural and historical resources study are presented in a separate report (Jacobs 2023).

Review of online records available through the Ohio Historic Preservation Office (OHPO) revealed that while no cultural resources are recorded within the Project APE, a total of 51 previously identified Ohio Archaeological Inventory (OAI)-listed sites, 16 Ohio Historic Inventory (OHI)-listed resources, and 5 Ohio Genealogical Society (OGS)-listed cemeteries are located within the study area. One previously identified site, 33FU0235, and three OHI resources are directly adjacent to the APE. In addition, 19 previous cultural resources surveys have been documented within the study area. Seven of these surveys covered portions of the current APE (OHPO 2023).

The goal of this survey is to identify previously recorded and undocumented archaeological resources that may be present within the Project corridor and that may be affected by the proposed tie line.

Personnel committed to the Project include the following:

Principal Investigator Megan Harding, M.S., RPA

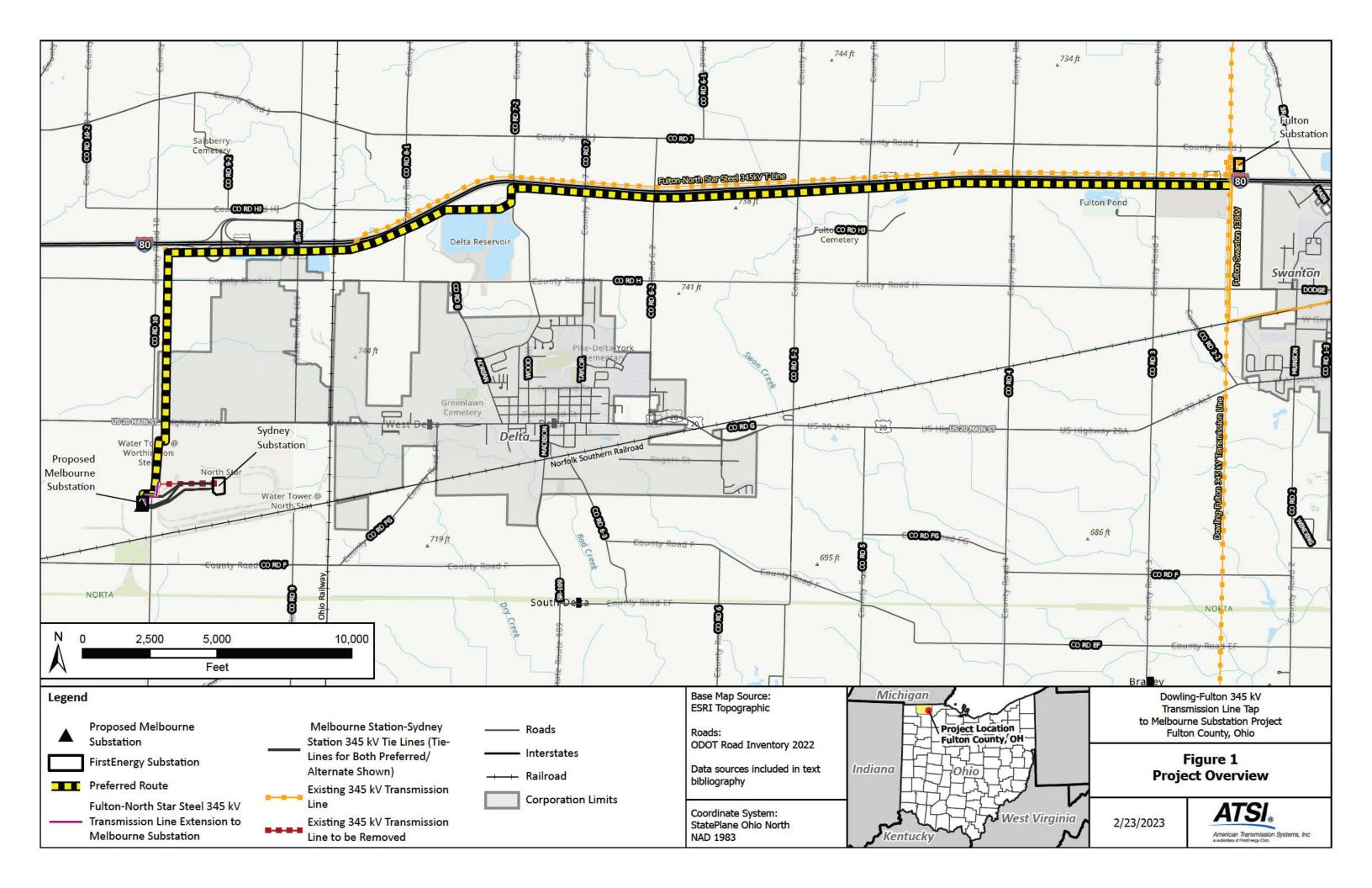
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- Principal Investigator Eric Burant, M.S., RPA
- Archaeologist Derrick Cole

Megan and Derrick coauthored this report, and Megan also conducted the records search and contributed to report graphics.

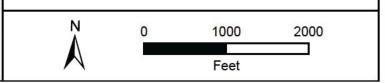
This report is organized as follows:

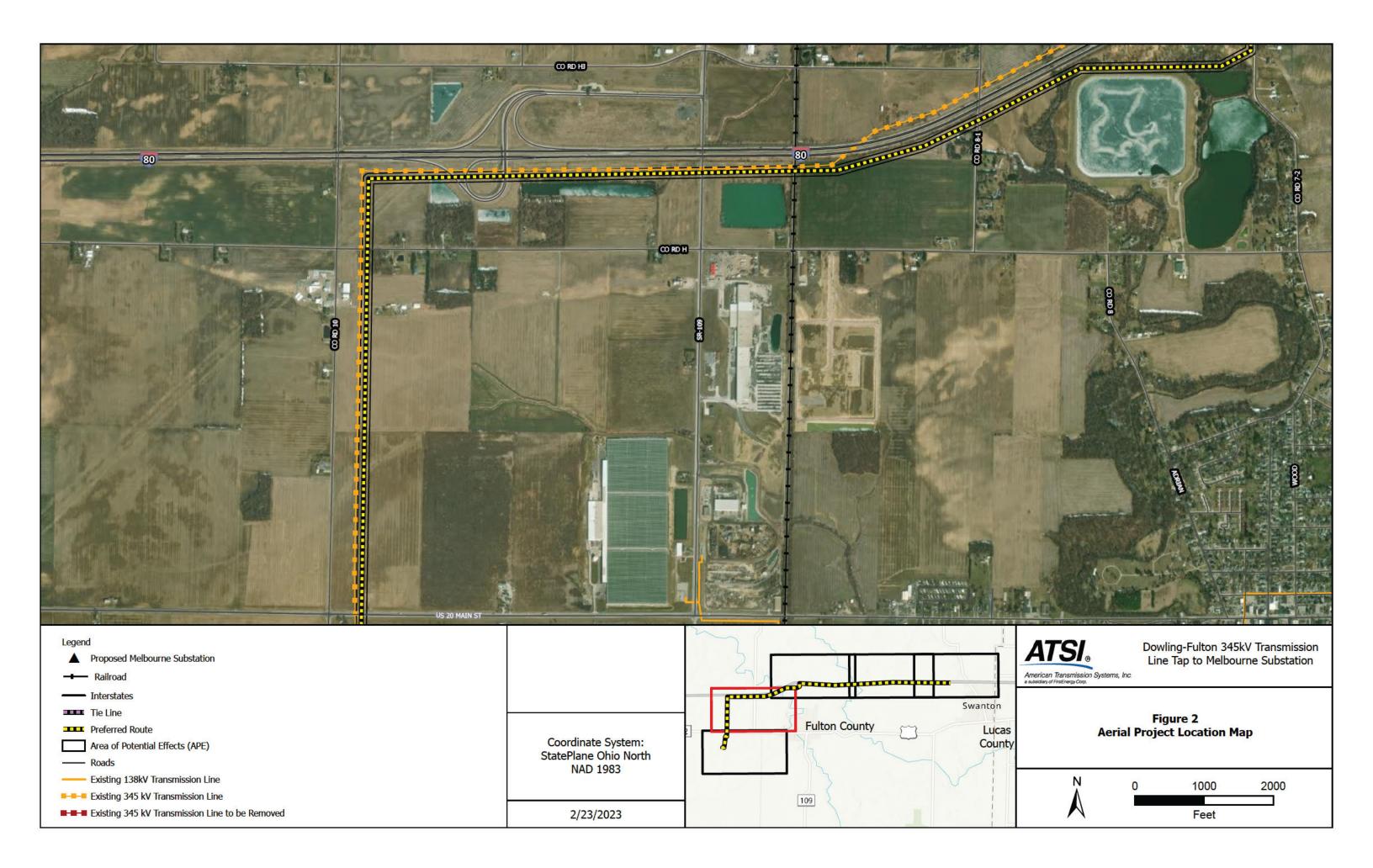
- Section 1 provides an overview of the Project.
- Section 2 presents the environmental contexts of the Project area.
- Section 3 presents the cultural contexts of the Project area.
- Section 4 describes the adjacent previously identified cultural resources within the Project's study area.
- Section 5 describes the research design and the field and laboratory methods used during the archaeological investigation.
- Section 6 discusses the results of the field reconnaissance.
- Section 7 provides the summary and recommendations.
- Section 8 lists the references used to develop this report.

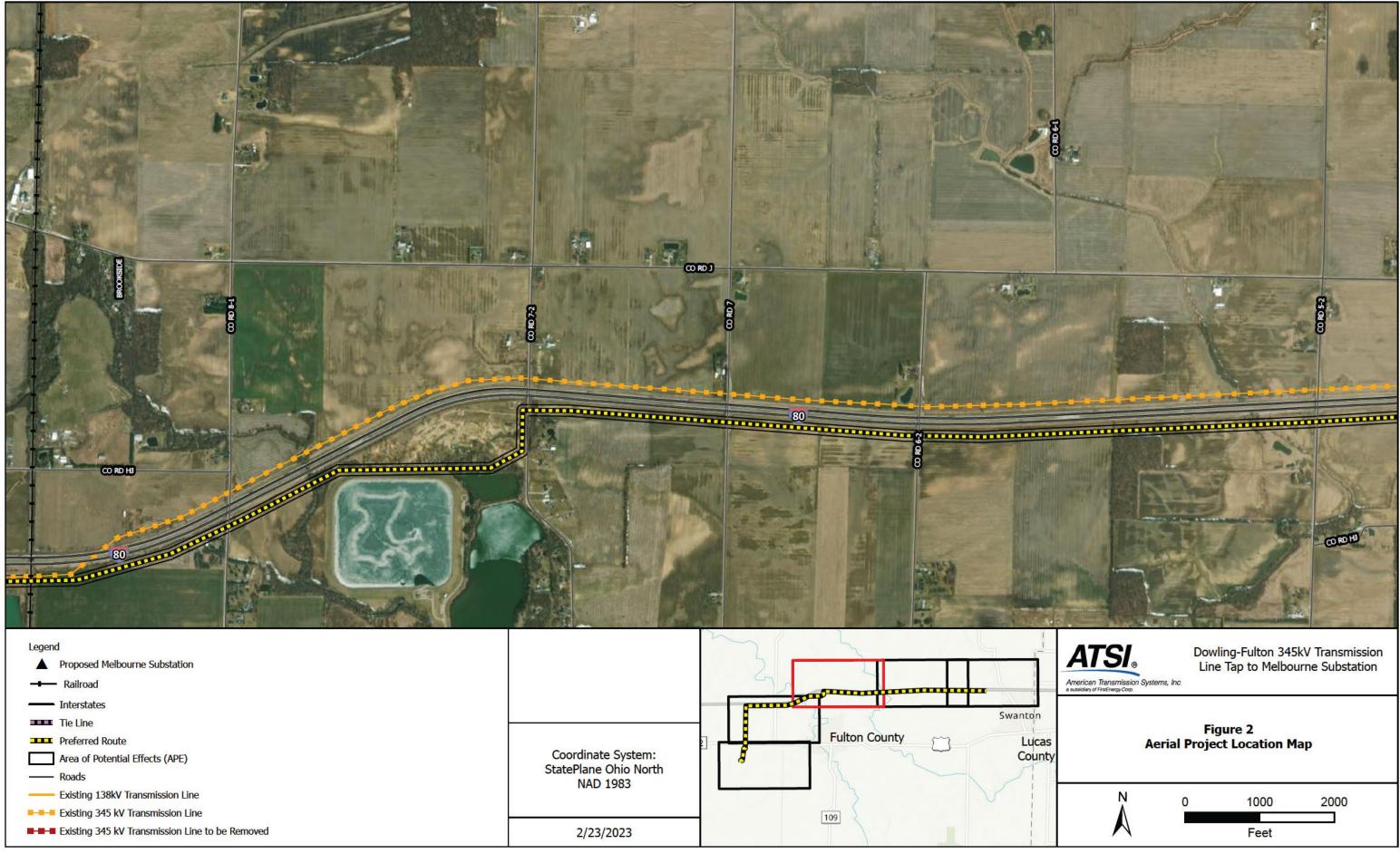




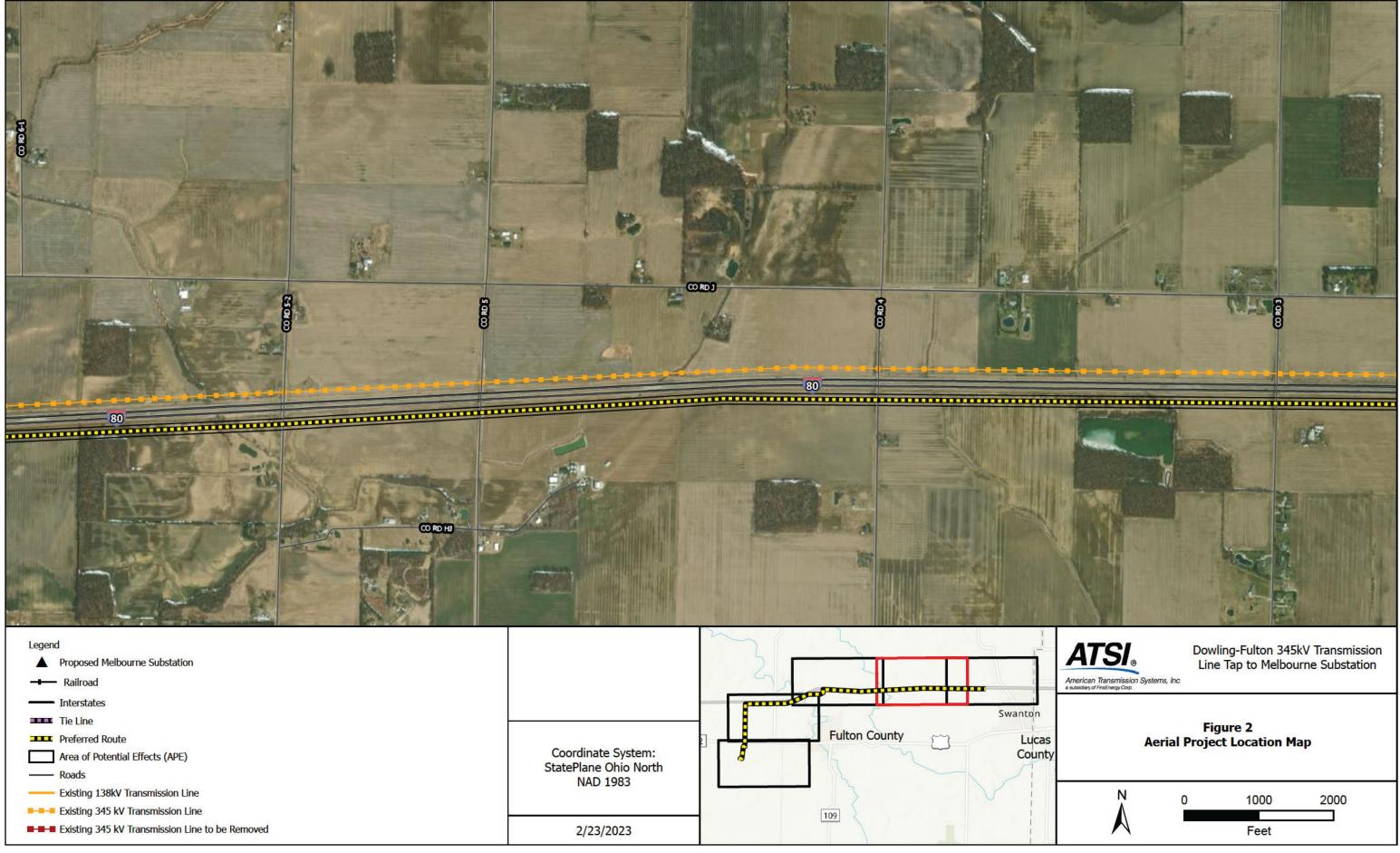
| Legend Proposed Melbourne Substation Railroad | | |
|--|---|---------------|
| Interstates Tie Line | | Swanton |
| Preferred Route Area of Potential Effects (APE) Roads Existing 138kV Transmission Line Existing 345 kV Transmission Line | Coordinate System: StatePlane Ohio North NAD 1983 | Fulton County |
| Existing 345 kV Transmission Line to be Removed | 2/23/2023 | |



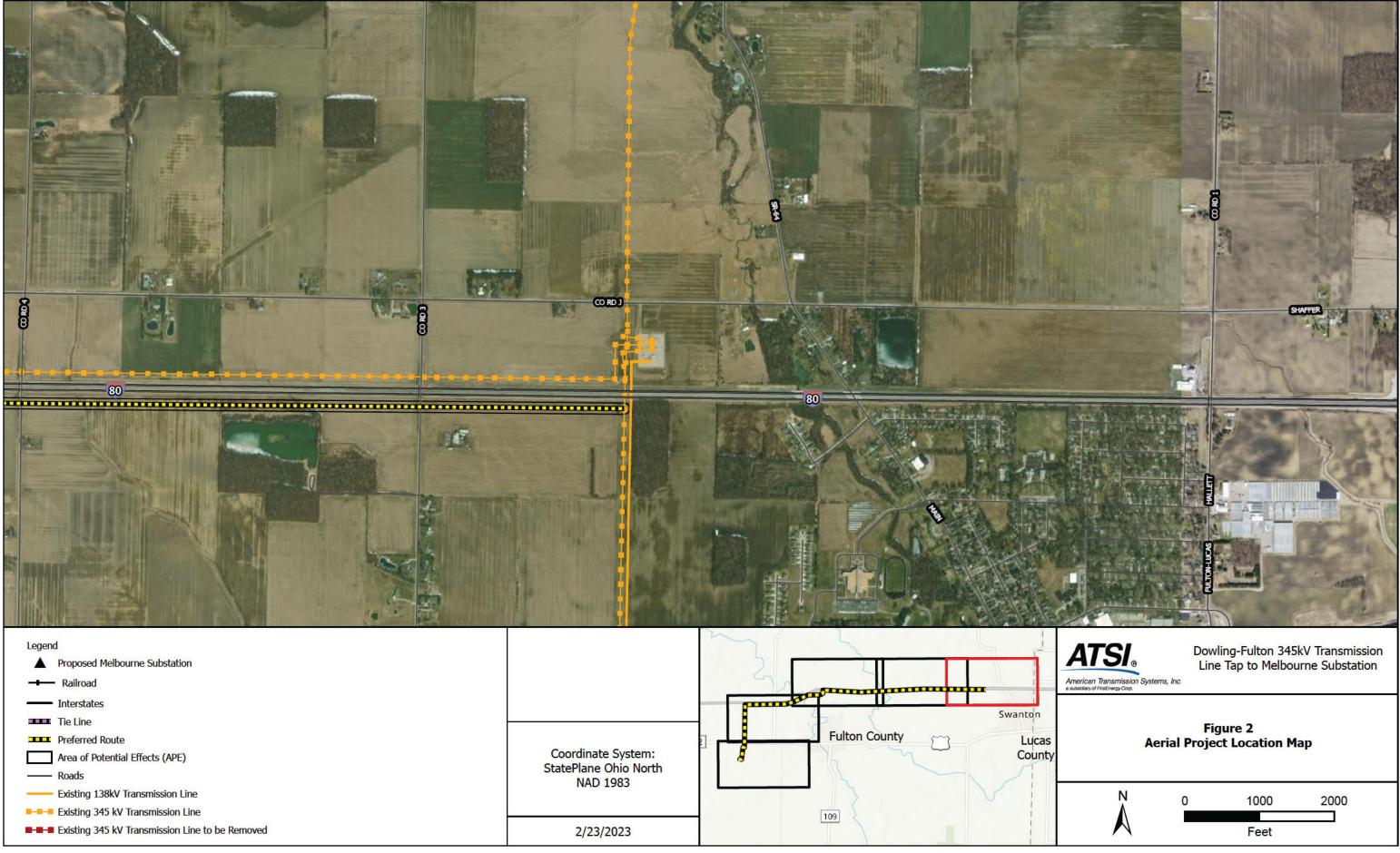


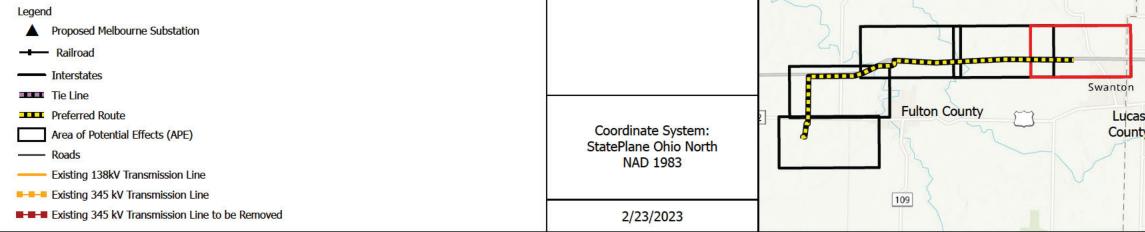


| Railroad | | |
|---|-----------------------------------|---------------|
| Interstates | | |
| Tie Line | | Swanton |
| Preferred Route | 2 | Fulton County |
| Area of Potential Effects (APE) | Coordinate System: | Z County |
| Roads | StatePlane Ohio North NAD 1983 | |
| Existing 138kV Transmission Line | NAD 1965 | |
| Existing 345 kV Transmission Line | | 109 |
| Existing 345 kV Transmission Line to be Removed | 2/23/2023 | |



| Legend Proposed Melbourne Substation | | |
|---|---|---------------|
| Railroad | | |
| Interstates | | Swanton |
| Tie Line Preferred Route | | Fulton County |
| Area of Potential Effects (APE) | Coordinate System: StatePlane Ohio North | County |
| Roads Existing 138kV Transmission Line | NAD 1983 | |
| Existing 345 kV Transmission Line | | |
| Existing 345 kV Transmission Line to be Removed | 2/23/2023 | 109 |





2. Environmental Context

This section provides information on the prehistoric and historic environmental setting of the general Project area, to develop a context for understanding the location and identification of cultural resources. Environmental variables (for example, geology or climate) significantly influenced the type and extent of both prehistoric and historic settlement and subsistence patterns.

2.1 Physiographic Region

The Project is situated within the Huron-Erie Lake Plains found within the larger Central Lowlands Province. This generally flat area of low relief is characterized by beach ridges, bars, low dunes, and sand sheets of glacial lakeshores (Brockman 1998). The region is dissected by modern streams; and prior to historic wetland drainage, it was the location of the Black Swamp, which occupied portions of northwest Ohio and northeast Indiana (Kaatz 1955).

2.2 Geology

The surface geology consists of Late Wisconsinan-age sand over clayey till and lacustrine deposits over deeply buried Silurian- and Devonian-age carbonate rocks and shales (Brockman 1998). Within Fulton County, there are few sources of chert, which implies that extensive use did not occur. Regionally, however, there are a number of outcrops that may have been used, such as Brassfield, Upper Mercer, and Flint Ridge (DeRegnaucourt and Georgiady 1998). Brassfield chert occurs as outcrops along Brush Creek and along the headwaters of Eagle Creek in Adams and Highland Counties (Stout 1945). Upper Mercer and Flint Ridge cherts can be found in central and eastern Ohio.

2.3 Soils

Soil distribution within the Project area is important for understanding the cultural arrangement of the landscape. Soils aid in determining the potential for archaeological sites and can provide a marker for archaeological site formation. Soil types also aid in understanding the pedogenic processes of the area and how archaeological sites and cultural materials are impacted by those processes.

Soils are predominately well-drained to moderately well-drained sandy loams typically found on dunes and beach ridges on lake plains or outwash plains. Other soils found in the APE are moderately well-drained to poorly drained loamy or clayey loam soils formed on moraines and till plains. Table 2-1 lists the specific soils within the Project APE which can be seen in Figure 3.

| Symbol | Soil Type | Slope (%) | Landform | Drainage |
|--------|----------------------------|-------------------|--|------------------------------|
| BrB | Boyer sandy loam | 1 to 6 | Stream terraces, moraines | Well drained |
| CoB | Colonie fine sand | 1 to 6 | Beach ridges on lake plains | Well drained |
| CoC | Colonie fine sand | 6 to 12 | Dunes on lake plains, beach ridges | Somewhat excessively drained |
| DmA | Digby loam | 0 to 3 | Outwash plains, terraces | Somewhat poorly drained |
| Gf | Gilford fine sandy loam | - | Flats on outwash plains, beach ridges | Very poorly drained |
| GnB2 | Glynwood loam | 2 to 6, eroded | Ground moraines on till plains | Moderately well drained |
| GnD2 | Glynwood loam | 12 to 18 | End moraines, ground moraines | Moderately well drained |

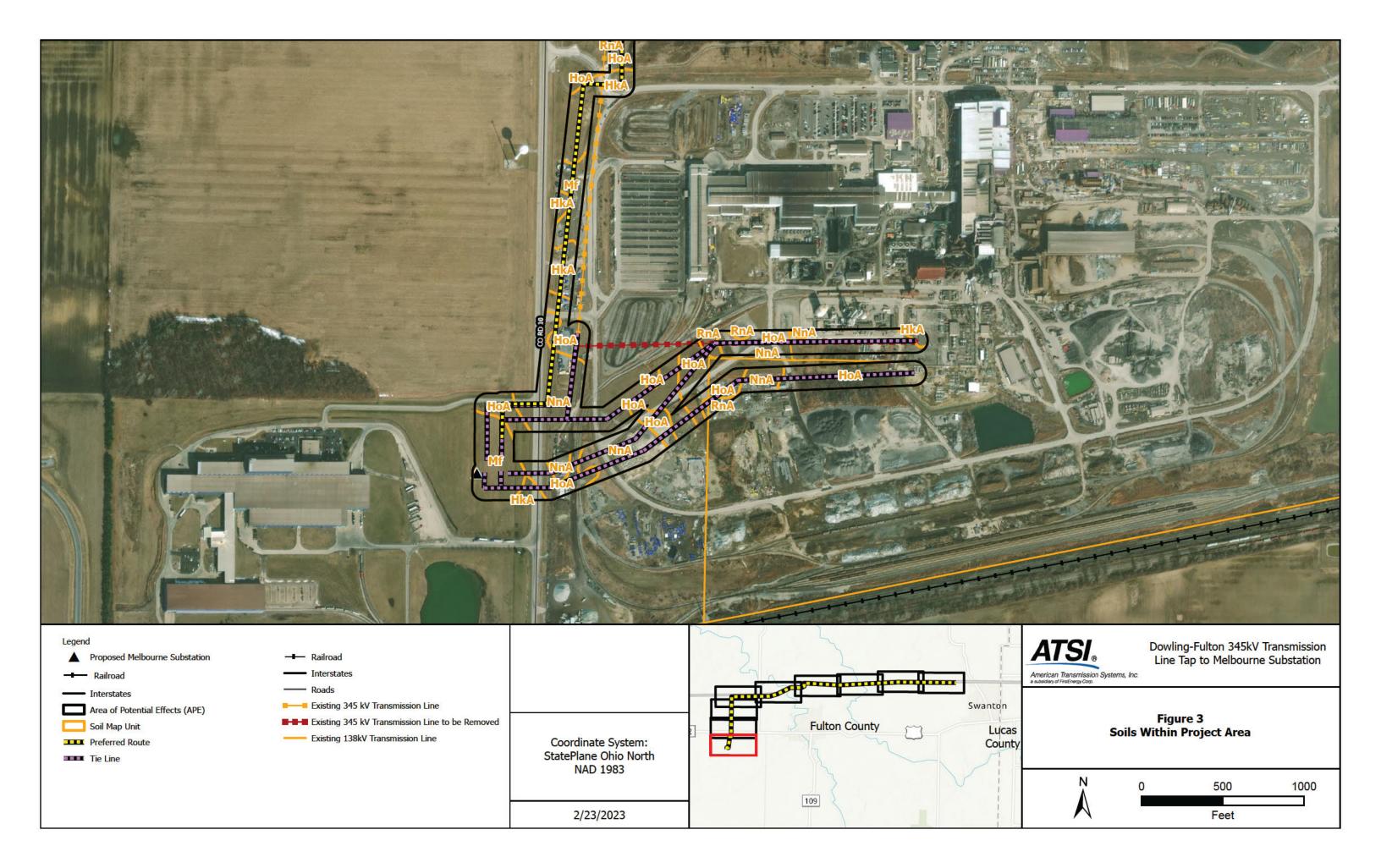
Table 2-1. Soils Within the Area of Potential Effects.

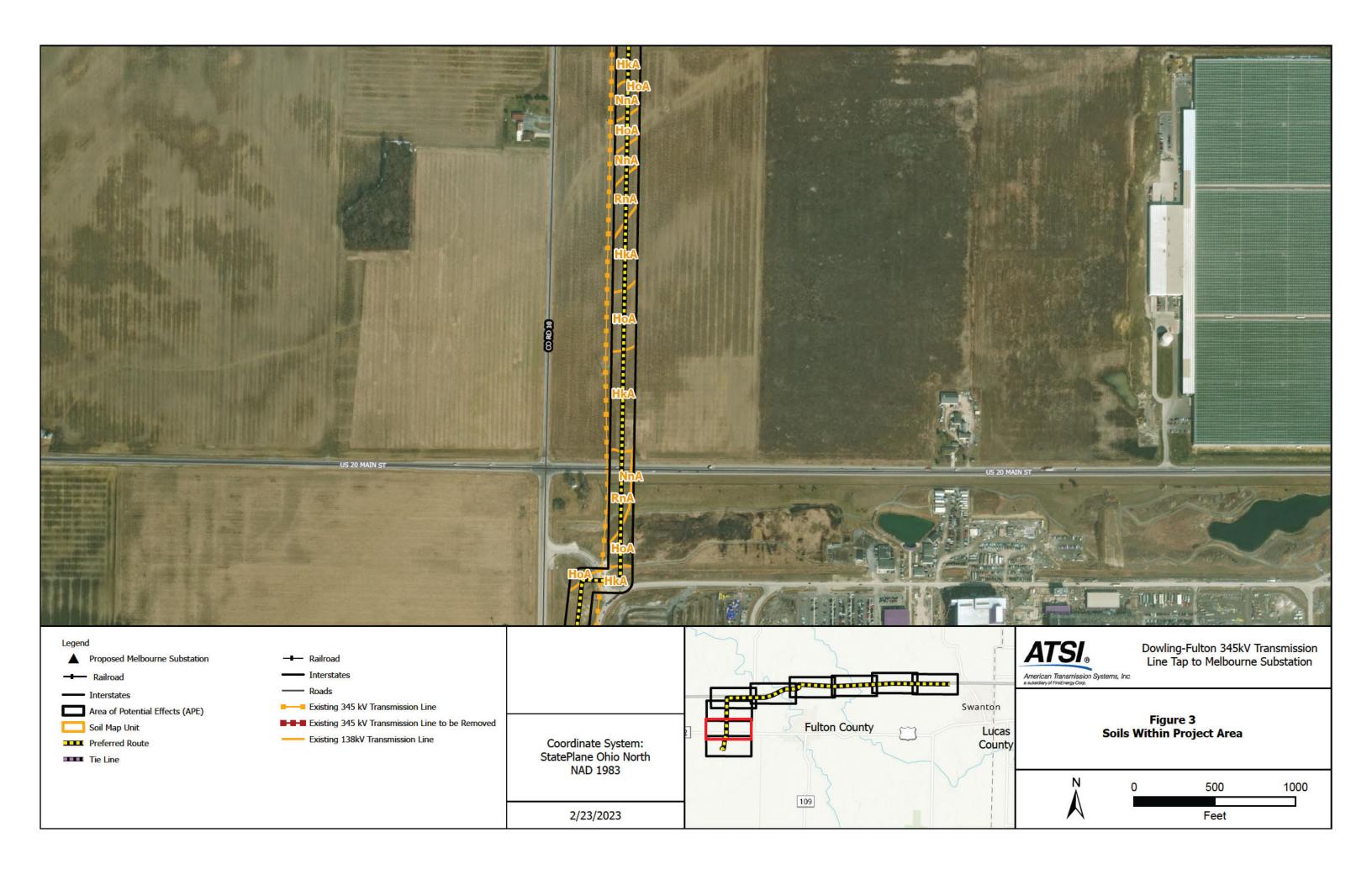
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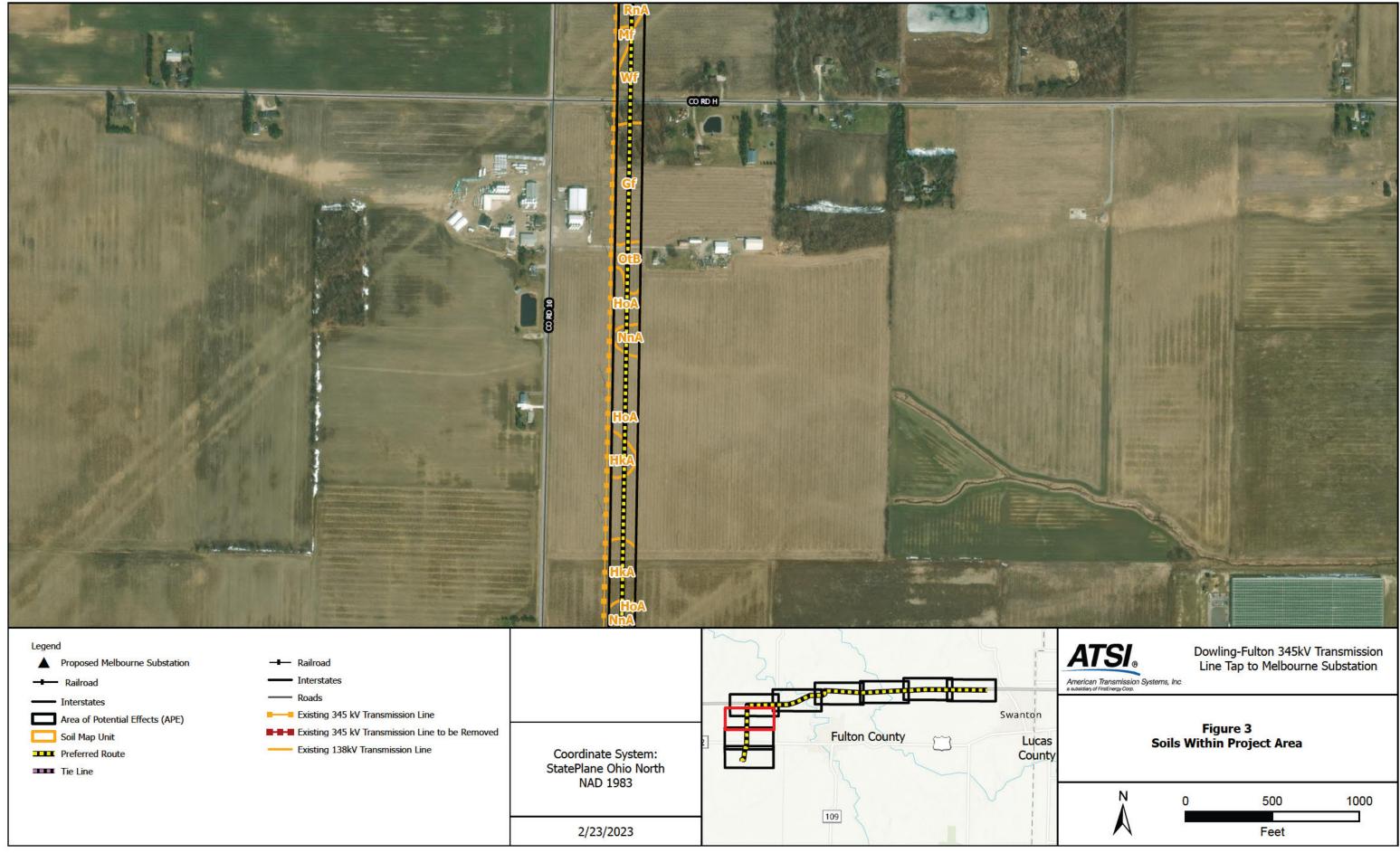
| Symbol | Soil Type | Slope (%) | Landform | Drainage |
|--------|----------------------------|--------------------------------|--|-------------------------|
| GoC3 | Glynwood clay loam | 6 to 12, severely eroded | End moraines, ground moraines | Moderately well drained |
| HkA | Haskins loam | 0 to 3 | Till Plains | Somewhat poorly drained |
| HoA | Hoytville clay loam | 0 to 1 | Till plains | Very poorly drained |
| Mf | Mermill loam | - | Drainageways on outwash plains | Very poorly drained |
| Мо | Millgrove loam | 9 0 | Drainageways on beach ridges | Very poorly drained |
| NnA | Nappanee loam | 0 to 2 | Lake plains | Somewhat poorly drained |
| NnB | Nappanee loam | 2 to 6 | Lake plains | Somewhat poorly drained |
| OtB | Ottokee fine sand | 0 to 6 | Knolls on beach ridges | Moderately well drained |
| RnA | Rimer fine sandy loam | 0 to 3 | Knolls on deltas, outwash plains | Somewhat poorly drained |
| SdB | Seward loamy fine sand | 2 to 6 | Beach ridges on lake plains, till plains | Moderately well drained |
| So | Sloan silty clay loam | - | Flats on floodplains | Very poorly drained |
| TdA | Tedrow loamy fine sand | 0 to 3 | Dunes on outwash plains, lake plains | Somewhat poorly drained |
| TuB | Tuscola fine sandy loam | 3 to 8 | Lake plains | Moderately well drained |
| Uo | Udorthents loamy | | - | |
| Wf | Wauseon fine sandy loam | - | Flats on outwash plains | Very poorly drained |

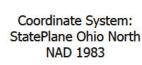
Source: (NRCS 2019)

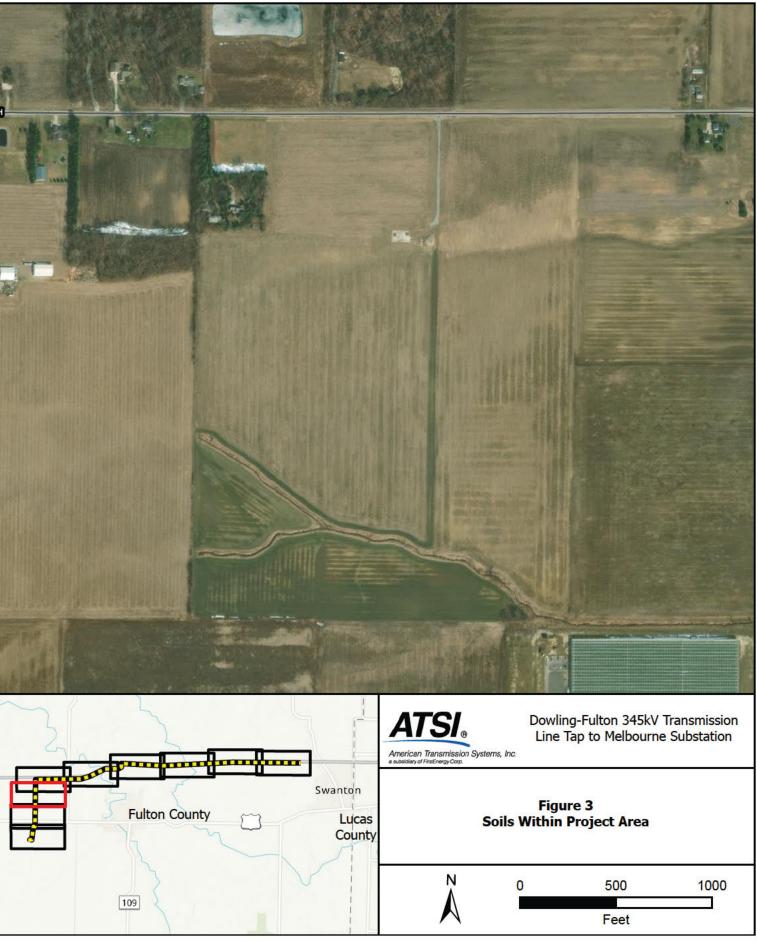
- = not applicable

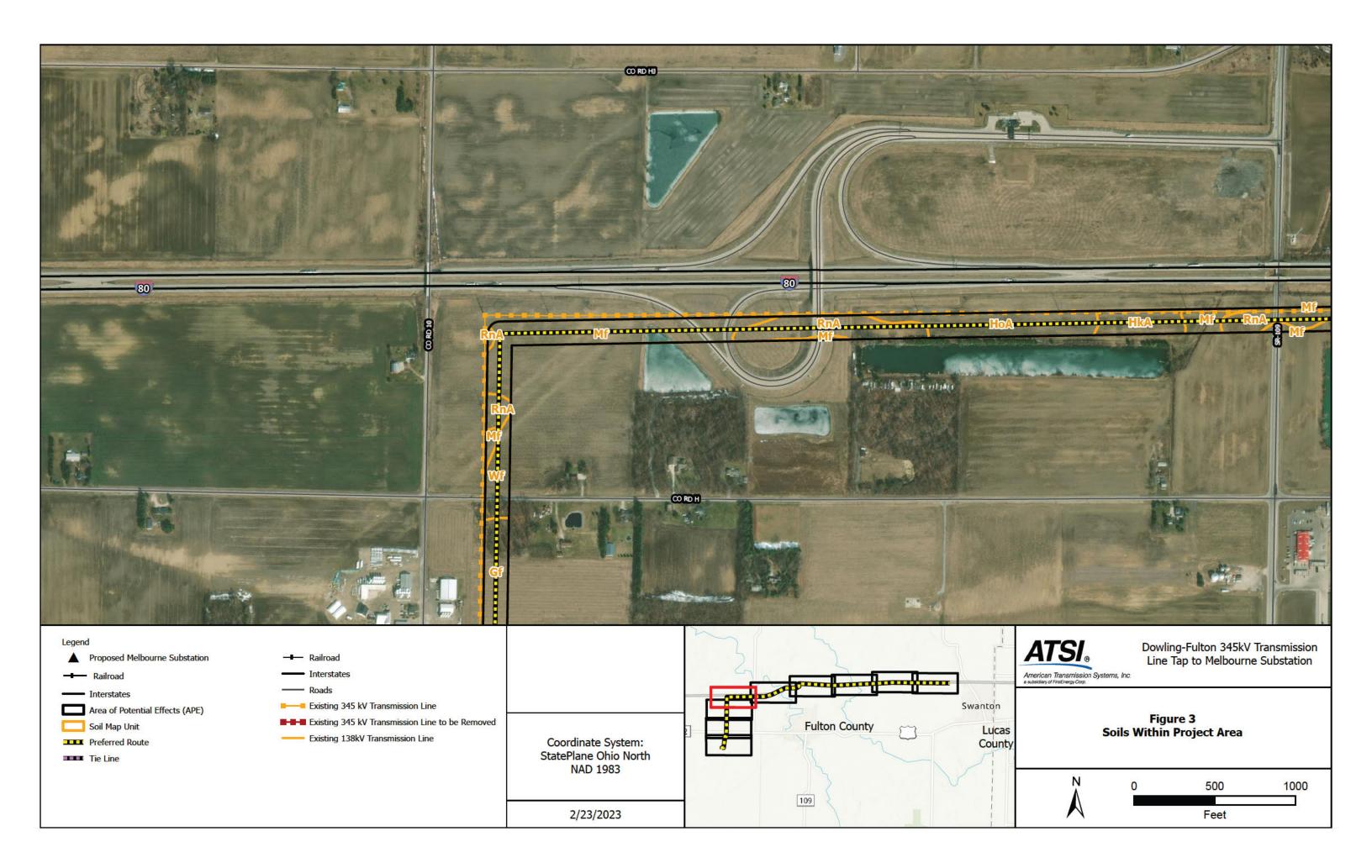


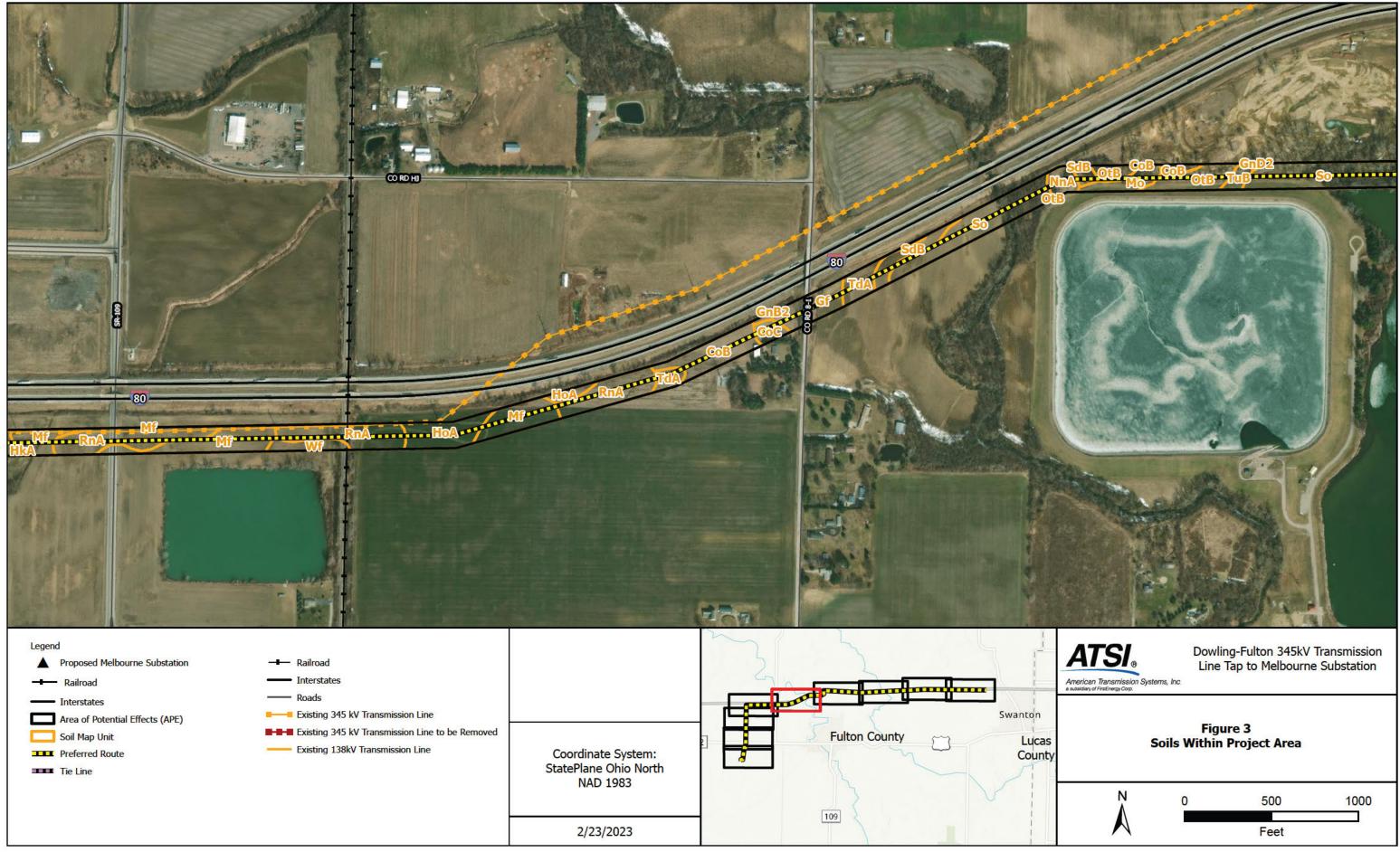


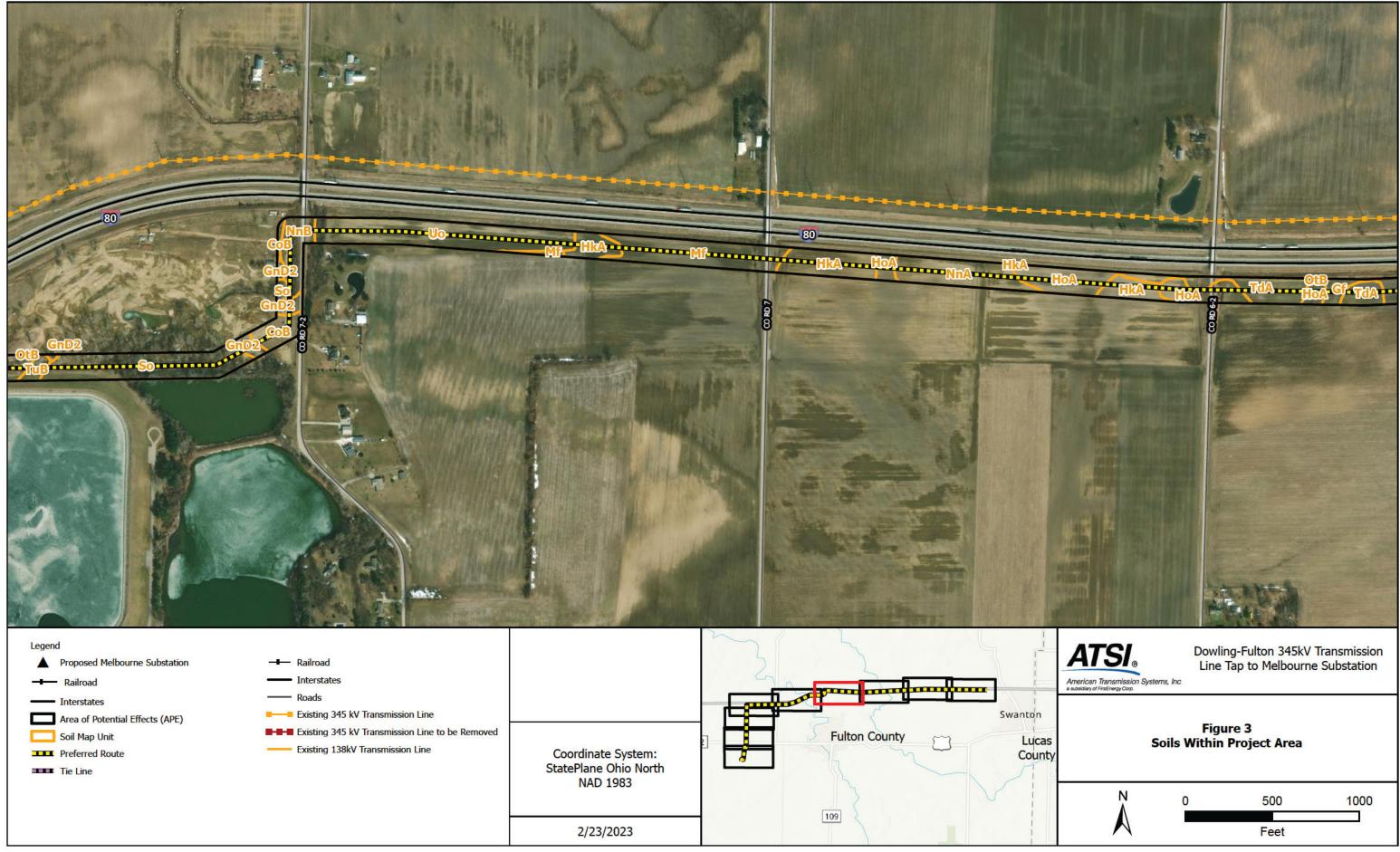


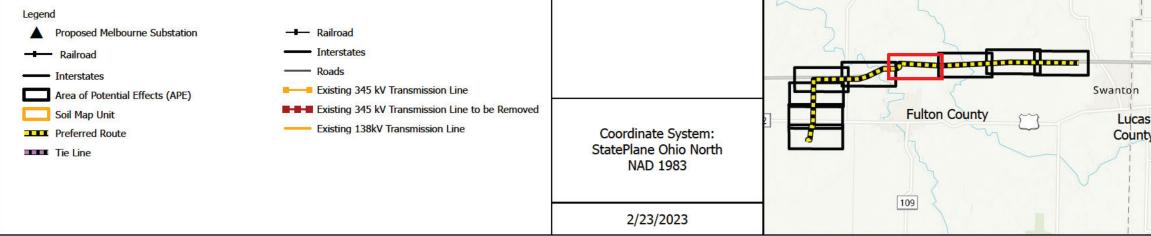


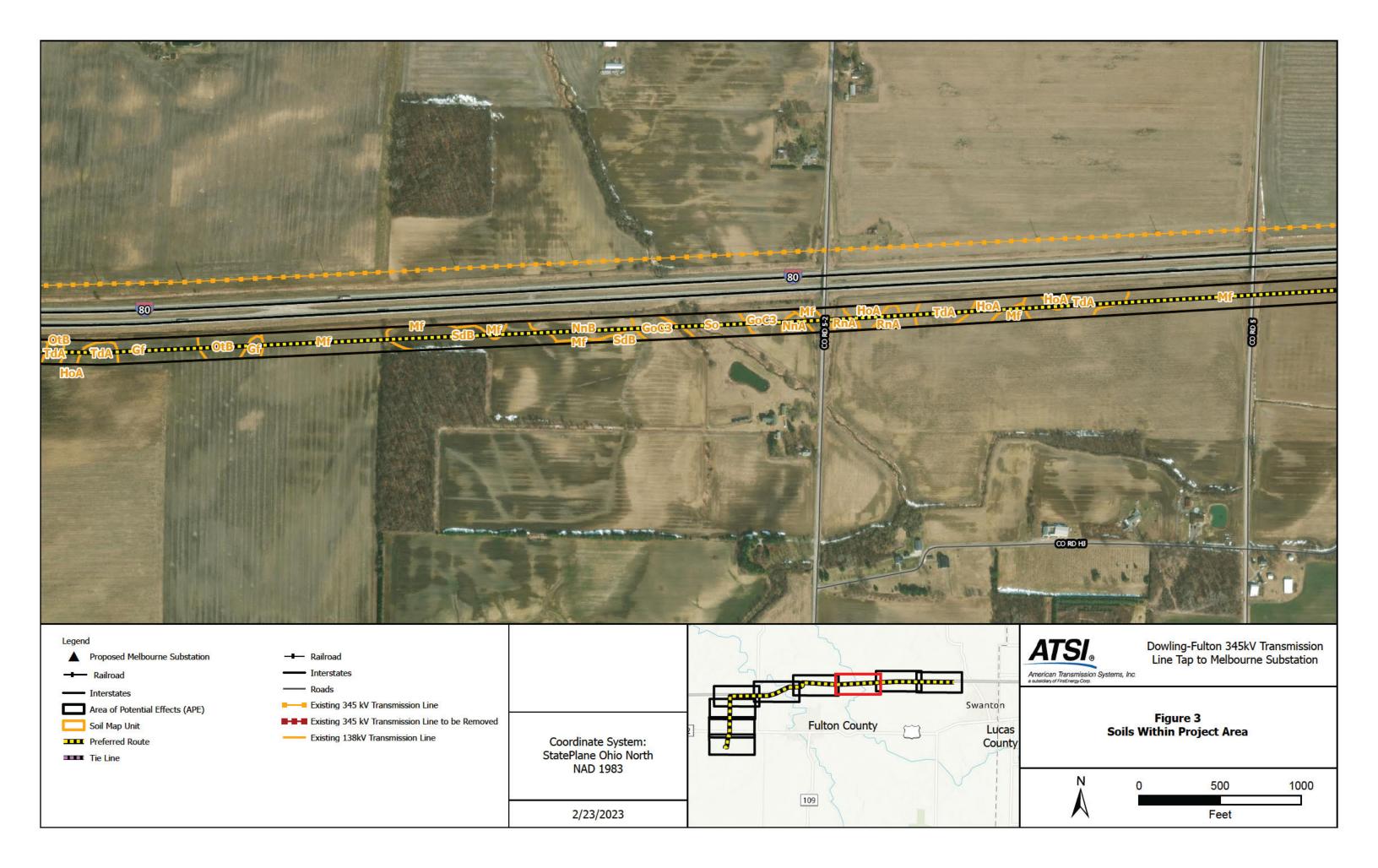


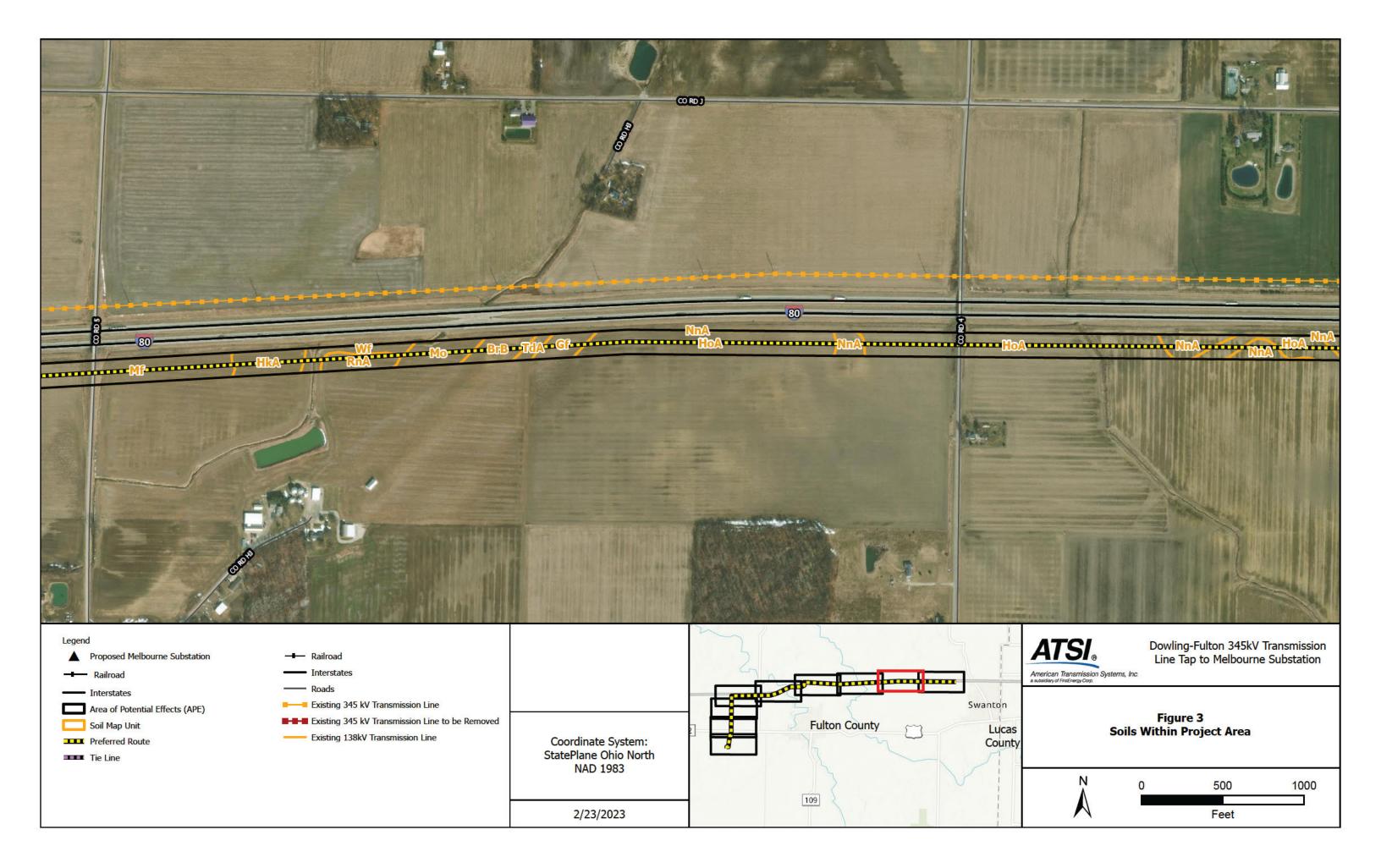


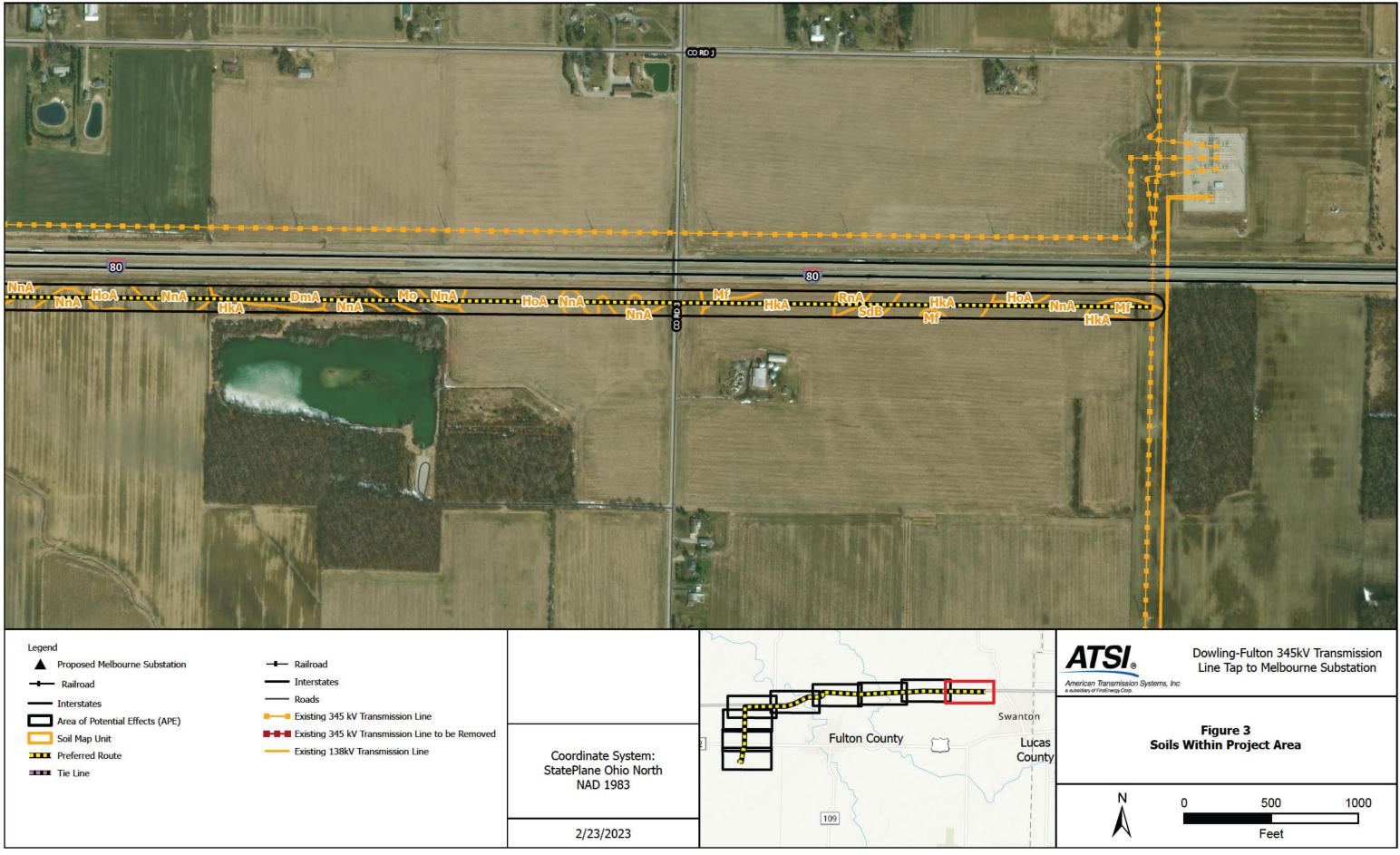


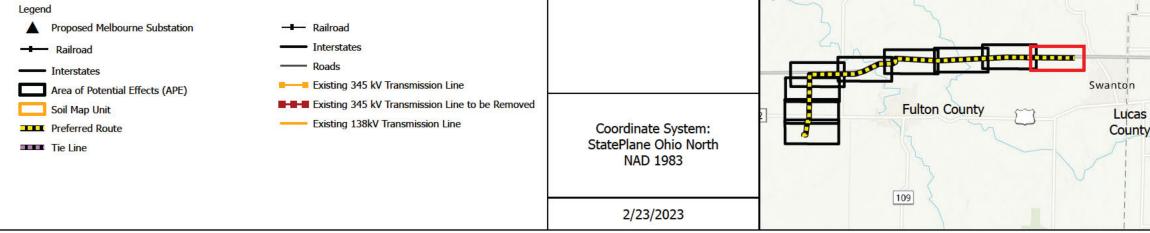












2.4 Hydrology

The Project is within the Tiffin Western Lake Erie Subregion of the Lake Erie Watershed. Numerous streams drain into the Maumee River south of the Project area. Specifically, the Project area is transected by Bad Creek and Swan Creek and their associated tributaries.

2.5 Flora and Fauna

During the Late Pleistocene, the Project area was covered in a coniferous forest consisting of spruce and fir trees, suited for a cool, moist climate (Braun 1950). This cool, moist climate also supported a wide array of mammals, including megafauna. Biomes along the glacier's southern margins were exploited by megafauna indigenous to these areas, specifically (Cleland 1966; Prufer and Baby 1963; Ritchie and Funk 1973):

- Barren ground caribou
- Giant beaver
- Mastodon and woolly mammoth
- Moose-elk
- Woodland musk ox

Over several hundred years, climatic moderation gradually altered the glacial-boreal ecosystem in the Midwest. This trend, which occurred sometime around 9,000 before present (BP), was typified by a warmer climate with predominantly drier seasons. The megafauna of the Late Pleistocene suffered massive extinction and were replaced by smaller animals that filled the opening faunal ecological niches. These smaller animals were similar to contemporary species (Cleland 1966; Prufer and Baby 1963; Ritchie and Funk 1973).

Oak and hickory began to dominate the landscape during this period. At the end of the warming trend, around 4,000 BP, the Project area was within the Mixed Mesophytic Forest region. The Mixed Mesophytic Forest is considered the most complex and the oldest association of the Deciduous Forest Formation. It was a community where the dominant trees included (Braun 1950):

- Basswood
- Beech
- Chestnut
- Hemlock
- Red oak
- Sugar maple
- Sweet buckeye
- Tuliptree
- White oak

Contemporary faunal resources within the Project area include both open agricultural land and forest wildlife. It is important to note that several large mammals that would have been important to prehistoric and historic subsistence patterns have been hunted into local extinction, including (Wiken et al. 2011):

- Bison (a possible Late Prehistoric species)
- Black bear
- Cougar
- Elk or wapiti
- Wolves

Knowledge of past climate is based primarily on palynological evidence that indicates broad floral patterns sensitive to specific climatic characteristics. Eastern United States (U.S.) climatic trends in Late Pleistocene times were shaped by the glaciers that occurred within the Project area, from points originating in northern Canada. This sequence developed in the Late Pleistocene, when a moist, cool climate succeeded a drier, cooler period.

Around 8,000 BP, a warming and drying trend occurred, which is often referred to as the Hypsithermal or Altithermal. This trend profoundly affected vegetation and faunal patterns until 4,000 BP. Modern floral and faunal patterns were in place sometime after 4,000 BP, by the end of the Hypsithermal period. Warm air masses from the Gulf of Mexico influenced the climactic patterns of the region.

The major climatic event during the late Holocene is the "Little Ice Age" or the Neo-Boreal episode, which dates from 348 to 50 BP. This shift to a cooler climate may have had a dramatic effect on local prehistoric populations, perhaps resulting in a shorter growing season. The impact on Late Prehistoric populations is poorly understood, but some researchers suggest changes in community size and plans, as well as social organization, resulted from this phenomenon (Braun 1950; Cleland 1966; Prufer and Baby 1963; Ritchie and Funk 1973).

The modern climate of the Project area is characterized as continental. This type of climate has winters that are cold, snowy, and cloudy, while summers are warm and humid (Wiken et al. 2011).

3. Cultural Overview

This section summarizes the known prehistoric and early historic cultures of eastern Ohio. While a lack of systematic investigation, as opposed to a lack of evidence, is responsible for the current dearth of archaeological information within the general Project area, existing regional data allow some extrapolation. This information provides a context for any sites identified during the Project, to aid in evaluating their National Register of Historic Places (NRHP) significance.

The prehistoric occupation of Ohio is generally divided into four broad periods:

- 1. Paleoindian: Encompasses the cultural remains of the earliest recorded occupations of the region, after about 13,000 BP, during early postglacial times
- 2. Archaic: Encompasses the cultural remains of the earliest recorded occupations of the region, after about 13,000 BP, during early postglacial times
- 3. Woodland: Identified by archaeologists as the period when localized seasonal settlement and subsistence patterns replaced the broad seasonal migration patterns of the Paleoindian period. Extensive exchange networks, the innovation of ceramic technology, the emergence of cultigens, and an increasing shift toward sedentism generally identify the transition to the Woodland time period.
- 4. Proto-Historic: Marked by continued population growth, large villages, and subsurface storage pits resulting from an increased reliance on maize agriculture.

This section describes each of these broad time periods, including smaller divisions within each.

3.1 Paleoindian Period (ca. 13,000–10,000 BP)

The Wisconsin stage produced the final glacial advance of the Pleistocene into the Project area. Around 17,000 years ago, it began to retreat, opening the area for Aboriginal occupation (Prufer and Baby 1963). In the northeastern U.S., the earliest generally accepted date for cultural material is found at the Meadowcroft Rockshelter in Pennsylvania, with a radiocarbon date (SI-2345) of 14,225 before the Common Era (BCE) to 11,300 BCE (Adovasio et al. 1991). Known as Pre-Clovis, sites with these types of earlier dates have not been documented in Ohio. Other possible pre-Clovis sites have been documented in regions surrounding Ohio, where the cultural assemblages are reported within depositional contexts occurring stratigraphically below Clovis layers. Possible pre-Clovis sites in the surrounding environs include the Cactus Hill site in Virginia, the Topper Site in South Carolina, and the Big Eddy site in Missouri (Maggard and Stackelbeck 2008).

The earliest (and currently most accepted) prehistoric occupation in Ohio is the Paleoindian period. The Paleoindian period is recognized as part of a widespread, homogeneous New World culture represented by the fluted Clovis projectile point (PPK). The Clovis PPK was used for hunting big game and for penetrating the hides of megafauna. Once the point penetrated the hide, the shaft was easily withdrawn, leaving the point embedded in the prey's body (Frison 1989; Tankersley 1996).

Most Paleoindian sites consist of lithic assemblages, including chipped stone knives and scrapers, awls, debitage, and two types of flaking hammers (Tankersley 1996). Analysis of these types of assemblages from sites, such as the Holcombe Beach site in Michigan (Fitting et al. 1966) and the Debert site in Nova Scotia (MacDonald 1968), indicate predominantly hunting, butchering, and hide-working activities. The relative scarcity of nonlithic artifacts in many Paleoindian assemblages can most likely be attributed to conditions unfavorable for their preservation.

Although the Paleoindian culture is often viewed as homogeneous, it appears that there was a variety of adaptations in different regions (Meltzer 1984, 1985, 1988; Meltzer and Smith 1986). Within the Great Lakes and eastern Midwest region, the rapidly changing environment supported open grazing lands and

boreal forests along the glacier's margins that would have contained the following species (Cleland 1966; Prufer and Baby 1963; Ritchie and Funk 1973):

- Barren ground caribou
- Giant beaver
- Mastodon
- Moose-elk
- Woodland musk ox
- Woolly mammoth

This type of environment, in addition to providing large numbers of animals, also provided Paleoindians a good opportunity to monitor and exploit them (Kelly and Todd 1988). For example, in western New York, the remains of mastodon, caribou, moose-elk, and California condor have been recovered at a site dating between 9240 and 9140 BCE (Laub et al. 1996). To hunt these animals, Paleoindians groups were small and highly mobile, with large territories (Tankersley 1989).

In the Midwest and northeastern U.S., Paleoindian sites are typically located on hilltops and bluffs overlooking open portions of major river valleys and larger tributary valleys, and frequently occur at the confluence of rivers on high Wisconsin-age terraces. Seeman and Prufer (1982) have noted that sites also often occur near sources of high-quality chert. Paleoindian fluted points are rarely found in the swampy bottomlands of northwestern Ohio or rugged highlands, such as the unglaciated portions of southeastern Ohio.

Toward the end of the Paleoindian period, the warming climate altered the flora and fauna. For example, megafauna were now extinct, so later Paleoindian groups had to focus on smaller game, such as white-tailed deer, bear, and turkey (Tankersley 1996). The emergence of more specialized ecological adaptations marks the end of the Paleoindian period and the beginning of the Archaic.

3.2 The Archaic Period (10,000–2,500 BP)

The Archaic period spans approximately 7,500 years and refers to the archaeological remains of post-Pleistocene hunter gatherers that did not make or use pottery (Stoltman 1978). The change in climatic conditions and available food resources led to dramatic changes in subsistence and settlement strategies, quite different from the Paleoindians (Stafford 1997). The Archaic period is divided into three subperiods (Early, Middle, and Late) based on the following criteria:

- Temporal
- Technological
- Social
- Subsistence
- Settlement

During the **Early Archaic period (circa [ca.] 10,000 to 8,000 BP),** the changing climatic conditions led to expanding deciduous forests that produced a more favorable habitat for game species, particularly the white-tailed deer (Cleland 1966). Concurrently, there was a shift from the Paleoindian lanceolate fluted points to smaller, more diversified types, such as bifurcates of the MacCorkle, LeCroy, and Kanawha points or knives. Woodworking and milling tools were added to the assemblage, including axes, gouges, drills, and grinding stones (Chapman 1975; Jennings 1978).

Early Archaic groups were small and mobile, gradually becoming more geographically restricted as seasonally oriented hunting and gathering activities were focused on smaller, more well-exploited territories. A narrow yet nutritious spectrum of plant foods seems to have been used, with deer hunting being the major subsistence activity (Chapman 1975; Cleland 1966). Occupational preferences appear to have centered on the uplands; however, some use of resources near major waterways existed as well. Early Archaic sites tend to be small and scattered, limited to surface discoveries, and usually located in uplands near secondary stream valleys (Benchley 1975), while larger sites are most likely to occur near waterways.

During the **Middle Archaic period (ca. 8,000 to 5,000 BP)**, the continuing improvement in the climate led to a greater diversification of subsistence-related activities and a more pronounced emphasis on the exploitation of seasonal resources. The Middle Archaic economy became more diffuse, with an emphasis still on deer hunting, but with use of a wider variety of plant foods (Cleland 1966). Specialization in certain activities generated a more complex social structure within the band network as evidenced by what Griffin (1978) calls the early indication of "status differentiation among the band members."

The material remnants of Middle Archaic culture expanded to reflect the increasingly sophisticated technology adapted to the intensive exploitation of forest and riverine biomes. Earlier bifurcate point types appear to have been replaced by a widespread tradition of large side-notched points, including types such as the Raddatz or Godar (Justice 1987). There was an increase of ground and polished stone tools, full grooved axes, pendants, and winged and cylindrical bannerstones used as atlatl weights. Bone tools begin to appear in the artifact assemblage as well (Chapman 1975; Griffin 1978).

Middle Archaic sites are usually found along major waterways where artifacts reflect a reliance on aquatic resources, and an unusually high number of bone tools are often present. Floral and faunal remains indicate that nuts, white-tailed deer, turkey, and passenger pigeon predominated in the diet (Cantley and Novick 1980).

In the Late Archaic period (ca. 5,000 to 2,500 BP), the expansion of deciduous forest reached its most northern limit around 2000 BCE, and the climate was warmer than present day (Cleland 1966). A wider array of specialized objects were used during the Late Archaic, such as (Chapman 1975):

- Bone tools, such as awls and needles
- Net sinkers
- Polished plummets
- Steatite and sandstone bowls
- Stone tubes and beads
- Whistles and rattles

Although pottery is generally understood to be a marker of the following Woodland period, ceramics have also been identified throughout Ohio dating between 4,500 to 2,650 BP (Purtill 2009). Ceremonialism became increasingly important as evidenced through more elaborate, formalized mortuary practices and the presence of exotic burial goods that were procured through emerging trade networks (Chapman and Otto 1976).

Late Archaic settlement and subsistence patterns appear to have consisted of mobile, hunter-gatherers with a band-level social structure (Jobe 1983). The size and composition of these mobile groups would vary in accordance with the distribution and availability of resources across the landscape and through the seasons (Boisvert 1986). During the spring and summer, the exploitation of shellfish, fish, turtles, migratory birds, and other aquatic resources produced concentrations of sites that can be characterized as small camps on slight knolls. Winter campsites were situated above the valleys for the effective exploitation of upland game, such as deer, other medium-sized mammals, and birds.

3.3 The Woodland Period (2,500–1,000 BP)

The transition from the Archaic to the Woodland period is typically marked by the development of ceramic technology and the use of ceramic vessels as part of everyday life. Other characteristics include earthwork construction, elaborate mortuary ceremony, and food production (Griffin 1952, 1967; Applegate 2005).

The **Early Woodland period (ca. 2,500 to 2,200 BP)** appears to represent a continuation of traditions from the Late Archaic (Brown 1986). However, there appears to be a greater tendency toward territorial permanence, as well as an increasing elaboration of ceremonial exchange and mortuary rituals. Burial practices, which formed the core around which Early Woodland mortuary complexes evolved, were practiced throughout the Archaic and persisted into the Early Woodland (Webb 1947; Griffin 1968).

Early Woodland inhabitants of Ohio were hunter gatherers who relied primarily on procuring deer and fish, and nut harvesting. Hickory was the primary nut resource used by Early Woodland inhabitants of the area, with walnut, beechnut, and hazelnut used as well (Stothers and Abel 1993). Evidence suggests horticulture supplemented hunting and gathering by the domestication of various native and non-native cultigens, like (Struever and Vickery 1973, Ford 1985, Wymer 1997):

- Amaranth
- Chenopodium
- Knotweed
- Maygrass
- Squash
- Sumpweed
- Sunflower

In northern Ohio, the Leimbach phase is the predominant Early Woodland manifestation. Within the Leimbach Phase there is an identifiable increase in ceramic variation and an overall increase in everyday ceramic use across northern Ohio (Stothers and Abel 1993). Settlement patterns center around semipermanent base camps with radiating secondary resource procurement camps. Base camp settlements were typically located along major river valleys or along the coastline of Lake Erie. Ancillary procurement sites were occupied temporarily and not limited to the major drainages, though they were in the surrounding upland areas. These encampments likely focused on hunting and wild plant collection activities in the autumn and spring months (Bergman et al. 1998).

Mortuary practices are less elaborate than those associated with Adena sites further south. Burials are rarely associated with mounds; rather, there were mass burial pits or burials in earthen enclosures on bluffs above creeks (Peskin 2011; Redman and Scanlan 2008).

Early Woodland artifact assemblage is characterized by Leimbach, Kramer, and Adena points and Leimbach Series Ceramics and are often described as thick grit, tempered with varying surface treatments (Stothers and Abel 1993). Surface treatment during vessel manufacture and vessel form seem to rely on geographic location (Clay 1980; Mayer-Oakes 1955; Shane 1975). Ceramic distribution is heavily focused on base camps during the early transitional period of the Leimbach Phase and may reflect the degree of sedentism in certain areas.

The **Middle Woodland period (ca. 2,200 to 1,600 BP)** is often defined with reference to the Hopewell. Hopewell generally represents a period of complex sociocultural integration across regional boundaries via networks of trade from western New York to western Missouri and from the Gulf of Mexico to Lake Huron. The Ohio Hopewell is often recognized by the following artifacts (Applegate 2005):

- Bladelets
- Conjoined geometric enclosures
- Copena bifaces
- Hilltop enclosures
- Horizontal cemeteries
- Mica and copper cutouts
- Obsidian artifacts
- Platform pipes
- Zoned and rocker stamped pottery

The main difference between the Early and Middle Woodland periods was a change in mortuary practice. No longer were conical mounds being used as cemeteries; instead, the dead were processed and laid to rest on or near the floors of mortuary ceremonial structures (Burks 2005). Middle Woodland mounds were constructed over destroyed or dismantled buildings, and additional burials were rarely interred within these mounds after initial construction was completed (Greber 1983; Burks 2005). There also appears to be massive earthen enclosure construction at this time.

Trade networks within the Middle Woodland were more extensive, and materials used in the manufacture of ceremonial objects were acquired from various regions of North America (Prufer and Baby 1964):

- Copper and silver from the Upper Great Lakes
- Quartz crystals and mica from the Lower Allegheny mountain region
- Obsidian and grizzly bear teeth from the west
- Shark and alligator teeth, marine shell, and pearls from the Gulf Coast region

These materials were obtained most likely through a variety of ways, including personal travel, gifts (formal and informal), bartering, and personal and group activities (Greber 2005).

Diagnostic PPK types attributed to the Hopewell are Snyders points, Hopewell leaf-shaped blades, and small side-notched points without basal grinding. Prismatic bladelets and associated polyhedral cores are also considered diagnostic lithic materials. Most of these lithics were manufactured from high-quality chert, another important trade commodity (Chapman and Otto 1976; Mayer-Oakes 1955).

Middle Woodland subsistence was based on hunting and gathering, and small-scale agriculture. The use of cultivation most likely varied by region and by time. Prevalent cultigens within Hopewell sites include components of the Eastern Agricultural Complex - maygrass, erect knotweed, and chenopodium (Wymer 1997). Other significant cultigens include sumpweed, sunflower, and yellow-flowered gourd squash. White-tailed deer were often hunted, along with black bear, elk or wapiti, and beaver (Griffin 1968).

Settlement patterns appear to fit a model proposed by Dancey and Pacheco (1997) known as the Dispersed Sedentary Community Model. The model is based on the concept of isolated households dispersed across the landscape, usually organized around regional drainages. These small settlements were widely dispersed to allow for a subsistence strategy, which combined horticulture and hunting and gathering. Other components of the settlement pattern include: "outlying camps, public works, and symbolic places" (Dancey and Pacheco 1997). The hamlets belong to a "ritual precinct," a ceremonial center of burial mounds and earthworks, which provided a focus for ceremonial activities and, possibly, trade and interaction with groups of other "ritual precincts."

The beginning of the Late Woodland (ca. 1,400 to 1,000 BP) coincides with the collapse of the Hopewell culture. Cleland (1966) and Farnsworth (1973) theorized the breakdown of territories and intergroup contacts was due to the concentration upon one subsistence activity, a focal agricultural economy. Dancey (1996) explains the breakdown as the result of a redirection of energy toward intensification of labor and community aggregation. Thus, the Late Woodland is often characterized by what it lacks when compared to the Middle Woodland period, including a reduction in earthwork construction and interregional trade (Applegate 2005). The Late Woodland is also marked by the presence of cordmarked pottery, nucleated circular villages, and side-notched points.

Within northern Ohio, the Late Woodland can be associated with the early phases of the Western Basin Tradition (WBT) (Stothers and Abel 2002). The WBT generally consists of two Late Woodland recognizable phases: Gibraltar (Common Era [CE] 500-750) and River au Vase (CE 750-1000). Groups of the WBT were generally confined to areas along the shores of Lake Erie and into southern Michigan and Ontario, Canada. The material culture of the Gibraltar phase consists primarily of small, globular, grit-tempered vessels with exterior cordmarking. Projectile point typology focuses on Jacks Reef and Levanna fashioned from locally available Pipe Creek and Upper Mercer cherts (Stothers and Abel 2002).

Mortuary practices of the phase are typically associated with mound burials and exotic grave goods, such as cache blades, finished blades of exotic chert types, and copper and slate ornaments. These mortuary practices appear to be cultural holdovers from the Middle Woodland period. Settlement patterns revolve around warm weather base camps around resource rich habitats. Warm weather settlements appear to have been river or estuary oriented with associated burial site complexes. Cold weather settlement favored dispersal during the late autumn and winter seasons. Gibraltar phase groups likely coalesced during the spring during the annual anadromous fish runs (Emerson et al. 2000).

The River au Vase material culture is characterized by somewhat larger globular, grit-tempered vessels with dentate and linear stamp motifs (Stothers and Abel 2002). River au Vase ceramics show a greater degree of interior decoration and a variety in vessel rim design. Projectile points of the River au Vase are generally Madison triangles associated with the flakes and bones tools used. Mortuary practices of the River au Phase begin to show the shift from mound construction of earlier periods toward burial site complexes. Settlement patterns show a continued preference for coastal habitation (Stothers and Bechtel 1993). Not surprisingly, faunal remains from these sites typically show a preference for aquatic mammal and fish species (Schneider 2000).

Toward the end of the Late Woodland period, there is an increase in maize agriculture, complex village societies, platform mound construction, decorated and shell tempered pottery, and social status among individuals (Appplegate 2005; Burks 2005). These changes mark the end of the Late Woodland and the beginning of the Late Prehistoric period.

3.4 Late Prehistoric (1,000–400 BP)

Nearing the end of the Late Woodland period, prehistoric groups in northern Ohio were subjected to influences from Fort Ancient groups further south. Sites during the period are considered part of the Whittlesey culture, characterized by a more sedentary lifestyle supported by maize, bean, and squash agriculture (Case 1998). The milder climate of the Lake Erie region made farming more practical and likely influenced the Woodland groups' transition to an agrarian focused economy. The farming economy of the Whittlesey culture was supplemented by hunting, fishing, and wild plant collection.

Early Whittlesey villages were often small and located close to the Lake Erie coast and in upland areas. Villages were occupied during summer seasons when resources were abundant; and in winter and spring, the larger village populations would split and occupy smaller hunting camps when resources were scarcer (Brose 1994). By 1450, the smaller Whittlesey settlements had coalesced into larger villages that were often located on high rises overlooking major drainages (Case 1998). These larger villages usually contained earthen embankments and stockades, generally considered evidence of possible conflict within the group or from outside sources.

Tuttle Hill notched pottery, identified at the Tuttle Hill site, is common on Whittlesey sites. The shell tempering in this pottery suggests Fort Ancient influences (Peskin 2011). Often, Whittlesey pottery was cordmarked or decorated with incised lines, notching, or stamped patterns, or some combination of these. Mortuary practices at early Whittlesey sites contain little evidence of social hierarchy. However, later Whittlesey sites start to exhibit signs of grave goods and ornamental goods, suggesting increased social hierarchy. Individuals are often interred in large cemeteries on the outskirts of the village (Case 1998).

3.5 Historic Period

Prior to the last half of the 17th century, several Native American tribes were occupying the region now known as present day Ohio. These tribes included the Mosopela of southwestern Ohio; the Oniassenthe of southeastern Ohio; and possibly the Erie, whose cultural center was known to geographically center in western New York and northern Pennsylvania regions. However, their subsistence range may have extended into northeastern Ohio (Wheeler-Voegelin 1974).

For northwestern Ohio, the Late Prehistoric cultures present during the 1400s and 1500s disappear from both the archaeological record and the early French accounts of the region (Brose 2000). Two other groups that were displaced westward by the influx of Northern Europeans, the Shawnee and Delaware, are known to have settled in Ohio. Originally, the Shawnee territorial lands were located in Southern Ohio. Conquered by the Iroquois in 1672, subsequent resettlement "brought them into association with a variety of different tribes," such as the Delaware and Creek Tribes (Callender 1978). Shawnee villages were typically semipermanent settlements composed of bark-covered lodges, sweathouses, and communal structures used for ritual and secular celebrations. During the summer months, crops were tended in fields near the towns; and, in the fall, the inhabitants dispersed to winter camps in sheltered valleys to hunt and trap (Clark 1974). French explorers and fur traders were the first Europeans to visit present day Ohio. René-Robert Cavelier, Sieur de La Salle explored the area and is credited as the first European to see the Ohio River around 1669 (OHC 2023a). From the late 17th to mid-18th century, the French and British battled for control of the area and the profitable fur trade. The battle over the region temporally ended in 1763 with the conclusion of the French and Indian War and the French ceding control of all North American territories to the British (OHC 2023b).

In 1783, the British signed the Treaty of Paris, which recognized U.S. independence and gave the U.S. all the land east of the Mississippi River, except for British possessions in Canada and Spanish territory in Florida. Because Native American groups did not participate in the signing of this treaty, conflicts arose between U.S. settlers and Native American groups over land. These conflicts became known as the Ohio Indian Wars (OHC 2023b).

The Governor of the Northwest Territory, Arthur St. Clair, tried to negotiate a peaceful resolution, but as part of this agreement, he wanted Native American groups to honor the Treaty of Fort McIntosh signed in 1785. This treaty meant that Native Americans had to relinquish lands in southern and eastern Ohio, limiting them to the western corner of modern-day Ohio with a border that roughly followed the Cuyahoga River on the east (OHC 2023b). Native Americans agreed to these terms by signing the Treaty of Fort Harmar on January 9, 1789.

However, many Native American groups refused to honor this treaty, and violence between Native Americans and European settlers continued. On August 20, 1794, an American army under the command of Anthony Wayne defeated a Native American force led by Blue Jacket of the Shawnee at the Battle of Fallen Timbers. In January 1795, representatives from the Wyandot, Delaware, Shawnee, Miami, Eel River, Wea, Chippewa, Potawatomi, Kickapoo, Piankashaw, and Kaskaskiamet tribes met with Wayne at Fort Greenville. On August 3, 1795, after 8 months of negotiations between the U.S. Government and the tribes, the Treaty of Greenville was formally signed. The Native Americans agreed to cede claims to land south and east of a boundary that began roughly at the mouth of the Cuyahoga River; southward to Fort Laurens; westward to Fort Loramie and Fort Recovery; and southward to the Ohio River (Hubbard 2020).

Despite the numerous treaties between Native American tribes and the U.S. Government, Native American resistance to European American settlement continued through the end of the War of 1812, until British support was effectively removed from the region. With most of the Native American resistance broken, more treaties were signed, which facilitated further European American settlement into Northwest of the River Ohio Northwest Territory. The Treaty of Greenville in 1814 formally marked the beginning of permanent Euro-American settlement of most of the lands north and west of the Ohio River, although several settlements, like Marietta and Losantiville (Cincinnati), were founded as early as 1788. Likewise, the Land Ordinance of 1785 and the 1787 Northwest Ordinance had already delineated how the western lands would be surveyed and governed, respectively (Carstensen 1987).

In 1817, the U.S. Government signed the Fort Meigs, or Maumee Rapids, Treaty, with several Native American tribes, including the Seneca Indians. This treaty bound the Seneca tribe to cede all claims to land north of the Greenville Treaty line; and in return, they received a 40,000-acre reservation at Lower Sandusky (Fremont). Beginning in 1830, a policy of "Indian removal" was developed by the administration of Andrew Jackson; and by 1832, all Native American lands east of the Missouri River were ceded to the U.S. government, and all tribes were removed to west of the Mississippi (Hurt 1996).

Aboriginal trails were extensively used by the first settlers and not only directed their movements but also outlined many later transportation systems (Wallace 1971). The trails connected points, usually villages or towns, directly; and most traversed dry, level land. They provided the first access to suitably habitable areas and later guided engineers in constructing stable, permanent road systems. Indian-European occupational continuity can be easily demonstrated; a modern highway map of most areas clearly shows that several major routes now follow old Indian trails, and that many of today's cities are situated where Aboriginal villages once were (Hulbert 1930). The most significant of these trails is Zane's Trace in Belmont County, Ohio, the route of present day Interstate 70.

Phase I Archaeological Survey Report

While the late 1700s were dominated by the establishment of self-sufficient farms and related pursuits, the groundwork was also being laid for better transportation and the beginnings of commerce and industry in the area. For the first 50 years, most farms were located on bottomlands and terraces along the Ohio River. As farms increased the number of cultivated acres, deforestation produced surplus lumber and foodstuffs. However, only in areas with adequate streams for transportation did sawmills for commercial production appear.

Boat building, especially in the Ohio Valley, and milling developed in conjunction with agricultural production. Keelboats and flatboats were used to ship agricultural produce downriver to New Orleans. Pittsburgh, the focus of this river commerce, grew to a town of 1,565 inhabitants by 1800. Local roads were improved and extended to make wagon traffic more practical, although wagon transportation was not common until after 1790 (Buck and Buck 1939).

Although original settlers and transients alike successfully used the Ohio River, its tributaries, and various Indian trails as a means of gaining access to the new territory, road building got an early start in Ohio. Zane's Trace, a frontier road, connected the cities of Wheeling, West Virginia and Maysville, Kentucky, and ran partially across Ohio, through Zanesville on the Muskingum, Lancaster on the Hocking, and Chillicothe on the Scioto (Schneider 1947).

In addition to roads, canals were also constructed to transport people, livestock, and goods. Most canals were built during the 30-year span between 1825 and 1855, when two major systems totaling more than 800 miles of canal were excavated: the Miami and Erie (Huntington and McClelland 1905). Although canals encouraged a growing agricultural and commercial market, ultimately railway transportation became faster and more efficient means of transporting goods (Huntington and McClelland 1905). The boom in railroad development lasted throughout the next 30 years, from 1850 to 1880, and caused an associated surge in economic growth.

4. Records Review

Jacobs conducted background research (OHPO 2022) to locate previously recorded cultural resources and surveys within or near the APE. A 1.6-km (1-mile) buffer (study area) was used to identify previously recorded cultural resources and to provide information on the probability of identifying cultural resources within the APE. The OHPO online mapping database included a review of the following sources:

- OAI
- OHI
- Determination of Eligibility (DOE) files
- NRHP
- OGS cemetery files
- Historic bridges
- National Historic Landmarks (NHLs)
- Previous cultural resources surveys

The literature review identified the following sites and resources within the study area:

- 51 OAI-listed sites
- 16 OHI-listed resources
- 5 OGS-listed resources

One previously identified site, 33FU0235, and three OHI resources are directly adjacent to the APE. No NRHP- or DOE-listed resources are located within the study area. In addition, 19 previous cultural resources surveys have been documented within the study area. Seven of these surveys covered portions of the current APE.

4.1 Previous Cultural Resource Investigations

Review of the OHPO online mapping database indicates there have been 19 previous cultural resource surveys conducted within 1.6 km (1 mile) of the Project (Table 4-1). Eight of the surveys overlap portions of the current APE, totaling 23.68 acres. The list includes 18 Phase I archaeological surveys and one Phase II investigation.

| | able 4-1 | 1. Previous | Surveys | Within | Study Ar | ea |
|--|----------|-------------|---------|--------|----------|----|
|--|----------|-------------|---------|--------|----------|----|

| OHPO ID | Report Title | Author | Year Published |
|--------------|---|----------------------|-------------------|
| - | A Phase II Archaeological Evaluation of Ful-314-11, York Township, Fulton County, Ohio | Dunham, Sean B. | 1996 |
| 2012FUL20991 | Phase I Cultural Resources Survey (for the) Fulton Substation and Delta-Swanton 138 kV Transmission Line Loop to Fulton Substation Project, Fulton and Swan Creek Townships, Fulton County, Ohio | Breetzke, David | 2011 |
| 21 | Phase I Cultural Resources Reconnaissance Survey for the Proposed Fulton County Processing Facility, York Township Section 11, Fulton County, Ohio | Schneider, Andrew M. | 2001 |
| 2021FUL51761 | Phase I Cultural Resource Management Survey of the 15.3ha (38a.) NatureFresh Farms Facility Expansion, in York Township, Fulton County, Ohio | Keener, Craig S. | 2021 |
| 2020FUL48069 | A Phase I Cultural Resources Survey of a 36.3-Acre Parcel for a Proposed Industrial Development in Section 11, York Township (Township 7 North Range 7 East), Fulton County, Ohio | Chidester, Robert C. | 2020 |

| OHPO ID | OHPO ID Report Title | | Year Published | |
|--------------|--|-----------------------|-------------------|--|
| 2015MLT30797 | 2015MLT30797 Phase I Archaeological Investigationsfor the Utopia Pipeline Project in Harrison Carroll Tuscarawas Stark Wayne Ashland Richland Huron Seneca Sandusky Wood Lucas Henry & Fulton Counties Ohio | | 2016 | |
| 22 | Cultural Resource Inventory Survey: Worthington Steel Company Site Improvements, York Township, Fulton County, Ohio | Hambacher, Michael J. | 1995 | |
| - | North Star Steel 345 Kv [sic] Transmission Line Project Archeological [sic] Investigation, Fulton County, Ohio | Friedman, Janet | 1996 | |
| 12 | Phase I Archaeology Survey for the Proposed Delta Steel Products Development in Section 11, York Township, Fulton County, Ohio | Cameron, Erica L. | 2005 | |
| 2014MLT28047 | | | 2014 | |
| 2000FUL25037 | 200FUL25037 Phase I Archaeological Survey of a Proposed 7.08ha (17.5a) Fulton County Processing, Ltd. Expansion in York Township, Fulton County, Ohio | | 2013 | |
| 2015FUL31472 | Phase I Cultural Resource Management Survey of a Proposed .01 ha (.03a.) Septic System Improvement in Swan Creek Township, Fulton County, Ohio | Keener, Craig S. | 2015 | |
| 2017FUL37846 | Phase I Cultural Resource Management Survey of the Proposed 20.5ha (50.72a.) MetalX Scrap Processing Facility in York Township, Fulton County, Ohio | Keener, Craig S. | 2017 | |
| 2017FUL39201 | Phase I Cultural Resource Management Survey of a Proposed 12.4ha (30.7a.) ALPO Development in York Township, Fulton County, Ohio | Keener, Craig S. | 2017 | |
| 2015FUL30755 | Phase I Cultural Resource Management Survey of the Proposed 64.7ha (160a.) Nature Fresh Farm Development, York Township, Fulton County, Ohio | Keener, Craig S. | 2016 | |
| 2015FUL30755 | Phase I Cultural Resource Management Survey of a Proposed 32.4ha (80a.) Nature Fresh Farm Development in York Township, Fulton County, Ohio | Keener, Craig S. | 2016 | |
| 2016FUL34842 | | | 2016 | |
| 2020FUL48983 | Phase I Archaeological Survey of the Target Steel Inc. Development, (York Township), Fulton County, Ohio | Zych, Thomas J. | 2020 | |
| 2019FUL48699 | Results of a Phase I Archaeological Survey of a 2.2-Acre Woodlot for Proposed New Construction Activity at the North Star BlueScope Steel Plant in York Township, Fulton County, Ohio | Chidester, Robert C. | 2020 | |

Source: OHPO 2022

Notes:

Shading denotes previous survey within the APE.

ID = identification

In 1995, Great Lakes Research Associates, Inc. (GLRA) conducted a Phase I cultural resources investigation of 270 acres for the proposed site of Worthington Steel (Hambacher et al. 1995). The survey identified one prehistoric isolate, two historic artifact scatters, and three standing structures. Based on archival investigation, the structures appeared to date from the late 19th to early 20th century.

A Phase II survey was recommended for one historic scatter, 33FU0147, and for the three standing structures (Hambacher et al. 1995). The survey covered the entire APE west of CR-10. Additionally, GLRA completed the Phase II investigation in 1996 for one of the structures proposed for demolition, FUL-314-11. The investigation included shovel testing and mechanical stripping of high potential areas within the survey area. No evidence of significant subsurface structural features was encountered, and the site consisted of a light scatter of late 19th to early 20th century artifacts (Dunham et al. 1996).

Dames & Moore conducted a Phase I survey for a proposed tie line to connect the proposed North Star steel mill to existing utilities (Friedman 1996). The survey tested areas along the Preferred Route scheduled for ground disturbance by the construction of towers and a 5.5-acre staging area. No sites were identified during the Phase I survey, and no further archaeological work was recommended (Friedman 1996). The APE overlaps portions of the previous survey on the Northstar Steel mill site and near tie line structures along CR-10 and on the southern side of I-80/90.

In 2011, GAI Consultants, Inc. completed a Phase I survey for a proposed FirstEnergy substation and tie line (Breetzke et al. 2011). The survey tested a total area of 29.6 acres. No archaeological sites were identified, and no further work was recommended. The previous survey overlaps the APE at the eastern terminus.

URS Corporation completed a survey for a proposed FirstEnergy tie line project within the existing tie line ROW. The survey included pedestrian survey and shovel testing and covered a total area of 173.93 acres across four counties. One prehistoric isolate was identified during the survey and was considered not eligible for the NRHP. No further work was recommended for the project (Leary 2014). The previous project overlaps the APE at the eastern terminus.

In 2016, SWCA Environmental Consultants completed a Phase I survey for Kinder Morgan for a proposed pipeline through multiple counties in northern Ohio. The survey identified or relocated 302 archaeological sites and 177 isolates, 10 of which were found in Fulton County (Birkner 2016). None of the Fulton County sites were recommended eligible for NRHP listing, and none overlap the APE. The previous survey crosses the APE perpendicularly approximately 165 meters west of County Road 4.

Finally, Professional Archaeological Services Team completed a Phase I survey of approximately 80 acres for the proposed construction of greenhouses north of U.S. Highway 20A. The survey used pedestrian survey and shovel testing and identified three archaeological sites. Site FU235 was identified as a 19th to early 20th century historic scatter and overlaps the APE. The site was recommended not eligible for NRHP listing. A prehistoric isolate (FU236) was also identified approximately 60 meters west of the APE. No further archaeological work was recommended for the project (Keener 2016).

4.2 Ohio Archaeological Inventory

The records review identified 51 OAI-listed resources within the study area (Table 4-2). All of these resources are located outside of the Project APE and are primarily situated along the southern side of the Project route. None of the sites are listed or considered eligible for the NRHP. The list includes:

- 44 prehistoric sites
- 5 historic sites
- 2 with prehistoric and historic components

Prehistoric sites include lithic scatters, camps, habitations, isolates, and burials. Sites with a known temporal affiliation include Early Archaic through the Late Woodland periods. Five historic sites are within the study area and consist of artifact scatters and house sites dating from the 19th through 20th centuries.

One site is directly adjacent to the APE. Site 33FU0235 is a historic artifact scatter representing a residential site dating from the late 19th through 20th centuries. The site consists of a gravel driveway and eight artifacts. Artifacts recovered consisted of stoneware, a nail, and a screw. Historic atlases from 1858 and 1888 show the property owner as Philip Boyce, and a house is mapped at the site location into the mid-20th century (Site Form 2016).

NRHP OHI No. Site Name **Temporal Affiliation** Site Detail FU0003 Prehistoric: Unknown Burial Clarence Saeger Village Unknown Site Prehistoric: Late Archaic FU0014 Sager **Burials** Unknown FU0016 Prehistoric: Archaic, Late Unknown **Kleck Site** Habitation Woodland FU0031 Dove Site Prehistoric: Unknown Lithic scatter Unevaluated FU0032 Watkins Site/Mallow Site Unevaluated Prehistoric: Unknown Lithic scatter FU0033 Greisinger Site Prehistoric: Unknown Prehistoric: lithic scatter Unevaluated Historic: house foundation Historic: 20th century and artifact scatter FU0034 Delta Reservoir Site Prehistoric: Late Woodland Lithic scatter Unevaluated FU0036 Pupos Site #1 Prehistoric: Woodland Camp Unevaluated Unevaluated FU0037 Pupos Site #2 Prehistoric: Woodland Camp FU0038 Elton #1 Prehistoric: Woodland Camp Unevaluated FU0039 Flton #2 Prehistoric: Woodland Camp Unevaluated FU0040 Elton #3 Prehistoric: Unknown Lithic scatter Unevaluated FU0052 Kleck-Bruner Site Prehistoric: Early Archaic, Late Lithic scatter Unevaluated Woodland Kleck-Garmenn Site FU0053 Prehistoric: Early Archaic Camp Unevaluated FU0054 Ora's Site Prehistoric: Late Woodland Unevaluated Camp FU0055 Walter Site Prehistoric: Late Woodland Lithic scatter Unevaluated Unevaluated FU0056 Garmenn Site Prehistoric: Early Archaic Lithic scatter FU0058 **Reed Site** Prehistoric: Woodland Unevaluated Camp FU0059 Ballin East Prehistoric: Late Woodland Unknown Unevaluated FU0060 Ballin West Unknown Unevaluated Prehistoric: Early Archaic FU0061 Ballin-Waterworks Site Prehistoric: Early Archaic Unknown Unevaluated Prehistoric: Early Archaic, Late FU0062 Lee's Site Unknown Unevaluated Woodland FU0068 Boyd Site #1 Prehistoric: Early Archaic Unknown Unevaluated FU0076 Wagner Site Prehistoric: Early Archaic Unknown Unevaluated FU0078 Esther Simon Site Prehistoric: Late Woodland Unknown Unevaluated Whitcomb Site Unevaluated FU0081 Prehistoric: Early Archaic Unknown Howard Site #1 Prehistoric: Early Archaic, Late Unevaluated FU0106 Unknown

Archaic

centuries

Historic: 19th to 20th

Residential

Table 4-2. Ohio Archaeological Inventory - Listed Resources Within the Study Area.

FU0147

Unevaluated

| OHI No. | Site Name | Temporal Affiliation | Site Detail | | |
|---------|------------------|--|---|--------------|--|
| FU0148 | | Historic: 19th to 20th centuries | Trash dump | | |
| FU0149 | | Prehistoric: Unknown | Isolate | Not eligible | |
| FU0150 | Site 1 | Prehistoric: Unknown | Lithic scatter | Unevaluated | |
| FU0151 | Site 2 | Prehistoric: Unknown | Lithic scatter | Unevaluated | |
| FU0152 | 12 | Prehistoric: Unknown | Lithic scatter | Unevaluated | |
| FU0154 | 9 4 8 | Prehistoric: Unknown | Lithic scatter | Unevaluated | |
| FU0155 | - | Prehistoric: Unknown | Lithic scatter | Unevaluated | |
| FU0156 | 12 | Prehistoric: Unknown | Isolate | Not eligible | |
| FU0174 | (H) | Historic: 20th century | Artifact scatter | Not eligible | |
| FU0180 | ne: | Prehistoric: Unknown | Isolate | Not eligible | |
| FU0181 | 1751 | Prehistoric: Late Woodland | Isolate | Not eligible | |
| FU0196 | .ex | Historic: 19th to 20th centuries | Artifact scatter | Unevaluated | |
| FU0204 | - T. | Prehistoric: Unknown Historic: 19th century | Prehistoric: Lithic scatter Historic: Artifact scatter | Unevaluated | |
| FU0205 | 120 | Prehistoric: Unknown | Isolate | Not eligible | |
| FU0215 | (=) | Prehistoric: Unknown | Lithic scatter | Not eligible | |
| FU0216 | 170 | Prehistoric: Unknown | Lithic scatter | Not eligible | |
| FU0226 | 12 | Prehistoric: Unknown | Lithic scatter | Not eligible | |
| FU0235 | | Historic: 19th to 20th centuries | Artifact scatter | Unevaluated | |
| FU0236 | 120 | Prehistoric: Unknown | Isolate | Not eligible | |
| FU0237 | 545. 2 | Prehistoric: Unknown | Lithic scatter | Unevaluated | |
| FU0238 | 151 | Prehistoric: Unknown | Isolate | Not eligible | |
| FU0239 | 1752 | Prehistoric: Late Archaic | Isolate | Not eligible | |
| FU0240 | 325 | Prehistoric: Early Archaic | Isolate | Not eligible | |

Source: OHPO 2022

Notes:

Shading denotes archaeological site adjacent to APE. # and No. = number

4.3 Ohio Historic Inventory

The records review identified 16 OHI-listed resources recorded within the study area. These resources are primarily single-dwelling residences, but also include agricultural buildings and transportation features. The resources closet to the APE are situated to the west of the city of Delta along U.S. Highway 20A and CR-10 (Table 4-3). The single-dwelling resources are representative of Italianate, Bungalow, and vernacular styles. These resources generally date from the mid-19th and early-20th century, with most between 1860 and 1920.

| OHI No. | Resource Name | Location | Architectural Style | Historic Use | Date | Within 1,000 feet of APE |
|------------|---|--------------------------------|-----------------------------------|--|---------------|-----------------------------|
| FUL0031511 | F Cass House | CR-10 S of U.S. 20, York | Vernacular | Single dwelling, barn | 1900 | Yes |
| FUL0043508 | Shumate House | 2360 CR-H, Fulton | Italianate | Single dwelling | ca. 1880 | No |
| FUL0043812 | Dziengelewski House | 2573 CR-H, Swan Creek | No academic style - Vernacular | Single dwelling | ca. 1900 | No |
| FUL0045411 | Shafers Rental House | 9967 U.S. 20A, York | No academic style - Vernacular | Single dwelling | 1932 | Yes |
| FUL0031611 | George A Hall House | CR-10 S of U.S. 20, York | Vernacular | Single dwelling, barn | 1885 | Yes |
| FUL0045911 | Woodring Property, Harmon Farm | 8695 CR-H, York | No academic style - Vernacular | Single dwelling, barn | ca. 1905-1925 | No |
| FUL0045511 | Miller House, Leiter Farm | 7421 CR-10, York | No academic style - Vernacular | Single dwelling, Shed | ca. 1900 | Yes |
| FUL0046011 | House | 8601 CR-H, Delta | No academic style - Vernacular | Single dwelling | ca. 1875 | No |
| FUL0043608 | Taylor House | 2661 CR-J, Fulton | No academic style - Vernacular | Single dwelling | ca. 1860 | No |
| FUL0044811 | Williams Farmstead, Berkybile-Williams Farm | 9526 U.S. 20A, Delta | No academic style - Vernacular | Barn, corn crib | ca. 1920 | No |
| FUL0031411 | A Borkeybile House | SWC U.S. 20 and CR-10, York | Bungalow | Single dwelling, secondary structure (residential) | 1875 | Yes |
| FUL0044911 | Nature Fresh Farms, Schnur Farmstead | 7167 SR 109, Delta | No academic style - Vernacular | Single dwelling, agriculture fields | 1928 | No |
| FUL0043408 | Westmeyer House | 2526 CR-H, Fulton | Not determined | Single dwelling | ca. 1860 | No |
| FUL0043712 | Northern Suffolk Railroad, Southern Michigan and Northern Indiana Railroad | E of TR 2-2, Swan Creek | | Rail related | 1853 | No |

Table 4-3. Ohio Historic Inventory Listed Resources Within the Study Area.

| OHI No. | Resource Name | Location | Architectural Style | Historic Use | Date | Within 1,000 feet of APE |
|------------|--|----------------------------------|-----------------------------------|-----------------|----------|-----------------------------|
| FUL0044712 | Norfolk Southern RR, CR 4, Lake Shore and Michigan Southern RR | RR, crossing CR 4, Swan Creek | No academic style – Vernacular | Rail related | ca. 1872 | No |
| FUL0045711 | House, 8900 U.S. 20A | 8900 U.S. 20A, York | Bungalow | Single dwelling | ca. 1920 | No |

Source: OHPO 2022

Notes:

Shading shows resources within 1,000 feet of APE.

CR = County Road

E = east

RR = railroad

S = south

SR = State Route

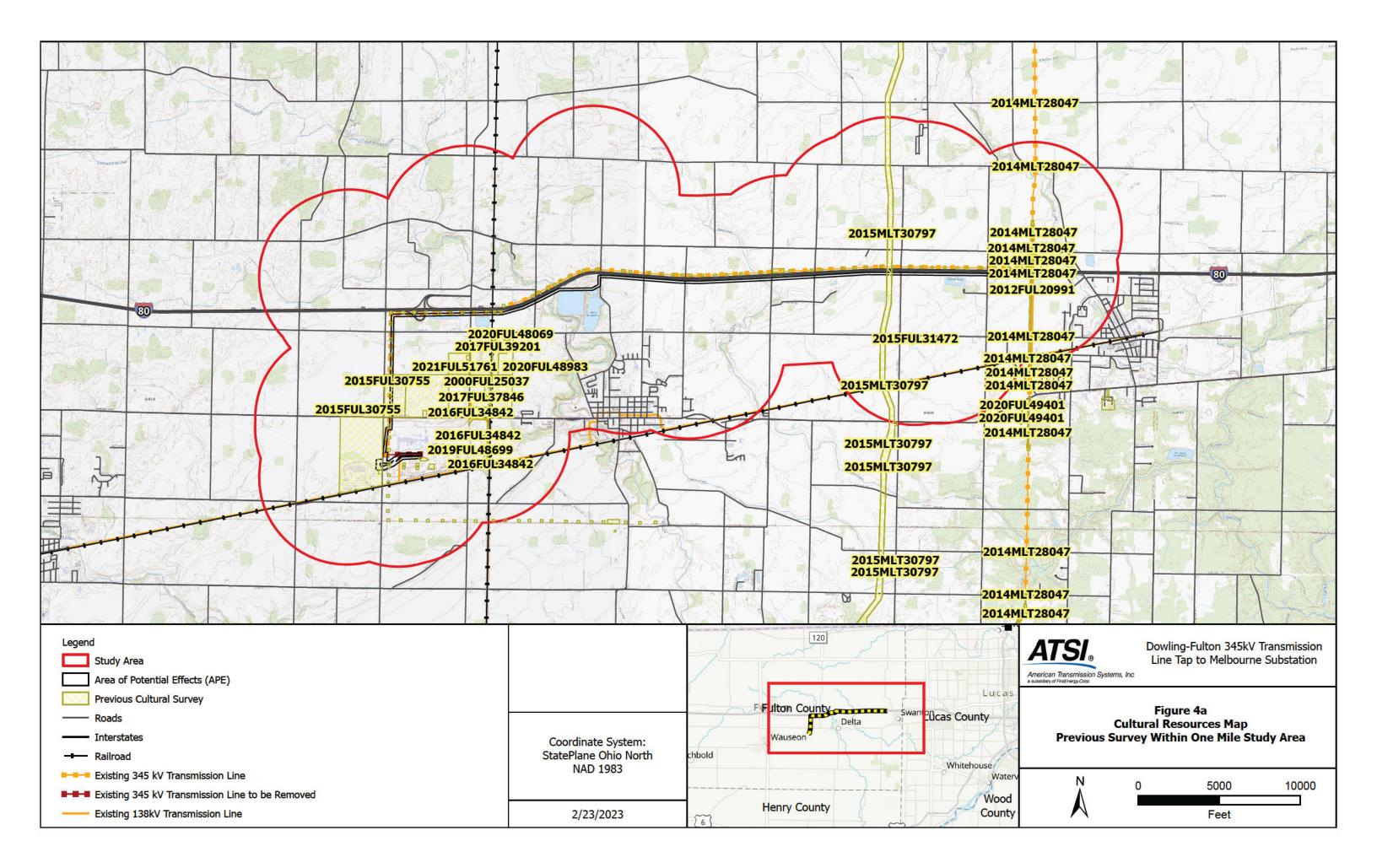
4.4 Ohio Genealogical Society Cemetery Files

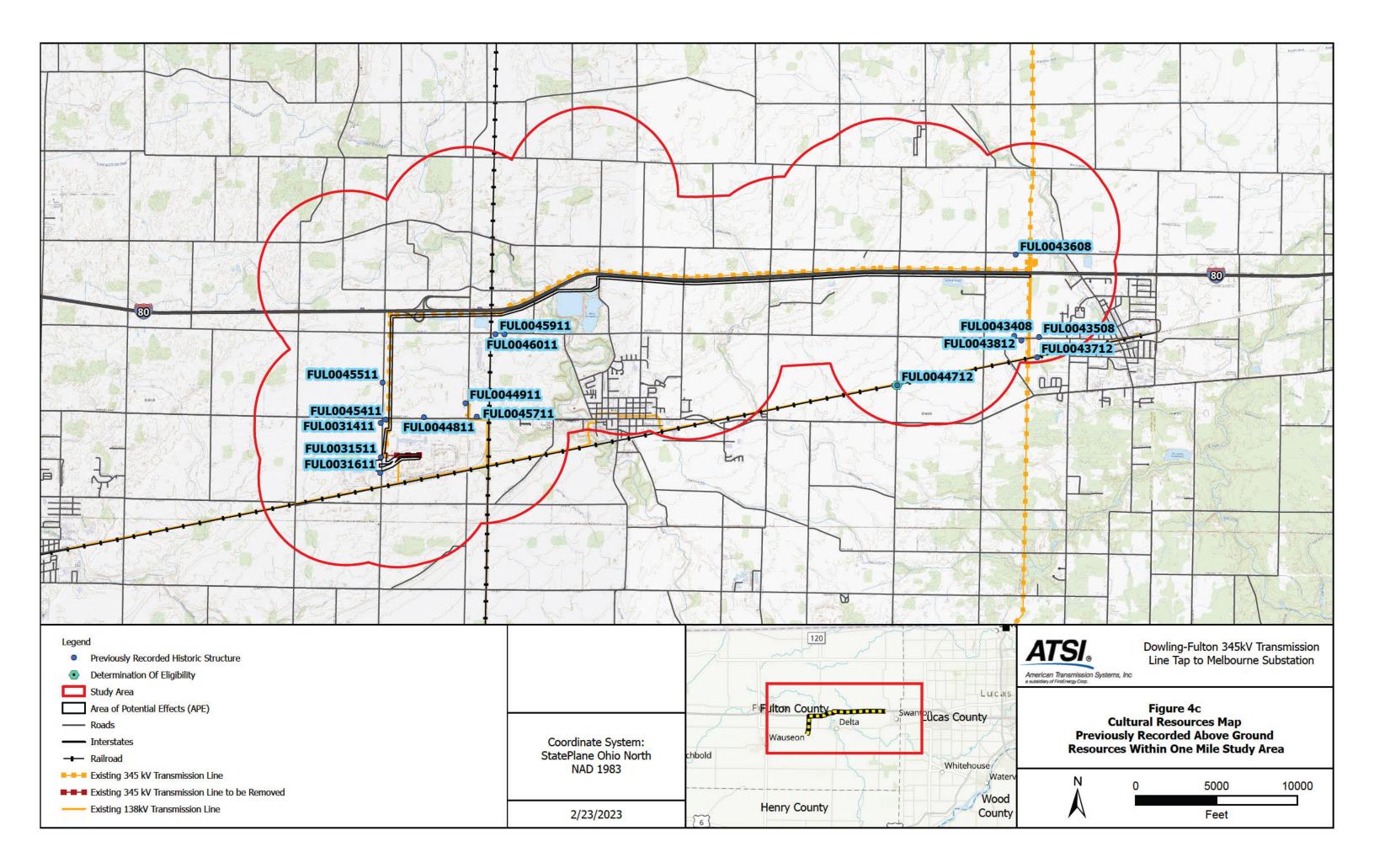
There are five OGS-listed cemeteries within the study area (Table 4-4). The closest cemetery to the APE is the Fulton Union-Viers cemetery (OGS 3757), which is approximately 0.29 mile south of the APE. None of the cemeteries will be affected by the Project.

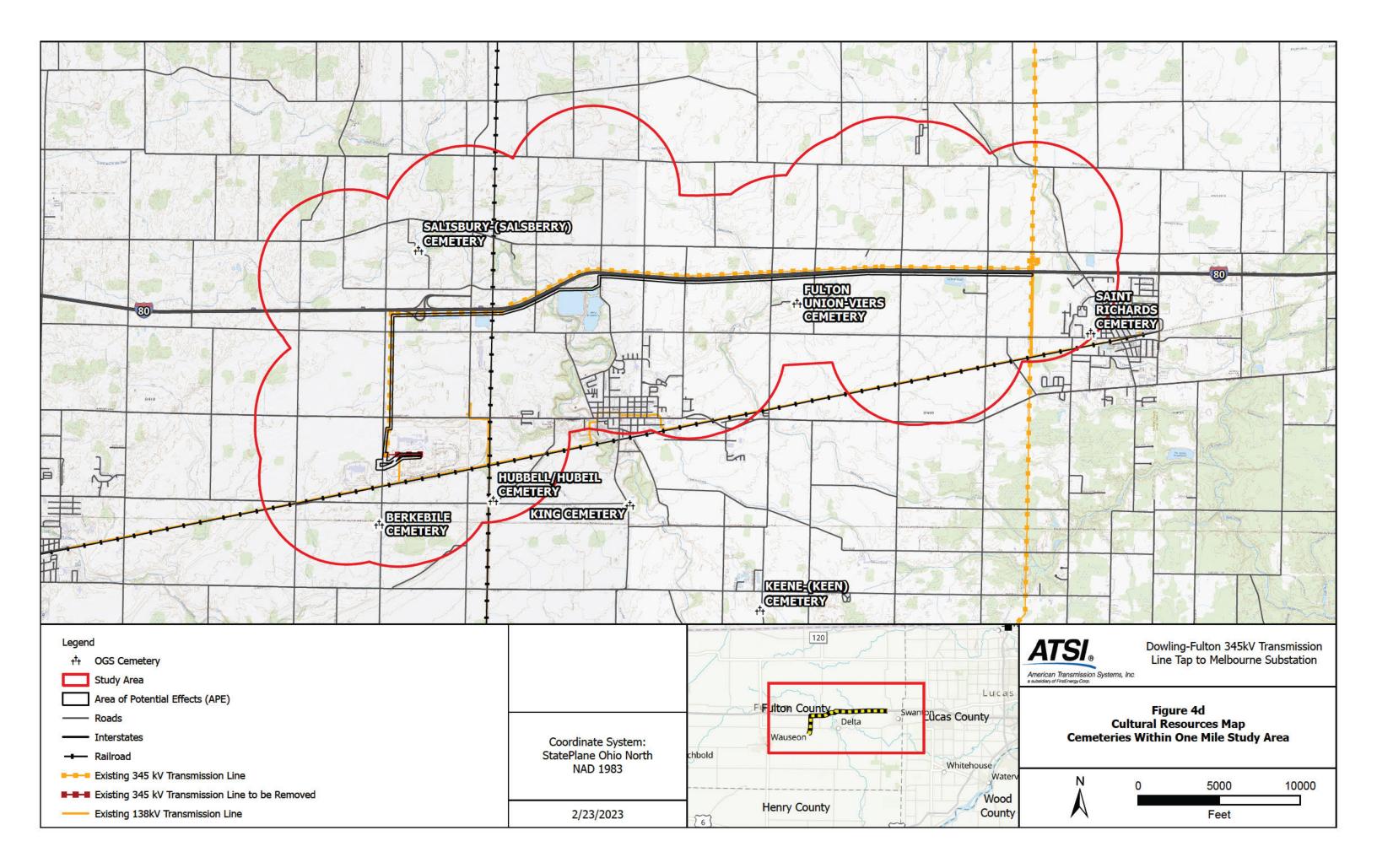
| OGS ID | Cemetery Name | Date Established | Current Condition |
|--------|-----------------------|------------------|-----------------------------|
| 3757 | Fulton Union-Viers | 1836 | Active, highly maintained |
| 3758 | Saint Richards | Unknown | Active, highly maintained |
| 3775 | Salisbury (Salsberry) | 1837 | Active, highly maintained |
| 3784 | Berkebile | 1835 | Inactive, highly maintained |
| 3789 | Hubbell (Hubeil) | Unknown | Inactive - Gone |

Table 4-4. Ohio Genealogical Society Listed Cemeteries within the Study Area.

Source: OHPO 2022







4.5 County Histories and Atlas Maps

In addition to a review of previously recorded cultural resources, Jacobs reviewed available online historic mapping. The following Fulton County historic atlases were reviewed:

- 1858 (Skinner and Kenyon)
- 1875 (Hardesty)
- 1888 (Griffing)
- 1903 (Wauseon Republican)
- 1914 (Mills)

U.S. Geological Survey (USGS) maps from 1911 and 1960 were also reviewed.

This section summarizes this research.

4.5.1 Fulton County

On February 20, 1850, the Ohio Government established Fulton County. Residents chose the name Fulton in honor of Robert Fulton, the inventor of the first economically viable, commercial steamboat. Fulton County was part of the territory that came under dispute between Ohio and Michigan during the "Toledo War."

Fulton County is located in the northwestern portion of Ohio. The county's northern border helps form Ohio's boundary with Michigan. The county seat is Wauseon, which is also the county's largest population center, with 7,568 residents in 2020. The county's next largest community is Swan Creek Township, with a population of approximately 8,566 people in 2010. The county experienced just over a 9% increase in population between 1990 and 2000, raising the total population to 42,084 residents. This increase was primarily due to proximity to Toledo – 15 miles east of Fulton County. Many Toledo residents migrated out of the city to escape the city's busyness.

Fulton County is heavily rural, with urban areas comprising less than 1% of the county's land mass. Most residents find employment in manufacturing establishments, with sales and service-oriented positions placing a distant second and third. The main products manufactured in the county are steel, aluminum, office furniture, and flashlights. Interestingly, an Archbold plant claims to process the most canned Chinese food of any single location in the entire world.

The 1858 and 1875 atlases depict Fulton County as largely rural, with most of the development within town centers, such as Delta and Swanton. The maps of Fulton, Pike, and York townships show the names of landowners, as well as the general location of farmhouses, churches, and school buildings (Skinner and Kenyon 1857; Hardesty 1875).

Roads and railroads are also depicted on the map. The Lake Shore & Michigan Shore Railroad was completed in 1854 and is also shown on the 1857 map and all subsequent versions passing through York Township. The 1888 and 1903 atlases and the 1911 USGS 15-minute maps show more development within the cities of Wauseon, Delta, and Swanton; but the surrounding rural areas have not experienced dramatic change. The atlases do show the increasing subdivision of properties throughout the county, though.

The USGS 7.5-minute quadrangle maps from 1960 show the Project area much as it is today. All of the constructed ponds, reservoirs, and wildlife areas are shown; and the area continues to be predominately rural, with few residences or structures shown. Structures are still depicted in the general vicinity of OAI Site 33FU0235 and OHI resource FUL0045411.

4.5.2 Mills Archaeological Resource Map

In addition to the historic atlases, the 1914 archaeological map "Archaeological Atlas of Ohio ..." was also consulted (Mills 1914). Similar to other maps of its time (for example, Guernsey 1932), this map depicts

archaeological resources at a countywide scale and is the result of early survey work conducted by the Ohio State Museum. The Mills map provides an overview of archaeological resources across the county, including:

- Burials
- Caches
- Cemeteries
- Earthwork enclosures
- Effigy mounds
- Flint quarries
- Mounds
- Native American trails
- Petroglyphs
- Rockshelters
- Stone graves
- Village sites

According to Mills, Fulton County contained more prehistoric works than any other county in northwestern Ohio, likely due to the well-drained soils and higher mean elevation. A large group of mounds is depicted north of the APE along the western side of Bad Creek in Pike Township, but no mounds are mapped within the APE. A burial is mapped on the western side of Bad Creek in Section 2 Township 7N Range 7E near the APE (Mills 1914). No archaeological site has been identified in that vicinity according to OHPO records.

5. Methods

This following section outlines the research design and field methods employed in the Phase I archaeological survey.

5.1 Research Design

Jacobs based the research design on the results of OHPO database research, environmental data, and available prehistoric and historic cultural background information. Based on the prehistoric context of the area, it is anticipated unidentified prehistoric sites may be located in or near the Project area and may represent a variety of time periods, ranging from prehistoric Archaic period sites to historic 19th to 20th century sites. These sites may represent a variety of site types, ranging from isolated artifacts to larger occupational sites.

The proximity of the Project area to Bad and Swan creeks, along with the presence of several small tributaries within the Project area, is a further indicator that unidentified archaeological deposits may be located in the Project area.

Previously recorded archaeological sites near the Project area in Fulton County represent two general site types: burials and small, low-density sites. Burials in the vicinity have been noted by Mills in one instance, and two more have been recorded by OHPO. Recorded burial sites are located in close association to Bad and Swan creeks, which cross the APE. The low-density sites are small with few artifacts, suggesting short-term and limited, but repeated use of the landscape. Terrace remnants and glacial moraines, particularly in association with drainages or other water sources, are local landforms likely to contain archaeological deposits. Numerous lithic scatters and isolates dating from the Early Archaic to Late Woodland are within 1 mile of the APE. These sites lie outside the Project limits and are unlikely to be affected by the proposed Project. Nevertheless, they convey the significant level of prehistoric activity that has occurred in the region.

Unidentified historic period archaeological resources are likely to relate to agricultural and rural domestic activities associated with the historic occupation of Fulton County. Some common site types that may be represented include:

- Farmsteads or other residential sites
- Municipal buildings, such as schools or churches
- Commercial elements, such as mills
- Historic dump and debris discard areas

Cemeteries are also common historical resources in rural areas. While the OGS does not list any cemeteries within the Project area, unidentified plots may be situated in or near the Project. Historic sites tend to occur in conjunction with transportation features, such as drainages, railroads, and roads.

In summary, OHPO database research revealed that numerous archaeological sites have been recorded within similar settings in Fulton County. This suggests a higher likelihood that cultural resources will be located within the Project area. The Project alignment crosses Bad and Swan creeks and is situated in a predominantly rural and wooded setting mixed with areas of residential and commercial development. The terrain consists of relatively level areas mixed with undulating landscape, with small streams and drainages located throughout. The presence of small, natural topographic rises in proximity to water, as well as the rural nature of the Project area. In addition, this type of setting suggests that there is moderate likelihood that a newly identified site will contain elements that could make it eligible for listing in the NRHP.

5.2 Field Methods

The APE was subjected to standard Phase I archaeological survey per OHPO (1994) guidelines. To identify archaeological sites within the APE, Jacobs conducted a walkover of the entire APE to evaluate visible ground disturbance and to identify potential areas of undisturbed soils that could be subjected to standard Phase I archaeological survey per the guidelines. Visible disturbance was photo documented, and the appropriate field forms were completed by the field crew.

Prior to entering the field, Jacobs created electronic mapping files based on boundaries of the APE provided by ATSI. In areas with more than 50% ground surface visibility, pedestrian survey was conducted at a 5-meter (16.4-foot) interval. In areas with standing water, visual inspection was used regardless of the degree of surface visibility.

In areas where the visibility of surface soils was less than 50% and undisturbed, systematic shovel testing was conducted and consisted minimally of 50 by 50-centimeter (cm) (19.6 by 19.6-inch) test pits excavated to 50 cm (19.6 inches) below the surface or until sterile soil was encountered. Shovel tests were excavated at 15-meter (49-foot) intervals across the APE. In areas with eroded or anthropogenically altered soil contexts, larger-interval shovel testing (30 meters [98.4 feet]) was used to verify disturbance. Areas that exhibited disturbance were recorded and photographed.

6. Phase I Archaeological Survey Results

The Phase I archaeological survey for the Project was conducted on December 15-16, 2022, and January 4-6, 2023. The Project is generally within a rural setting dominated by agricultural fields of corn and soybean. Areas not currently used for agricultural purposes include wooded areas along streams and near constructed recreational ponds. The western terminus of the APE passes through the North Star BlueScope steel mill, which has been severely altered by manufacturing activities. Most of the APE follows along the southern side of I-80/90 and within the existing tie line ROW (Photographs 1 through 13). Figure 5 shows the field survey results.

A total of 80.2 ha (198.2 acres) were examined during the Phase I survey. Large portions of the APE within agricultural fields had sufficient ground surface visibility (greater than 50%); therefore, they were subjected to pedestrian survey. Approximately 55.9 ha (138.14 acres) of the APE were surveyed by pedestrian survey due to sufficient ground surface visibility.

Areas that did not have sufficient ground visibility and appeared to contain intact soils were subject to shovel testing. A total of 4.73 ha (11.68 acres) of the APE were subjected to shovel testing.

Portions of the APE containing hydric areas or streams and previously disturbed areas were also subjected to pedestrian survey. Hydric areas comprised approximately 1.29 ha (3.19 acres) of the APE. Disturbed areas are associated with:

- Existing substation facilities
- Roadway infrastructure
- Industrial development pertaining to the steel plant
- Reservoir construction
- Railroad infrastructure

Approximately 17.81 ha (44.01 acres) of the APE was pedestrian surveyed due to disturbance.

Archaeological artifacts were encountered in one area during the pedestrian survey. Survey near previously identified site 33FU0235 found the site boundaries extend into the APE.



Historic topographic maps from 1875 and 1888 depict a structure in the general location of the site and show the property owned by Philip Boyce (Hardesty 1875; Griffing 1888). Historic aerials also show a house with outbuildings in the area as late as 1994 (NETR Online 2023). Site 33FU0235 consists of a historic artifact scatter and house site that dates from the late 19th century through the late 20th century. Philip Boyce does not appear to be a significant person in the history of Fulton County, and the site appears to lack sufficient archaeological integrity. Therefore, Jacobs recommends site 33FU0235 is not eligible for listing in the NRHP, and no additional archaeological work is recommended for the site.

Jacobs excavated a total of 100 shovel tests. Most of the shovel tests took place in lightly wooded areas near the Delta Reservoirs Fishing Area (n=42) and in an area of planted pines at the Fulton Pond Wildlife Area (n=45). The rest of the shovel tests were on North Star BlueScope property (n=8) and in a grassy

field along Swan Creek (n=5). Shovel testing resulted in 63 Negative, 32 Disturbed, and 5 Wet tests. None of the shovel tests were positive for archaeological material. Most of the disturbed shovel tests were encountered on steel mill property or along the northern side of the reservoir, which is also bordered by the Delta Raceway. Disturbed shovel tests generally exhibited mixed soils, gravel, and fill. Some test locations also displayed signs of poorly drained soils, consistent with Natural Resources Conservation Service (NRCS) soil mapping (NRCS 2022).

Generally, intact soils throughout the APE were composed of sandy loams underlain by silty clays and loams. Intact soils were encountered along Bad and Swan creeks and in the Fulton Pond Wildlife Area. Soil profiles were similar to shovel test pit D22, which was composed of a 30-cm-thick layer of brown (10YR 4/3) sandy loam underlain by a yellowish brown (10YR 5/6) sandy clay (Photo 14).

7. Summary and Recommendations

This report describes the background research, field strategy, and results of the Phase I archaeological survey for the Dowling-North Star 345 kV Transmission Line Tap to Melbourne Substation Project in Fulton County, Ohio. The entire corridor from ATSI's existing Dowling-Fulton 345 kV Transmission Line to the Melbourne Substation, approximately 9.46 miles (15.22 kilometers) in length, will be constructed primarily on single steel monopoles (Figure 1, Figure 2). ATSI also plans to construct two, approximately 0.5-mile-long, 345 kV tie lines to connect the existing, customer-owned Sydney Substation to the proposed Melbourne Substation.

The Preferred Route begins along ATSI's existing Dowling-Fulton 345 kV Transmission Line directly south of I-80/90 and runs west, paralleling I-80/90, for approximately 5.0 miles (8.04 kilometers). At County Road 7-2, the route turns south, and then runs west between the Delta Reservoir and Delta Motorsports Park, before continuing to parallel I-80/90 for approximately 2.0 miles (3.21 kilometers). Just east of CR-10, the Preferred Route turns south and runs approximately 1.3 miles (2.09 kilometers), paralleling ATSI's existing Fulton-North Star Steel 345 kV Transmission Line. The Preferred Route then crosses the Fulton-North Star Steel 345 kV Transmission Line and continues south for 0.4 mile (0.64 kilometers) before turning west and terminating at the proposed Melbourne Substation.

The new permanent ROW required will range from 95 to 150 feet (29 to 46 meters), dependent on the specific location due to the Preferred Route being parallel to the existing Fulton-North Star Steel 345 kV Transmission Line and ROW for a portion of the Preferred Route.

The Project area is defined as the vertical and horizontal space that will be impacted by Project activities and corresponds to the 9.46 miles in length tie line alignment. This also constitutes the APE. The field investigation surveyed the entire Preferred Route alignment, approximately 198 acres (80 ha), aside from one parcel that was inaccessible at the time of survey. The Project crosses through a predominantly rural area that is dominated by agricultural land use. The APE also crosses through industrial areas at the western terminus and some recreational areas.

The literature review identified 51 OAI-listed sites, 16 OHI-listed resources, and 5 OGS-listed resources within the study area. One previously identified site, 33FU0235, and three OHI resources are directly adjacent to the APE. No NRHP- or DOE-listed resources are located within the study area. In addition, 19 previous cultural resources surveys have been documented within the study area. Seven of these surveys covered portions of the current APE.

The Phase I archaeological survey conducted in December 2022 and January 2023 used both pedestrian reconnaissance and shovel testing within the APE. No new archaeological sites were identified during the Phase I archaeological survey. One previously identified site, 33FU0235, was found to overlap the APE. The field investigation indicated that the site does not retain sufficient archaeological integrity to be considered eligible for listing on the NRHP, and Jacobs recommends no further archaeological work is necessary for the site.

Therefore, Jacobs recommends a finding of No Historic Properties Affected for the Project; and no adverse effects or significant impacts are expected to occur on cultural resources within the APE as a result of the Project's construction, implementation, or operation. If cultural resources are discovered during construction, work in the immediate area should stop, and a qualified archaeologist should be consulted.

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Appendix A Field Photographs

Appendix A. Field Photographs

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Dowling-North Star 345 kV Transmission Line Project Fulton County, Ohio

Draft Architectural and Historical Resources Report

March 2023

American Transmission Systems, Inc., a Subsidiary of FirstEnergy Corporation





Dowling-North Star 345 kV Transmission Line Project Fulton County, Ohio

| Project No: | D3500900 |
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| Document Title: | Architectural and Historical Resources Draft Report |
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| Client Name: | American Transmission Systems, Inc., a Subsidiary of FirstEnergy Corporation |
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Executive Summary

On behalf of American Transmission Systems, Inc. (ATSI), a FirstEnergy Company (FirstEnergy), Jacobs Engineering Group, Inc. (Jacobs) of Cincinnati, Ohio, conducted an architectural and historical resources reconnaissance survey for the Dowling-North Star 345 kilovolt (kV) Transmission Line Project, in Fulton County, Ohio (Project). As currently designed, proposed route runs west along the Ohio Turnpike from the existing Dowling-Fulton 345 kV Transmission Line and then turns south along County Road 10 before reaching a new substation, known now as the Melbourne Substation, west of the village of Delta.

Jacobs conducted an architectural and historical resources reconnaissance survey for the Project in January 2023. This report presents the results of the literature review and reconnaissance survey for the preferred route. The Project traverses through the townships of Fulton, Pike, York, and Swan Creek, and it is within the Delta, Swanton, Colton and Napoleon East U.S. Geological Survey 7.5" topographical quadrangles in Ohio and is approximately 9.5 miles (15.29 kilometers) long. This architectural and historical resources report details the background research, field strategy, and survey results for the currently planned preferred route.

The Project involves the construction of a new greenfield 345 kV transmission line approximately 9.5 miles (15.29 kilometers) in length and with an expected right-of-way (ROW) width of 150 feet (45.72 meters). Within the proposed Project limits of disturbance, activities will consist of vegetation/tree clearing, installation of gravel or timber mat work pads, pull pads, access roads, and material laydown yard(s) to facilitate transmission line construction efforts. The Project area, which also constitutes the Area of Potential Affect (APE), is defined as the vertical and horizontal space that will be impacted by Project activities and corresponds to the 9.5 mile (15.29 kilometer) long wide transmission line alignment and a maximum 305-meter (1,000-foot) buffer centered on the preferred alignment to account for potential changes within the viewshed.

Prior to field reconnaissance, Jacobs conducted a literature review using the records available on the Ohio Historic Preservation Office (OHPO) online GIS Database in December 2022. A 1.6-kilometer (one-mile) study area centered on the Project alignment was examined. The literature review identified 16 Ohio Historic Inventory (OHI) recorded resources within the study area. Of the 16 OHI-recorded resources, 5 resources with undetermined NRHP-eligibility (OHI #FUL31411; FUL31511; FUL31611; FUL45411; FUL45511) are located within 1,000-feet (304.8 meters) of the Project. No resources that are listed on the NRHP or eligible for inclusion on the NRHP, and no DOE-listed resources are located within the study area. nor direct APE. In addition, 19 previous cultural resources surveys are documented within the study area.

The architectural and historical resources reconnaissance survey for the transmission line was conducted in January 2023. The 5 OHI-recorded resources were revisited and only 2 of the 5 OHI-recorded resources remained extant. In addition, 11 newly identified resources were recorded by the reconnaissance survey. The 5 OHI-recorded resources and 11 newly identified resources were evaluated for listing in the NRHP. Based on the lack of identified significance and substantial alterations to many of the resources, the 16 resources are recommended not eligible for listing in the NRHP. No architectural or historical resources were identified whose surroundings are essential to convey their significance. Therefore, Jacobs recommends that no architectural and historical resources will be impacted by the Project, and no further work is required.

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Acronyms and Abbreviations

| APE | Area of Potential Effects |
|-------------|--|
| ATSI | American Transmission Systems, Inc., a Subsidiary of FirstEnergy Corporation |
| DOE | Determination of Eligibility |
| FirstEnergy | FirstEnergy Corporation |
| Jacobs | Jacobs Engineering Group, Inc. |
| kV | kilovolt |
| NRHP | National Register of Historic Places |
| OHI | Ohio Historic Inventory |
| OHPO | Ohio Historic Preservation Office |
| PL | Pole Location |
| Project | Dowling North Star 345 kV Transmission Line Project |
| ROW | Right-of-Way |

1. Introduction

On behalf of American Transmission Services Incorporated (ATSI), a Subsidiary of FirstEnergy Corporation (FirstEnergy), Jacobs Engineering Group, Inc. (Jacobs) conducted an architectural and historical resources survey of the proposed Dowling-North Star 345 kilovolt (kV) Transmission Line Project, in Fulton County, Ohio (Project) (Figure 1.1. Project Location). This architectural and historical resources report details the background research, field strategy, survey results, and assessment of impacts for the Area of Potential Effects (APE) associated with the Project.

The investigation located and identified architectural and historical resources within the Project APE, using the guidelines from the Ohio Power Siting Board (OPSB) and the Ohio Historic Preservation Office (OHPO 2014). These activities are stipulated within state legislation detailed in the Ohio Revised Code, Sections 149:51-149:54. In order to meet the requirements set for this legislation, several research strategies were employed:

- Background research, specifically a literature review, using the OHPO online mapping system;
- An architectural and historical resources survey of the APE; and
- A summary of the field results into a report.

Note that this Project is not under federal jurisdiction and therefore not subject to Section 106 review.

The background research was conducted by Derrick Cole in January 2023. Using guidance from consultation with the OHPO for previous ATSI/FirstEnergy architectural and historical resources surveys, the viewshed analysis was restricted to a maximum 1,000-foot (305-meter) buffer, particularly due to the nature and extent of previous visual intrusions from existing electric transmission lines and other modern infrastructure.

Jacobs conducted the architectural and historical resources field survey using the maximum 1,000-foot (305-meter) buffer between January 17 and 20, 2023. Architectural historians Jessica R. Wobig, MA and Amanda Reese, MA conducted the viewshed assessment based on data collected in the field and prepared the report summarizing findings.

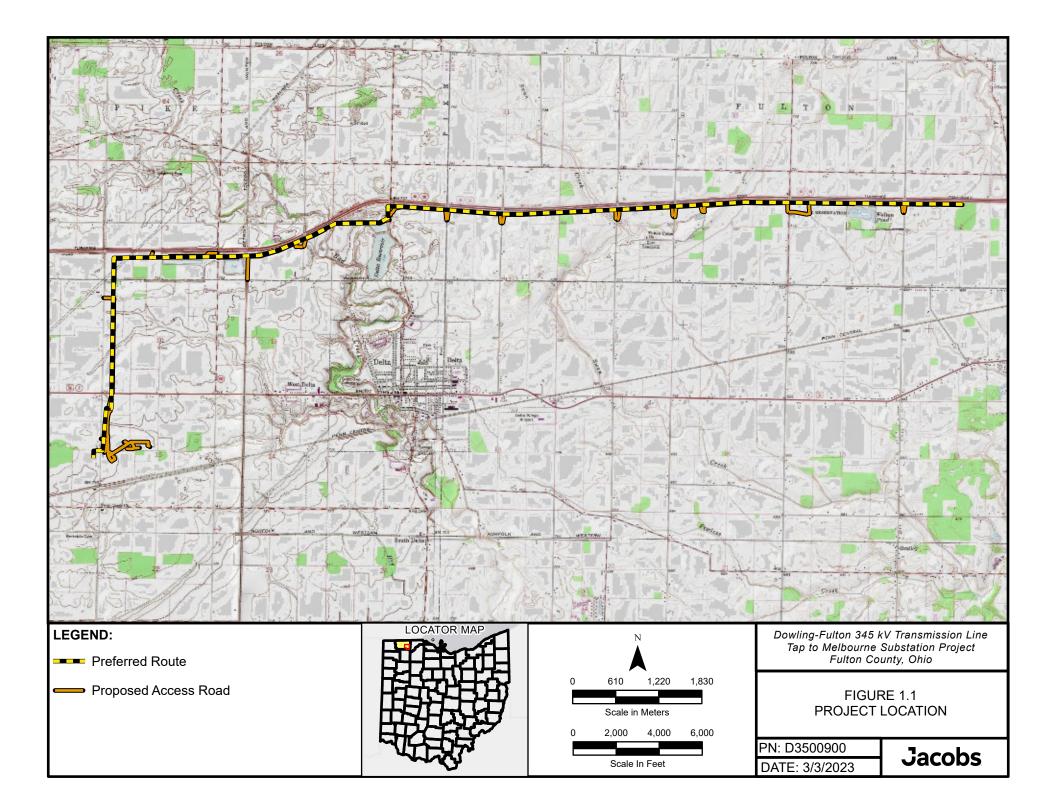
1.1 Project Description

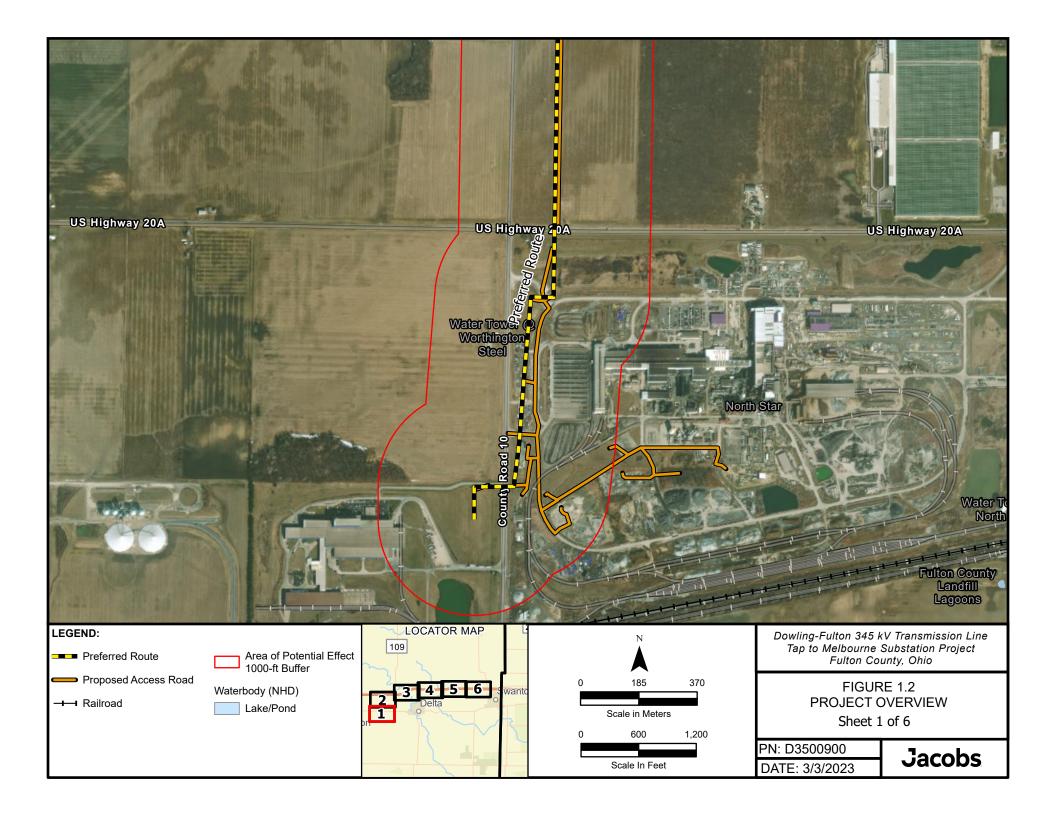
The purpose of the Project is to provide a second 345-kV source to the proposed Melbourne Substation to enhance the electric service reliability for existing customers, add redundancy to the transmission network, and allow for future growth in the area. The Project will also alleviate a potential 300-megawatt (MW) load loss as a result of increased load on the transmission system. In Ohio, a project of this scope requires an Application for a Certificate of Environmental Compatibility and Public Need (Application) from the OPSB, which is part of the Public Utilities Commission of Ohio (PUCO).

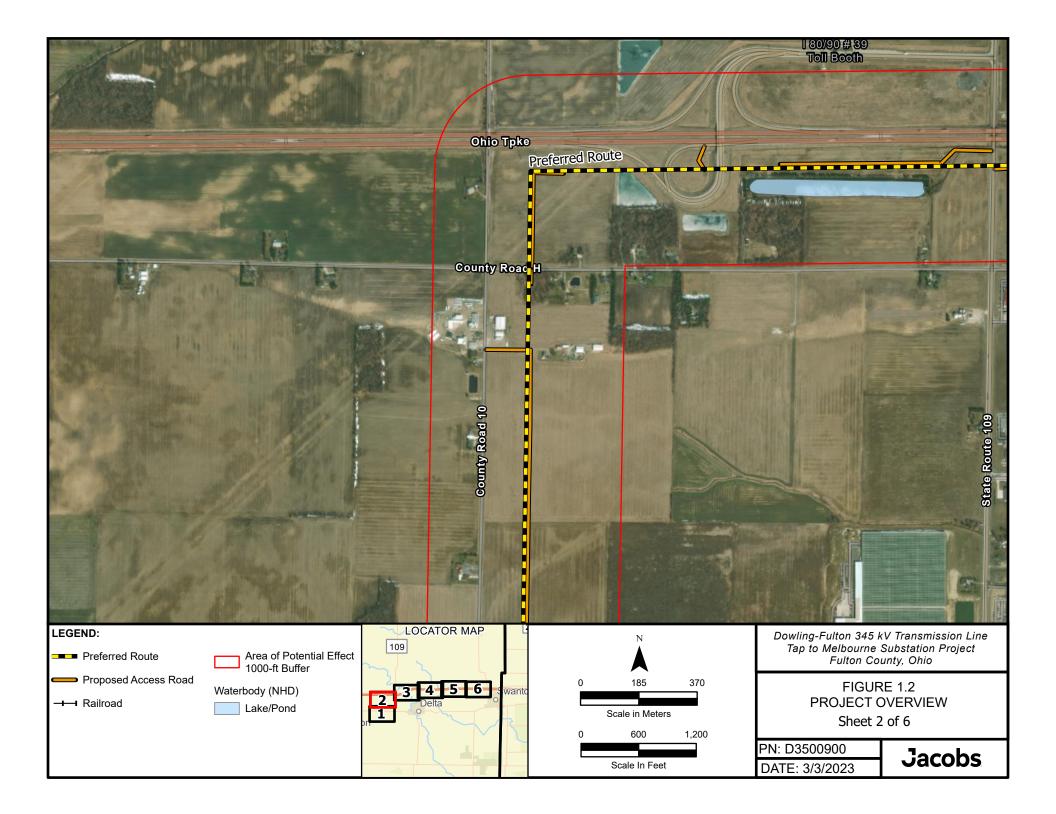
The Project involves the construction of an approximately 9.46 mile long transmission line, which spans from ATSI's existing Dowling-Fulton 345-kV transmission line to the Melbourne Substation. The line will be constructed primarily on single steel monopoles and the new permanent right-of-way (ROW) required will range from 95 to 150 feet, dependent on the specific route and location due the new tie line being parallel. Within the proposed Project limits of disturbance, activities will consist of vegetation/tree clearing, installation of gravel or timber mat work pads, pull pads, access roads, and material laydown yard(s) to facilitate transmission line construction efforts (Figure 1.2 Project Overview).

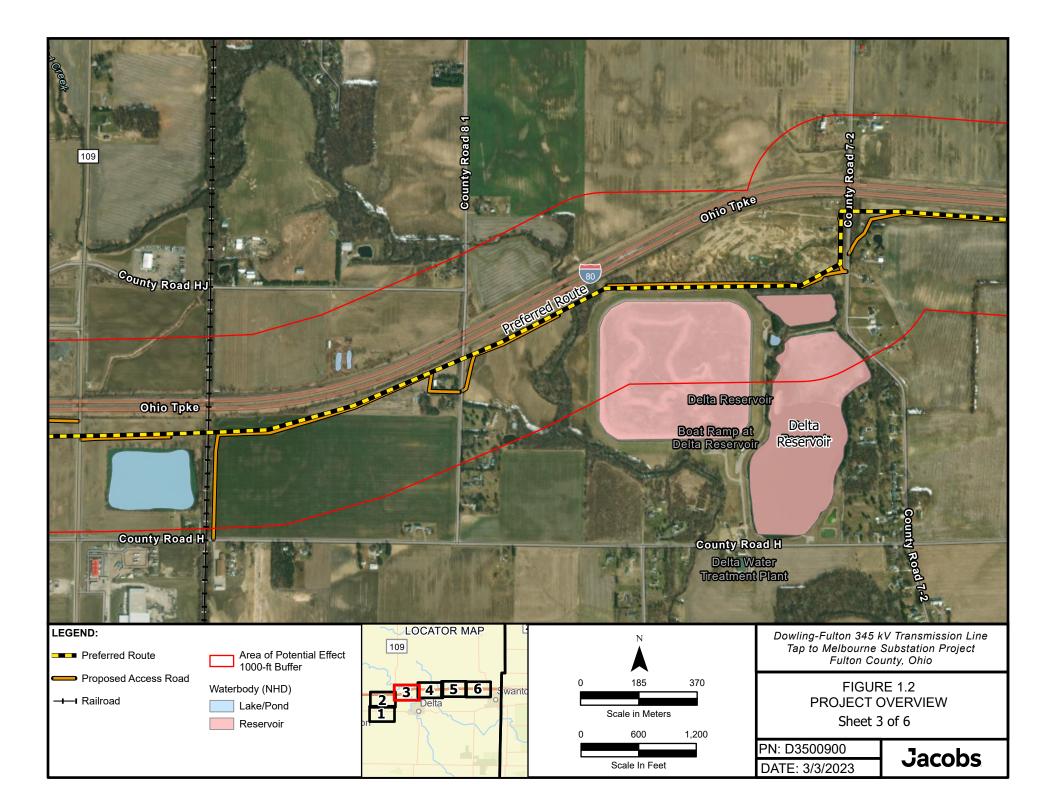
1.2 Report Overview

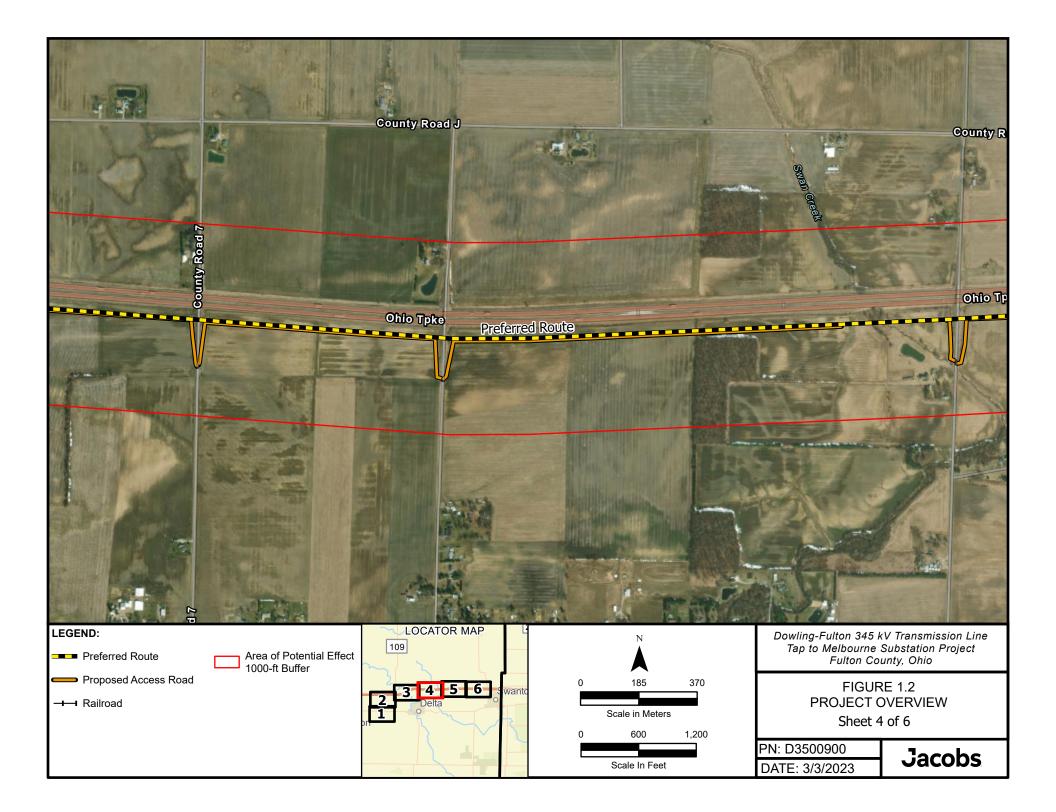
This report contains six sections. The first section introduces the report and provides a description of the Project. Section 2 provides a definition of the APE and summarizes the methodology for the architectural and historical resources survey. Section 3 lists and briefly discusses previously surveyed architectural and historical resources in the vicinity of the APE and provides a historical overview of the Project area. Section 4 describes the survey findings and evaluations, including National Register of Historic Places (NRHP) eligibility recommendations and an assessment of Project impacts. Section 5 includes the summary and recommendations relative to architectural and historical resources investigations. Section 6 lists the references cited throughout the report. Figures and photographs are located within the text, when appropriate.

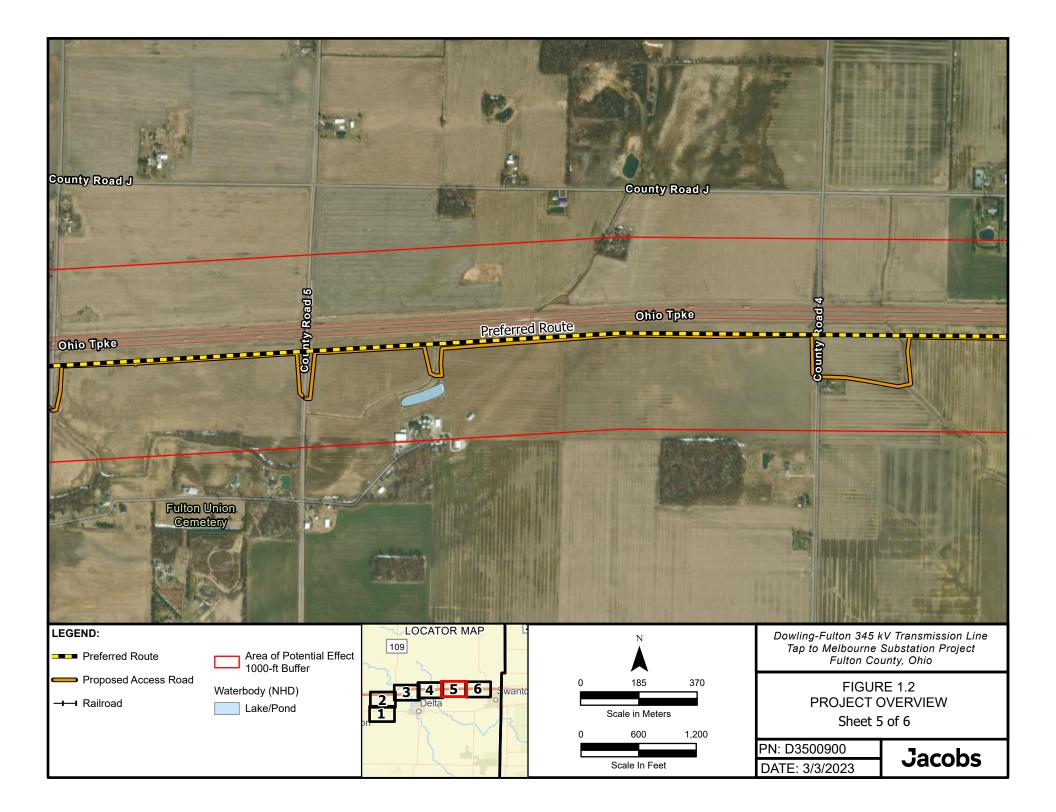


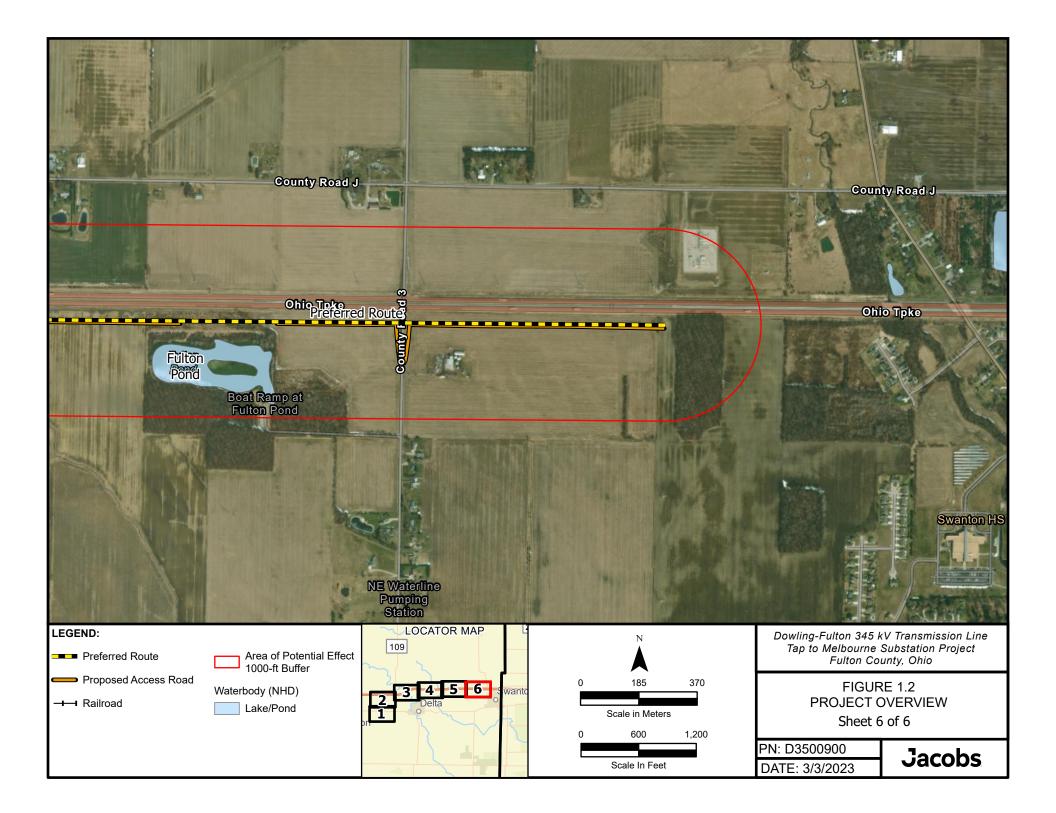












2. Methodology

2.1 Area of Potential Effects

The development of the APE considered potential Project impacts (both direct and indirect) to architectural and historical resources. For this study, the APE was defined – based on consultation with the OHPO for previous projects – as a maximum of 1,000 feet (305 meters) on either side of the proposed Project centerline, refined as appropriate, based on landforms, vegetation, terrain features, and intervening modern infrastructure. For example, if a potential resource were located 800 feet (244 meters) from the Project but separated from it by a hill or intervening stands of trees, it was not considered within the APE, since the Project would have no potential to generate a visual impact.

Also included in the APE were the footprints of associated temporary construction access roads, as well as 1,000-foot (305-meter) maximum viewsheds (for newly constructed access roads requiring tree clearing), which also consider topographic and vegetative features.

Because the proposed Project is parallel to an existing electric transmission line, as well as the presence of large industrial facilities, Jacobs considered visual intrusions already generated by these modern elements when evaluating potential impacts from the current Project. Measures were taken to include only those areas within reasonable limits. For example, for flat, open areas with minimal topographical relief, visual impacts from existing structures (including radio, television, microwave, and cellular towers, as well as existing electric transmission lines) were evaluated and compared to the potential visual changes by new Pole Locations (PLs). In addition, every location from which a proposed PL could be seen was not necessarily construed as within the viewshed (if beyond 1,000 feet), as the distances between PLs and resources could be so great as to result in no discernable visible impact.

2.2 Background and Literature Research

Background research on architectural and historical resources located within and in the vicinity of the APE, as well as on the general history of Fulton County, was conducted by Jacobs using the OHPO online mapping database and online histories and documents in January 2023. In Fulton County, property-specific research was conducted using online records from the county auditor, recorder, and tax map departments. Further research on the Project area was conducted, as necessary, using online resources available at the Library of Congress, National Archives, and the NRHP.

OHPO records were used to locate previously recorded cultural resources and surveys within or near the Project APE. The Study Area included a 1-mile (1.6 kilometer) buffer around the Project to identify these previously recorded cultural resources and to provide information on the probability of identifying cultural resources within the Project APE. The OHPO online mapping database included a review of the Ohio Archaeological Inventory (OAI), the Ohio Historic Inventory (OHI), Determination of Eligibility (DOE) files, the NRHP, Ohio Genealogical Society (OGS) historic cemeteries, historic bridges, National Historic Landmarks (NHLs), and previous cultural resources surveys.

2.3 Field Survey and Data Entry

Field reconnaissance involved a systematic survey of architectural and historical resources within the viewshed of the Project, resulting in the survey of 16 resources. Pursuant to OHPO (2014) architectural survey guidelines, these resources, including the primary buildings and any contributing outbuildings, were photographed and mapped on Project mapping, provided property access and full visibility was available. Jacobs recorded the architectural style, condition, and important features of each resource and noted any major changes or alterations.

2.4 Evaluation and Assessment of Impacts

The surveyed architectural and historical resources were evaluated for their potential significance according to the NRHP Criteria for Evaluation, which are used as the basis for evaluating architectural and/or historical significance for state-funded or –permitted projects in Ohio; the historic context of the Project area; and guidelines contained in National Register Bulletin 15 – *How to Apply the National Register Criteria for Evaluation* (National Park Service 1998). Boundaries for potentially eligible historic resources and/or historic districts were defined according to National Register Bulletin 21 – *Defining Boundaries for National Register Properties* (National Park Service 1997). The architectural and historical resources surveyed as part of the Project were evaluated both for their potential significance according to the NRHP criteria (used by the OHPO for evaluating state significance), and for their integrity.

3. Previous Surveys and Historical Overview

Jacobs' OHPO online mapping database research identified 16 OHI-listed resources recorded within the 1-mile (1.6 kilometers) Study Area. There are no NRHP-listed resources within the study area. Of the 16 resources identified within one mile of the Project, 5 resources are located within the 1,000-foot (305-meter) maximum APE limits. The majority of 16 previously surveyed OHI resources within the one-mile Project Study Area are either demolished or have experienced substantial modifications. Jacobs revisited the 5 OHI resources within the 1,000-foot (305-meter) APE as part of this survey to confirm their condition and provide an updated evaluation for this Project.

3.1 Ohio Historic Inventory Resources

The records review identified 16 OHI-listed resources recorded within the Study Area. These resources are primarily single-dwelling residences, but also include agricultural buildings and transportation features. The resources closet to the APE are situated to the west of the city of Delta along U.S. Highway 20A and CR10 (Table 3-1). The single-dwelling resources are representative of Italianate, Bungalow, and vernacular styles. These resources generally date from the mid-19th and early-20th century, with most dating from 1860 to 1920.

| OHI No. | Resource Name | Location | Architectural Style | Historic Use | Date | Within 1,000 feet of APE |
|------------|--------------------------------------|-----------------------------|--------------------------------------|--------------------------|-------------------|--------------------------------|
| FUL0031511 | F Cass House | CR-10 S of U.S. 20, York | Vernacular | Single dwelling, barn | 1900 | Yes |
| FUL0043508 | Shumate House | 2360 CR-H, Fulton | Italianate | Single dwelling | ca. 1880 | No |
| FUL0043812 | Dziengelewski House | 2573 CR-H, Swan Creek | No academic style - Vernacular | Single dwelling | ca. 1900 | No |
| FUL0045411 | Shafers Rental House | 9967 U.S. 20A, York | No academic style - Vernacular | Single dwelling | 1932 | Yes |
| FUL0031611 | George A Hall House | CR-10 S of U.S. 20, York | Vernacular | Single dwelling, barn | 1885 | Yes |
| FUL0045911 | Woodring Property, Harmon Farm | 8695 CR-H, York | No academic style - Vernacular | Single dwelling, barn | ca. 1905- 1925 | No |
| FUL0045511 | Miller House, Leiter Farm | 7421 CR-10, York | No academic style - Vernacular | Single dwelling, Shed | ca. 1900 | Yes |
| FUL0046011 | House | 8601 CR-H, Delta | No academic style - Vernacular | Single dwelling | ca. 1875 | No |

| Table 3-1. Ohio Historic Inventor | y Listed Resources Within the Study Area. |
|-----------------------------------|---|
|-----------------------------------|---|

| OHI No. | Resource Name | Location | Architectural Style | Historic Use | Date | Within 1,000 feet of APE |
|------------|--|-------------------------------------|--------------------------------------|--|----------|--------------------------------|
| FUL0043608 | Taylor House | 2661 CR-J, Fulton | No academic style - Vernacular | Single dwelling | ca. 1860 | No |
| FUL0044811 | Williams Farmstead, Berkybile-Williams Farm | 9526 U.S. 20A, Delta | No academic style - Vernacular | Barn, corn crib | ca. 1920 | No |
| FUL0031411 | A Borkeybile House | SWC U.S. 20 and CR-10, York | Bungalow | Single dwelling, secondary structure (residential) | 1875 | Yes |
| FUL0044911 | Nature Fresh Farms, Schnur Farmstead | 7167 SR 109, Delta | No academic style - Vernacular | Single dwelling, agriculture fields | 1928 | No |
| FUL0043408 | Westmeyer House | 2526 CR-H, Fulton | Not determined | Single dwelling | ca. 1860 | No |
| FUL0043712 | Northern Suffolk Railroad, Southern Michigan and Northern Indiana Railroad | E of TR 2-2, Swan Creek | | Rail related | 1853 | No |
| FUL0044712 | Norfolk Southern RR, CR 4, Lake Shore and Michigan Southern RR | RR, crossing CR 4, Swan Creek | No academic style - Vernacular | Rail related | ca. 1872 | No |
| FUL0045711 | House, 8900 U.S. 20A | 8900 U.S. 20A, York | Bungalow | Single dwelling | ca. 1920 | No |

Source: OHPO 2022

Notes:

Shading shows resources within 1,000 feet of APE.

- CR = County Road
- E = east
- RR = railroad
- S = south

SR = State Route

3.2 Cemeteries

There are 5 previously identified OGS cemeteries within the Study Area. The closest cemetery to the APE is the Fulton Union-Viers cemetery (OGS #3757), which is approximately 0.29 miles south of the APE. None of the cemeteries will be affected by the Project (Table 3-2).

| OGSID | Cemetery Name | Date Established | Current Condition |
|-------|-----------------------|---------------------|-----------------------------|
| 3757 | Fulton Union-Viers | 1836 | Active, Highly Maintained |
| 3758 | Saint Richards | Unknown | Active, Highly Maintained |
| 3775 | Salisbury-(Salsberry) | 1837 | Active, Highly Maintained |
| 3784 | Berkebile | 1835 | Inactive, Highly Maintained |
| 3789 | Hubbell/Hubeil | Unknown | Inactive - Gone |

Table 3-2. OGS Cemeteries within the Study Area.

Source: OHPO 2022

3.3 NRHP-Listed Resources

Background research did not identify any NRHP-listed resources within the Study Area.

3.4 Historical Overview

3.4.1 State and Region

During the 1600s, French fur traders colonized the geographical region that would later become part of Ohio. Before the Ohio Territory was created, the region was part of the Northwest Territory, which included modern-day Ohio, Indiana, Illinois, and parts of Michigan, Wisconsin and Minnesota. The Land Ordinance of 1785 and the 1787 Northwest Ordinance delineated how the western lands would be surveyed and governed. Ohio is bounded by Lake Erie to the north, and to the south by the Ohio River. A series of glaciers carved the terrain, deposited fertile soil, and created the Great Black Swamp in the northwestern part of the state. The state of Ohio was admitted as the 17th state on March 1, 1803. Permanent Euro-American settlement, however, did not formally occur until after the Treaty of Greenville in 1814 (Ohio History Connection 2023a; Sherman 1925).

Transportation and settlement paralleled Native American trails. These trails were extensively used by the first settlers and influenced the locations of many later transportation systems (Wallace 1971). The trails connected points, such as villages or towns, and traversed dry, level land. The first suitably habitable areas were accessed by the trails, and engineers were guided in constructing permanent road systems along these routes. Subsequently, many contemporary places are situated near former Native American village sites (Hulbert 1930).

Early statehood was dominated by self-sufficient farms and related pursuits; however, the groundwork was also being laid for better transportation and the beginnings of commerce and industry in Ohio. Beginning in the 1850s, the Great Black Swamp was drained and cleared for agriculture and settlement. As farms and the number of cultivated acres increased, deforestation produced surplus lumber and surplus agricultural resources, and boat building and milling developed in conjunction with this agricultural production. Local roads were improved and extended to make wagon traffic more practical, although wagon transportation was not common until after 1790 (Buck and Buck 1939). Iron and steel industries developed as the need for hardware, wheels, railroad parts, and architectural features emerged after statehood.

During the 1830s, Ohio and Michigan entered into an altercation over lands first claimed by the Michigan Territory. In anticipation of Michigan gaining statehood, the lands, which are is now part of northwestern

Ohio, were resurveyed under the direction of Ohio Governor Robert Lucas in 1835. This resulted in the first dispute occurring on April 26, 1835, at Phillips Corners near what is now the Ohio Route 109 and Route 120. Though no physical battle occurred, this dispute, now known as the Toledo War, took place along the Maumee River. Michigan Territory military stood guard over the north bank, and the Ohio militia occupied the south bank. The dispute was eventually settled when President Andrew Jackson replaced the Michigan Governor and issued the Toledo Strip, or four hundred square miles of disputed land, to Ohio (Faber 2008; Ohio History Connection 2023b).

3.4.1.1 Fulton County

During the early 1830s, Eli Phillips and Joseph Bates were the first Euro-American pioneers to settle in the Toledo Strip in what would become Fulton County. Fulton County was established two decades later on February 20, 1850. Eli Phillips, who was the namesake of Phillips Corners, occupied Sections 10 and 11, in Township 9 South, Range 3 East. Phillips and family were originally from Adrian, Michigan. Joseph Bates arrived a short time later to occupy Section 2, Township 7 North, Range 4 East. Fulton County was formed from parts of Henry, Lucas and Williams Counties. Later known for its association with both the railroad and underground railroad, the county was also serviced by the Miami and Erie canal system that extended from Toledo through the Maumee Valley to Cincinnati during the early 1800s (Reighard 1920). The county was named after Robert Fulton, a steamboat inventor (Fulton County Chapter of the Ohio Genealogical Society 2023; Ohio History Connection 2023c).

Wauseon has served as the county seat since 1871. The county seat is located approximately 4 miles (6.44 kilometers) to the southwest of the study area. The study area intersects with the townships of Fulton, Pike, York, and Swan Creek, and is within Delta, Swanton, Colton and Napoleon. Notably, Delta was commonly known as the "Six Mile Woods" because of a 6-mile-wide by 20-mile-long old growth forest that consisted of oak, walnut, and sycamore trees. Delta's first Euro-American pioneer was William Meeker, who arrived in 1833. Meeker cleared space for his homestead on land that would later become known as the S.H. Cately place near Swancreek Township. James McQuillan was the first to settle within the current townsite of Delta in 1834. McQuillan's cabin and sawmill were located near the present-day site of a Presbyterian Church (Village of Delta 2023).

By the 1830s, the arrival of the Lake Shore and Michigan Southern Railway to the state heightened settlement in northwestern Ohio. By 1850, the Michigan Southern and Northern Indiana Railway extended from the southwest of Toledo to Fort Wayne, Indiana. This rail line paralleled the Wabash and Erie Canal, and intersected the with Miami Canal near Defiance, Ohio (Jervis 1850). After 1850, the addition of a wood plank road that extended from Delta to Toledo further improved transportation between the early townsites. The village of Swanton, which is located to the southeast of the study area, was originally known as Wing Township from 1836 until 1851. Swanton experienced railroad-related development and grew into a regional business center by the 1850s (Mikesell 1905; Swanton 2023).

Northwestern Ohio is associated with the abolitionist movement that occurred prior to the outbreak of the Civil War (1861-1865). The abolitionist movement was an organized effort to end slavery in the United States. It occurred from the 1830s to 1870, and corresponded with similar efforts in other countries, such as Great Britain (McNeese 2008). The study area contains locations associated with the abolitionist movement and underground railroad. For example, Reverend William King (1812-1895) lived in part of Section 24 to the south of Delta in York. In 1834, Reverend King was a member of the Free Presbyterians, who were active in the underground railroad. King had inherited 15 enslaved persons from his wife Mary Phares of Louisiana. In 1849, Reverend King established the Eglin Settlement in southwestern

Ontario, Canada, after he had emancipated all of the 15 persons from slavery. Accordingly, the King Farmstead in Fulton County is one of the oldest and most notable sites in northwestern Ohio's underground railroad (Twining and Lozer 2023).

Fulton County's population increased from approximately 7,700 to 14,000 people between 1850 and 1860. This was the most dramatic increase in Fulton County's population in its history. After the Civil War (1861-1865) ended, the railroad continued to support development in the region through the second half of the 1800s with the peak of railroad mileage being reached by the early 1920s. Toledo expanded its industrial base through the 1950s. Though metropolitan areas like Toledo experienced population loss in the mid-to-late 1900s, rural areas like Fulton County retained a slow and incremental increase in population. In Fulton County, the population steadily increased from approximately 20,000 to 25,000 people between 1880 to 1950 (U.S. Census 2023).

After the 1950s, infrastructure improvements in the state and federal highway systems affected population dispersion in the state. A well-established network of county and state roads were in place by the 1910s, while the federal highway system was established by the 1920s. For Fulton County, these improvements bisected its geography, altered where development occurred, or entirely bypassed communities (Ohio Turnpike 2023).

In the study area, the Ohio Turnpike and U.S. Highway 20A parallel each other and extend from east-to-west. The Ohio Turnpike was built by 1955, while the U.S. Highway 20A was in place by the 1920s. The Ohio Turnpike was built as a toll road and carried over 40,000 vehicles the day it opened in 1955. By 1956, the Ohio Turnpike carried more than 10 million vehicles per year (Ohio Turnpike 2023). On the other hand, U.S. 20A extended from the Indiana state line to Toledo by the 1920s and would become part of the longest road in the nation by 1963—U.S. 20 from Boston, Massachusetts to Newport, Oregon (FHWA 2023). Both highways were advantageous for growth in the automobile tourism and trucking industries. The region's manufacturing industry was also bolstered by the shipping industry, and new industries emerged as the agricultural industry became less labor intensive.

Today, Fulton County is 99 percent rural. Manufacturing, sales, and service industries employ the most residents, and steel, aluminum, office furniture, and flashlights are Fulton County's main products. North Star BlueScope, a steel mill owned by a global building and construction industry based in Melbourne, Australia, was constructed in the study area near Delta in 1996 (NSBLSL 2023). The two main highways remain actively used, and the Ohio Turnpike carries nearly 50 million vehicles per year (Ohio Turnpike 2023). The county is home to approximately 42,000 people, who self-identify as white (Ohio History Connection 2023c; U.S. Census 2023). The population is further comprised of 7.8 percent Hispanic or Latino population, and less than 1 percent African American or Black population. Of those who self-identify as white, 45.5 percent have German ancestry, 11.9 percent have Irish ancestry, 10.7 percent have English ancestry, 6.9 percent have Polish ancestry, and 6.2 percent self-identify as American (U.S. Census 2023).

4. Survey Results

4.1 Field Methods

For the viewshed analysis of architectural and historical resources, the survey corridor was walked to identify any intact, above-ground resources greater than 50 years of age within a maximum of 1,000 feet (305 meters) from the Project centerline. Resources within this maximum distance that maintained potential to see the Project (defined as the indirect APE) were photo documented to the extent practicable (based on property access and/or visibility from public rights-of-way, when access was not available), and notes were taken on construction methods and materials, as well as additions and alterations that may compromise their architectural integrity.

Using a combination of representative landscape photographs and digital terrain data, Jacobs evaluated the potential for visual impacts to any resource(s) maintaining potential architectural and/or historical significance, with consideration given to topographic or vegetative features, as well as existing intrusions on the viewshed. The results of this analysis were used to develop recommendations for any additional architectural and historical resources work that might be needed for the Project.

4.2 Resources Within the APE

The architectural and historical survey of the Project resulted in the identification of 16 resources greater than 50 years of age within the indirect APE (Table 4.1). Of these, 5 previously surveyed OHI resources and 11 newly surveyed resources have been identified within the indirect APE. Jacobs revisited the 5 previously surveyed OHI resources as part of the current investigation, and newly documented the other 11 resources within this report. Each of the surveyed resources is described in the sections below.

For ease of identification and data organization, Jacobs assigned previously surveyed OHI resources with a specific naming convention (e.g. either Historic or Other Name and Property Type followed by OHI number), and newly surveyed resources were provided a specific naming convention (e.g., Current Property Owner Name and Resource Type followed by Parcel Number) to each of the resources. Newly surveyed properties may include more than one parcel where a farmstead extended across parcel lines and had features located within the indirect APE (e.g., Fetterman House [Parcel #11-021932] and barn [Parcel #11-021952]). Figure 4.1. Survey Results depicts the locations of resources and is presented at the conclusion of this section.

| | ······································ | | | | | |
|--|--|------|--|------------------------|-------------|--|
| Name | Location | Date | Style | NRHP Recommendation | Comments | |
| A. Borkeybile House (OHI #FUL-314-11) | County Road 10, York Township | 1875 | Nonextant house | Not Eligible | Not extant. | |
| F. Cass House (OHI #FUL- 315-11) | County Road 10, York Township | 1900 | Nonextant house and outbuildings | Not Eligible | Not extant. | |
| George A. Hall House (OHI #FUL-316-11) | County Road 10, York Township | 1885 | Nonextant house and outbuildings | Not Eligible | Not extant. | |

| Table 4-1. Architectural | and Historical Resources | Identified in the Project APE. |
|--------------------------|--------------------------|--------------------------------|
| | | |

| Name | Location | Date | Style | NRHP Recommendation | Comments |
|--|---|---------------|--|------------------------|---|
| Shafers Rental House (OHI #FUL-454-11) | 9967 US 20A, York Township | 1932 | Frame Vernacular | Not Eligible | Heavily altered. Lacks integrity. Almost entirely screened by treeline. |
| Leiter Farm (OHI #FUL- 455-11) | 7421 County Road 10, York Township | ca. 1900 | Nonextant house and outbuildings | Not Eligible | Not extant. |
| Falor House (Parcel #29- 055944) | 7887 County Road 10, Delta Township | 1920 | Upright and Wing | Not eligible | Heavily altered. Lacks integrity |
| Burkholder House (Parcel #29- 056024) | 7830 County Road 10, Delta Township | 1900 | Upright and Wing | Not eligible | Heavily altered. Lacks integrity |
| Fouty House (Parcel #20- 041184) | 8161 County Road 10, Delta Township | 1950 | Tudor Revival Elements | Not eligible | Heavily altered. Lacks integrity |
| Wuebker House (Parcel #29-05599) | 9851 County Road H, Delta Township | 1920 | Bungalow | Not eligible | Heavily altered. Lacks integrity |
| Fry House (Parcel #29- 056004) | 9673 County Road H, Delta Township | 1900 | Upright and Wing | Not eligible | Heavily altered. Lacks integrity |
| White House (Parcel #20- 041052) | 8535 County Road 8-1, Delta Township | 1890 | Modified Saltbox | Not eligible | Heavily altered. Lacks integrity |
| Goetz House (Parcel #20- 040960) | 8823 County Road 7-2, Delta Township | 1900 | Central Hallway | Not eligible | Heavily altered. Lacks integrity |
| Hertzfeld House (Parcel #20-040956) | 8818 County Road 7-2, Delta Township | 1900 | Central Hallway | Not eligible | Heavily altered. Lacks integrity |
| Fetterman House (Parcel #11-021932) and barn (Parcel #11- 021952) | 8479 County Road 5-2 and 8513 County Road 5-2, Delta Township | 1913; 1900 | Bungalow | Not eligible | Heavily altered. Lacks integrity |
| Nagel House (Parcel #11- 021828) | 8610 County Road 4, Fulton Township | 1900 | Gable-Ell | Not eligible | Heavily altered. Lacks integrity |
| Gombash Farms (Parcel #13-022552) | 8628 County Road 3, Fulton Township | 1950- 1970 | Utilitarian | Not eligible | Heavily altered. Lacks integrity |

Source: OHPO 2022

Notes:

Shading shows OHI-recorded resources.



4.2.1 A. Borkeybile House (OHI #FUL-314-11)



Photograph 4-1. Nonextant A. Borkeybile House (OHI #FUL-314-11) location with extant modern industrial property, facing west.

Built in 1875 and likely modified in the 1920s, the A. Borkeybile House (OHI #FUL-314-11) was a one-and-a-half story bungalow house type located at the southwest corner of US 20 and County Road 10 in York Township, Fulton County. The resource had associated outbuildings, which included a large dairy barn and corn cribs. The resource has been demolished since it was recorded in 1995. The resource had an undetermined NRHP-eligibility. No aboveground features were observed during the reconnaissance survey. The nonextant architectural resource is recommended not eligible for listing in the NRHP under any criteria.



4.2.2 F. Cass House (OHI #FUL-315-11)



Photograph 4-2. Nonextant F. Cass House (OHI #FUL-315-11) location with existing overhead transmission line and modern steel industrial facility in background, facing west.

Built circa 1900, the F. Cass House (OHI #FUL-315-11) was an up-right-and-wing vernacular house type with associated outbuildings, which included a granary. The resource was located on approximately a 0.5-mile south of US 20 on County Road 10 in York Township, Fulton County. The resource was demolished since it was recorded in 1995. The resource had an undetermined NRHP-eligibility. No aboveground features were observed during the reconnaissance survey. The nonextant architectural resource is recommended not eligible for listing in the NRHP under any criteria.



4.2.3 George A. Hall House (OHI #FUL-316-11)



Photograph 4-3. Nonextant George A. Hall House (OHI #FUL-316-11) location with existing overhead transmission line and modern steel industrial facility in background, facing west.

Built circa 1880, the George A. Hall House (OHI #FUL-316-11) was an up-right-and-wing vernacular house type with an associated garage. The resource was located approximately 0.5-mile south of US 20 on the west side of County Road 10 in York Township, Fulton County. The resource was demolished since it was recorded in 1995. The resource had an undetermined NRHP-eligibility. No aboveground features were observed during the reconnaissance survey. The nonextant architectural resource is recommended not eligible for listing in the NRHP under any criteria.

4.2.4 Shafers Rental House (OHI #FUL-454-11)



Photograph 4-4. Shafters Rental House (OHI #FUL-454-11) with existing overhead transmission line and modern industrial building in background, facing northeast.

Built in 1932, Shafers Rental House (OHI #FUL-454-11) is a two-story dwelling that lacks a distinguishable architectural style. The architectural resource is located at 9967 US 20A, York Township, Fulton County. The rectangular plan dwelling has an asphalt shingled gable roof and aluminum sided exterior. The dwelling is part of an earlier farm property from the late 19th century. The property had an earlier barn, but it is no longer extant. The dwelling has been significantly altered with new exterior building materials, including windows and siding. The architectural resource was previously recorded with an undetermined NRHP-eligibility in 2016.

Shafers Rental House (OHI #FUL-454-11) is not associated with a significant event, period, or historical theme important in the development of York Township or Fulton County, Ohio. The architectural resource does not convey the life achievements of an important person. The architectural resource does not embody the distinctive characteristics of a type, period, or style of architecture, nor does it contribute to an eligible district. The architectural resources does not retain sufficient integrity to convey its original construction nor an identified period of significance. Therefore, Shafers Rental House (OHI #FUL-454-11) is recommended not eligible for listing in the NRHP under any criteria.



4.2.5 Leiter Farm (OHI #FUL-455-11)



Photograph 4-5. Nonextant Leiter Farm (OHI #FUL-455-11) location with new house and outbuildings, facing west.

Built circa 1900 and modified between 1950 and 1990, Leiter Farm (OHI #FUL-455-11) was a two-story vernacular dwelling that lacked a distinguishable architectural style. The architectural resource was located at 7421 County Road 10 in York Township, Fulton County. The rectangular plan dwelling had a steeply pitched, asphalt shingled, gable roof with side gable wall dormers. The dwelling was part of a late 19th century farm property. The resource was demolished since it was recorded in 2016. The resource had an undetermined NRHP-eligibility. Modern aboveground features, which included a one story, single-family dwelling and associated outbuildings, replaced the previous resource at the location. The nonextant architectural resource and replacement architectural resource are recommended not eligible for listing in the NRHP under any criteria.



4.2.6 Falor House (Parcel #29-055944)



Photograph 4-6. Falor House (Parcel #29-055944) and barn facing northwest.



Photograph 4-7. Falor House (Parcel #29-055944) and silos facing west.

Located along County Road 10 at the western end of the project, the Falor House (Parcel #29-055944) is a two-story, cross-gable roofed, upright and wing dwelling with no discernible style dating from 1900. The house is built on a modified L plan on a cut-stone foundation and sheathed in replacement vinyl siding. The residence has a dropped shed roof which overhangs the full-width concrete front porch, supported by brick pillars, and surrounded by brick balustrade. Fenestration throughout consist of 1/1, double hung, replacement vinyl sashes and 1/1 vinyl sliding sashes, all trimmed with decorative shutters and a glazed front door. The two-story side-gable roofed ell projects from the east side of the residence. Two historic-era outbuildings are associated with this house. These include a 1920 Dutch style barn, and a 1972 shop building. There are five modern outbuildings not of historic age, dating from 1992-1999. The barn has a corrugated metal gambrel roof and is constructed in an ell with clapboard siding and a large, double-height modern garage door. The shop building is a large ell with a front-gable roof.

No information could be located that associates the Falor House with significant events or patterns of events in the history of York Township or Fulton County. The Falor House and outbuildings are not associated with a significant event, period, or historical theme important in the development of York Township or Fulton County, Ohio. The architectural resource does not convey the life achievements of an important person. The architectural resource does not embody the distinctive characteristics of a type, period, or style of architecture, nor does it contribute to an eligible district. The architectural resource does not retain sufficient integrity to convey its original construction nor an identified period of significance. The Falor House is extensively altered, including numerous material changes, such as the vinyl siding and vinyl windows, which have caused the resource to lose its integrity of material and feeling. Similarly, the outbuildings are not exceptional or intact examples of their types. Therefore, Falor House and outbuildings are not exceptional or ligible for listing in the NRHP under any criteria.

4.2.7 Burkholder House (Parcel #29-056024)



Photograph 4-8. Burkholder House and barn (Parcel #29-056024) facing east.

Located along County Road 10 at the western end of the project, the Burkholder House (Parcel #29-056024) is an upright and wing style side-gable roof dwelling dating from 1900. The residence has a twotier dropped side gable at the east side of the façade, wooden siding, and a partial width front porch with a dropped shed roof supported by plain wooden columns. The fenestration appears to be 1/1 wooden sashes. Two front-gable rectangular barns from 1955 and 1969 are present to the north of the residence, and are double-height, wooden clad buildings.

No information could be located that associates the Burkholder House with significant events or patterns of events in the history of York Township or Fulton County. The Burkholder House and outbuildings are not associated with a significant event, period, or historical theme important in the development of York Township or Fulton County, Ohio. The architectural resource does not convey the life achievements of an important person. The architectural resource does not embody the distinctive characteristics of a type, period, or style of architecture, nor does it contribute to an eligible district. The architectural resource does

not retain sufficient integrity to convey its original construction nor an identified period of significance. The resource features residential and agricultural resource that do not represent significant architecture or engineering achievements. The Burkholder House has been extensively altered, including numerous material changes that have caused the resource to lose its integrity of design and materials. Similarly, the outbuildings are not exceptional or intact examples of their types. Therefore, Burkholder House and outbuildings are recommended not eligible for listing in the NRHP under any criteria.



4.2.8 Fouty House (Parcel #20-041184)

Photograph 4-9. Fouty House (Parcel #20-041184) facing northwest.



Photograph 4-10. Fouty House's associated barn (Parcel #20-041184) facing west.

Located along County Road 10 at the western end of the project, Fouty House (Parcel #20-041184) is a dwelling with Tudor Revival style elements dated to 1950. The residence has a cut stone foundation and has two roof forms, with a front-gable at the east side of the façade and a sweeping, high-pitch cross gable with a gable dormer at the second story. The residence has a partial width front porch supported by plain

wooden columns, and an attached garage at the south-facing elevation. The fenestration consists of replacement 1/1 and 2/2 vinyl sashes, as well as a three-pane bay window facing County Road 10. The siding appears to be vinyl and is likely replacement materials. There is a Dutch barn type built in 1940 to the south of the residence, with a double-height garage door, wooden siding, and a small front-gable entrance at the east side of the primary elevation.

No information could be located that associates the Fouty House with significant events or patterns of events in the history of York Township or Fulton County. The Fouty House and outbuildings are not associated with a significant event, period, or historical theme important in the development of York Township or Fulton County, Ohio. The architectural resource does not convey the life achievements of an important person. The architectural resource does not embody the distinctive characteristics of a type, period, or style of architecture, nor does it contribute to an eligible district. The architectural resource does not retain sufficient integrity to convey its original construction nor an identified period of significance. The resource features residential and agricultural resource that do not represent significant architecture or engineering achievements. The Fouty House has been extensively altered, including numerous material changes that have caused the resource to lose its integrity of materials, design, and feeling. Similarly, the outbuildings are not exceptional or intact examples of their types. Therefore, Fouty House and outbuilding are recommended not eligible for listing in the NRHP under any criteria.

4.2.9 Wuebker House (Parcel #29-05599)



Photograph 4-11. Wuebker House (Parcel #29-05599) facing southeast.



Photograph 4-12. Wuebker House (Parcel #29-05599) facing southwest.

Located along County Road H at the western end of the project, Wuebker House (Parcel #29-05599) is a Bungalow style dwelling dating to 1920. The residence has a cross-gable roof with dropped gable at the western elevation. The fenestration consists of replacement 1/1 vinyl sashes. There is a small concrete entry porch, and the residence is clad in wooden siding.

No information could be located that associates the Wuebker House with significant events or patterns of events in the history of York Township or Fulton County. The Wuebker House and outbuildings are not associated with a significant event, period, or historical theme important in the development of York Township or Fulton County, Ohio. The architectural resource does not convey the life achievements of an important person. The architectural resource does not embody the distinctive characteristics of a type, period, or style of architecture, nor does it contribute to an eligible district. The architectural resource does not retain sufficient integrity to convey its original construction nor an identified period of significante. The resource features residential and agricultural resource types that do not represent significant architecture or engineering achievements. The Wuebker House has been extensively altered, including numerous material changes that have caused the resource to lose its integrity of material, design, and feeling. Similarly, the outbuildings are not exceptional or intact examples of their types. Therefore, the Wuebker House and outbuildings are recommended not eligible for listing in the NRHP under any criteria.



4.2.10 Fry House (Parcel #29-056004)



Photograph 4-13. Fry House (Parcel #29-056004) facing southwest.



Photograph 4-14. Fry House lean-to (Parcel #29-056004) facing southeast.

Located on County Road H at the western end of the project, Fry House (Parcel #29-056004) is an upright and wing style dwelling dating to 1900. The residence has a cut stone foundation and a partial-width concrete front porch covered by a dropped shed style roof supported by plain wooden pillars and there is an unglazed wooden front door. The fenestration consists of 1/1 replacement vinyl sashes and the cladding appears to be wooden. One historic era building is associated with this house, a partially extent lean-to built in 1920, and there is a non-historic age detached garage built in 2000. A barn associated with the parcel and built in 1920 is no longer extant. The lean-to has a shed roof, wooden siding and a raised foundation.

No information could be located that associates the Fry House with significant events or patterns of events in the history of York Township or Fulton County. The Fry House and outbuildings are not associated with a significant event, period, or historical theme important in the development of York Township or Fulton County, Ohio. The architectural resource does not convey the life achievements of an important person. The architectural resource does not embody the distinctive characteristics of a type, period, or style of architecture, nor does it contribute to an eligible district. The architectural resource does not retain sufficient integrity to convey its original construction nor an identified period of significance. The resource features residential and agricultural resource types that do not represent significant architecture or engineering achievements. The Fry House has been extensively altered, including numerous material changes that have caused the resource to lose its integrity of material, design, and feeling. Similarly, the outbuildings are not exceptional or intact examples of their types. Therefore, the Fry House and outbuildings are recommended not eligible for listing in the NRHP under any criteria.



4.2.11 White House (Parcel #20-041052)

Photograph 4-15. White House (Parcel #20-041052) facing northwest.

Located on County Road 8-1 at the western end of the project, White House (Parcel #20-041052) is a modified Salt Box style dwelling built in 1890. The foundation was not visible from public ROW. The residence is one and a half stories tall and has a steeply pitched side gable roof with a shed dormer, wooden siding, and 1/1 and 2/2 replacement vinyl sashes. There are three non-historic age outbuildings associated with the residence built between 2018 and 2021.

No information could be located that associates the White House with significant events or patterns of events in the history of York Township or Fulton County. The White House and outbuildings are not associated with a significant event, period, or historical theme important in the development of York Township or Fulton County, Ohio. The architectural resource does not convey the life achievements of an

important person. The architectural resource does not embody the distinctive characteristics of a type, period, or style of architecture, nor does it contribute to an eligible district. The architectural resource does not retain sufficient integrity to convey its original construction nor an identified period of significance. The resource features residential and agricultural resource types that do not represent significant architecture or engineering achievements. The White House has been extensively altered, including numerous material changes that have caused the resource to lose its integrity of materials, design, and feeling. Similarly, the outbuildings are not exceptional or intact examples of their types. Therefore, the White House and outbuildings are recommended not eligible for listing in the NRHP under any criteria.

<image>

4.2.12 Goetz House (Parcel #20-040960)

Photograph 4-16. Goetz House (Parcel #20-040960) facing west.



Photograph 4-17. Goetz House and outbuildings (Parcel #20-040960) facing west.

Located on County Road 7-2 at the western end of the project, Goetz House (Parcel #20-040960) is a Central Hallway style dwelling built in 1900. The residence sits on a cut stone foundation and the front elevation has a side gable roof and a dropped shed roof covered the full-width front porch, supported by two sets of plain wooden columns. There is a hipped roof at the rear section of the property. The fenestration consists of 1/1 replacement vinyl and wooden sashes, along with decorative shutters. The siding of the residence is wood.

There are eight historic-age outbuildings associated with the residence: a poultry house, frame barn and lean-to built in 1920, and three pole barns and two lean-tos built in 1977. Many of these outbuildings were not visible from public ROW. A barn to the rear of the residence appears to be a Dutch pole barn with a corrugated metal roof, and at the far west of the property the poultry house appears to be only partially extent and not in use, consisting of a front-gable roofed building with wooden siding and no doors or windows.

No information could be located that associates the Goetz House with significant events or patterns of events in the history of York Township or Fulton County. The Goetz House and outbuildings are not associated with a significant event, period, or historical theme important in the development of York Township or Fulton County, Ohio. The architectural resource does not convey the life achievements of an important person. The architectural resource does not embody the distinctive characteristics of a type, period, or style of architecture, nor does it contribute to an eligible district. The architectural resource does not retain sufficient integrity to convey its original construction nor an identified period of significance. The resource features residential and agricultural resource types that do not represent significant architecture or engineering achievements. The Goetz House has been extensively altered, including numerous material changes that have caused the resource to lose its integrity of materials, design, and feeling. Similarly, the outbuildings are not exceptional or intact examples of their types. Therefore, the Goetz House and outbuildings are recommended not eligible for listing in the NRHP under any criteria.



4.2.13 Hertzfeld House (Parcel #20-040956)



Photograph 4-18. Hertzfeld House (Parcel #20-040956) and detached garage, facing east.



Photograph 4-19. Hertzfeld House (Parcel #20-040956) and two barns, facing east.

Located on County Road 7-2 at the western end of the project, Hertzfeld House (Parcel #20-040956) is a Central Hallway style dwelling built in 1900. The residence has a cut stone foundation and a side gable roof with a dropped shed roof covering a partial-width porch supported by a plain column at the western side of the façade. A dropped one-story section of the residence is located at the rear elevation and is likely an addition. The fenestration consists of 1/1 replacement vinyl sashes, some with metal awnings. The siding appears to be replacement vinyl siding. There are five historic-age outbuildings associated with the residence built from 1920 to 1940. There is a detached garage (1930) consisting of stone walls and a

metal roll up door, two front-gable roof barns (1920, 1940) a frame lean-to (1920) and a Dutch barn with a gambrel roof and wooden siding (1930).

No information could be located that associates the Hertzfeld House with significant events or patterns of events in the history of York Township or Fulton County. The Hertzfeld House and outbuildings are not associated with a significant event, period, or historical theme important in the development of York Township or Fulton County, Ohio. The architectural resource does not convey the life achievements of an important person. The architectural resource does not embody the distinctive characteristics of a type, period, or style of architecture, nor does it contribute to an eligible district. The architectural resource does not retain sufficient integrity to convey its original construction nor an identified period of significant. The resource features residential and agricultural resource types that do not represent significant architecture or engineering achievements. The Hertzfeld House has been extensively altered, including numerous material changes that have caused the resource to lose its integrity of material, design, and feeling. Similarly, the outbuildings are not exceptional or intact examples of their types. Therefore, the Hertzfield House and outbuildings are recommended not eligible for listing in the NRHP under any criteria.



4.2.14 Fetterman House (Parcel #11-021932) and barn (Parcel #11-021952)

Photograph 4-20. Fetterman House (Parcel #11-021932) facing southeast.



Photograph 4-21. Fetterman barn and outbuilding (Parcel #11-021952) facing southeast.

Located on County Road 5-2 at the center of the project, Fetterman House (Parcel #11-021932) is a Bungalow style dwelling built in 1913. The residence is one and a half stories tall with a cross-gable roof and a dropped shed roof covering a full-width front porch supported by four plain wooden columns. The fenestration at the first floor consists of 1/1 wooden sashes, and there is a tri-plane window at the second level at the façade. The siding appears to be wooden and the house rests on a cut stone foundation. Parcel #11-021932 also has three outbuildings, all built in 1900: a rectangular detached garage, a hog barn, and a small utility shed.

Related to Parcel #11-021932 is parcel #11-021952 which consist of four structures all built in 1900: two flat barns, a frame lean-to and a small utility shed. The largest flat barn is Dutch barn type with a gambrel roof in a T plan, with wooden siding. The secondary barn is rectangular with a front gable roof and wooden siding.

No information could be located that associates the Fetterman House with significant events or patterns of events in the history of York Township or Fulton County. The Fetterman House and outbuildings are not associated with a significant event, period, or historical theme important in the development of York Township or Fulton County, Ohio. The architectural resource does not convey the life achievements of an important person. The architectural resource does not embody the distinctive characteristics of a type, period, or style of architecture, nor does it contribute to an eligible district. The architectural resource does not retain sufficient integrity to convey its original construction nor an identified period of significance. The resource features residential and agricultural resource types that do not represent significant architecture or engineering achievements. The Fetterman House has been extensively altered, including numerous material changes that have caused the resource to lose its integrity of materials, design, and feeling. Similarly, the outbuildings are not exceptional or intact examples of their types. Therefore, the Fetterman House and outbuildings are recommended not eligible for listing in the NRHP under any criteria.



4.2.15 Nagel House (Parcel #11-021828)

Photograph 4-22. Nagel House (Parcel #11-021828) facing east.



Photograph 4-23. Nagel House (Parcel #11-021828) and poultry house facing north.

Located on County Road 4 at the eastern end of the project, Nagel House is a heavily modified Gable-Ell style dwelling built in 1900. The residence has a cut stone foundation and a cross-gable roof with shed dormer and dropped shed roof covering the deep partial width porch. The porch has stone balustrades and battered wooden columns. Fenestration consists of 1/1 replacement vinyl sashes and a glazed front door. The south facing elevation has a large three-plane bay window, and the east facing elevation has a second story balcony with turned wooden balustrade. The siding is wood. The parcel also has a frame

poultry house which is a one-story, rectangular building with 1/1 vinyl sash windows built in 1900. There is also a small rectangular shed built in 1900.

No information could be located that associates the Nagel House with significant events or patterns of events in the history of York Township or Fulton County. The Nagel House and outbuildings are not associated with a significant event, period, or historical theme important in the development of York Township or Fulton County, Ohio. The architectural resource does not convey the life achievements of an important person. The architectural resource does not embody the distinctive characteristics of a type, period, or style of architecture, nor does it contribute to an eligible district. The architectural resource does not retain sufficient integrity to convey its original construction nor an identified period of significance. The resource features residential and agricultural resource types that do not represent significant architecture or engineering achievements. The Nagel House has been extensively altered, including numerous material changes that have caused the resource to lose its integrity of material, design, and feeling. Similarly, the outbuildings are not exceptional or intact examples of their types. Therefore, the Nagel House and outbuildings are recommended not eligible for listing in the NRHP under any criteria.



4.2.16 Gombash Farms (Parcel #13-022552)

Photograph 4-24. Gombash Farms (Parcel #13-022552) facing east.

Located on County Road 3 at the eastern end of the project, Gombash Farms is a series of farm related outbuildings. There are five historic-age farm buildings: a detached frame garage (1956), metal pole barn (1970) and three grain bins (1950). There is a non-historic age residence on the parcel built in 2000, and four non-historic era outbuildings built from 1995-2010. The detached frame garage is rectangular, with a front-gable roof and metal siding. The metal pole barn is three sided with a dirt floor, a front-gable corrugated metal roof and metal siding. There are large garage bays present at the street-facing façade. The grain bins are cylindrical, double height metal bins to the north and east of the barn.

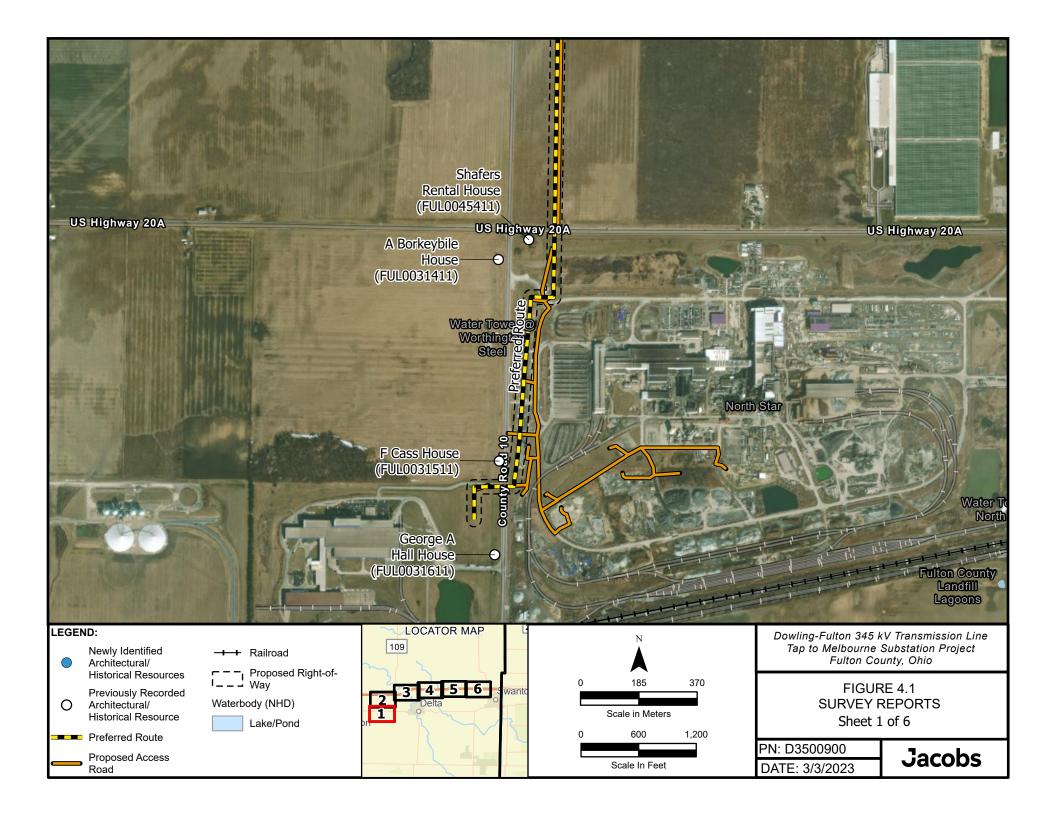
No information could be located that associates the Gombash Farms with significant events or patterns of events in the history of York Township or Fulton County. Gombash Farms is not associated with a

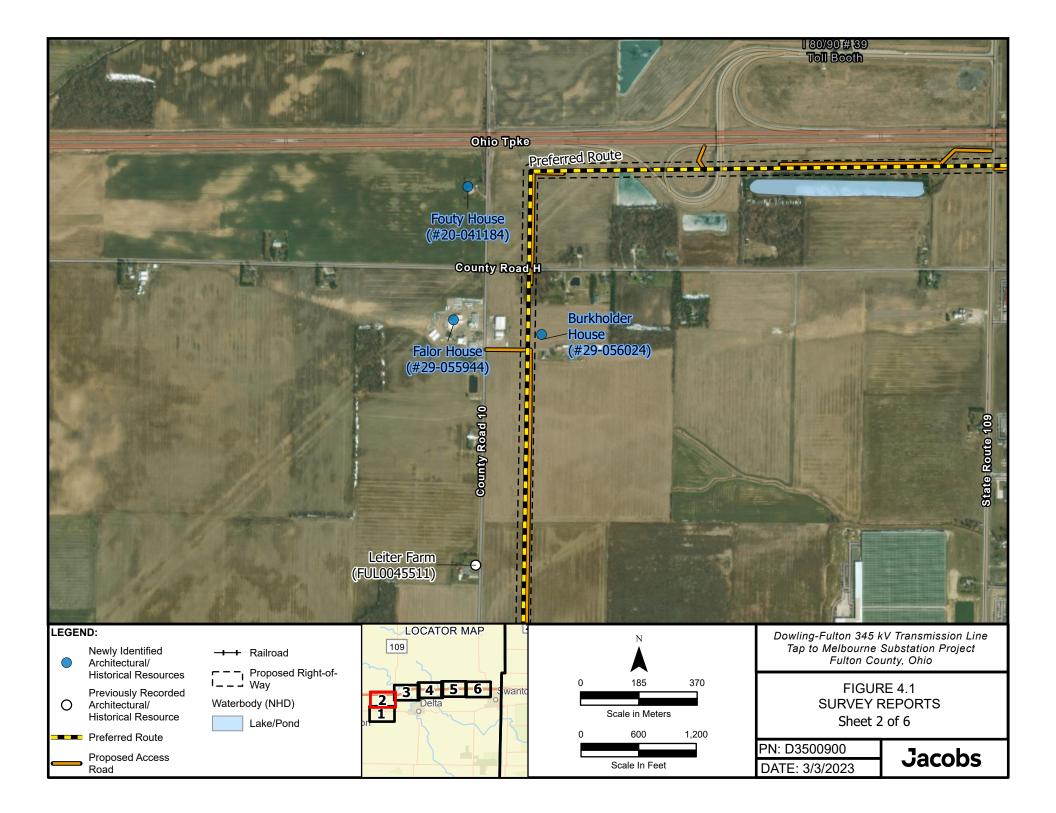
significant event, period, or historical theme important in the development of York Township or Fulton County, Ohio. The architectural resource does not convey the life achievements of an important person. The architectural resource does not embody the distinctive characteristics of a type, period, or style of architecture, nor does it contribute to an eligible district. The architectural resource does not retain sufficient integrity to convey its original construction nor an identified period of significance. The resource features agricultural resource types commonly found in Ohio, and it does not represent significant architecture or engineering achievements. Gombash Farms has been extensively altered, including numerous material changes that have caused the resource to lose its integrity of material, design, and feeling. Therefore, Gombash Farms is recommended not eligible for listing in the NRHP under any criteria.

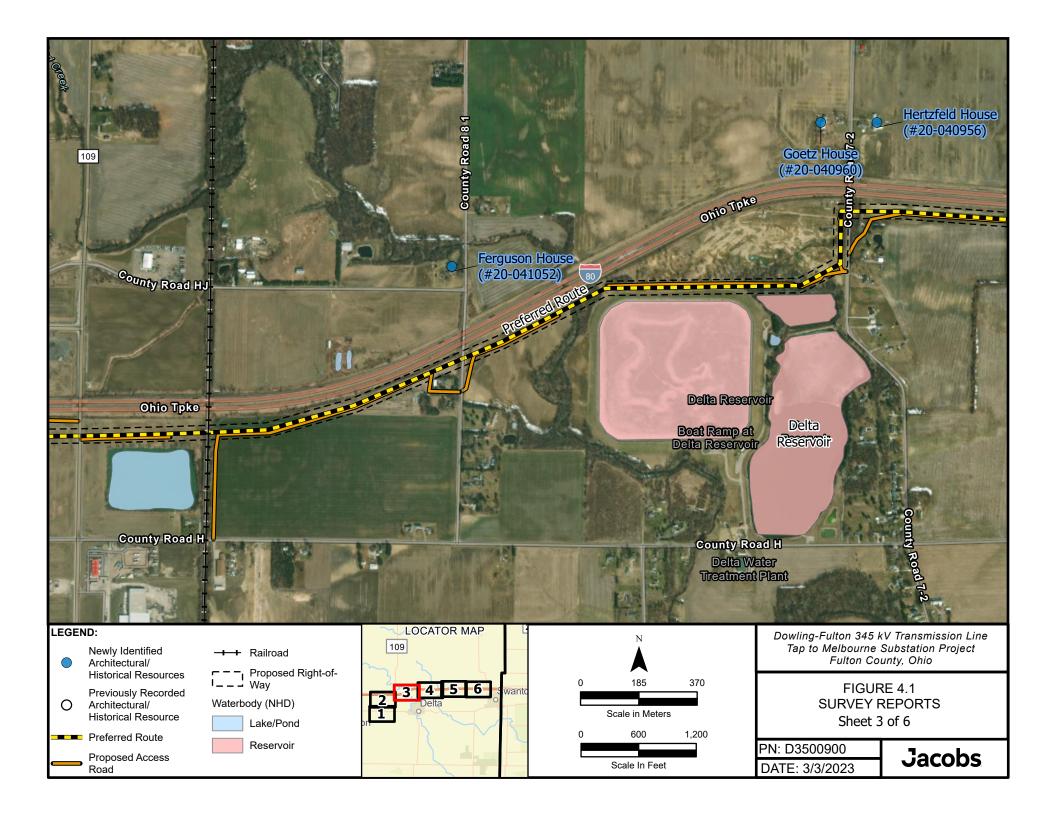
4.3 Assessment of Impacts

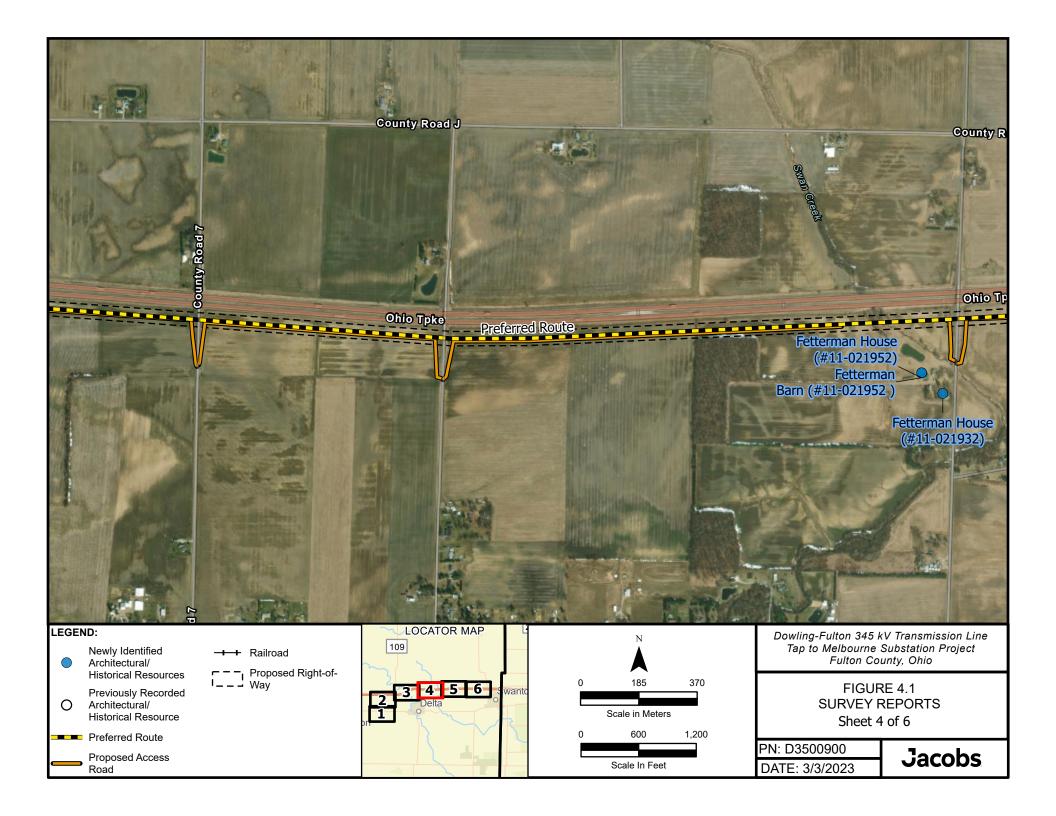
The Project is situated in a rural area defined by a flat terrain that is a mix of agricultural fields with limited forested areas near human-made and naturally occurring water bodies, such as Bad Creek and the Delta Reservoir. The proposed transmission line, as designed, will be constructed next to an existing transmission line that passes through Delta and Fulton townships, within an existing, cleared transmission line corridor. Other visual intrusions in the immediate vicinity of the Project beyond the existing transmission line include large, modern telecommunications towers, modern highway infrastructure, electrical substation, and manufacturing facilities. Additionally, residential properties have thick stands of trees that provide a measure of visual buffer, as was discovered during the field survey phase of this study. These factors were taken into consideration when evaluating impacts from the proposed Project.

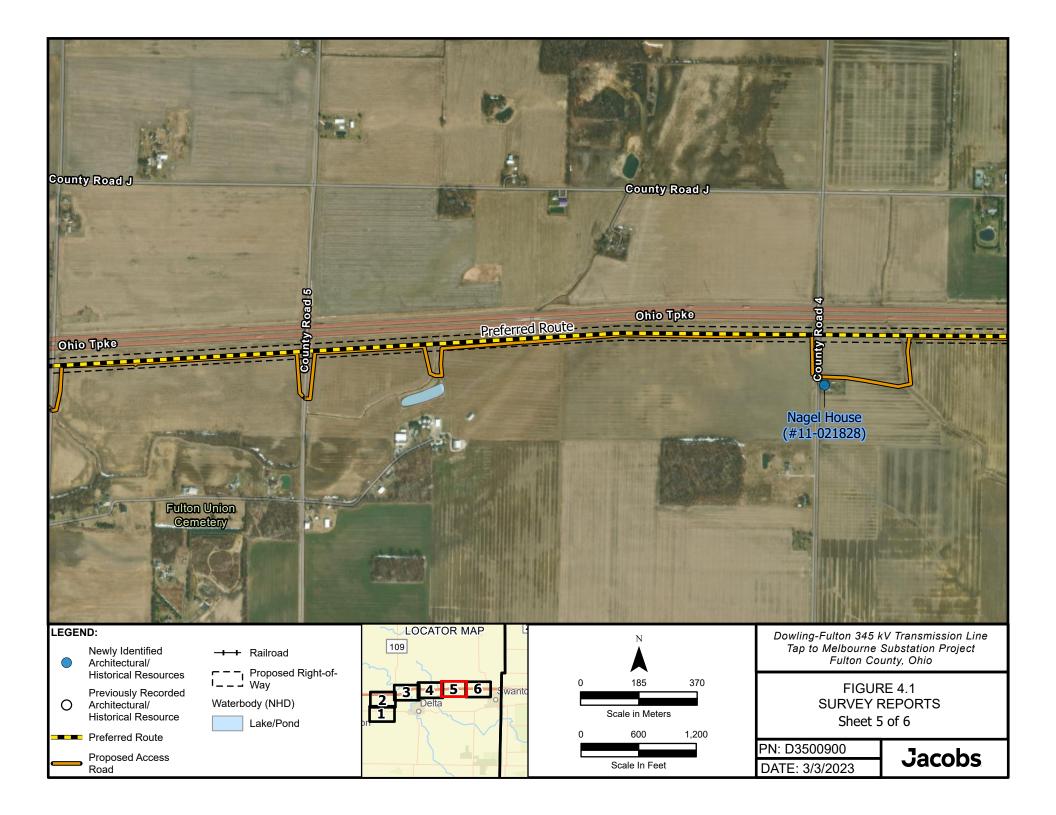
Based on the results of the reconnaissance survey, Jacobs recommends that no NRHP-eligible or NRHPlisted resources or historic properties are located within the indirect APE. The surveyed resources are located adjacent to an existing electric transmission line that passes the resources along a similar alignment as the proposed Project. Importantly, mature trees are commonly found planted near residential buildings, which partially screen the view of the existing transmission line and the Project's proposed placement. As proposed, the Project will not be situated near any NRHP-eligible or NRHP-listed resources or historic properties. The placement of the Project along an existing transmission line will not introduce an impact to any NRHP-eligible or NRHP-listed resources or historic properties. Therefore, Jacobs recommends that the Project will have no impact on historic properties.

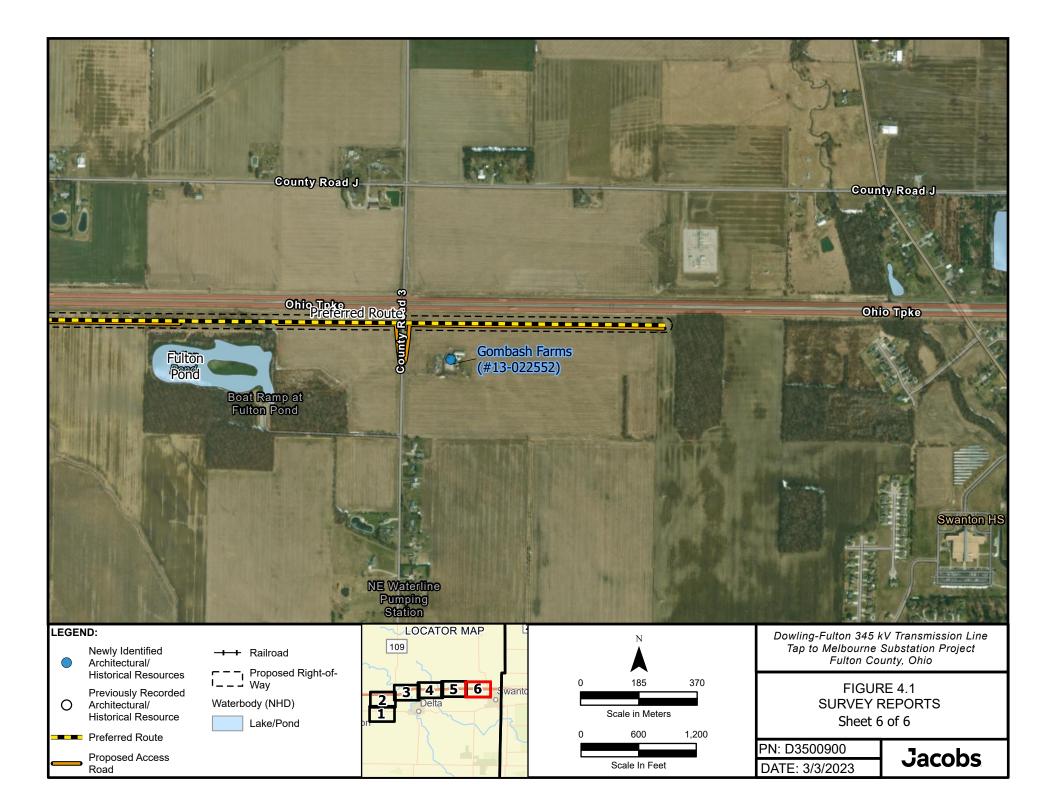












5. Summary and Recommendations

This report has presented the background research, field strategy, and results of the architectural and historical resources survey for the Project. The overall Project includes the construction of a new greenfield 345 kV transmission line approximately 9.5 miles in length and with an expected ROW width of 150 feet in Fulton County, Ohio.

The APE considered potential Project impacts (both direct and indirect) to architectural and historical resources. The APE was defined based on consultation with the OHPO for previous ATSI/FirstEnergy projects and considered potential Project impacts (both direct and indirect) to architectural and historical resources. The APE for the Project is defined as a maximum of 1,000 feet (305 meters) on either side of the proposed centerline, refined as appropriate, based on landforms, vegetation, terrain features, and intervening modern infrastructure, for the entire length of the Project. For example, if a potential resource was located 800 feet (244 meters) from the Project, but separated from it by a hill or intervening stands of trees, it was not considered within the APE, since the Project would have no potential to generate a visual impact. Also included in the APE were the footprints of the associated temporary construction access roads, as well as their viewsheds (for newly-constructed access roads), which consider topographic and vegetative features.

The literature review identified 16 OHI resources within 1 mile (1.6 kilometers) of the overall Project. Of the 16 OHI resources within the study area, only 5 OHI resources are located within 1,000-feet (305-meter) maximum APE limits. Only 2 of the 5 OHI resources located within the 1,000-foot (305-meter) maximum APE limits remain extant. None of the OHI resources are recommended eligible for listing in the NRHP. Therefore, the Project does not maintain the potential to introduce an adverse impact to any of the previously surveyed resources, as the 5 OHI resources within the indirect APE are recommended not eligible for listing in the NRHP.

The reconnaissance survey conducted in January 2023 identified 11 additional resources within the APE, including residences and farms. These resources were evaluated for their historic and/or architectural significance according to the NRHP criteria, as well as their level of integrity. Based on the results of this evaluation, none of the resources are recommended eligible for listing, as the resources do not reflect significant architectural or historical themes or associations, have lost integrity, or both.

Jacobs assessed impacts as part of the study. Based on this assessment, no historical or architectural resources are identified within the indirect APE that qualify for listing in the NRHP. Jacobs recommends that no architectural and historical resources will be impacted by the Project, and no further work is required.

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In reply refer to: 2023-FUL-57272

March 14, 2023

Megan Harding, MS, RPA Jacobs Engineering Group, Inc. 1610 N 2nd Street, Suite 201 Milwaukee, Wisconsin 53212 Email: <u>megan.harding@jacobs.com</u>

RE: Section 106 Review-Dowling-Fulton 345kV Transmission Line Tap to Melbourne Substation Project, Delta, Fulton County, Ohio.

Dear Ms. Harding:

This letter is in response to correspondence received on February 28, 2023 regarding the proposed Dowling-Fulton 345kV Transmission Line Tap to Melbourne Substation Project in Fulton County, Ohio. We appreciate the opportunity to comment on this project. The comments of the Ohio State Historic Preservation Office (SHPO) are made pursuant to Section 149.53 of the Ohio Revised Code (O.R.C.) and the Ohio Power Siting Board rules for siting this project (OAC 4906-5). The comments of the Ohio SHPO are also submitted in accordance with the provisions of Section 106 of the National Historic Preservation Act of 1966, as amended (54 U.S.C. 306108 [36 CFR 800]).

The proposed undertaking involves the installation of a new 345kV transmission line within a proposed 95- to 150ft. wide by 9.46-mile right-of-way (ROW) corridor, which is defined as the direct Area of Potential Effect (APE). The following review and comments pertain <u>only</u> to the *Phase I Archaeological Survey Report* by Jacobs Engineering Group, Inc. (Jacobs 2023). The architectural component has been submitted in a stand-alone report, and therefore the SHPO review will be under a separate cover.

The archaeological survey involved a literature review, shovel test unit excavations, surface collection, and visual inspection of the entire APE, as defined above. A total of 100 shovel test units were excavated within the APE while the remaining portions were subjected to surface collection and visual inspection. According to the literature review, one previously documented archaeological site, 33FU235, is mapped adjacent to the APE. This site is recorded as an historic-era site associated with a razed and graded residential house seat locale. It was documented during a previous cultural resource management survey and was determined by the SHPO not to be eligible for the National Register of Historic Places (NRHP). The current survey re-identified the site and determined that the site extends into the current APE based on a diffuse scatter of historic-era artifacts. Based on the additional artifacts identified during this survey, Jacobs recommends that the site is not eligible for the NRHP and no additional archaeological work is warranted.

After careful review of the archaeological report, our office concurs with Jacobs that site 33FU235 is not considered eligible for the NRHP. Therefore, as proposed, the project will have no effect on significant archaeological resources. Furthermore, the SHPO also concurs that, as proposed, no further archaeological investigations are warranted for the 9.46-mile APE. No further coordination in regards to archaeology are required for this project unless the scope of work changes or new/additional archaeological remains are discovered during the course of the

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project. In such a situation, this office should be contacted. If you have any questions concerning this review, please contact me via email at <u>sbiehl@ohiohistory.org</u>. Thank you for your cooperation.

Sincerely,

Steph M. Biell

Stephen M. Biehl, Project Reviews Coordinator (archaeology) Resource Protection and Review State Historic Preservation Office

RPR Serial No. 1097155

"Please be advised that this is a Section 106 decision. This review decision may not extend to other SHPO programs."

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Summary: Application First Supplement to Application (Cultural Resources Reports) - Part 3 of 3 electronically filed by Ms. Devan K. Flahive on behalf of American Transmission Systems Incorporated.