

APPENDIX D

Waters of the U.S. Investigation Memorandum



MEMO

Date: June 26, 2020
To: Don Wheeler (The Energy Cooperative)
From: Michael Krokonko (EMH&T)
Subject: State Route 13 (Line 3-C) Replacement Project
Thorn Township, Perry County, Ohio
Waters of the U.S. Review

Overview

EMH&T conducted a field investigation on May 28 and June 19, 2020, to determine the location, extent, and quality of potential waters of the United States located within a 100-foot wide corridor associated with the State Route 13 (Line 3-C) Replacement Project. The pipeline corridor is located near the intersection of State Route 13 and High Point Road in Thorn Township, Perry County, Ohio. The results of the literature review and field investigation are summarized below.

Literature Review

As shown on Exhibit 1, the project is located north of Thornville, west of the intersection of SR 13 and High Point Road in Thorn Township, Perry County, Ohio. The project corridor is comprised of maintained residential property and highway right of way, with a small amount of actively managed agricultural field.

Topographic Features

As shown on Exhibit 2, the subject corridor lies at elevations between 1,000 and 1,050 feet (National Geodetic Vertical Datum) according to the USGS 7.5' Series *Rushville, Ohio* quadrangle (USGS, 1985). One (1) intermittent stream is mapped adjacent to the corridor to the southeast. No other drainageways, marshes, or open water ponds were depicted within or adjacent to the corridor.

Mapped Soils

According to the USDA-Natural Resources Conservation Service (NRCS) Soil Survey Geographic (SSURGO) Database (2017), as shown on Exhibit 3A, the corridor contains a total of two (2) soil types. These soils are listed below in Table 1 along with their hydric status. According to the Licking County Soil Survey (USDA, 1992) (Exhibit 3B), no drainageways, open water features, or marsh symbols are mapped within or adjacent to the site.

TABLE 1
Mapped On-site Soils

Mapped Soil Unit	Map Unit Symbol	Hydric Status	Hydric Inclusions	Location of Hydric Inclusions
Alford silt loam, 1 to 8 percent slopes	AfB	Non-Hydric	-	-
Bennington silt loam, 0 to 3 percent slopes	BeA	Hydric	Pewamo (10%)	Depressions

Hydrologic Conditions

A hydric soil is a soil that is *saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions that favor the growth and regeneration of hydrophytic vegetation* (USDA, NRCS, 2010). Map units are composed of one or more map unit components or soil types, each of which is rated as hydric or not hydric soil. Map units that are made up dominantly of hydric soils may have small areas of minor non-hydric components in the higher positions on the landform, and map units that are made up dominantly of non-hydric soils may have small areas of minor hydric components in the lower positions on the landform.

According to the USDA, and Pewamo silty clay loam is a hydric soil. "Non-hydric" means that all components are rated as not hydric. "Hydric" means that the major components of the soil are rated as hydric.

The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) was reviewed for the site (FEMA, 2007). The entire project area lies within Zone X (unshaded), which is an area determined to be outside the 0.2% annual chance floodplain. Since no floodway areas were mapped within or near the site, an exhibit was not provided. No drainageways were mapped within or adjacent to the pipeline corridor.

The United States Fish and Wildlife Service's (USFWS) National Wetland Inventory (NWI) mapping was reviewed for the corridor using the online Wetlands Mapper portal and USFWS GIS data (USFWS, 2017). Since no NWI features were mapped within or near the study corridor, an exhibit was not provided.

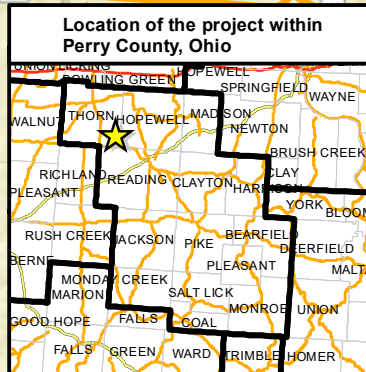
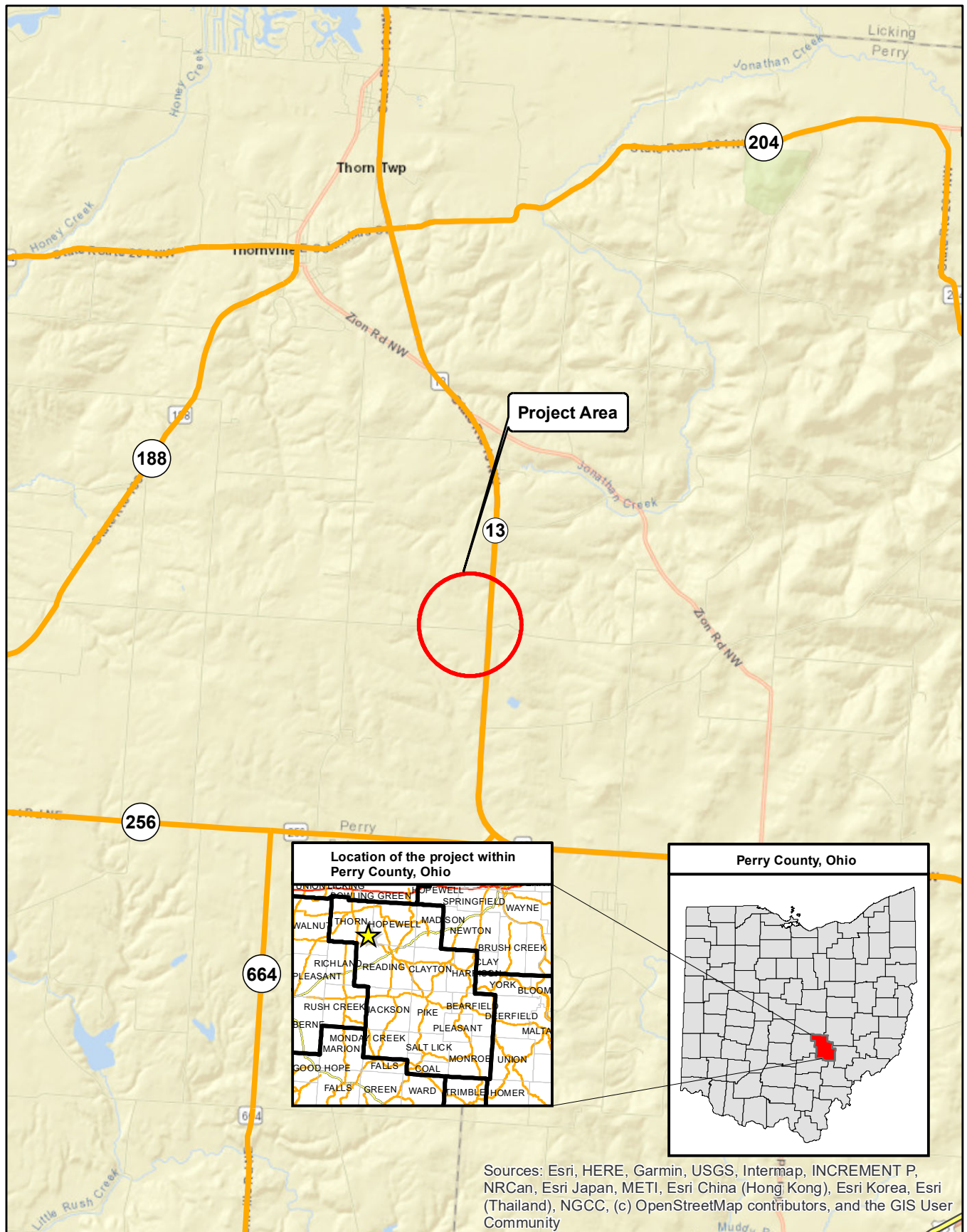
Field Investigation Results

EMH&T conducted a field investigation for the corridor on May 28 and June 19, 2020, to determine the location, extent, and quality of potential waters of the United States, including wetlands and streams. As shown on Exhibit 4, no potentially jurisdictional streams or wetlands were located within the study corridor. One non-jurisdictional drainage swale was observed east of SR 13, within highway right of way. The swale lacks a defined bank, stream bed material, flow characteristics, and an ordinary high water mark. The lack of stream characteristics suggest the feature serves as a drainage feature conveying roadway drainage from SR 13 and High Point Road during high run-off events. The absence of stream characteristics categorizes this feature as upland drainage swale and therefore it would not be considered a jurisdictional water of the U.S. in accordance with 33 CFR 328.4(c)(1). Representative photographs of the project corridor are included in the Photographs section of this Memorandum.

Conclusion

EMH&T conducted a field investigation of the corridor on May 28 and June 19, 2020, to determine the location, extent, and quality of potential waters of the United States, including wetlands and streams. The results of the field review indicate that no streams or wetlands are located within proposed project corridor. One (1) roadway drainage swale is located east of SR 13, within highway right of way. However, given the lack of stream characteristics (i.e. defined bed and bank, stream bed material, flow characteristics), it is EMH&T's opinion that this feature would not be jurisdictional as it develops entirely within the highway right of way and serves as a graded roadway drainage feature conveying drainage from SR 13 and High Point Road during high run-off events. Temporary impacts to the SR 13 roadway drainage network will likely be avoided as the replacement pipe is bored under SR 13 right of way. If you have questions about the contents of this memo or wish to discuss permitting, please contact Mike Krokonko at (614) 775-4509 or mkrokonko@emht.com.

EXHIBITS



Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



Engineers • Surveyors • Planners • Scientists
5500 New Albany Road, Columbus, OH 43054
Phone: 614.775.4500 Toll Free: 888.775.3648

emht.com

THORN TOWNSHIP, PERRY COUNTY, OHIO

State Route (SR) 13 Line 3-C Replacement Project
USGS Topographic Map
Exhibit 2

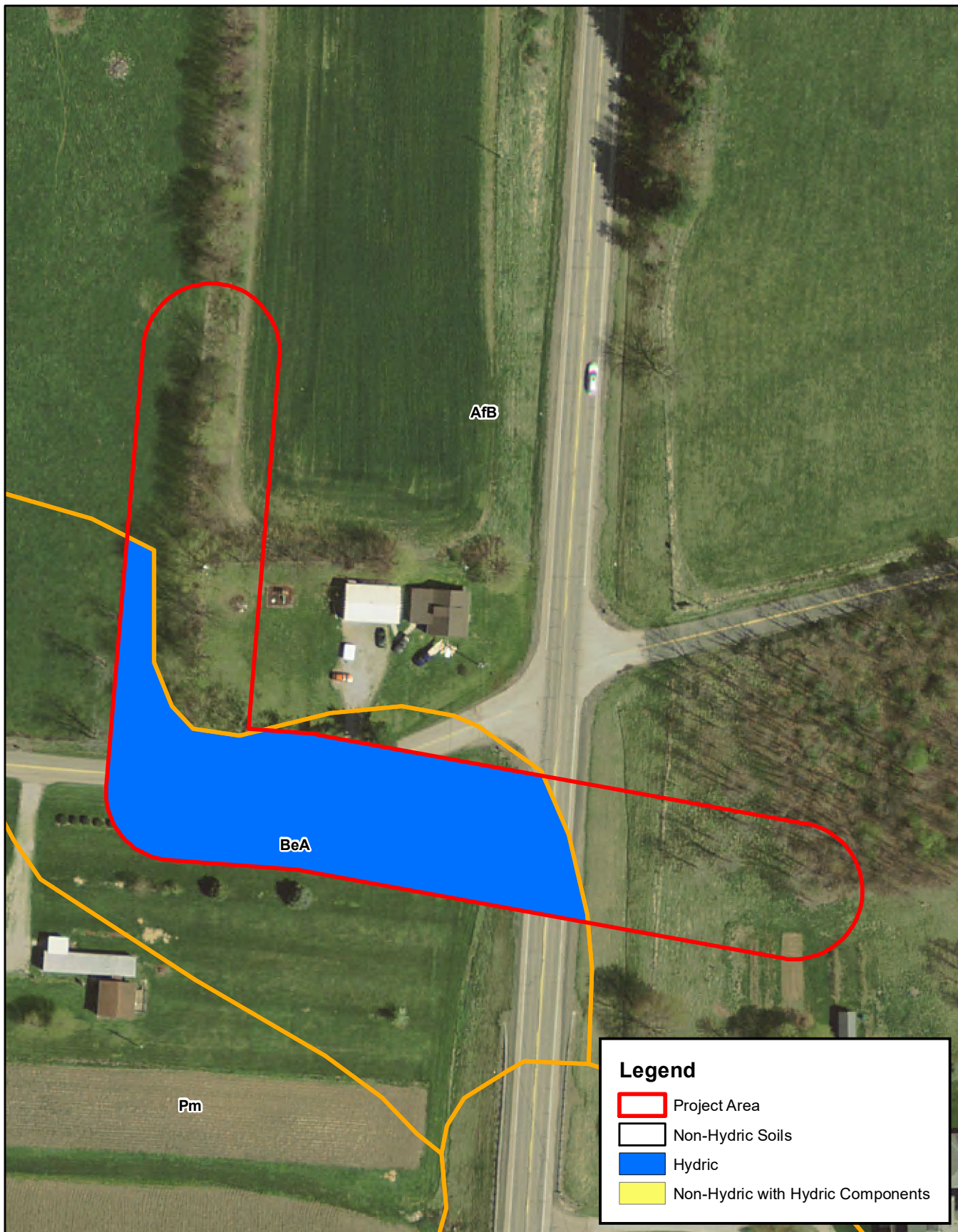
SCALE: 1" = 1,000'

0 500 1,000 2,000 Feet

Source: USGS Rushville Quad Map (Pub. 1985)



Path: J:\20200396\GIS\Exhibit 3A - Soils.mxd



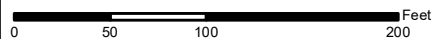
Engineers • Surveyors • Planners • Scientists
5500 New Albany Road, Columbus, OH 43054
Phone: 614.775.4500 Toll Free: 888.775.3648

emht.com

THORN TOWNSHIP, PERRY COUNTY, OHIO

**State Route (SR) 13 Line 3-C Replacement Project
Soils Map
Exhibit 3A**

SCALE: 1" = 100'



Source: SSURGO/NRCS, 2016
Aerial - OSIP 2013



Path: J:\20200396\GIS\Exhibit 3B - Soils.mxd



Legend

 Project Area



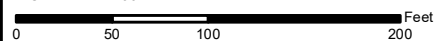
Engineers • Surveyors • Planners • Scientists
5500 New Albany Road, Columbus, OH 43054
Phone: 614.775.4500 Toll Free: 888.775.3648

emht.com

THORN TOWNSHIP, PERRY COUNTY, OHIO

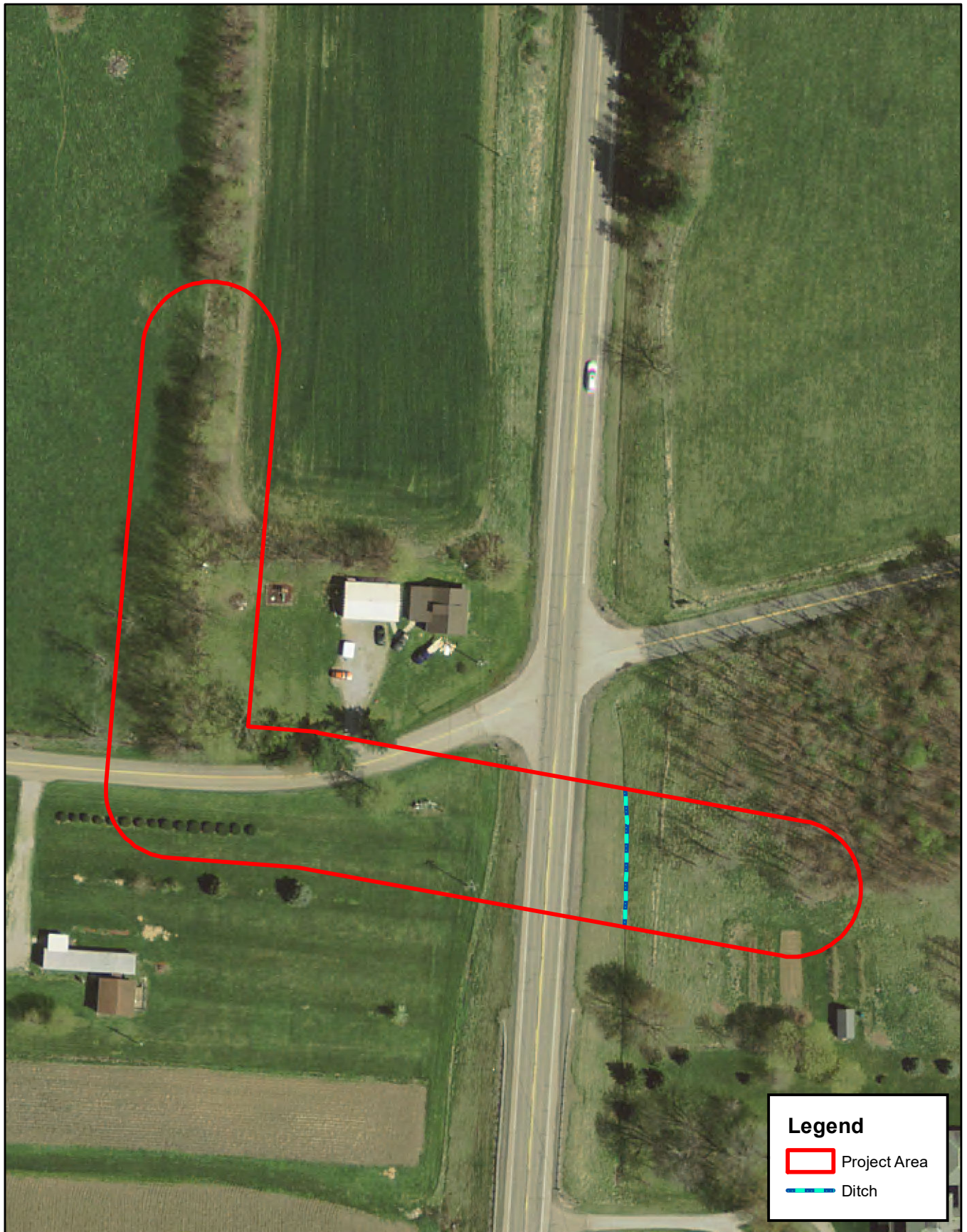
**State Route (SR) 13 Line 3-C Replacement Project
Soils Map
Exhibit 3B**

SCALE: 1" = 100'



Source: Soils USDA 1988

Path: J:\2020063\GIS\Exhibit 4 - Delineation Map.mxd



PHOTOGRAPHS



A legacy of **experience**. A reputation for **excellence**.



Photo 1: View of the existing pipeline corridor located east of SR 13, facing east.



Photo 2: View of vegetated drainage swale looking north towards the SR 13 & High Point Road Intersection.



Photo 3: Looking west along the existing pipeline corridor, from the southbound SR 13 edge of pavement.



Photo 4: Looking west along the proposed pipeline corridor, south of High Point Road.



A legacy of **experience**. A reputation for **excellence**.



Photo 5: Looking north along the proposed pipeline corridor, north of High Point Road.



Photo 6: Looking south along the proposed pipeline corridor, from the proposed relocation tie-in.

This foregoing document was electronically filed with the Public Utilities

Commission of Ohio Docketing Information System on

7/6/2020 2:52:21 PM

in

Case No(s). 20-1204-GA-BNR

Summary: Application Application Part 4 - Construction Notice for the State Route 13 (Line 3-C) Replacement Project located in Thorn Township, Perry County, Ohio electronically filed by Mr. Michael A Krokonko on behalf of The Energy Cooperative (NGO Transmission)