EXHIBIT #14

Lakeview-Ottawa 138kV
Transmission Line Reconductoring Project

PRESENCE / ABSENCE SURVEY REPORT
EASTERN PRAIRIE FRINGED ORCHID
(PLATANTHERA LEUCOPHAEA)

Prepared for:
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a FirstEnergy Company
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Akron, Ohio 44308

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September 2022

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ATTACHMENTS

1.0 INTRODUCTION

American Transmission Systems, Inc. (ATSI), a FirstEnergy Company (FirstEnergy), is proposing to reconductor 7.8 miles of an existing 138 kilovolt (kV) transmission line as two disconnected segments located within Bay, Portage, and Salem Townships, in Ottawa County, Ohio. The first segment is located near the eastern portion of the Project and the reconductoring of the line will begin at the Lakeview Substation in Portage Township and terminate at Structure 1448A located west of S. Hopfinger Road in Bay Township. The second segment is located near the western portion of the Project and the reconductoring of the line will begin at the Ottawa Substation in Portage Township and will terminate to the east at Structure 111.5 in Salem Township. During the reconductoring of the transmission line, ATSI plans to replace and/or modify eleven (11) existing structures and will require temporary equipment access. All other structures will be reconductored by foot and/or aerial via helicopter use. Additionally, the reconductoring of the Project will require several ancillary sites including turn arounds, pull sites, guard structures, and laydown yards as displayed on **Figure 1 – Agency Overview Map** and **Figure 2 – Presence/Absence Survey Map**. Therefore, the Project Study Area presented within this report equates to the proposed "action area" or work area required by ATSI to perform the Project activities.

This report has been prepared by AECOM Technical Services, Inc. (AECOM), on behalf of ATSI, to document the presence/absence survey results as requested by the United States Fish and Wildlife Service (USFWS) for the Eastern Prairie Fringed Orchid (*Planthera leucophea*), referred herein as "target species", as identified under the USFWS response (TAILS# 03E15000-2020-TA-0471) dated December 30, 2019 (**Attachment A**).

2.0 METHODS

Prior to completion of the presence/absence survey, a detailed literature review and site visit to a reference population of the target species was completed to identify the unique characteristics, habitat preferences, flowering and fruiting periods, and historical ranges within Ottawa County. The literature review was completed by the AECOM ecologists performing the survey to help familiarize them with the target species. The literature review included the review of a variety of published and online resources with the results included under **Section 3.1**. Regarding the reference population, AECOM completed the site visit with USFWS's Jennifer Finfera on June 30, 2021 to identify if the species was in flower and characteristics of t habitat during the period of the presence/absence survey completed between June 29 through July 1st,, 2021. Photographs and general characteristics note of the target species identified at the reference population was taken during the site visit and included as **Section 3.2**.

The presence/absence survey for the target species was completed on June 29 through July 1st, 2021 within the Project study area associated with the areas where proposed work activities would occur. Following the initial site assessment, an access road adjustment occurred as well as addition of an existing

gravel helicopter pad, existing paved/gravel staging area, and additional proposed pull site. The existing gravel helicopter pad and paved/gravel staging area were not included within this assessment due to lacking suitable habitat. However, the survey for the access road adjustment and pull site occurs outside of the recommended presence/absence window and assessment included determination if the habitats along the access road would warrant additional presence absence survey within this report. Furthermore, the Project study area consisted of 100x100 foot area center along eleven (11) structures proposed for modification and/or replacement, 50-ft corridor centered along proposed temporary access roads, and 25-ft offset of all proposed pull areas, laydown yards, turnarounds, and other workspaces. The extent of the study area is displayed on **Figure 2 – Presence/Absence Survey Map**.

The entire Project study area was assessed, and each habitat type was classified according to its ability to support the target species. As identified in the literature review in Section 3.1, the target species occurs in a variety of habitats from mesic prairie to wetlands and could occur in moist road-side ditches (USFWS, 2005; **Attachment A**). Therefore, the species may be present within areas outside of wetlands and AECOM completed the presence/absence survey within the entire extent of the Project study area.

AECOM ecologists were equipped with a Trimble Geo-XH6000 Global Positioning System (GPS) and a digital camera to document existing plant communities and populations of the target species, identified during the survey. Ecologists collected detailed habitat information including an inventory of plant species, land use, topographic position, hydrologic regime, as well as anthropogenic and natural disturbances that could affect the target species. GPS coordinates/boundaries of habitat areas, boundaries of target species populations, and photograph locations would also be collected if the target species is identified.

3.0 RESULTS

3.1 LITERATURE REVIEW

Eastern Prairie Fringed Orchid (*Platanthera leucophaea*) Identification

The *Platanthera* genus includes approximately thirty-four (34) species within North America that are primarily located within north temperate zone with a few identified in more tropical settings (FNA, 2020a). Of these thirty-four (34) species, twelve (12) are known to occur within Ohio. These species include northern green orchid (*Platanthera aquilonis*), white fringed bog orchid (*Platanthera blephariglottis*), Orange fringed bog orchid (*Platanthera ciliaris*), little club spur bog orchid (*Platanthera clavellata*), northern tubercled bog orchid (*Platanthera flava*), greater purple fringed bog orchid (*Platanthera grandiflora*), hooker's bog orchid (*Platanthera hookeri*), ragged fringed orchid (*Platanthera lacera*), eastern prairie fringe orchid (*Platanthera leucophaea*), round leaved orchid (*Platanthera orbiculata*), purple fringeless orchid (*Platanthera peramoena*), and lesser purple fringed bog orchid (*Platanthera psycodes*) (FNA, 2020a).

Of these twelve (12) species that could be found in Ohio, three (3) species (*P. blepharigolottis, P. lacera,* and *P. psycodes*) are known to have similar characteristics to the target species (*P. leucophaea*). The

target species, *P. leucophaea*, is a 0.2-1.2m tall herbaceous perennial with lanceolate leaves scattered along the stem with white or creamy, deeply 3-lobed, margins fringed, and column hooded flowers arranged in a cylindric spike (ODNR, 2007). As per coordination with the USFWS, the species typically flowers between the last two weeks of June and/or first week of July, which is dependent upon seasonal conditions and weather. The target species requires full sun, neutral to calcareous soils, mesic to wet prairies, marshes, fens, ditches, and old fields (ODNR, 2007; Attachment A). As the other similar species can occur within the same habitat, the difference between the target and similar species include:

- *P.blepharigolottis* – a acid bog species with white flowers that are smaller and morphologically different than the target species (USFWS, 1999). *P. leucophaea* has a lip in three division, whereas *P. blepharigolottis* has no divisions to the lip (ODNR, 2007).
- *P. lacera* – prefers less calcareous habitats with similar flower color and structure of *P. leucophaea* but has shorter nectar spurs, ovaries, and flower bracts (USFWS, 1999). Generally, the *P. lacera* has spurs between 11-23 millimeters (mm) with ovary between 8-20 mm. In contrast, *P. leucophaea* has nectar spur between 28-47 mm and ovary between 15-30mm. Additionally, *P. lacera* has linear-oblong to oblong-spatulate petals with a greenish white lip and *P. leucophaea* has oblong-obovate to flabellate petals with pure white lip (FNA, 2020a; FNA, 2020b; FNA, 2020c; FNA, 2020d; FNA, 2020e; ONDR, 2007).
- *P. psycodes* – This orchid species generally has lavender to rose purple color flowers and in rare cases, can display white flowers (ODNR, 2007; FNA, 2020e). Under this rare occurrence where *P. psycodes* is an albino, *P. leucophaea* can be differentiated by a longer nectar spur and deeper fringing of the lip. For instance, *P. psycodes* nectar spur is between 11-23 mm, which is approximately 5 mm less than the lower limits of *P. leucophaea* (FNA, 2020a; FNA, 2020b; FNA, 2020c; FNA, 2020d; FNA, 2020e).

As a result, identification of the species requires the flower to be present for proper identification to the species level. Individuals that were identified without flowering are assumed to be the target species until proper identification surveys can be completed during the next flowering season.

3.2 Target Species' Reference Population

AECOM completed the presence/absence surveys for the target species between June 29 through July 1st, 2021. All areas except for two portions along Access Road LG-02b and one pull site were assessed within the recommended flowering period of the target species. The two portions of Access Road LG-02b assessment and pull site were completed on February 23, 2022, which is displayed as "AECOM Survey February 2022" on **Figure 2**.

During the June to July 2021 presence/absence survey, AECOM met with personnel from the U.S. Fish and Wildlife Service to examine reference populations of the target species. The two populations of the

target species were reviewed in two different distinct habitats. One of the habitats included a wet prairie/palustrine emergent wetland that has an open canopy and associated with a seasonally saturated and/or inundated wetland habitat. The population of this community was in good health and abundance upon our site investigation with many individuals in full flower. Additionally, a second population was observed along an inundated ditch and the target species was observed within both the inundated portion of the ditch and upland sloping banks. Due to the adjacent trees and their canopy cover, the habitat did not provide optimal conditions for a large population of the species and only a few individuals were present. Photographs of the target species and associated habitats of these reference populations are provided for comparison purposes in **Attachment B**.

3.3 PRESENCE/ABSENCE SURVEY RESULTS

Based on the proposed work limits and identified construction, AECOM surveyed the areas where proposed work activities including vehicle access, timber matting, and rebuild of the existing transmission line will occur. Due to the existing conditions of the transmission line, several of the structures will not require replacement and modifications to other existing structures can be completed on foot and/or aerial via use of helicopter. Therefore, these areas were excluded from the assessment as displayed on **Figure 2 – Presence/Absence Survey Map.**

As a result of the review of the proposed work areas situated within the Study Area, a total of eight unique habitats were identified. Several of these habitats displayed various characteristics that would be suitable for the population of the target species, however anthropogenic disturbances due to agricultural, residential, and commercial use has reduce the quality and/or probability of occurrence. A summary of the habitat assessment and results of the presence/absence surveys have been summarized in the following sections.

3.2.1 Habitat Assessment and Presence/Absence Survey

During the presence/absence survey, habitat areas were identified and evaluated for their potential to support the target species. These areas included several wetland habitats, wet fields, ditches, and various upland habitats with a variety for vegetative community types. As a due-diligence effort generic notes and descriptions of the habitats investigated during the presence and absence survey were document and a summary of these habitats are provided below based on similarities of vegetative community, hydrology, and/or presence of disturbances. The location of these habitats with representative photograph locations are also displayed on **Figure 2 – Presence/Absence Survey Map** with the photographs of these areas provided as **Attachment C**.

Habitat (HAB)-01 consists of a total of seven (7) palustrine emergent (PEM) wetlands that displayed similar characteristics including being seasonally inundated to regularly saturated, displayed disturbances by others, and were extensively dominated by invasive species. Four of these wetlands (Wetland LO-01 through LO-04) are situated between the Lakeview Substation and Structure 1466 and

displayed areas that are actively mowed, with regular ROW maintenance activities, and subjected to adjacent residential/commercial runoff and discharges during stormwater events. Wetland LO-12a is associated with a similar PEM habitat but is located south of State Route 2 and within an actively mowed/maintained portion of the existing electric transmission right-of-way that is bordered by shrub and forested habitat. The remaining two wetlands (Wetland LO-13a and LO-16) are located near Structures 1398 and 1414, respectively. Wetland LO-13a is characterized by a large PEM wetland habitat within and bounded by active agricultural practices and forested areas that forms from a ditch/stream (Stream LO-03). The portion of the wetland along the ditch is characterized further under **HAB-06** below and excluded from this habitat due to difference in hydrology and favorable characteristics for the target species. Like Wetland LO-13a, Wetland LO-16 is part of a larger wetland complex but is surrounded by agricultural and residential land use.

Even though these areas displayed adequate hydrology and open canopy to support the target species, these wetlands were heavily dominated by *Phragmites australis, Phalaris arundinacea,* and *Typha angustifolia*. Although the reference wet prairie showed a dominance of Phalaris arundinacea, as demonstrated in Reference photos 1-4, it did not have high concentrations of *Phragmites australis* or *Typha angustifolia*. A decline of the target species has been noted in previous research due to the introduction of invasive species within their habitat, therefore these habitats were considered to be low potential for supporting a population of the target species due to disturbances by others and presence of invasive species (Bowles et al., 1992; USFW, 1999). Furthermore, AECOM's pedestrian survey of these habitats indicated an absence of the target species. Representative photographs of **HAB-01** are provided in **Attachment C** as photographs PH-02, PH-11, PH-14, PH-17, and PH-24.

Habitat (HAB)-02 is associated with upland habitats located within various locations across the Project area that are attributed with recently mowed, tilled, cultivated, and/or otherwise disturbed surfaces that lack the presence of adequate hydrology to support a population of the target species. These habitats are dominated by *Dactylis glomerata*, *Trifolium pratense*, *Daucus carota*, and *Securigera varia*. Furthermore, several of these habitat areas are associated with active agricultural fields that are mono-cultured of soybeans and/or corn. Due to the active and regular disturbance, these areas were not considered suitable habitats. Furthermore, AECOM's review of these habitat areas indicated an absence of the target species. Representative photographs of **HAB-02** are provided in **Attachment C** as photographs PH-03, PH-05, PH-10, PH-16, PH-18, PH-19, PH-20, PH-21, PH-22, PH-23, PH-24, PH-25, PH-29, PH-31, PH-33, PH-35, PH-36, PH-37, PH-38, and PH-45.

Habitat (HAB)-03 is associated with existing gravel, dirt, and/or other permanent use areas including driveways, farm roads, parking lots, and substation pads that lack vegetive communities and/or characteristics for providing suitable habitat for the target species. Representative photographs of **HAB-**

03 are provided in **Attachment C** as photographs PH-01, PH-04, PH-13, PH-21, PH-23, PH-27, PH-28, PH-30, PH-36.

Habitat (HAB)-04 is associated with a portion of Wetland LO-09b that is disturbed by agricultural practices of a soybean field within the study area of a proposed access road. The portion of the Wetland LO-09b located outside and north of the study area is not disturbed and would more likely be associated within ditch type habitat as represented in **HAB-06**. However, the portion of the wetland located within the proposed work activities and study area is associated with converted cropland represented by stunted soybeans. Representative photographs of **HAB-04** are provided in **Attachment C** as photograph PH-06.

Habitat (HAB)-05 is associated with vegetative communities with shrub lands, forested, and other woody vegetation that creates a canopy cover that would unlikely be suitable for the target species. This habitat includes upland shrub lands located near Structure 1437 and Structure 1465 as well as several other palustrine scrub-shrub (PSS) wetlands located through the Project area. These upland shrub lands lack adequate hydrology to support the target species and were mostly are dominated by *Rosa multiflora*, *Elaeagnus umbellata*, and various *Cornus spp*. The wetlands within this habitat classification include Wetland LO-08, LO-09, LO-12B and displayed a dominance of *Cornus amomum*, *Phalaris arundinacea*, *Cornus racemosa*, and *Acer negundo*. The forested wetlands within this habitat group include edge habitat along Wetland LO-36b located near Structure 1447. This forested wetland is dominated by *Salix nigra* and *Populus tremuloides.* Even though the wetlands could provide adequate hydrology to support a population of the target species, a decline of orchids species are known to occur due to invasion of *Cornus spp.* and *Phalaris arundiancea* (USFWS, 1999). Additionally, the canopy cover created by the presence of the forested and scrub-shurb habitats also decrease the likelihood for the species to persist within these areas. Lastly, AEOCM did not identify the presence of the target species within these habitat areas. Representative photographs of **HAB-05** are provided in **Attachment C** as photographs PH-07, PH-08, and PH-34.

Habitat (HAB)-06 is associated with several linear wetlands, wet ditches, and/or stream channels that drain agricultural fields or are situated along the edge of active roadways. These habitats include eight (8) PEM wetlands (Wetlands LO-10, LO-21, LO-22, LO-29, LO-34, LO-36a, LO-38, LO-39), one PUB wetland (Wetland LO-37), as well as two streams (Stream LO-02 and LO-03). The wetlands and edge of both stream banks were mainly dominated by *Phragmites australis, Phalaris arundiancea,* and *Typha angustifolia*. Additionally, the PUB wetland (Wetland LO-37) was also dominated by *Phalaris arundinacea* as well as *Cornus racemosa*. These habitats represented the similar habitat identified during the reference population review with the USFWS, however lacked the presence of target the species. The lack of the population may be attributed to the dominance of the invasive species as noted as an unfavorable condition in **HAB-01**. Furthermore, AEOCM did not identify the presence of the target

species within these habitat areas. Representative photographs of **HAB-06** are provided in **Attachment C** as photographs PH-09, PH-26, PH-32, PH-39, PH-40, PH-41, PH-42, and PH-44.

Habitat (HAB)-07 is associated with a fallow agricultural field/disturbed meadow located within an active 100-year floodplain that is associated potentially seasonally saturated based on potential of precipitation and snow melt. This habitat is located Structure 1461 and 1462 and near Structure 111.5 and is characterized by early successional plants including a dominance of *Phalaris arundinacea, Rumex crispus, Trifolium pratense*, and *Securigera varia*. These habitats are associated with fallow agricultural fields that had previous disturbances and may again become disturbed by future tilling and soybean operations. These habitats have a potential if left undisturbed to be potential habitat to the target species, however the likelihood of restoration to a natural environment is not likely to occur. Furthermore, the pedestrian review of these habitat areas indicated an absence of the target species. Representative photographs of **HAB-07** are provided in **Attachment C** as photographs PH-12, PH-15, PH-43, and PH-44.

Habitat (HAB)-08 is associated with Wetland 35 a/b/c, which is a PEM/PFO/PUB wetland complex that is directly connected to the Little Portage River and eventually directly connects to bay of the Portage River and Lake Erie. This wetland habitat is unique among the others observed within this habitat assessment as fluctuations of hydrology is directly contributed to the levels of the lake. The PFO portion of the wetland complex (Wetland LO-35a) would unlikely provide suitable habitat for the target species due to canopy cover and will entirely be avoided by construction of the Project area as ATSI intends to utilize the farm as access to the existing right-of-way and structures. Similar, the PUB portion (Wetland LO-35b) of the wetland habitat will be entirely avoided by construction activities and would unlikely provide suitable habitat for the target species. Lastly, the PEM portion of this wetland complex (Wetland LO-35c) is situated along the edge of Structure 1448A and is sparsely dominated by *Phragmites australis*. This portion of the wetland complex would likely be suitable habitat for the target species due to the open canopy, sparsely dominance of *Phragmites australis*, and potential variations of Lake Erie flood levels which could lead potential colonization of the target species (USFWS, 1999). However, the presence/absence survey did not identify the target species within Project area. Representative photographs of **HAB-08** are provided in **Attachment C** as photographs PH-38 and PH-42.

Lastly, AECOM identified one additional PEM/PFO/PSS wetland habitat complex (Wetland LO-14a/b/c/d) that displayed similar characteristics as **HAB-07** but is located outside of the proposed disturbance activities associated with this Project. Between Structures 1404 and 1414, this wetland habitat will be avoided by ATSI by utilizing a helicopter to access the existing structures and/or will walk on foot and climb. Therefore, disturbance to the vegetative communities and wetland habitat is not anticipated and it was excluded from this survey. If changes occur to the construction plans associated

this wetland complex, AECOM recommends additional coordination with the USFWS due to the potential habitat could provide opportunities for the target species to be present.

3.3 HABITAT SURVEY RESULTS

Due to completion of additional surveys in February 2022 and outside of the recommended presence/absence survey period for the listed species, AECOM completed only a habitat assessment for small areas identified on **Figure 2** as "AECOM Survey February 2022". Regarding Access Road LG-02b, the access road is located on an old timber road/path that within an upland mixed shrub area (characterized as HAB-05) as well as within an active soybean field that would not provide suitable habitat for the target species due to lack of necessary hydrology (i.e., upland conditions) and canopy coverage from the adjacent trees and saplings. Furthermore, the pull site was identified as a continuation of HAB-02 and is associated with active disturbances from agricultural fields. However, two wetlands were extended along the north and south portion of the pull site that might provide suitable habitat for the listed. As these wetlands are outside of the work area limits for the Project, it was excluded from the assessment. As a result, the habitat assessment for the additional work areas completed after the June 29 and July 1st, 2021 survey were deemed non-suitable/upland areas for the target species and further presence/absence survey would not be warranted. Site photographs of these areas are provided as Photographs xxx to xxx.

4.0 CONCLUSION AND DISCUSSION

AECOM completed the botanical survey including a habitat assessment and presence/absence survey between June 29th and July 1st, 2021 and additional habitat assessment on February 23, 2022. During the presence/absence survey, AECOM coordinated with the USFWS to observe two reference populations and confirmed that the target species was in flower during the presence/absence survey. During the ecological survey, a total of eight (8) unique habitats were classified and the pedestrian survey was completed within the Project study area as defined on **Figure 2 – Presence/Absence Survey Map**. Based on AECOM findings, no individuals and/or populations of the target species, *Platanthera leucophaea*, were identified within the Project area. Furthermore, the habitat assessment completed for portions of the Project in February 23, 2022, would not provide suitable habitat for the target species and AECOM recommends that further presence/absence surveys would not be necessary for these areas.

The information contained in this report is for a study area that may be much larger than the actual Project limits-of-disturbance; therefore, this report may not constitute the actual impacts of the Project defined in subsequent permit applications. If necessary, anticipated impacts to each of these habitats can be provided upon request. However, AECOM findings indicate an absence of the target species within the study area, which encompasses a larger footprint than the actual work limits.

The field survey results presented herein apply to the existing and reasonably foreseeable site conditions at the time of our assessment. They cannot apply to site changes of which AECOM is unaware and has not had the opportunity to review. Changes in the condition of a property may occur with time due to natural processes or human impacts at the Project site or on adjacent properties. Changes in applicable standards may also occur as a result of legislation or the expansion of knowledge over time. Accordingly, the findings of this report may be invalidated, wholly or in part, by changes beyond the control of AECOM.

5.0 LITERATURE CITED

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FIGURES

Oak Harbor

Lacarne

Port Clinton

Lakeview Substation
41.5131
-82.9151

Ottawa Substation
41.497
-83.0982

Str. 111.5
41.4968
-83.0975

Str. 1448A
41.4935
-83.044

Ottawa County

Wightmans Grove

Vickery

Sandusky County

Legend

- Existing Substation
- Existing Structure
- Proposed Reconductoring of Lakeview-Ottawa 138kV Tranmission Line
- Existing Lakeview-Ottawa 138kV Transmission Line (Not Proposed for Reconductoring)
- Ohio USGS 7.5" Topographical Quandrangle
- County Boundary

N

0 4,000 8,000 Feet

ATSI

American Transmission Systems, Inc.
Lakeview-Ottawa 138kV Transmission Line Reconductoring Project
Orchid Survey
Figure 1
Agency Overview Map

Issued: August 21, 2021

URS Path: Z:\Projects\IMS\FIRSTENERGY\OHIO_Projects\60618528_FE_LAKOTT\920_929_GIS_Graphics\LakeviewOttawa_OrchidSurvey_Fig1.mxd

PORT CLINTON

Laydown is existing paved/gravel and was not included within survey.

PH-01

LO-01

Wetland LO-04
PEM - Category

Lakeview Substation

Pull 1

Wetland LO-01
PEM - Category 1

PH-02

Stream LO-01
UNT to Lake Erie
HHEI: 68
11 FT

1467

Wetland LO-02
PEM - Category 1

Wetland LO-03
PEM - Category 1

Stream LO-01
UNT to Lake Erie
HHEI: 68
11 FT

LG-08a

Laydown Yard 2

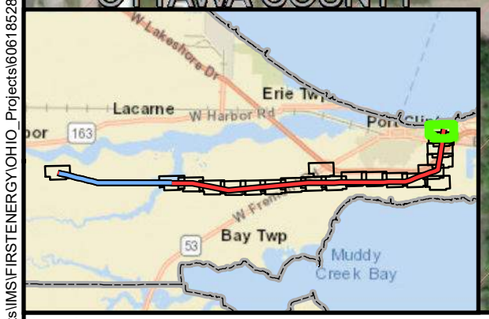
PORT CLINTON

OTTAWA COUNTY

Wetland LO-04
PEM - Category 1

1466

PH-03



Legend

- Existing Structure - Access by Access Road
- Existing Structure - Walk and Climb
- Proposed Steel Structure Replacement - Access by Access Road
- Photograph Locations (PH)
- Existing Reconductoring of Lakeview-Ottawa 138kV Transmission Line
- Lakeview - Ottawa 138kV 100ft Project Corridor
- Access Entrance
- Pull Site
- Laydown Yard
- **Habitat Areas (HAB)**
- HAB-01
- HAB-02
- HAB-03
- Delineated Stream
- Delineated Wetland
- AECOM Survey (June - July 2021)
- Existing Gravel Access Road
- Existing Paved Access Road
- Proposed Temporary Access Road

0 100 200 400 Feet

N

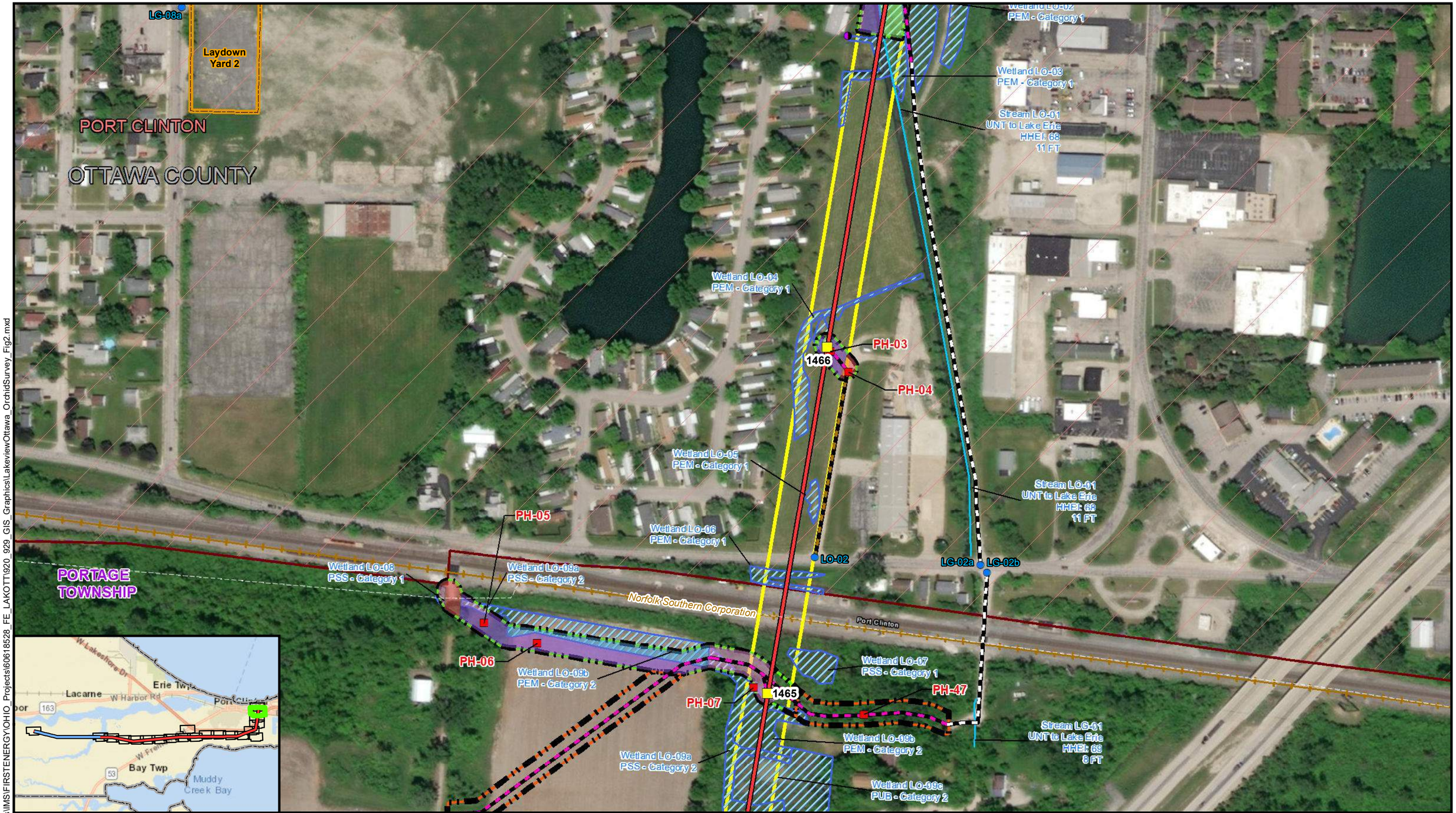
ATSI

American Transmission Systems, Inc.
Lakeview - Ottawa 138kV
Transmission Line
Presence/Absence Survey Map
Figure 2-1 of 21

URS Path: L:\DCS\Projects\IMS\FIRSTENERGY\OHIO_Projects\60618528_FE_LAKOTT\920_929_GIS_Graphics\LakeviewOttawa_OrchidSurvey_Fig2.mxd

Source: BMCD, ESRI, FEMA, NWI, NHD, Bing Map Hybrid

Issued: September 7, 2022



Legend

- Existing Structure - Walk and Climb
- Photograph Locations (PH)
- Existing Reconductoring of Lakeview-Ottawa 138kV Transmission Line
- Lakeview - Ottawa 138kV 100ft Project Corridor
- Access Entrance
- Laydown Yard

Habitat Areas (HAB)

- HAB-01
- HAB-02
- HAB-03
- HAB-04
- HAB-05
- Delineated Stream
- Delineated Wetland
- AECOM Survey (Febraury 2022)
- AECOM Survey (June - July 2021)
- Existing Gravel Access Road
- Existing Paved Access Road
- Proposed Temporary Access Road

0 100 200 400 Feet

N

ATSI

American Transmission Systems, Inc.
Lakeview - Ottawa 138kV
Transmission Line
Presence/Absence Survey Map
Figure 2-2 of 21

URS Path: L:\DCS\Projects\IMS\FIRSTENERGY\OHIO_Projects\60618528_FE_LAKOTT\920_929_GIS_Graphics\Lakeview

Source: BMCD, ESRI, FEMA, NWI, NHD, Bing Map Hybrid

Issued: September 7, 2022

OTTAWA COUNTY

PORTAGE TOWNSHIP

PH-06

Wetland LO-09b
PEM - Category 2

PH-07

1465

Wetland LO-07
PSS - Category 1

PH-47

Norfolk Southern Corporation

Stream LG-01
UNT to Lake Erie
HHEI: 69
6 FT

Wetland LO-09b
PEM - Category 2

Wetland LO-09a
PSS - Category 2

Wetland LO-09c
PUB - Category 2

Wetland LO-09b
PEM - Category 2

Wetland LO-09a
PSS - Category 2

Wetland LO-09a
PSS - Category 2

Wetland LO-09c
PUB - Category 2

PH-09

1464

Wetland LO-09a
PSS - Category 2

Stream LO-02
UNT to Lake Erie
HHEI: 68
6 FT

PH-08

PH-10

Wetland LO-10
PEM - Category 1

Wetland LO-11
PEM - Category 1

Legend

- Existing Structure - Walk and Climb
- Photograph Locations (PH)
- Existing Reconductoring of Lakeview-Ottawa 138kV Transmission Line
- Lakeview - Ottawa 138kV 100ft Project Corridor

Habitat Areas (HAB)

- HAB-01
- HAB-02
- HAB-04
- HAB-05
- HAB-06
- Delineated Stream
- Delineated Wetland
- AECOM Survey (Febraury 2022)
- AECOM Survey (June - July 2021)
- Existing Gravel Access Road
- Proposed Temporary Access Road

0 100 200 400 Feet

N

ATSI

American Transmission Systems, Inc.
Lakeview - Ottawa 138kV
Transmission Line
Presence/Absence Survey Map
Figure 2-3 of 21

URS Path: L:\DCS\Projects\IMS\FIRSTENERGY\OHIO_Projects\60618528_FE_LAKOTT\920_929_GIS_Graphics\LakeviewOttawa_OrchidSurvey_Fig2.mxd

Source: BMCD, ESRI, FEMA, NWI, NHD, Bing Map Hybrid

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OTTAWA COUNTY

PORTAGE TOWNSHIP

Wetland LO-10
PEM - Category 1

Wetland LO-11
PEM - Category 1

PH-11

1463

Wetland LO-12b
PSS - Category 1

Wetland LO-12b
PSS - Category 1

Wetland LO-12c
PFO - Category 1

Wetland LO-12a
PEM - Category 1

PH-12

1462

PH-13

Legend

- Existing Structure - Access by Helicopter
- Photograph Locations (PH)
- Existing Reconductoring of Lakeview-Ottawa 138kV Transmission Line
- Lakeview - Ottawa 138kV 100ft Project Corridor

Habitat Areas (HAB)

- HAB-01
- HAB-02
- HAB-03
- HAB-05
- HAB-06
- HAB-07
- Delineated Wetland
- AECOM Survey (June - July 2021)
- Existing Gravel Access Road
- Proposed Temporary Access Road

0 100 200 400 Feet

N

ATSI

American Transmission Systems, Inc.
Lakeview - Ottawa 138kV
Transmission Line
Presence/Absence Survey Map
Figure 2-4 of 21

URS Path: L:\DCS\Projects\IMS\FIRSTENERGY\OHIO_Projects\60618528_FE_LAKOTT1920_929_GIS_Graphics\LakeviewOttawa_OrchidSurvey_Fig2.mxd

Source: BMCD, ESRI, FEMA, NWI, NHD, Bing Map Hybrid

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OTTAWA COUNTY

PORTAGE TOWNSHIP

Stream LO-03
UNT to Muddy Creek Bay
QHEI: 16
7 FT

PH-14

PH-16

PH-15

Pull 2

Pull 3

1461

1398

1398

1399

1400

Work Pad 1
(Approx 160' x 100')

Wetland LO-13a
PEM - Category 2

Wetland LO-13a
PEM - Category 2

Wetland LO-13b
PFO - Category 2

Legend

- Existing Structure - Access by Access Road
- Existing Structure - Access by Helicopter
- Proposed Steel Structure Replacement - Access by Access Road
- Photograph Locations (PH)
- Existing Reconductoring of Lakeview-Ottawa 138kV Transmission Line
- Lakeview - Ottawa 138kV 100ft Project Corridor
- Pull Site

Habitat Areas (HAB)

- HAB-01
- HAB-02
- HAB-03
- HAB-06
- HAB-07
- Delineated Wetland
- AECOM Survey (June - July 2021)
- Existing Gravel Access Road
- Proposed Temporary Access Road

0 100 200 400 Feet

N

ATSI

American Transmission Systems, Inc.
Lakeview - Ottawa 138kV
Transmission Line
Presence/Absence Survey Map
Figure 2-5 of 21

URS Path: L:\DCS\Projects\IMS\FIRSTENERGY\OHIO_Projects\60618528_FE_LAKOTT\920_929_GIS_Graphics\LakeviewOttawa_OrchidSurvey_Fig2.mxd

Source: BMCD, ESRI, FEMA, NWI, NHD, Bing Map Hybrid

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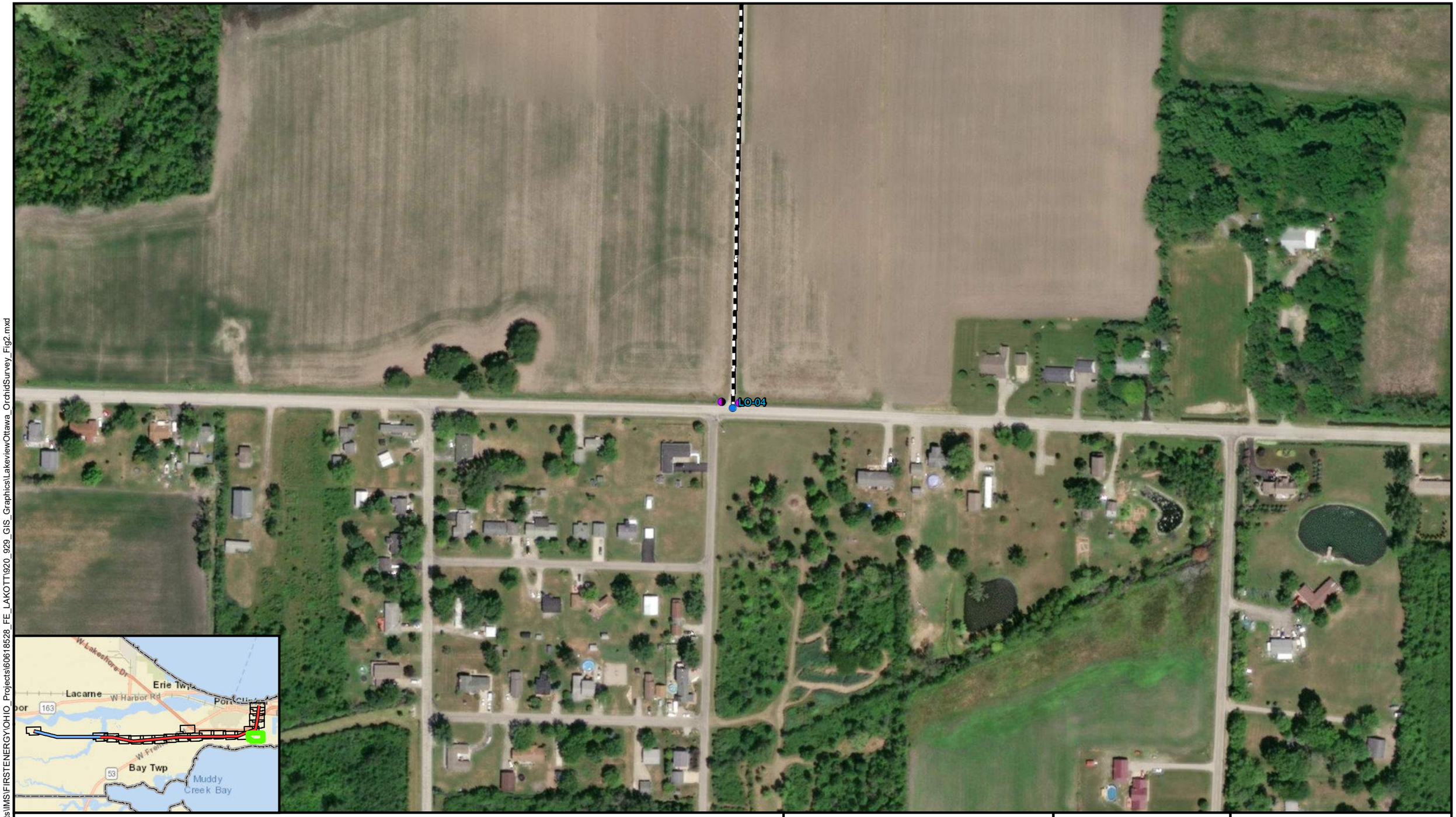

Legend

- Access Entrance
- Existing Gravel Access Road

0 100 200 400 Feet

N

ATSI

American Transmission Systems, Inc.
Lakeview - Ottawa 138kV
Transmission Line
Presence/Absence Survey Map
Figure 2-6 of 21

Source: BMCD, ESRI, FEMA, NWI, NHD, Bing Map Hybrid

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PORTAGE TOWNSHIP

OTTAWA COUNTY

Wetland LO-13a
PEM - Category 2

1400

Wetland LO-13b
PFO - Category 2

1401

1402

1403

Wetland LO-14b
PFO - Category 3

60x60 Turnaround 1

Stream LO-04
UNT to Muddy Creek Bay
HHEI: 59
5 FT

1404

60x60 Turnaround 1

LO-06

PH-17

PH-18

Wetland LO-14a
PEM - Category 3

Wetland LO-13a
PEM - Category 2

Legend

- Existing Structure - Access by Helicopter
- Proposed Structure Modification - Access by Access Road
- Photograph Locations (PH)
- Existing Reconductoring of Lakeview-Ottawa 138kV Transmission Line
- Lakeview - Ottawa 138kV 100ft Project Corridor
- Access Entrance
- Turnaround Area

Habitat Areas (HAB)

- HAB-01
- HAB-02
- Delineated Stream
- Delineated Wetland
- AECOM Survey (June - July 2021)
- Proposed Temporary Access Road

0 100 200 400 Feet

N

ATSI

American Transmission Systems, Inc.
Lakeview - Ottawa 138kV
Transmission Line
Presence/Absence Survey Map
Figure 2-7 of 21

Source: BMCD, ESRI, FEMA, NWI, NHD, Bing Map Hybrid

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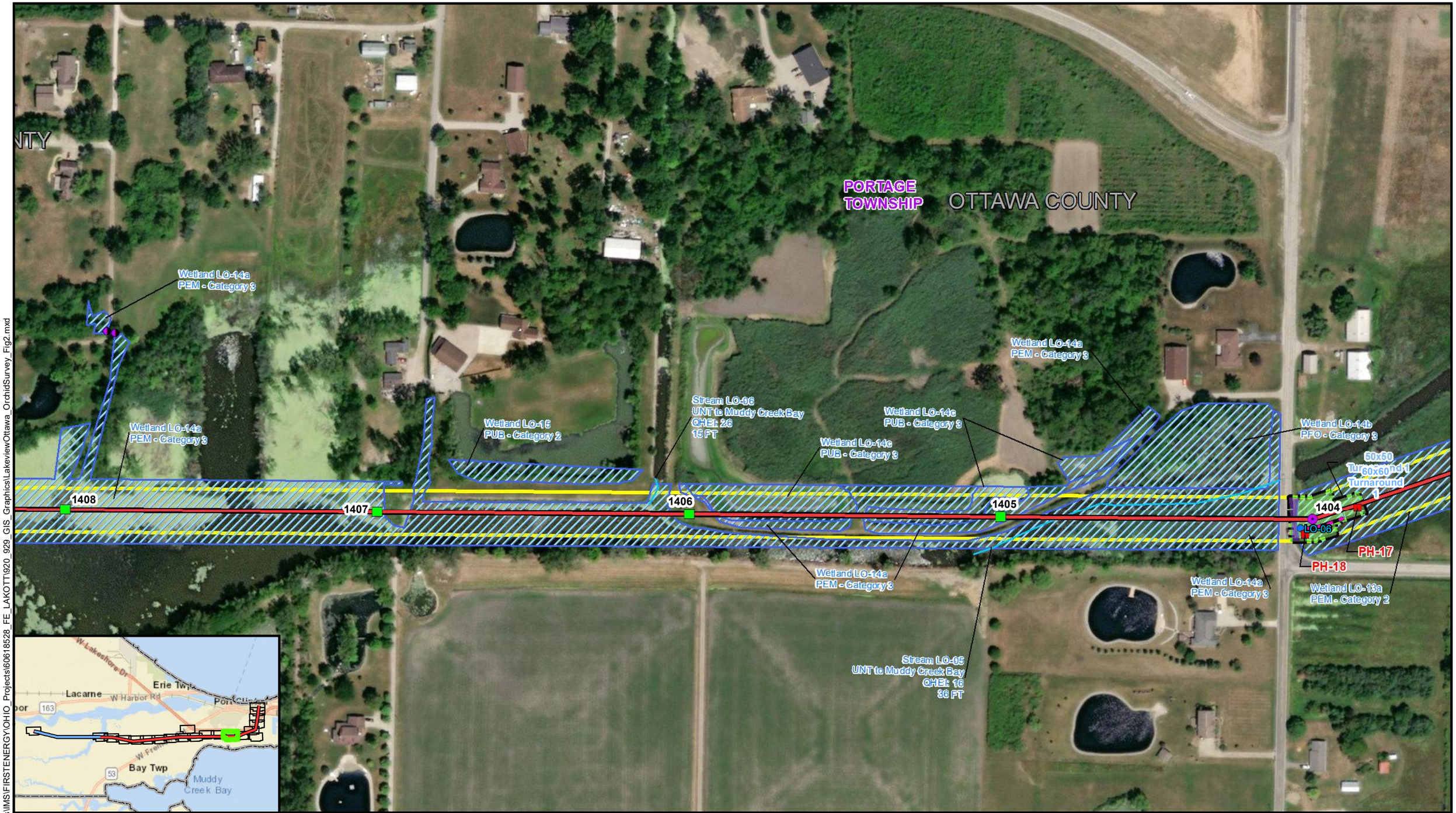

Legend

- Existing Structure - Access by Helicopter
- Proposed Structure Modification - Access by Access Road
- Photograph Locations (PH)
- Existing Reconductoring of Lakeview-Ottawa 138kV Transmission Line
- Lakeview - Ottawa 138kV 100ft Project Corridor
- Access Entrance
- Turnaround Area

Habitat Areas (HAB)

- HAB-01
- HAB-02
- Delineated Wetland
- AECOM Survey (June - July 2021)
- Proposed Temporary Access Road

0 100 200 400 Feet

N

ATSI

American Transmission Systems, Inc.
Lakeview - Ottawa 138kV
Transmission Line
Presence/Absence Survey Map
Figure 2-8 of 21

Source: BMCD, ESRI, FEMA, NWI, NHD, Bing Map Hybrid

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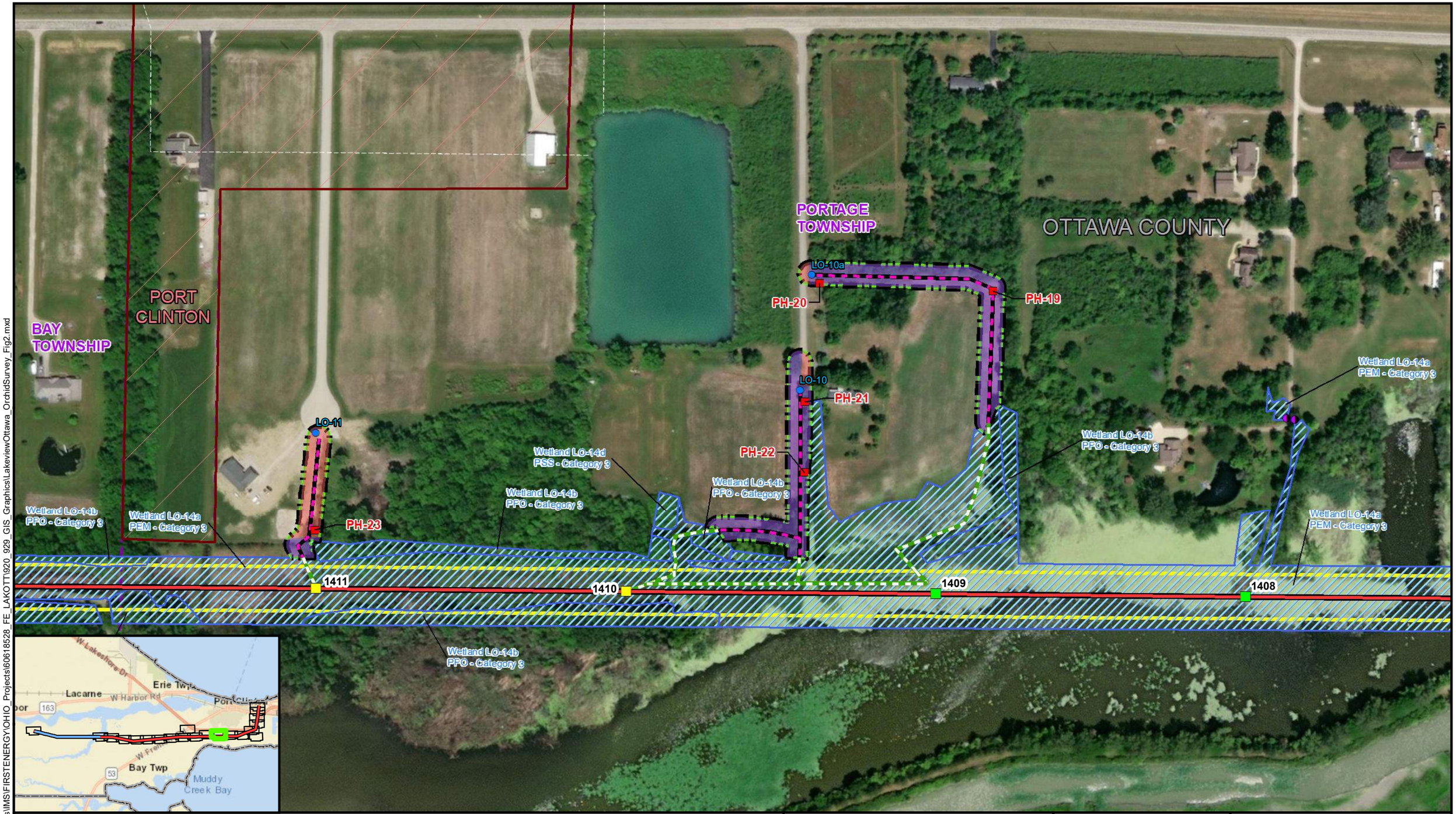

Legend

- Existing Structure - Access by Helicopter
- Existing Structure - Walk and Climb
- Photograph Locations (PH)
- Existing Reconductoring of Lakeview-Ottawa 138kV Transmission Line
- Lakeview - Ottawa 138kV 100ft Project Corridor
- Access Entrance

Habitat Areas (HAB)

- HAB-02
- HAB-03
- Delineated Wetland
- AECOM Survey (June - July 2021)
- Proposed Temporary Access Road
- Walk and Climb Access Path

0 100 200 400 Feet

N

ATSI

American Transmission Systems, Inc.
Lakeview - Ottawa 138kV
Transmission Line
Presence/Absence Survey Map
Figure 2-9 of 21

Source: BMCD, ESRI, FEMA, NWI, NHD, Bing Map Hybrid

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LO-12

Wetland LO-41b
PSS -
Category 2

Wetland LO-41a
PEM -
Category 2

OTTAWA COUNTY

BAY
TOWNSHIP

PORT
CLINTON

PH-24

Wetland LO-17
PEM -
Category 1

Wetland LO-16
PEM -
Category 1

Laydown
Yard 1

Stream LO-07
UNT to Muddy Creek Bay
HHEI: 62
20 FT

Wetland LO-14b
PFO - Category 3

Wetland LO-14a
PEM - Category 3

1415

1414

1413

1412

Stream LO-08
UNT to Muddy Creek Bay
HHEI: 64
6 FT

Wetland LO-14b
PFO - Category 3

Wetland LO-14a
PEM - Category 3

Wetland LO-14a
PEM - Category 3

Wetland LO-14b
PFO - Category 3

Legend

- Existing Structure - Access by Helicopter
- Existing Structure - Walk and Climb
- Photograph Locations (PH)
- Existing Reconductoring of Lakeview-Ottawa 138kV Transmission Line
- Lakeview - Ottawa 138kV 100ft Project Corridor
- Access Entrance
- Laydown Yard
- **Habitat Areas (HAB)**
  - HAB-01
  - HAB-02
  - HAB-03
- Delineated Stream
- Delineated Wetland
- AECOM Survey (June - July 2021)
- Existing Gravel Access Road
- Walk and Climb Access Path

0 100 200 400 Feet

N

ATSI

American Transmission Systems, Inc.
Lakeview - Ottawa 138kV
Transmission Line
Presence/Absence Survey Map
Figure 2-10 of 21

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Source: BMCD, ESRI, FEMA, NWI, NHD, Bing Map Hybrid

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BAY TOWNSHIP

OTTAWA COUNTY

n LO-18
e Muddy Creek Bay
64

Wetland LO-19
PEM - Category 1

Stream LO-09
UNT to Muddy Creek Bay
HHEI: 64
14 FT

Wetland LO-18
PEM - Category 1

Wetland LO-17
PEM -
Category 1

1419

1418

1417

1416

1415

Legend

- Existing Structure - Access by Helicopter
- Existing Reconductoring of Lakeview-Ottawa 138kV Transmission Line
- Lakeview - Ottawa 138kV 100ft Project Corridor
- Delineated Stream
- Delineated Wetland

0 100 200 400 Feet

N

ATSI

American Transmission Systems, Inc.
Lakeview - Ottawa 138kV
Transmission Line
Presence/Absence Survey Map
Figure 2-11 of 21

URS Path: L:\DCS\Projects\IMS\FIRSTENERGY\OHIO_Projects\60618528_FE_LAKOTT\920_929_GIS_Graphics\LakeviewOttawa_OrchidSurvey_Fig2.mxd

Source: BMCD, ESRI, FEMA, NWI, NHD, Bing Map Hybrid

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Helicopter Pad will utilize existing paved/gravel areas and excluded from survey.

LO-12b

LO-12a

Legend

- Access Entrance
- Existing Paved Access Road

0 100 200 400 Feet

N

ATSI

American Transmission Systems, Inc.
Lakeview - Ottawa 138kV
Transmission Line
Presence/Absence Survey Map
Figure 2-12 of 21

Source: BMCD, ESRI, FEMA, NWI, NHD, Bing Map Hybrid

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BAY TOWNSHIP

OTTAWA COUNTY

PH-28

LO-17

Wetland LO-22
PEM - Category 1

Wetland LO-21
PEM - Category 1

Wetland LO-20
PEM - Category 1

Stream LO-18
UNT to Muddy Creek Bay
HHEI: 64
15 FT

Wetland LO-19
PEM - Category 1

Pull 4

1422

1421

1420

1419

60x60
Turnaround 2

LO-16

PH-27

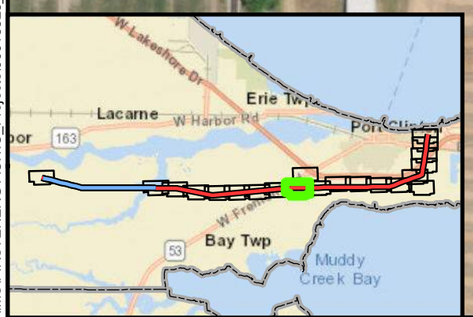
1423

PH-25

PH-26

50x50
Turnaround 2

Wetland LO-23
PEM - Category 1



Legend

- Existing Structure - Access by Access Road
- Existing Structure - Access by Helicopter
- Proposed Steel Structure Replacement - Access by Access Road
- Proposed Structure Modification - Access by Access Road
- Photograph Locations (PH)
- Existing Reconductoring of Lakeview-Ottawa 138kV Transmission Line
- Lakeview - Ottawa 138kV 100ft Project Corridor
- Access Entrance
- Pull Site
- Turnaround Area

Habitat Areas (HAB)

- HAB-02
- HAB-03
- HAB-06
- Delineated Stream
- Delineated Wetland
- AECOM Survey (June - July 2021)
- Proposed Temporary Access Road

0 100 200 400 Feet

N

ATSI

American Transmission Systems, Inc.
Lakeview - Ottawa 138kV
Transmission Line
Presence/Absence Survey Map
Figure 2-13 of 21

Source: BMCD, ESRI, FEMA, NWI, NHD, Bing Map Hybrid

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BAY TOWNSHIP

OTTAWA COUNTY

Wetland LO-24
PEM - Category 1

1427

1426

1425

1424

1423

LO-18

PH-30

PH-29

Pull 4

LO-17

PH-28

Wetland LO-22
PEM - Category 1

LO-16

PH-27

PH-26

Wetland LO-23
PEM - Category 1

Work Pad 2
(Approx 250' x 100')

Legend

- Existing Structure - Access by Access Road
- Existing Structure - Access by Helicopter
- Proposed Steel Structure Replacement - Access by Access Road
- Photograph Locations (PH)
- Existing Reconductoring of Lakeview-Ottawa 138kV Transmission Line
- Lakeview - Ottawa 138kV 100ft Project Corridor
- Access Entrance
- Pull Site

Habitat Areas (HAB)

- HAB-02
- HAB-03
- HAB-06
- Delineated Wetland
- AECOM Survey (June - July 2021)
- Existing Paved Access Road
- Proposed Temporary Access Road

0 100 200 400 Feet

N

ATSI

American Transmission Systems, Inc.
Lakeview - Ottawa 138kV
Transmission Line
Presence/Absence Survey Map
Figure 2-14 of 21

Source: BMCD, ESRI, FEMA, NWI, NHD, Bing Map Hybrid

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BAY TOWNSHIP

OTTAWA COUNTY

Wetland LO-27
PEM - Category 1

Wetland LO-26
PEM - Category 1

Wetland LO-25
PEM - Category 1

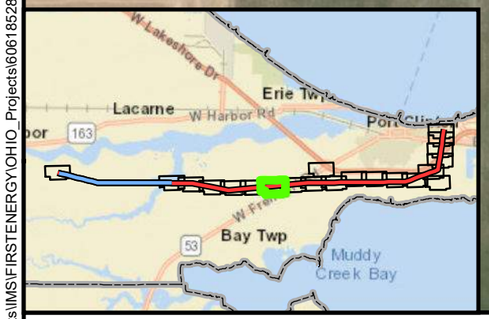
Wetland LO-24
PEM - Category 1

1430

1429

1428

1427



Legend

- Existing Structure - Access by Helicopter
- Existing Reconductoring of Lakeview-Ottawa 138kV Transmission Line
- Lakeview - Ottawa 138kV 100ft Project Corridor
- Delineated Wetland

0 100 200 400 Feet

N

ATSI

American Transmission Systems, Inc.
Lakeview - Ottawa 138kV
Transmission Line
Presence/Absence Survey Map
Figure 2-15 of 21

Source: BMCD, ESRI, FEMA, NWI, NHD, Bing Map Hybrid

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BAY TOWNSHIP

OTTAWA COUNTY

Wetland LO-27
PEM - Category 1

Stream LO-11
UNT to Portage River
HHEI: 69
11 FT

Wetland LO-28
PEM - Category 1

1431

1432

1433

1434

Legend

- Existing Structure - Access by Helicopter
- Existing Reconductoring of Lakeview-Ottawa 138kV Transmission Line
- Lakeview - Ottawa 138kV 100ft Project Corridor
- Delineated Stream
- Delineated Wetland

0 100 200 400 Feet

N

ATSI

American Transmission Systems, Inc.
Lakeview - Ottawa 138kV
Transmission Line
Presence/Absence Survey Map
Figure 2-16 of 21

Source: BMCD, ESRI, FEMA, NWI, NHD, Bing Map Hybrid

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AWA COUNTY

OTTAWA COUNTY

BAY TOWNSHIP

LO-23a

PH-31

PH-32

PH-33

PH-34

1434

1435

1436

1437

1438

50x50
Turnaround 3

60x60
Turnaround 3

Wetland LO-29
PEM - Category 1

Wetland LO-28
PEM - Category 1

Legend

- Existing Structure - Access by Helicopter
- Proposed Structure Modification - Access by Access Road
- Photograph Locations (PH)
- Existing Reconductoring of Lakeview-Ottawa 138kV Transmission Line
- Lakeview - Ottawa 138kV 100ft Project Corridor
- Access Entrance
- Turnaround Area
- **Habitat Areas (HAB)**
  - HAB-02
  - HAB-05
  - HAB-06
- Delineated Wetland
- AECOM Survey (June - July 2021)
- Proposed Temporary Access Road

0 100 200 400 Feet

N

ATSI

American Transmission Systems, Inc.
Lakeview - Ottawa 138kV
Transmission Line
Presence/Absence Survey Map
Figure 2-17 of 21

URS Path: L:\DCS\Projects\IMS\FIRSTENERGY\OHIO_Projects\60618528_FE_LAKOTT\920_929_GIS_Graphics\LakeviewOttawa_OrchidSurvey_Fig2.mxd

Source: BMCD, ESRI, FEMA, NWI, NHD, Bing Map Hybrid

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BAY TOWNSHIP

OTTAWA COUNTY

Wetland LO-31
PEM - Category 1

Wetland LO-32
PEM - Category 1

Wetland LO-30
PEM - Category 1

1442

1441

1440

1439

1438

Legend

- Existing Structure - Access by Helicopter
- Existing Reconductoring of Lakeview-Ottawa 138kV Transmission Line
- Lakeview - Ottawa 138kV 100ft Project Corridor
- Delineated Wetland

0 100 200 400 Feet

N

ATSI

American Transmission Systems, Inc.
Lakeview - Ottawa 138kV
Transmission Line
Presence/Absence Survey Map
Figure 2-18 of 21

Source: BMCD, ESRI, FEMA, NWI, NHD, Bing Map Hybrid

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BAY TOWNSHIP

OTTAWA COUNTY

Wetland LO-35b
PUB - Category 3

Wetland LO-36a
PFO - Category 3

PH-40

PH-38

PH-37

PH-36

LO-26

LO-27

1446

1445

1444

PH-39

PH-35

1443

1442

Wetland LO-36b
PFO - Category 1

Wetland LO-36a
PEM - Category 1

Wetland LO-34
PEM - Category 1

Wetland LO-33
PEM - Category 1

Stream LO-12
UNT to Little Portage River
HHEI: 69
11 FT

Wetland LO-31
PEM - Category 1

Wetland LO-32
PEM - Category 1

Legend

- Existing Structure - Access by Helicopter
- Proposed Structure Modification - Access by Access Road
- Photograph Locations (PH)
- Existing Reconductoring of Lakeview-Ottawa 138kV Transmission Line
- Lakeview - Ottawa 138kV 100ft Project Corridor
- Access Entrance

Habitat Areas (HAB)

- HAB-02
- HAB-03
- HAB-06
- HAB-08

- Delineated Stream
- Delineated Wetland
- AECOM Survey (June - July 2021)
- Proposed Temporary Access Road

0 100 200 400 Feet

N

ATSI

American Transmission Systems, Inc.
Lakeview - Ottawa 138kV
Transmission Line
Presence/Absence Survey Map
Figure 2-19 of 21

Source: BMCD, ESRI, FEMA, NWI, NHD, Bing Map Hybrid

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BAY TOWNSHIP

OTTAWA COUNTY

Little Portage River

Wetland LO-35c
PEM -
Category 3

PH-46

1448A

Pull 7

Pull 5

PH-41

1447

Wetland LO-35b
PUB - Category 3

PH-40

1446

Wetland LO-35a
PFO - Category 3

Wetland LO-36a
PEM - Category 1

PH-42

Wetland LO-36b
PFO - Category 1

Wetland LO-36a
PEM - Category 1

Wetland LO-34
PEM - Category 1

Wetland LO-35c
PFO -
Category 3

Wetland LO-36c
PSS - Category 1

Wetland LO-37
PUB - Category 1

Wetland LO-36a
PEM - Category 1

Legend

- Proposed Structure Modification - Access by Access Road
- Photograph Locations (PH)
- Existing Lakeview-Ottawa 138kV Transmission Line (Not Proposed for Reconductoring)
- Existing Reconductoring of Lakeview-Ottawa 138kV Transmission Line
- Lakeview - Ottawa 138kV 100ft Project Corridor
- Pull Site

Habitat Areas (HAB)

- HAB-02
- HAB-05
- HAB-06
- HAB-08
- Delineated Wetland
- AECOM Survey (Febraury 2022)
- AECOM Survey (June - July 2021)
- Proposed Temporary Access Road

0 100 200 400 Feet

N

ATSI

American Transmission Systems, Inc.
Lakeview - Ottawa 138kV
Transmission Line
Presence/Absence Survey Map
Figure 2-20 of 21

URS Path: L:\DCS\Projects\IMS\FIRSTENERGY\OHIO_Projects\60618528_FE_LAKOTT\920_929_GIS_Graphics\LakeviewOttawa_OrchidSurvey_Fig2.mxd

Source: BMCD, ESRI, FEMA, NWI, NHD, Bing Map Hybrid

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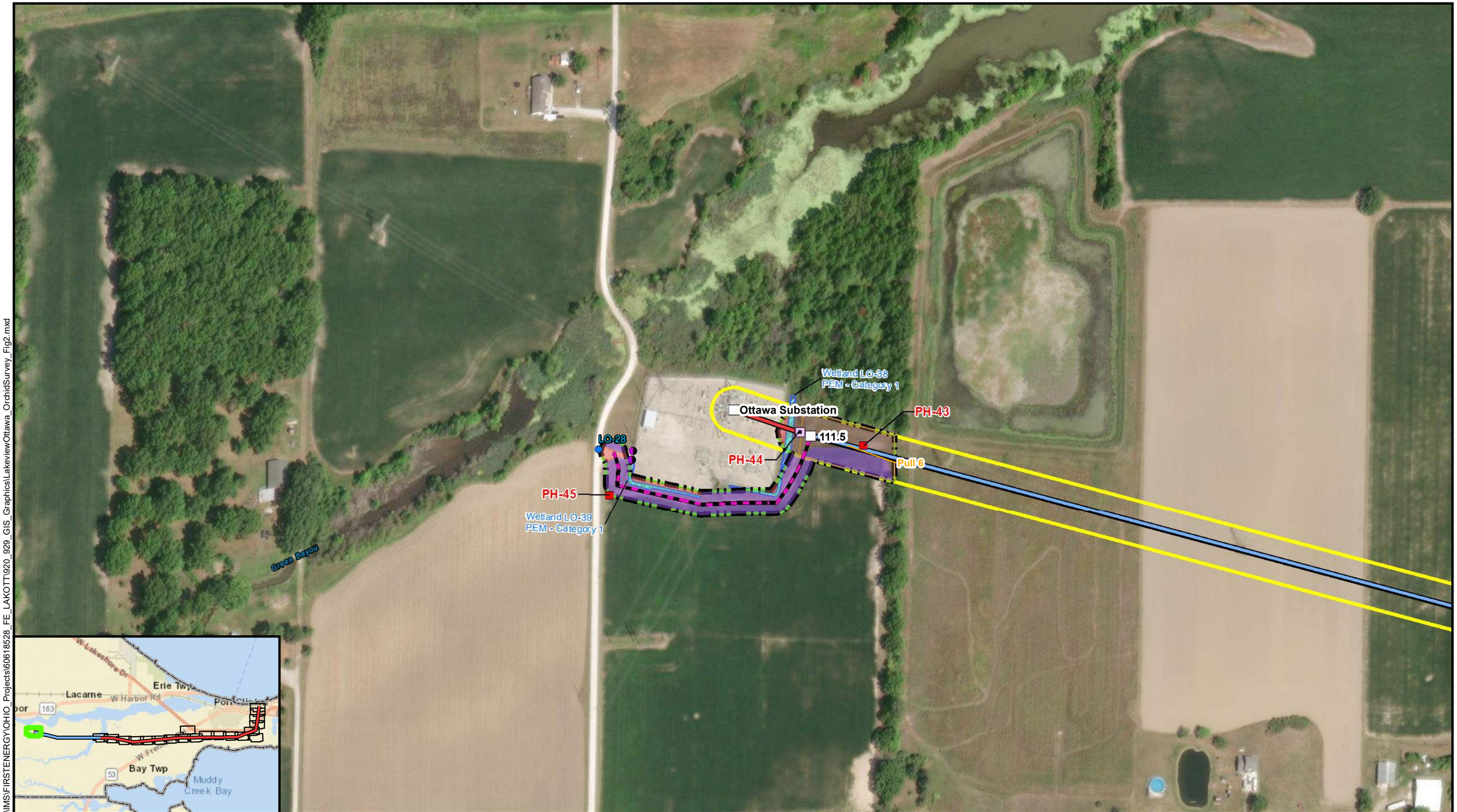


Legend

- Existing Structure - Access by Access Road
- Proposed Steel Structure Replacement - Access by Access Road
- Photograph Locations (PH)
- Existing Lakeview-Ottawa 138kV Transmission Line (Not Proposed for Reconductoring)
- Existing Reconductoring of Lakeview-Ottawa 138kV Transmission Line
- Lakeview - Ottawa 138kV 100ft Project Corridor
- Access Entrance
- Pull Site

Habitat Areas (HAB)

- HAB-02
- HAB-03
- HAB-06
- HAB-07
- Delineated Wetland
- AECOM Survey (June - July 2021)
- Proposed Temporary Access Road

0 100 200 400 Feet

N

ATSI

American Transmission Systems, Inc.
Lakeview - Ottawa 138kV
Transmission Line
Presence/Absence Survey Map
Figure 2-21 of 21

Source: BMCD, ESRI, FEMA, NWI, NHD, Bing Map Hybrid

Issued: September 7, 2022

URS Path: L:\DCS\Projects\IMS\FIRSTENERGY\OHIO_Projects\60618528_FE_LAKOTT\920_929_GIS_Graphics\LakeviewOttawa_OrchidSurvey_Fig2.mxd

ATTACHMENT A
USFWS INITIAL CORRESPONDENCE

Miller, Brian

From: susan_zimmermann@fws.gov on behalf of Ohio, FW3 <ohio@fws.gov>
Sent: Monday, December 30, 2019 1:04 PM
To: Miller, Brian
Cc: nathan.reardon@dnr.state.oh.us; kate.parsons@dnr.state.oh.us
Subject: Lakeview-Ottawa 138 kV Transmission Line Reconductoring, Ottawa Co.

Follow Up Flag: Follow up
Flag Status: Completed

UNITED STATES DEPARTMENT OF THE INTERIOR
U.S. Fish and Wildlife Service
Ecological Services Office
4625 Morse Road, Suite 104
Columbus, Ohio 43230
(614) 416-8993 / Fax (614) 416-8994

TAILS# 03E15000-2020-TA-0471

Dear Mr. Miller,

We have received your recent correspondence requesting information about the subject proposal. There are no federal wilderness areas, wildlife refuges or designated critical habitat within the vicinity of the project area. The following comments and recommendations will assist you in fulfilling the requirements for consultation under section 7 of the Endangered Species Act of 1973, as amended (ESA).

The U.S. Fish and Wildlife Service (Service) recommends that proposed developments avoid and minimize water quality impacts and impacts to high quality fish and wildlife habitat (e.g., forests, streams, wetlands). Additionally, natural buffers around streams and wetlands should be preserved to enhance beneficial functions. If streams or wetlands will be impacted, the Corps of Engineers should be contacted to determine whether a Clean Water Act section 404 permit is required. Best management practices should be used to minimize erosion, especially on slopes. All disturbed areas should be mulched and revegetated with native plant species. Prevention of non-native, invasive plant establishment is critical in maintaining high quality habitats.

FEDERALLY LISTED SPECIES COMMENTS: All projects in the State of Ohio lie within the range of the federally endangered **Indiana bat** (*Myotis sodalis*) and the federally threatened **northern long-eared bat** (*Myotis septentrionalis*). In Ohio, presence of the Indiana bat and northern long-eared bat is assumed wherever suitable habitat occurs unless a presence/absence survey has been performed to document absence. Suitable summer habitat for Indiana bats and northern long-eared bats consists of a wide variety of forested/wooded habitats where they roost, forage, and travel and may also include some adjacent and interspersed non-forested habitats such as emergent wetlands and adjacent edges of agricultural fields, old fields and pastures. This includes forests and woodlots containing potential roosts (i.e., live trees and/or snags ≥3 inches diameter at breast height (dbh) that have any exfoliating bark, cracks, crevices, hollows and/or cavities), as well as linear features such as fencerows, riparian forests, and other wooded corridors. These wooded areas may be dense or loose aggregates of trees with variable amounts of canopy closure. Individual trees may be considered suitable habitat when they exhibit the characteristics of a potential roost tree and are located within 1,000 feet (305 meters) of other forested/wooded habitat. Northern long-eared bats have also been observed roosting in human-made structures, such as buildings, barns, bridges, and bat houses; therefore, these structures should also be considered potential summer habitat. In the winter, Indiana bats and northern long-eared bats hibernate in caves and abandoned mines.

Should the proposed site contain trees ≥3 inches dbh, we recommend that trees be saved wherever possible. If any caves or abandoned mines may be disturbed, further coordination with this office is requested to determine if fall or spring portal surveys are warranted. If no caves or abandoned mines are present and trees ≥3 inches dbh cannot be avoided, we

recommend that removal of any trees ≥3 inches dbh only occur between October 1 and March 31. Seasonal clearing is being recommended to avoid adverse effects to Indiana bats and northern long-eared bats. While incidental take of northern long-eared bats from most tree clearing is exempted by a 4(d) rule (see http://www.fws.gov/midwest/endangered/mammals/nleb/index.html), incidental take of Indiana bats is still prohibited without a project-specific exemption. Thus, seasonal clearing is recommended where Indiana bats are assumed present.

If implementation of this seasonal tree cutting recommendation is not possible, summer surveys may be conducted to document the presence or probable absence of Indiana bats within the project area during the summer. If a summer survey documents probable absence of Indiana bats, the 4(d) rule for the northern long-eared bat could be applied. Surveys must be conducted by an approved surveyor and be designed and conducted in coordination with the Endangered Species Coordinator for this office. Surveyors must have a valid federal permit. Please note that in Ohio summer mist net surveys may only be conducted between June 1 and August 15.

The project lies within the range of the **eastern massasauga** (Sistrurus catenatus), a small, docile rattlesnake that is federally listed as threatened. Several factors have contributed to the decline of the species including habitat loss and fragmentation, indiscriminate killing, collection, gene pool contamination and incompatible land use practices.

Eastern massasaugas use both upland and wetland habitat and these habitats differ by season. During the winter, massasaugas hibernate in low wet areas, primarily in crayfish burrows, but may use other structures. Presence of a water table near the surface is important for a suitable hibernaculum. In the summer, massasaugas use drier, open areas that contain a mix of grasses and forbs such as goldenrods and other prairie plants that may be intermixed with trees or shrubs. Adjoining lowland and upland habitat with variable elevations between are critical for the species to travel back and forth seasonally. Should the proposed project area contain any of the habitat types or features described above, we recommend that a habitat assessment be conducted to determine if suitable habitat for the species exists within the vicinity of the proposed site. Please note that habitat assessments should only be conducted by a herpetologist permitted by the Ohio Division of Wildlife to conduct eastern massasauga surveys (list attached) due to variable habitat types and the cryptic nature of the species. Any habitat assessments or surveys should be coordinated with this office.

BALD EAGLE COMMENTS: The project lies within the range of the bald eagle (Haliaeetus leucocephalus). Bald eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668-668d, BGEPA), which prohibits, among other things, the killing and disturbance of eagles.

Our records indicate that a bald eagle nest is located within ½ mile of the project area. To evaluate your project's potential to affect bald eagles, please visit: https://www.fws.gov/midwest/eagle/permits/baeatake/index.html.

In order to avoid take of bald eagles, we recommend that no tree clearing occur within 660 feet of a bald eagle nest or within any woodlot supporting a nest tree. Further, we request that work within 660 feet of a nest or within the direct line-of-site of a nest be restricted from January 15 through July 31. This will prevent disturbance of the eagles from the egg-laying period until the young fledge, which encompasses their most vulnerable times.

If these recommendations cannot be implemented and take of bald eagles is likely, a bald eagle take permit for this project may be necessary. Further information on eagle take permits can be found at: https://www.fws.gov/midwest/eagle/permits/baeatake/index.html.

The proposed project lies within the range of the **eastern prairie fringed orchid** (Platanthera leucophaea), a federally listed threatened species. This tall, showy orchid is found in wet prairies, sedge meadows, and moist road-side ditches. We recommend that the project location be examined to determine if suitable habitat for the orchid is present. If suitable habitat is present, we recommend that surveys for this species be conducted when the orchids are in bloom (late June through early July).

If there is a federal nexus for the project (e.g., federal funding provided, federal permits required to construct), no tree clearing should occur on any portion of the project area until consultation under section 7 of the ESA, between the Service and the federal action agency, is completed. We recommend that the federal action agency submit a determination of effects to this office, relative to the Indiana bat and northern long-eared bat, for our review and concurrence.

Due to the project type, size, and location, we do not anticipate adverse effects to any other federally endangered, threatened, proposed, or candidate species. Should the project design change, or during the term of this action, additional information on listed or proposed species or their critical habitat become available, or if new information reveals effects of the action that were not previously considered, consultation with the Service should be initiated to assess any potential impacts.

These comments have been prepared under the authority of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.), the ESA, and are consistent with the intent of the National Environmental Policy Act of 1969 and the Service's Mitigation Policy. This letter provides technical assistance only and does not serve as a completed section 7 consultation document. We recommend that the project be coordinated with the Ohio Department of Natural Resources due to the potential for the project to affect state listed species and/or state lands. Contact John Kessler, Environmental Services Administrator, at (614) 265-6621 or at john.kessler@dnr.state.oh.us.

If you have questions, or if we can be of further assistance in this matter, please contact our office at (614) 416-8993 or ohio@fws.gov.

Sincerely,

Patrice M. Ashfield
Field Office Supervisor

cc: Nathan Reardon, ODNR-DOW
Kate Parsons, ODNR-DOW

ATTACHMENT B
REFERENCE POPULATION PHOTOGRAPHS

AECOM

PHOTOGRAPHIC RECORD
Attachment B: Reference Population Survey Photographs

Client Name:	Site Location:	Project No.
American Transmission Systems, Inc, a FirstEnergy Company	Lakeview-Ottawa 138kV Transmission Line Reconductoring Project	60618528

Date:

June 30, 2021

Description:

Reference Population 1

Wet Prairie

The habitat in which the fringed orchid was located is decribed as a wet prairie or meadow. Area currently has no surface water in most sections but is seasonally inundated.

Photograph 1. Facing North

Date:

June 30, 2021

Description:

Reference Population 1

Wet Prairie

Photograph 2. Facing East

AECOM

PHOTOGRAPHIC RECORD

Attachment B: Reference Population Survey Photographs

Client Name:	Site Location:	Project No.
American Transmission Systems, Inc, a FirstEnergy Company	Lakeview-Ottawa 138kV Transmission Line Reconductoring Project	60618528

Date:

June 30, 2021

Description:

Reference Population 1

Wet Prairie

Photograph 3. Facing South

Date:

June 30, 2021

Description:

Reference Population 1

Wet Prairie

Photograph 4. Facing West

AECOM

PHOTOGRAPHIC RECORD

Attachment B: Reference Population Survey Photographs

Client Name:	Site Location:	Project No.
American Transmission Systems, Inc, a FirstEnergy Company	Lakeview-Ottawa 138kV Transmission Line Reconductoring Project	60618528

Date:

June 30, 2021

Description:

Reference Population 1

Eastern Prarie Fringed Orchid

Platanthera leucophaea, full bloom

Photograph 5.

Date:

June 30, 2021

Description:

Reference Population 1

Eastern Prarie Fringed Orchid

Platanthera leucophaea, vegetative portion

Photograph 6.

AECOM

PHOTOGRAPHIC RECORD

Attachment B: Reference Population Survey Photographs

Client Name:	Site Location:	Project No.
American Transmission Systems, Inc, a FirstEnergy Company	Lakeview-Ottawa 138kV Transmission Line Reconductoring Project	60618528

Date:

June 30, 2021

Description:

Reference Population 1

Eastern Prarie Fringed Orchid

Platanthera leucophaea, past full bloom

Photograph 7.

Date:

June 30, 2021

Description:

Reference Population 1

Eastern Prarie Fringed Orchid

Platanthera leucophaea, past full bloom

Photograph 8.

AECOM

PHOTOGRAPHIC RECORD
Attachment B: Reference Population Survey Photographs

Client Name:	Site Location:	Project No.
American Transmission Systems, Inc, a FirstEnergy Company	Lakeview-Ottawa 138kV Transmission Line Reconductoring Project	60618528

Date:

June 30, 2021

Description:

Reference Population 2

Roadside Swale

The habitat in which the fringed orchid was located is decribed as a ditch/swale that is inundated with water.The orchid was seen growing on the bank of the ditch about standing water.

Photograph 9. Facing North

Date:

June 30, 2021

Description:

Reference Population 2

Roadside Swale

Photograph 10. Facing East

AECOM

PHOTOGRAPHIC RECORD

Attachment B: Reference Population Survey Photographs

Client Name:	Site Location:	Project No.
American Transmission Systems, Inc, a FirstEnergy Company	Lakeview-Ottawa 138kV Transmission Line Reconductoring Project	60618528

Date:

June 30, 2021

Description:

Reference Population 2

Roadside Swale

Photograph 11. Facing South

Date:

June 30, 2021

Description:

Reference Population 2

Roadside Swale

Photograph 12. Facing West

AECOM

PHOTOGRAPHIC RECORD
Attachment B: Reference Population Survey Photographs

Client Name:	Site Location:	Project No.
American Transmission Systems, Inc, a FirstEnergy Company	Lakeview-Ottawa 138kV Transmission Line Reconductoring Project	60618528

Date:

June 30, 2021

Description:

Reference Population 2

Eastern Prarie Fringed Orchid

Platanthera leucophaea, full bloom

Photograph 13.

Date:

June 30, 2021

Description:

Reference Population 2

Eastern Prarie Fringed Orchid

Platanthera leucophaea, full bloom

Photograph 14.

ATTACHMENT C
PRESENCE/ABSCENCE SURVEY PHOTOGRAPHS

AECOM

PHOTOGRAPHIC RECORD

Attachment C: Presence/Absence Survey Photographs

Client Name:	Site Location:	Project No.
American Transmission Systems, Inc, a FirstEnergy Company	Lakeview-Ottawa 138kV Transmission Line Reconductoring Project	60618528

Date:

July 1, 2021

Description:

PH-01

Habitat 03
(HAB-03)

Upland

Representative of existing paved access lane.

Facing South

Date:

July 1, 2021

Description:

PH-02

Habitat 01
(HAB-01)

Wetland
LO-01

PEM

Facing South

AECOM

PHOTOGRAPHIC RECORD

Attachment C: Presence/Absence Survey Photographs

Client Name:	Site Location:	Project No.
American Transmission Systems, Inc, a FirstEnergy Company	Lakeview-Ottawa 138kV Transmission Line Reconductoring Project	60618528

Date:

July 1, 2021

Description:

PH-02

Habitat 01
(HAB-01)

Wetland
LO-01

PEM

Facing North

Date:

July 1, 2021

Description:

PH-03

Habitat 02
(HAB-02)

Upland

Representative of mowed, tilled, cultivated, or otherwise disturbed surfaces.

Facing North

AECOM

PHOTOGRAPHIC RECORD

Attachment C: Presence/Absence Survey Photographs

Client Name:	Site Location:	Project No.
American Transmission Systems, Inc, a FirstEnergy Company	Lakeview-Ottawa 138kV Transmission Line Reconductoring Project	60618528

Date:

July 1, 2021

Description:

PH-03

Habitat 02 (HAB-02)

Upland

Representative of mowed, tilled, cultivated, or otherwise disturbed surfaces.

Facing South

Date:

July 1, 2021

Description:

PH-04

Habitat 03 (HAB-03)

Upland

Representative of existing gravel access lane.

Facing South

AECOM

PHOTOGRAPHIC RECORD

Attachment C: Presence/Absence Survey Photographs

Client Name:	Site Location:	Project No.
American Transmission Systems, Inc, a FirstEnergy Company	Lakeview-Ottawa 138kV Transmission Line Reconductoring Project	60618528

Date:

July 1, 2021

Description:

PH-05

Habitat 02 (HAB-02)

Upland

Representative of mowed, tilled, cultivated, or otherwise disturbed surfaces.

Facing Northwest

Date:

July, 2021

Description:

PH-06

Habitat 04 (HAB-04)

Wetland LO-09b

PEM

Facing East

AECOM

PHOTOGRAPHIC RECORD

Attachment C: Presence/Absence Survey Photographs

Client Name:	Site Location:	Project No.
American Transmission Systems, Inc, a FirstEnergy Company	Lakeview-Ottawa 138kV Transmission Line Reconductoring Project	60618528

Date:

July 1, 2021

Description:

PH-07

Habitat 05 (HAB-05)

Upland

Representative of shrub and forested land with high amounts of canopy cover.

Facing North

Date:

July, 2021

Description:

PH-08

Habitat 05 (HAB-05)

Wetland LO-09a

PSS

Facing North

AECOM

PHOTOGRAPHIC RECORD

Attachment C: Presence/Absence Survey Photographs

Client Name:	Site Location:	Project No.
American Transmission Systems, Inc, a FirstEnergy Company	Lakeview-Ottawa 138kV Transmission Line Reconductoring Project	60618528

Date:

June 30, 2021

Description:

PH-09

Habitat 06 (HAB-06)

Stream LO-02

Intermittent

Facing East

Date:

June 29, 2021

Description:

PH-10

Habitat 02 (HAB-02)

Upland

Representative of mowed, tilled, cultivated, or otherwise disturbed surfaces.

Facing South

AECOM

PHOTOGRAPHIC RECORD

Attachment C: Presence/Absence Survey Photographs

Client Name:	Site Location:	Project No.
American Transmission Systems, Inc, a FirstEnergy Company	Lakeview-Ottawa 138kV Transmission Line Reconductoring Project	60618528

Date:

June 30, 2021

Description:

PH-11

Habitat 01
(HAB-01)

Wetland
LO-12a

PEM

Facing North

Date:

June 30, 2021

Description:

PH-11

Habitat 01
(HAB-01)

Wetland
LO-12a

PEM

Facing South

AECOM

PHOTOGRAPHIC RECORD

Attachment C: Presence/Absence Survey Photographs

Client Name:	Site Location:	Project No.
American Transmission Systems, Inc, a FirstEnergy Company	Lakeview-Ottawa 138kV Transmission Line Reconductoring Project	60618528

Date:

June 30, 2021

Description:

PH-12

Habitat 07 (HAB-07)

Upland

Representative of fallow agricultural fields or disturbed meadows that are potentially seasonally saturated.

Facing North

Date:

June 30, 2021

Description:

PH-12

Habitat 07 (HAB-07)

Upland

Representative of fallow agricultural fields or disturbed meadows that are potentially seasonally saturated.

Facing West

AECOM

PHOTOGRAPHIC RECORD

Attachment C: Presence/Absence Survey Photographs

Client Name:	Site Location:	Project No.
American Transmission Systems, Inc, a FirstEnergy Company	Lakeview-Ottawa 138kV Transmission Line Reconductoring Project	60618528

Date:

June 30, 2021

Description:

PH-13

Habitat 03
(HAB-03)

Upland

Representative of existing gravel access lane.

Facing South

Date:

June 30, 2021

Description:

PH-14

Habitat 01
(HAB-01)

Wetland
LO-13a

PEM

Facing East

AECOM

PHOTOGRAPHIC RECORD

Attachment C: Presence/Absence Survey Photographs

Client Name:	Site Location:	Project No.
American Transmission Systems, Inc, a FirstEnergy Company	Lakeview-Ottawa 138kV Transmission Line Reconductoring Project	60618528

Date:

June 30, 2021

Description:

PH-14

Habitat 01
(HAB-01)

Wetland
LO-13a

PEM

Facing West

Date:

June 30, 2021

Description:

PH-15

Habitat 07
(HAB-07)

Upland

Representative of fallow agricultural fields or disturbed meadows that are potentially seasonally saturated.

Facing East

AECOM

PHOTOGRAPHIC RECORD

Attachment C: Presence/Absence Survey Photographs

Client Name:	Site Location:	Project No.
American Transmission Systems, Inc, a FirstEnergy Company	Lakeview-Ottawa 138kV Transmission Line Reconductoring Project	60618528

Date:

June 30, 2021

Description:

PH-15

Habitat 07 (HAB-07)

Upland

Representative of fallow agricultural fields or disturbed meadows that are potentially seasonally saturated.

Facing West

Date:

June 29, 2021

Description:

PH-16

Habitat 02 (HAB-02)

Upland

Representative of mowed, tilled, cultivated, or otherwise disturbed surfaces.

Facing North

AECOM

PHOTOGRAPHIC RECORD

Attachment C: Presence/Absence Survey Photographs

Client Name:	Site Location:	Project No.
American Transmission Systems, Inc, a FirstEnergy Company	Lakeview-Ottawa 138kV Transmission Line Reconductoring Project	60618528

Date:

June 29, 2021

Description:

PH-17

Habitat 01
(HAB-01)

Wetland
LO-13a

PEM

Facing East

Date:

June 29, 2021

Description:

PH-17

Habitat 01
(HAB-01)

Wetland
LO-13a

PEM

Facing West

AECOM

PHOTOGRAPHIC RECORD

Attachment C: Presence/Absence Survey Photographs

Client Name:	Site Location:	Project No.
American Transmission Systems, Inc, a FirstEnergy Company	Lakeview-Ottawa 138kV Transmission Line Reconductoring Project	60618528

Date:

June 29, 2021

Description:

PH-18

Habitat 02 (HAB-02)

Wetland LO-13a

Representative of mowed, tilled, cultivated, or otherwise disturbed surfaces.

Facing East

Date:

June 29, 2021

Description:

PH-18

Habitat 02 (HAB-02)

Upland

Representative of mowed, tilled, cultivated, or otherwise disturbed surfaces.

Facing West

AECOM

PHOTOGRAPHIC RECORD

Attachment C: Presence/Absence Survey Photographs

Client Name:	Site Location:	Project No.
American Transmission Systems, Inc, a FirstEnergy Company	Lakeview-Ottawa 138kV Transmission Line Reconductoring Project	60618528

Date:

July 1, 2021

Description:

PH-19

Habitat 02 (HAB-02)

Upland

Representative of mowed, tilled, cultivated, or otherwise disturbed surfaces.

Facing South

Date:

July 1, 2021

Description:

PH-19

Habitat 02 (HAB-02)

Upland

Representative of mowed, tilled, cultivated, or otherwise disturbed surfaces.

Facing West

AECOM

PHOTOGRAPHIC RECORD

Attachment C: Presence/Absence Survey Photographs

Client Name:	Site Location:	Project No.
American Transmission Systems, Inc, a FirstEnergy Company	Lakeview-Ottawa 138kV Transmission Line Reconductoring Project	60618528

Date:

June 30, 2021

Description:

PH-20

Habitat 02 (HAB-02)

Upland

Representative of mowed, tilled, cultivated, or otherwise disturbed surfaces.

Facing East

Date:

July 1, 2021

Description:

PH-21

Habitat 02 (HAB-02)

Upland

Representative of mowed, tilled, cultivated, or otherwise disturbed surfaces.

Facing South

AECOM

PHOTOGRAPHIC RECORD

Attachment C: Presence/Absence Survey Photographs

Client Name:	Site Location:	Project No.
American Transmission Systems, Inc, a FirstEnergy Company	Lakeview-Ottawa 138kV Transmission Line Reconductoring Project	60618528

Date:

July 1, 2021

Description:

PH-21

Habitat 03 (HAB-03)

Upland

Representative of existing gravel access lane.

Facing North

Date:

July 1, 2021

Description:

PH-22

Habitat 02 (HAB-02)

Upland

Representative of mowed, tilled, cultivated, or otherwise disturbed surfaces.

Facing North

AECOM

PHOTOGRAPHIC RECORD

Attachment C: Presence/Absence Survey Photographs

Client Name:	Site Location:	Project No.
American Transmission Systems, Inc, a FirstEnergy Company	Lakeview-Ottawa 138kV Transmission Line Reconductoring Project	60618528

Date:

July 1, 2021

Description:

PH-22

Habitat 02 (HAB-02)

Upland

Representative of mowed, tilled, cultivated, or otherwise disturbed surfaces.

Facing South

Date:

June 29, 2021

Description:

PH-23

Habitat 03 (HAB-03)

Upland

Representative of existing gravel access lane.

Facing North

AECOM

PHOTOGRAPHIC RECORD

Attachment C: Presence/Absence Survey Photographs

Client Name:	Site Location:	Project No.
American Transmission Systems, Inc, a FirstEnergy Company	Lakeview-Ottawa 138kV Transmission Line Reconductoring Project	60618528

Date:

June 29, 2021

Description:

PH-23

Habitat 02 (HAB-02)

Upland

Representative of mowed, tilled, cultivated, or otherwise disturbed surfaces.

Facing South

Date:

July 1, 2021

Description:

PH-24

Habitat 01 (HAB-01)

Wetland LO-16a

PEM

Facing North

AECOM

PHOTOGRAPHIC RECORD

Attachment C: Presence/Absence Survey Photographs

Client Name:	Site Location:	Project No.
American Transmission Systems, Inc, a FirstEnergy Company	Lakeview-Ottawa 138kV Transmission Line Reconductoring Project	60618528

Date:

July 1, 2021

Description:

PH-24

Habitat 01
(HAB-01)

Wetland
LO-16a

PEM

Facing South

Date:

July 1, 2021

Description:

PH-24

Habitat 02
(HAB-02)

Upland

Representative of mowed, tilled, cultivated, or otherwise disturbed surfaces.

Facing West

AECOM

PHOTOGRAPHIC RECORD

Attachment C: Presence/Absence Survey Photographs

Client Name:	Site Location:	Project No.
American Transmission Systems, Inc, a FirstEnergy Company	Lakeview-Ottawa 138kV Transmission Line Reconductoring Project	60618528

Date:

June 29, 2021

Description:

PH-25

Habitat 02 (HAB-02)

Upland

Representative of mowed, tilled, cultivated, or otherwise disturbed surfaces.

Facing East

Date:

June 29, 2021

Description:

PH-25

Habitat 02 (HAB-02)

Upland

Representative of mowed, tilled, cultivated, or otherwise disturbed surfaces.

Facing West

AECOM

PHOTOGRAPHIC RECORD

Attachment C: Presence/Absence Survey Photographs

Client Name:	Site Location:	Project No.
American Transmission Systems, Inc, a FirstEnergy Company	Lakeview-Ottawa 138kV Transmission Line Reconductoring Project	60618528

Date:

June 29, 2021

Description:

PH-26

Habitat 06
(HAB-06)

Wetland
LO-22

PEM

Facing North

Date:

June 29, 2021

Description:

PH-26

Habitat 06
(HAB-06)

Wetland
LO-22

PEM

Facing South

AECOM

PHOTOGRAPHIC RECORD

Attachment C: Presence/Absence Survey Photographs

Client Name:	Site Location:	Project No.
American Transmission Systems, Inc, a FirstEnergy Company	Lakeview-Ottawa 138kV Transmission Line Reconductoring Project	60618528

Date:

June 29, 2021

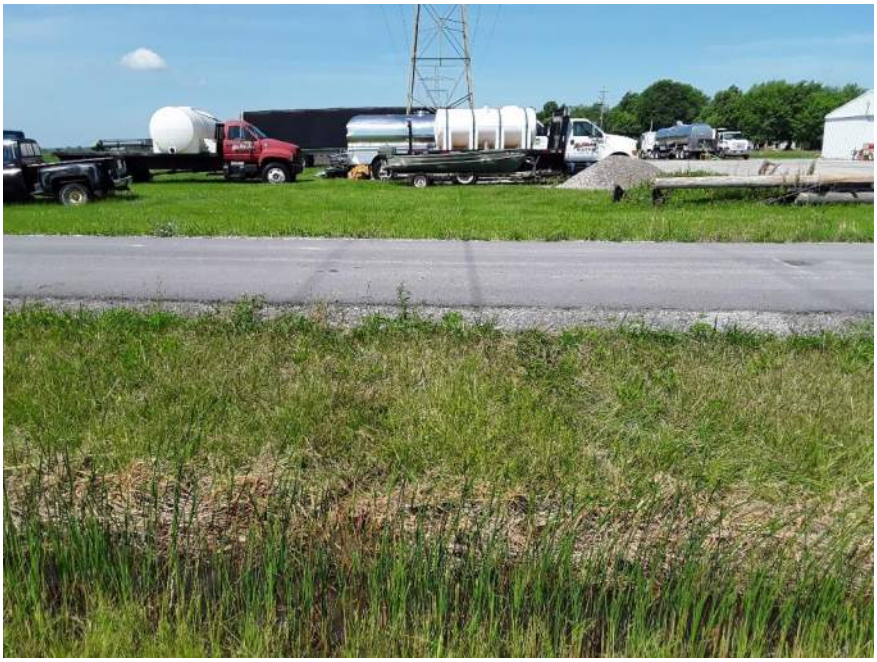
Description:

PH-27

Habitat 03 (HAB-03)

Upland

Representative of existing paved access lane.



Facing West

Date:

June 29, 2021

Description:

PH-28

Habitat 03 (HAB-03)

Upland

Representative of existing gravel parking area.

Facing Northast

AECOM

PHOTOGRAPHIC RECORD

Attachment C: Presence/Absence Survey Photographs

Client Name:	Site Location:	Project No.
American Transmission Systems, Inc, a FirstEnergy Company	Lakeview-Ottawa 138kV Transmission Line Reconductoring Project	60618528

Date:

June 29, 2021

Description:

PH-28

Habitat 03 (HAB-03)

Upland

Representative of existing gravel parking area.

Facing Southwest

Date:

June 29, 2021

Description:

PH-29

Habitat 02 (HAB-02)

Upland

Representative of mowed, tilled, cultivated, or otherwise disturbed surfaces.

Facing East

AECOM

PHOTOGRAPHIC RECORD

Attachment C: Presence/Absence Survey Photographs

Client Name:	Site Location:	Project No.
American Transmission Systems, Inc, a FirstEnergy Company	Lakeview-Ottawa 138kV Transmission Line Reconductoring Project	60618528

Date:

June 29, 2021

Description:

PH-29

Habitat 02 (HAB-02)

Upland

Representative of mowed, tilled, cultivated, or otherwise disturbed surfaces.

Facing West

Date:

June 29, 2021

Description:

PH-30

Habitat 03 (HAB-03)

Representative of existing gravel access lane.

Facing North

AECOM

PHOTOGRAPHIC RECORD

Attachment C: Presence/Absence Survey Photographs

Client Name:	Site Location:	Project No.
American Transmission Systems, Inc, a FirstEnergy Company	Lakeview-Ottawa 138kV Transmission Line Reconductoring Project	60618528

Date:

June 29, 2021

Description:

PH-31

Habitat 02 (HAB-02)

Upland

Representative of mowed, tilled, cultivated, or otherwise disturbed surfaces.

Facing North

Date:

June 29, 2021

Description:

PH-31

Habitat 02 (HAB-02)

Upland

Representative of mowed, tilled, cultivated, or otherwise disturbed surfaces.

Facing South

AECOM

PHOTOGRAPHIC RECORD

Attachment C: Presence/Absence Survey Photographs

Client Name:	Site Location:	Project No.
American Transmission Systems, Inc, a FirstEnergy Company	Lakeview-Ottawa 138kV Transmission Line Reconductoring Project	60618528

Date:

June 29, 2021

Description:

PH-32

Habitat 06
(HAB-06)

Wetland
LO-29

PEM

Facing East

Date:

June 29, 2021

Description:

PH-32

Habitat 06
(HAB-06)

Wetland
LO-29

PEM

Facing West

AECOM

PHOTOGRAPHIC RECORD
Attachment C: Presence/Absence Survey Photographs

Client Name:	Site Location:	Project No.
American Transmission Systems, Inc, a FirstEnergy Company	Lakeview-Ottawa 138kV Transmission Line Reconductoring Project	60618528

Date:

June 29, 2021

Description:

PH-33

Habitat 02 (HAB-02)

Upland

Representative of mowed, tilled, cultivated, or otherwise disturbed surfaces.

Facing North

Date:

June 29, 2021

Description:

PH-33

Habitat 02 (HAB-02)

Upland

Representative of mowed, tilled, cultivated, or otherwise disturbed surfaces.

Facing West

AECOM

PHOTOGRAPHIC RECORD

Attachment C: Presence/Absence Survey Photographs

Client Name:	Site Location:	Project No.
American Transmission Systems, Inc, a FirstEnergy Company	Lakeview-Ottawa 138kV Transmission Line Reconductoring Project	60618528

Date:

June 29, 2021

Description:

PH-34

Habitat 05 (HAB-05)

Upland

Representative of shrub and forested land with high amounts of canopy cover.

Facing North

Date:

June 29, 2021

Description:

PH-34

Habitat 05 (HAB-05)

Upland

Representative of shrub and forested land with high amounts of canopy cover.

Facing West

AECOM

PHOTOGRAPHIC RECORD

Attachment C: Presence/Absence Survey Photographs

Client Name:	Site Location:	Project No.
American Transmission Systems, Inc, a FirstEnergy Company	Lakeview-Ottawa 138kV Transmission Line Reconductoring Project	60618528

Date:

June 29, 2021

Description:

PH-35

Habitat 02 (HAB-02)

Upland

Representative of mowed, tilled, cultivated, or otherwise disturbed surfaces.

Facing East

Date:

June 29, 2021

Description:

PH-36

Habitat 02 (HAB-02)

Upland

Representative of mowed, tilled, cultivated, or otherwise disturbed surfaces.

Facing Southeast

AECOM

PHOTOGRAPHIC RECORD

Attachment C: Presence/Absence Survey Photographs

Client Name:	Site Location:	Project No.
American Transmission Systems, Inc, a FirstEnergy Company	Lakeview-Ottawa 138kV Transmission Line Reconductoring Project	60618528

Date:

June 29, 2021

Description:

PH-36

Habitat 03 (HAB-03)

Upland

Representative of existing gravel access lane.

Facing Northwest

Date:

June 29, 2021

Description:

PH-37

Habitat 02 (HAB-02)

Upland

Representative of mowed, tilled, cultivated, or otherwise disturbed surfaces.

Facing East

AECOM

PHOTOGRAPHIC RECORD

Attachment C: Presence/Absence Survey Photographs

Client Name:	Site Location:	Project No.
American Transmission Systems, Inc, a FirstEnergy Company	Lakeview-Ottawa 138kV Transmission Line Reconductoring Project	60618528

Date:

June 29, 2021

Description:

PH-37

Habitat 02
(HAB-02)

Upland

Representative of mowed, tilled, cultivated, or otherwise disturbed surfaces.

Facing West

Date:

June 29, 2021

Description:

PH-38

Habitat 08
(HAB-08)

Wetland
LO-35a

PFO

Facing North

AECOM

PHOTOGRAPHIC RECORD

Attachment C: Presence/Absence Survey Photographs

Client Name:	Site Location:	Project No.
American Transmission Systems, Inc, a FirstEnergy Company	Lakeview-Ottawa 138kV Transmission Line Reconductoring Project	60618528

Date:

June 29, 2021

Description:

PH-38

Habitat 02
(HAB-02)

Upland

Representative of mowed, tilled, cultivated, or otherwise disturbed surfaces.

Facing South

Date:

June 29, 2021

Description:

PH-39

Habitat 06
(HAB-06)

Wetland
LO-34

PEM

Facing East

AECOM

PHOTOGRAPHIC RECORD

Attachment C: Presence/Absence Survey Photographs

Client Name:	Site Location:	Project No.
American Transmission Systems, Inc, a FirstEnergy Company	Lakeview-Ottawa 138kV Transmission Line Reconductoring Project	60618528

Date:

June 29, 2021

Description:

PH-39

Habitat 06
(HAB-06)

Wetland
LO-34

PEM

Facing West

Date:

July 1, 2021

Description:

PH-40

Habitat 06
(HAB-06)

Wetland
LO-34

PEM

Facing East

AECOM

PHOTOGRAPHIC RECORD

Attachment C: Presence/Absence Survey Photographs

Client Name:	Site Location:	Project No.
American Transmission Systems, Inc, a FirstEnergy Company	Lakeview-Ottawa 138kV Transmission Line Reconductoring Project	60618528

Date:

July 1, 2021

Description:

PH-40

Habitat 06
(HAB-06)

Wetland
LO-36a

PEM

Facing West

Date:

July 1, 2021

Description:

PH-41

Habitat 06
(HAB-06)

Wetland
LO-36a

PEM

Facing East

AECOM

PHOTOGRAPHIC RECORD

Attachment C: Presence/Absence Survey Photographs

Client Name:	Site Location:	Project No.
American Transmission Systems, Inc, a FirstEnergy Company	Lakeview-Ottawa 138kV Transmission Line Reconductoring Project	60618528

Date:

July 1, 2021

Description:

PH-41

Habitat 06
(HAB-06)

Wetland
LO-36a

PEM

Facing West

Date:

June 29, 2021

Description:

PH-42

Habitat 06
(HAB-06)

Wetland
LO-36a

PEM

Facing North

AECOM

PHOTOGRAPHIC RECORD

Attachment C: Presence/Absence Survey Photographs

Client Name:	Site Location:	Project No.
American Transmission Systems, Inc, a FirstEnergy Company	Lakeview-Ottawa 138kV Transmission Line Reconductoring Project	60618528

Date:

June 29, 2021

Description:

PH-42

Habitat 08 (HAB-08)

Wetland LO-36a and LO-35c

PEM

Facing West

Date:

June 29, 2021

Description:

PH-43

Habitat 07 (HAB-07)

Upland

Representative of fallow agricultural fields or disturbed meadows that are potentially seasonally saturated.

Facing North

AECOM

PHOTOGRAPHIC RECORD

Attachment C: Presence/Absence Survey Photographs

Client Name:	Site Location:	Project No.
American Transmission Systems, Inc, a FirstEnergy Company	Lakeview-Ottawa 138kV Transmission Line Reconductoring Project	60618528

Date:

June 29, 2021

Description:

PH-44

Habitat 06
(HAB-06)

Wetland
LO-38

PEM

Facing West

Date:

June 29, 2021

Description:

PH-44

Habitat 07
(HAB-07)

Upland

Representative of fallow agricultural fields or disturbed meadows that are potentially seasonally saturated.

Facing East

AECOM

PHOTOGRAPHIC RECORD

Attachment C: Presence/Absence Survey Photographs

Client Name:	Site Location:	Project No.
American Transmission Systems, Inc, a FirstEnergy Company	Lakeview-Ottawa 138kV Transmission Line Reconductoring Project	60618528

Date:

June 29, 2021

Description:

PH-45

Habitat 02 (HAB-02)

Upland

Representative of mowed, tilled, cultivated, or otherwise disturbed surfaces.

Facing North

Date:

June 29, 2021

Description:

PH-45

Habitat 02 (HAB-02)

Upland

Representative of mowed, tilled, cultivated, or otherwise disturbed surfaces.

Facing East

AECOM

PHOTOGRAPHIC RECORD

Attachment C: Presence/Absence Survey Photographs

Client Name:	Site Location:	Project No.
American Transmission Systems, Inc, a FirstEnergy Company	Lakeview-Ottawa 138kV Transmission Line Reconductoring Project	60618528

Date:

February 23, 2022

Description:

PH-46
(View of Pull Site 2)

Habitat 02
(HAB-02)

Upland

Representative of mowed, tilled, cultivated, or otherwise disturbed surfaces.

Facing Southwest

Date:

June 29, 2021

Description:

PH-47

Habitat 05
(HAB-05)

Upland

Representative of shrub and forested land with high amounts of canopy cover.

Facing East

EXHIBIT #15

Miller, Brian

To: aruggiero@firstenergycorp.com
Subject: RE: USFWS TAILS 03E15000-2020-TA-0471 -> Eastern Prairie Fringed Orchid Survey - Lakeview - Ottawa 138kV TLine

From: Finfera, Jennifer <jennifer_finfera@fws.gov>
Sent: Tuesday, October 18, 2022 10:22 AM
To: Miller, Brian <brian.miller1@aecom.com>
Subject: Re: USFWS TAILS 03E15000-2020-TA-0471 -> Eastern Prairie Fringed Orchid Survey - Lakeview - Ottawa 138kV TLine

Project Code: 2023-005599

Brian,

The Service appreciates your coordination with this office on the survey for eastern prairie fringed orchid.

A survey for this species was conducted during the 2021 field season between June 29, 2021 to July 1, 2021. You provided a completed report of the survey. Two reference populations were visited and plants were in bloom at both reference sites. The survey followed required protocols and no eastern prairie fringed orchids were identified within the project area.

We have no objection to the results of the survey.

Thank you for your efforts to avoid impacts to this species.

Sincerely,

Jenny

From: Miller, Brian <brian.miller1@aecom.com>
Sent: Friday, October 7, 2022 3:44 AM
To: Finfera, Jennifer <jennifer_finfera@fws.gov>
Cc: aruggiero@firstenergycorp.com <aruggiero@firstenergycorp.com>
Subject: [EXTERNAL] USFWS TAILS 03E15000-2020-TA-0471 -> Eastern Prairie Fringed Orchid Survey - Lakeview - Ottawa 138kV TLine

Ms. Finfera,

AECOM Technical Services, Inc. (AECOM0, on behalf of American Transmission Systems, Inc. (ATIS) , a FirstEnergy Company, is requesting your concurrence regarding the Eastern Prairie Fringed Orchid Survey completed as part of the Lakeview – Ottawa 138kV Transmission Line Reconductoring Project. As a result of the completed survey, an absence of the listed species was identified within the proposed work areas. A link containing the report has been provided below.

2022-10_07_Orchid Survey to USFWS

If you have any questions, please let us know.

Thanks

Brian J. Miller
Project Manager / Senior Ecologist

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EXHIBIT #16

LAKEVIEW-OTTAWA 138KV TRANSMISSION LINE RECONDUCTORING PROJECT

WETLAND DELINEATION AND STREAM ASSESSMENT REPORT

Prepared for:
American Transmission Systems, Incorporated
a FirstEnergy Company
76 South Main Street
Akron, Ohio 44308

681 Andersen Drive, Suite 120
Pittsburgh, Pennsylvania 15220, USA

AUGUST 2022

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APPENDICES

1.0 INTRODUCTION

American Transmission Systems, Incorporated (ATSI), a FirstEnergy Company (FirstEnergy), is proposing to reconductor the existing poles along 7.8 miles of an existing 138 kilovolt (kV) transmission line as two disconnected segments located within Bay, Portage, and Salem Townships, in Ottawa County, Ohio. The first segment is located near the eastern portion of the Project and the reconductoring of the line will begin at the Lakeview Substation in Portage Township and terminate at Structure 1448A located west of S. Hopfinger Road in Bay Township. The second segment is located near the western portion of the Project and the reconductoring of the line will begin at the Ottawa Substation in Portage Township and will terminate to the east at Structure 111.5 in Salem Township. During the reconductoring of the transmission line, ATSI plans to replace and/or modify eleven (11) existing structures and will require temporary equipment access. All other structures will be reconductored by foot and/or aerial via helicopter use. Additionally, the reconductoring of the Project will require several ancillary sites including turn arounds, pull sites, guard structures, and laydown yards as displayed on Figure 1. The approximate coordinates for the start and termination points are 41.497, -83.098 and 41.5131, -82.915, respectively.

AECOM Technical Services, Inc. (AECOM) was retained by ATSI to complete the initial wetland delineation and stream assessment within a 158-acre survey boundary as further defined in **Section 2.0**, which encompasses the Project extent. The purpose of the field survey was to assess for the presence of wetlands, streams, and other waterbodies that may occur within the Project's survey boundary. Additionally, this report has been prepared to preliminary identify the aquatic features that would likely be considered as either jurisdictional and/or non-jurisdictional "Waters of the United States". However, determination of jurisdictional status of any aquatic features are solely the opinion of AECOM and only the United States Army Corps of Engineers (USACE) are authorized to determine any jurisdiction over WOTUS.

2.0 METHODOLOGY

The wetland delineation and stream assessment was completed within a 158-acre survey boundary, which includes a 150-foot survey corridor centered along the transmission line route, 50-ft survey corridor centered along proposed temporary access roads, and a 25-foot offset of all pull sites, laydown yards, and other ancillary sites.

On January 14, 15, 16, 17, October 20, November 17, 18, 2020, November 11, 2021, and February 23, 2022, AECOM ecologists walked the survey boundary, access roads, and work areas to conduct the wetland delineation and stream assessment. During the field survey, the physical boundaries of observed water features, if identified, were recorded using sub-meter capable Trimble Global Positioning System (GPS) units or equivalent sub-meter capable GPS unit. The GPS data was imported into ArcMap

Geographic Information System (GIS) software, where the data was then reviewed, edited for accuracy, and compiled in a format suitable for inclusion on figures within this report.

2.1 BACKROUND AND EXISTING DATA REVIEW

Prior to conducting field surveys, digital and available published information were reviewed to identify the potential occurrence and location of wetlands and other WOTUS, general land use, stream classifications, and watershed characteristics within the Project's survey boundary. The digital and available published information includes:

- Natural Resources Conservation Service (NRCS) soil surveys,
- Aerial Imagery (Past and Present)
- U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) maps,
- U.S. Geological Survey (USGS) 7.5-minute topographic maps,
- Aquatic Life Habitat Use Designation under Ohio Administrative Code (OAC) Chapter 3745-1,
- Section 401 Water Quality Certification (WQC) for Nationwide Permit and Stream Eligibility Web Map,
- USACE Antecedent Precipitation Tool V1.019, and
- WETS Climatic Data

2.2 WETLAND DELINEATION

AECOM completed the wetland delineation in accordance with USACE *1987 Wetland Delineation Manual (1987 Manual)* (Environmental Laboratory, 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (Version 2.0) (Regional Supplement) (USACE, 2012)*. Wetlands were identified due to the presence of three environmental criteria: wetland hydrology, hydrophytic vegetation, and hydric soils. If a wetland was identified, AECOM completed a USACE Wetland Determination Dataform (USACE Dataform) within each unique wetland habitat to serve as a representative of the wetland hydrology, vegetative community, and soil characteristics. The unique wetland habitats were classified as palustrine emergent (PEM), palustrine forested (PFO), palustrine unconsolidated bottom (PUB), palustrine scrub-shrub (PSS), or other classifications as defined by adhering to the methodology within the Wetlands and Deepwater Habitats of the United States (Cowardin et al. 1979). Adjacent to each wetland complex, AECOM completed an additional USACE Dataform as a representative of the upland community. At each wetland data point, AECOM collected photographs in each cardinal direction and of the soil profile. Additionally, USACE Data forms and representative photographs were also taken to represent upland communities where areas indicated the potential presence of an aquatic feature based on aerial imagery, two or less wetland criteria were observed, and/or an absence of an aquatic features was observed for areas mapped by United States

Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) and/or National Hydrology Dataset (NHD).

In accordance with Ohio Environmental Protection Agency (OEPA), all wetlands were also classified during the wetland delineation utilizing the *Ohio Rapid Assessment Method for Wetlands v. 5.0* (ORAM) and associated 10-page ORAM forms were completed for each wetland community. Wetlands scored from 0 to 29.9 are grouped into "Category 1", 30 to 59.9 are "Category 2" and 60 to 100 are "Category 3". Transitional zones exist between “Categories 1 and 2” from 30 to 34.9 and between “Categories 2 and 3” from 60 to 64.9. However, according to the OEPA, if the wetland score falls into the transitional range, it must be given the higher Category unless scientific data can prove it should be in a lower Category (Mack 2001). The ORAM scoring boundaries of the assessed wetlands were identified during the site assessment and separate wetlands scored together in accordance with the ORAM manual. The limits of these ORAM scoring boundaries within this report on the 10-page ORAM forms.

Additionally, AECOM completed the initial coordination with the USFWS and Ohio Division of Natural Resources (ODNR) to identify the potential of any state and/or federal listed endangered and/or threatened species “known” to occur within the wetland habitats. Upon receipt of these agencies’ technical assistance, AECOM reviewed the agencies responses with the delineated resources and updated the ORAM forms regarding the agencies’ responses. The formal coordination letters from the USFWS and ODNR are provided under separate cover and can be provided upon request.

2.3 STREAM CROSSINGS

Streams were identified by the presence of a defined bed and bank, and evidence of an ordinary high-water mark (OHWM). The USACE defines OHWM as “that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas” (USACE 2005). Upon identification of a stream, they were assessed using the methods described in the OEPA’s Methods for Assessing Habitat in Flowing Waters: Using OEPA’s *Qualitative Habitat Evaluation Index* (Rankin 2006) and *Field Evaluation Manual for Ohio’s Primary Headwater Habitat Streams, Version 4.1* (Ohio EPA, 2020). Streams associated with watershed area less than or equal to 1.0 mi^2 (259ha), *and* a maximum depth of water pools equal to or less than 15.75 inches were evaluated utilizing the HHEI methodology and all other streams assessed as QHEI (Ohio EPA 2018).

2.4 UPLAND DRAINAGE FEATURES

An upland drainage feature (UDF) is a non-jurisdictional drainage that does not meet the criteria of either a jurisdictional stream and/or wetland community. A UDF generally lacks an OHWM (USACE, 2005)

and are equivalent to a swale or an erosional feature as described by the USACE as a generally shallow feature in a landscape that may convey water across upland areas during and/or following storm events. A roadside ditch may also be documented as a UDF if it meets the "not potentially jurisdictional" characterization as described in the Office of Environmental Services Roadway Ditch Characterization Flowchart (Ohio Department of Transportation, 2014). Areas identified during the wetland delineation and stream assessments as UDFs were photographed and documented utilizing GPS unit and provided within this report, if observed.

3.0 RESULTS

3.1 BACKGROUND AND EXISTING DATA REVIEW

3.1.1 Description of Project Area's Landuse, Watershed, and Existing Use Classifications

Land uses of the Project area were assigned a general classification based upon the principal land characteristics as observed through aerial photography review and observations during the field surveys. General land use types in the vicinity of the proposed Project include residential lots, agricultural fields, wetlands, wooded lots, and maintained transmission line ROW. Existing transmission line ROW, agricultural fields, and residential lawns are the dominant land uses in the vicinity of the Project.

The Project area drains into unnamed tributaries to the Little Portage River, the Portage River, and Sandusky Bay, which eventually flows into Lake Erie. The Little Portage River, Sandusky Bay, and its unnamed tributaries are located within the Portage River drainage basin. The watersheds identified in the Project area include Lacarpe Creek-Frontal Lake Erie Watershed [Hydrologic Unit Code (HUC: 041000100503], Northern Side Sandusky Bay Watershed (HUC: 041000111405), and Little Portage River Watershed (HUC: 041000100501). As per the Section 401 Water Quality Certification (WQC) for Nationwide Permit and Stream Eligibility Web Map website (Ohio Environmental Protection Agency (OEPA)), the Project is located within an Eligible area and impacts to streams, if required, could be authorized by the United States Army Corps of Engineers (USACE) under the Nationwide Permit Conditions. The Portage River has an Ohio Administrative Code (OAC) Chapter 3745-1 aquatic life habitat use designation of Warm Water Habitat (WWH) (State of Ohio, 2018).

3.1.2 USFWS National Wetland Inventory and National Hydrology Dataset Review

According to the NWI mapped wetlands and NHD located within Wightmans Grove, Vickery, and Port Clinton quadrangles, a total of ten mapped wetlands and ten mapped streams crossings were identified within the Project survey boundary. During the field review of these resources, AECOM identified the following conditions of the existing mapped resources.

- Four palustrine, emergent, persistent, seasonally flooded (PEM1C) wetlands were field verified as Wetland LO-09a, LO-09c, LO-14a, and LO-35c.

- Three palustrine, forested, broad-leaved deciduous, emergent, persistent, seasonally flooded (PFO1/EM1C) wetlands were field verified as Wetland LO-13a, LO-13b, and LO-14b.
- One \ palustrine, unconsolidated bottom, intermittently exposed, excavated (PUBGx) wetlands were field verified as Wetland LO-14c.
- Two palustrine, scrub-shrub, broad-leaved deciduous, seasonally flooded (PSS1C) wetlands were field verified as Wetland LO-36a and LO-36b.
- Seven riverine, unknown perennial, unconsolidated bottom, semi permanently flooded, excavated (R5UBFx) waterbodies were field verified as Wetlands LO-03, LO-04, LO-16, Streams LO-09, LO-10, LO-11, and LO-12.
- Three riverine, unknown perennial, unconsolidated bottom, permanently flooded (R5UBH) waterbodies were field verified as Streams LO-03, LO-05, and LO-07.

The location of NWI and NHD mapped resources overlayed with the delineated wetlands, streams, and other waterbodies identified during the site visit are provided on Figure 2**.**

3.1.3 Growing Season and USACE Antecedent Precipitation Tool

The Regional Supplement states that if onsite data gathering is not practical, the growing season can be approximated by the number of days between the average (five years out of ten, or 50 percent probability) date of the last and first 28°F air temperature in the spring and fall, respectively. The National Weather Service WETS data obtained from the NRCS National Water and Climate Center reveals for Ottawa County did not have sufficient data to determine the average growing season. Therefore, AECOM utilized data from an adjacent county, Sandusky County, to estimate the average growing period. Sandusky County growing season in an average year, lasts from April 25 to October 15, or about 173 days. In the Project area, five percent of the growing season equates to approximately nine days (NRCS 2018b).

In accordance with the Executive Order 13788 on January 23, 2020 and the adjustment of the Navigable Waters Protection Rule by the U.S. Environmental Protection Agency (EPA) and Department of Army (Army), AECOM evaluated the "Typical Year" or normal periodic range of precipitation occurring during the site assessment utilizing the USACE Antecedent Precipitation Tool between DATES for the area located within the Project area. The results of the tool indicated that the field assessment was completed during normal conditions under the typical climatic conditions from January 14, 2020 to October 20, 2020, and conditions were wetter than normal from November 17 to November 18, 2020 of the survey period.

3.1.4 Preliminary Soils Evaluation

According to the United States Department of Agricultural (USAD) Natural Resource Conservation (NRCS) Web Soil Surveys, a total of six soil map units are identified within the Project area. Of these six soil map units, a total of three soil map units are identified as hydric soils. During the field assessment of the survey boundary, AECOM evaluated the locations of hydric soils and inclusions to document the potential of wetlands, waterbodies, and streams. The results of the delineation of these resources are

presented in **Section 3.2**. Additionally, a table that provides a detailed overview of all soil series and soil map units is provide in **Table 1** and boundaries of map units are displayed on **Figure 2**.

TABLE 1
SOIL MAP UNITS AND DESCRIPTIONS WITHIN PROJECT SURVEY BOUNDARY

Soil Series[1]	Symbol[1]	Map Unit Description[1]	Topographic Setting[1]	Hydric[2]	Hydric Component (%)
Bono	Bo	Bono silty clay	Depressions	Yes	Bono (95%)
Nappanee	NpA	Nappanee silty clay loam, 0 to 3 percent slopes	Lake Plains	No	0%
Toledo	To	Toledo silty clay, 0 to 1 percent slopes	Lakebeds (relict)	Yes	Toledo (85%)
	Tp	Toledo silty clay, 0 to 1 percent slopes, flooded	Lakebeds (relict)	Yes	Toledo-Flooded (90%)
Udorthents	Ud	Udorthents, gently sloping	-	No	0%
N/A	W	Water	-	Unranked	0%

NOTES:
(1) Data sources include: Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Web Soil Survey. Available online at the following link: http://websoilsurvey.sc.egov.usda.gov/. Accessed [2/2/2022].
(2) Soils that are identified as hydric with an asterisk represent soils with hydric inclusions within the identified topographic settings.

3.2 WETLAND DELINEATION AND STREAM ASSESSMENT

3.2.1 Delineated Wetlands

During the delineation, AECOM identified a total of 41 wetlands comprised of nine different wetland habitat types including 30 PEM wetlands, two PSS wetland, two PUB wetlands, one PEM/PSS wetland complex, one PEM/PFO wetland complexes, one PEM/PSS/PUB wetland complex, one PEM/PFO/PUB wetland complex, two PEM/PSS/PFO wetland complexes, and one PEM/PSS/PFO/PUB wetland complex. As a result, a total of 34 - Category 1, fiver Category 2, and two Category 3 wetlands were identified within the Survey Boundary. Based on review of site conditions and existing data sources, AECOM concluded that all wetlands identified within the survey boundary are likely to be considered jurisdictional by the USACE.

The USFWS and ODNR provided their responses regarding “know” occurrences of state and/or federal listed endangered and/or threatened species on November 26, 2019, and December 30, 2019, respectively. In accordance with ORAM manual, the known locations of species were not endangered and/or threatened species were identified within the responses from the USFWS and ODNR; therefore, wetlands were not assumed to contain habitat and assigned as Category 3. However, the two Category 3 wetland complexes were identified as Category 3 due to being coastal wetlands to Lake Erie.

Table 2 provides a summary of the delineated wetlands within the AECOM survey boundary. The locations and approximate extent of the wetlands identified within the AECOM survey boundary are

shown on **Figure 3**. Completed USACE wetland determination and ORAM forms are provided in **Appendices A and B**, respectively. Color photographs taken of each wetland habitat have been provided **in Appendix D.**

TABLE 2
DELINEATED WETLANDS WITHIN PROJECT SURVEY BOUNDARY

Wetland Name	Latitude	Longitude	Provisional Jurisdictional Status	NWI Classification	ORAM Score	ORAM Category[1]	Cowardin Classification[2]	Acreage within Survey Boundary
Wetland LO-01	41.512678	-82.914851	Yes	N/A	24	Category 1	PEM	1.404
Wetland LO-02	41.512029	-82.915017	Yes	N/A	24	Category 1	PEM	0.254
Wetland LO-03	41.511915	-82.915326	Yes	R5UBFx	24	Category 1	PEM	0.387
Wetland LO-04	41.509984	-82.915816	Yes	R5UBFx	24	Category 1	PEM	0.270
Wetland LO-05	41.509096	-82.915819	Yes	N/A	14	Category 1	PEM	0.044
Wetland LO-06	41.508604	-82.916062	Yes	N/A	14	Category 1	PEM	0.098
Wetland LO-07	41.508073	-82.915776	Yes	N/A	29.5	Category 1	PSS	0.135
Wetland LO-08	41.508426	-82.918885	Yes	N/A	21	Category 1	PSS	0.004
Wetland LO-09a	41.506648	-82.916327	Yes	PEM1C	29.5	Category 1	PSS	2.510
Wetland LO-09b	41.507795	-82.916986	Yes	N/A	29.5	Category 1	PEM	0.884
Wetland LO-09c	41.507152	-82.91602	Yes	PEM1C	29.5	Category 1	PUB	0.731
Wetland LO-10	41.504764	-82.916491	Yes	N/A	29.5	Category 1	PEM	0.435
Wetland LO-11	41.503637	-82.916753	Yes	N/A	37.5	Category 2	PEM	0.182
Wetland LO-12a	41.502257	-82.917099	Yes	N/A	37.5	Category 2	PEM	2.698
Wetland LO-12b	41.502395	-82.917209	Yes	N/A	37.5	Category 2	PSS	0.857
Wetland LO-12c	41.502348	-82.91669	Yes	N/A	37.5	Category 2	PFO	0.579
Wetland LO-13a	41.496431	-82.926069	Yes	PFO1/EM1C	37.5	Category 2	PEM	16.720
Wetland LO-13b	41.496975	-82.923441	Yes	PFO1/EM1C	37.5	Category 2	PFO	0.198
Wetland LO-14a	41.494331	-82.945984	Yes	PEM1C	75.5	Category 3	PEM	20.340
Wetland LO-14b	41.494384	-82.947304	Yes	PFO1/EM1C	75.5	Category 3	PFO	4.755
Wetland LO-14c	41.494467	-82.937282	Yes	PUBGx	75.5	Category 3	PUB	1.047
Wetland LO-14d	41.494733	-82.948653	Yes	N/A	75.5	Category 3	PSS	0.085
Wetland LO-15	41.494584	-82.939943	Yes	PUBGx	39.5	Category 2	PUB	0.369
Wetland LO-16	41.494387	-82.959806	Yes	R5UBFx	23	Category 1	PEM	0.946
Wetland LO-17	41.494138	-82.961467	Yes	N/A	12	Category 1	PEM	0.139
Wetland LO-18	41.494122	-82.964187	Yes	N/A	13	Category 1	PEM	0.332
Wetland LO-19	41.494025	-82.97179	Yes	N/A	16	Category 1	PEM	0.025

TABLE 2
DELINEATED WETLANDS WITHIN PROJECT SURVEY BOUNDARY

Wetland Name	Latitude	Longitude	Provisional Jurisdictional Status	NWI Classification	ORAM Score	ORAM Category[1]	Cowardin Classification[2]	Acreage within Survey Boundary
Wetland LO-20	41.493921	-82.976744	Yes	N/A	17	Category 1	PEM	0.024
Wetland LO-21	41.493828	-82.980269	Yes	N/A	17	Category 1	PEM	0.014
Wetland LO-22	41.493861	-82.98156	Yes	N/A	17	Category 1	PEM	0.018
Wetland LO-23	41.49373	-82.981668	Yes	N/A	15	Category 1	PEM	0.015
Wetland LO-24	41.493033	-82.991351	Yes	R5UBFx	17	Category 1	PEM	0.020
Wetland LO-25	41.492869	-82.993778	Yes	N/A	17	Category 1	PEM	0.061
Wetland LO-26	41.492656	-82.99611	Yes	N/A	17	Category 1	PEM	0.054
Wetland LO-27	41.492314	-83.000899	Yes	N/A	17	Category 1	PEM	0.035
Wetland LO-28	41.492547	-83.01068	Yes	N/A	18	Category 1	PEM	0.200
Wetland LO-29	41.491818	-83.014765	Yes	N/A	18	Category 1	PEM	0.217
Wetland LO-30	41.491905	-83.022698	Yes	N/A	16	Category 1	PEM	0.030
Wetland LO-31	41.492899	-83.029937	Yes	N/A	17	Category 1	PEM	0.050
Wetland LO-32	41.492928	-83.03033	Yes	N/A	17	Category 1	PEM	0.107
Wetland LO-33	41.49339	-83.03492	Yes	N/A	17	Category 1	PEM	0.013
Wetland LO-34	41.493589	-83.037041	Yes	N/A	19	Category 1	PEM	0.524
Wetland LO-35a	41.493572	-83.03935	Yes	PSS1C	78.5	Category 3	PFO	1.820
Wetland LO-35b	41.493805	-83.041884	Yes	PEM1C	78.5	Category 3	PUB	0.300
Wetland LO-35c	41.493432	-83.04442	Yes	PEM1C	78.5	Category 3	PEM	1.031
Wetland LO-36a	41.493462	-83.042046	Yes	PSS1C	30	Category 1	PEM	2.158
Wetland LO-36b	41.493362	-83.041234	Yes	PSS1C	30	Category 1	PFO	0.392
Wetland LO-36c	41.492934	-83.043882	Yes	N/A	30	Category 1	PSS	0.635
Wetland LO-37	41.492986	-83.044349	Yes	N/A	24	Category 1	PUB	0.673
Wetland LO-38	41.496703	-83.097766	Yes	N/A	21	Category 1	PEM	0.062
Wetland LO-39	41.496482	-83.098829	Yes	N/A	21	Category 1	PEM	0.030
Wetland LO-40	41.514416	-82.915698	Yes	N/A	9	Category 1	PEM	0.028
Wetland LO-41a	41.495707	-82.95963	Yes	N/A	36	Category 2	PEM	0.145

TABLE 2
DELINEATED WETLANDS WITHIN PROJECT SURVEY BOUNDARY

Wetland Name	Latitude	Longitude	Provisional Jurisdictional Status	NWI Classification	ORAM Score	ORAM Category[1]	Cowardin Classification[2]	Acreage within Survey Boundary
Wetland LO-41b	41.496845	-82.959628	Yes	N/A	36	Category 2	PSS	0.982

Project Totals

Notes:
1): The Ohio Rapid Assessment Method for Wetlands v. 5.0, User's Manual and Scoring Forms
2): PEM = palustrine emergent; PSS = Palustrine scrub/shrub, PFO=palustrine forested, and PUB = Palustrine unconsolidated bottom
3): Acreage associated with off right-of-way areas includes access roads, turnarounds, pull sites, laydowns, and other ancillary sites.

Wetland Categories[1,2]	Category 1	Category 2	Category 3	Acreage within Survey Boundary
PEM	29	1	0	6.018
PSS	2	0	0	0.139
PUB	1	1	0	0.482
PEM/PSS	0	1	0	1.127
PEM/PFO	0	1	0	16.918
PEM/PSS/PUB	1	0	0	4.125
PEM/PFO/PUB	0	0	1	2.729
PEM/PSS/PFO	1	1	0	7.224
PEM/PSS/PFO/ PUB	0	0	1	26.227
Total	**34**	**5**	**2**	**64.989**

3.3 STREAM CROSSINGS

AECOM identified one intermittent stream and 12 perennial streams within the AECOM survey boundary, as listed in **Table 3**. Of these streams, ten were classified using the HHEI methodology as Modified Class 2 and three were classified using the QHEI methodology. The QHEI streams identified were provisionally classified as an aquatic life use designation of Very Poor. AECOM has preliminarily determined that the assessed streams within the Project survey boundary would likely be considered jurisdictional based on the 2020 Navigable Water Rule.

The locations of the streams identified within the AECOM survey boundary are shown on **Figure 3**, data forms provided in **Appendix C**, and representative photographs provided as **Appendix D**.

TABLE 3
DELINEATED STREAMS WITHIN PROJECT SURVEY BOUNDARY

Report Name	Latitude	Longitude	Watercourse Name	Flow Regime	Form Used[1]	Score	Class or Narrative Description[2]	Bank Full Width (feet)	Maximum Pool Depth (inches)	OEPA 401 WQC Eligibility for Nationwide Permits[3]	Linear Feet within Survey Boundary
Stream LO-01	41.512100	-82.915398	UNT to Lake Erie	Perennial	HHEI	60	Mod Class 2	11	18	Eligible	1479
Stream LO-02	41.505798	-82.917603	UNT to Lake Erie	Perennial	HHEI	63	Mod Class 2	6	22	Eligible	847
Stream LO-03	41.498299	-82.919403	UNT to Muddy Creek Bay	Perennial	QHEI	21	Very poor	7	12	Eligible	786
Stream LO-04	41.495602	-82.929100	UNT to Muddy Creek Bay	Intermittent	HHEI	59	Mod Class 2	5	4	Eligible	157
Stream LO-05	41.494499	-82.935097	UNT to Muddy Creek Bay	Perennial	QHEI	39	Poor	36	24	Eligible	721
Stream LO-06	41.494499	-82.939003	UNT to Muddy Creek Bay	Perennial	QHEI	32	Poor	15	24	Eligible	64
Stream LO-07	41.494099	-82.958603	UNT to Muddy Creek Bay	Perennial	HHEI	57	Mod Class 2	20	20	Eligible	168
Stream LO-08	41.493900	-82.960999	UNT to Muddy Creek Bay	Perennial	HHEI	59	Mod Class 2	5	10	Eligible	941
Stream LO-09	41.494099	-82.964798	UNT to Muddy Creek Bay	Perennial	HHEI	64	Mod Class 2	14	36	Eligible	158
Stream LO-10	41.493999	-82.972000	UNT to Muddy Creek Bay	Perennial	HHEI	64	Mod Class 2	15	36	Eligible	162
Stream LO-11	41.491798	-83.008400	UNT to Portage River	Perennial	HHEI	64	Mod Class 2	11	24	Eligible	154
Stream LO-12	41.493500	-83.034798	UNT to Little Portage River	Perennial	HHEI	59	Mod Class 2	11	30	Eligible	116
Stream LG-01	41.507737	-82.914448	UNT to Lake Erie	Perennial	HHEI	69	Mod Class 2	8	12	Eligible	111

Project Totals

Notes:
1. HHEI = Headwater Habitat Evaluation Index
2. Class or Narrative Description provides the designated beneficial uses for assessed resources identified within the Ohio Administrative Code Chapter 3745-1 Water Quality Standards. In absence of a listed designation for a resource, AECOM included the Category assessment identified by the OEPA's Qualitative Habitat Evaluation Index (Rankin 2006) or Field Evaluation Manual for Ohio's Primary Headwater Habitat Streams, Version 3.
3. As defined by OEPA Division of Surface Water Stream Eligibility Map. Available online at: http://oepa.maps.arcgis.com/apps/webappviewer/index.html?id=e6b46d29a38f46229c1eb47deefe49b6
4. Linear Feet is associated with off right-of-way areas includes access roads, turnarounds, pull sites, laydowns, and other ancillary sites

Flow Regime	HHEI Class 1	HHEI Class 2	HHEI Class 3	QHEI Warm Water Habitat	Linear Feet within Survey Boundary
Ephemeral	-	-	-	-	-
Intermittent	-	1	-	-	157
Perennial	-	9	-	3	5,707
Total	-	10	-	3	5,864

3.4 UPLAND DRAIANGE FEATURE

No UDFs were surveyed within the AECOM survey boundary.

3.5 PONDS

No ponds were surveyed within the AECOM survey boundary.

4.0 SUMMARY

The wetland delineation and stream assessment was completed on January 14, 15, 16, 17, October 20, November 17, 18, 2020, November 11, 2021, and February 23, 2022, within the 158-acre survey area associated with the Lakeview-Ottawa 138KV Transmission Line Reconductoring Project. During the survey, nine types of wetland complexes were identified within the AECOM survey boundary and these wetlands included 30 PEM wetlands, two PSS wetland, two PUB wetlands, one PEM/PSS wetland complex, one PEM/PFO wetland complexes, one PEM/PSS/PUB wetland complex, one PEM/PFO/PUB wetland complex, two PEM/PSS/PFO wetland complexes, and one PEM/PSS/PFO/PUB wetland complex. Of these, 34 were identified as ORAM Category 1 wetlands, five were identified as ORAM Modified Category 2 wetlands, and two were identified as ORAM Modified Category 3 wetlands.

The 13 streams identified within the AECOM survey boundary included 12 perennial streams and one intermittent stream. Ten streams were assessed using the HHEI methodology; all ten streams were identified as Modified Class 2 Streams. Three streams were assessed using the QHEI methodology and twowere classified as Poor Streams and one as a Very Poor Stream.

On June 22, 2020, the Navigable Waters Protection Rule under the Clean Water Act (CWA) was modified and in most cases, excluded ephemeral stream as being jurisdictional waters of the United States. Therefore, the jurisdictional status of ephemeral streams shall be left to the federal review, if required, and AECOM has preliminarily determined that all assessed streams and wetlands within the AECOM survey boundary appear to be jurisdictional (i.e., waters of the U.S.). The locations of the streams and wetlands identified within the survey boundary are shown on **Figure 3**.

The information contained in this wetland delineation report is for a study boundary that may be much larger than the actual Project limits-of-disturbance; therefore, lengths and acreages listed in this report may not constitute the actual impacts of the Project defined in subsequent permit

applications. If necessary, a separate report that identifies the actual Project impacts will be provided with agency submittals.

The field survey results presented herein apply to the existing and reasonably foreseeable site conditions at the time of our assessment. They cannot apply to site changes of which AECOM is unaware and has not had the opportunity to review. Changes in the condition of a property may occur with time due to natural processes or human impacts at the Project site or on adjacent properties. Changes in applicable standards may also occur as a result of legislation or the expansion of knowledge over time. Accordingly, the findings of this report may be invalidated, wholly or in part, by changes beyond the control of AECOM.

5.0 REFERENCES

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