

October 20, 2022

Ms. Tanowa Troupe, Secretary
Docketing Division, Ohio Power Siting Board
The Public Utilities Commission of Ohio
180 East Broad Street
Columbus, OH 43215-3793

**Amendment to the
Beaver-Wellington 138 kV Transmission Line Project
Case No. 22-0494-EL-BTA**

Dear Ms. Troupe:

Pursuant to Ohio Administrative Code (“OAC”) Rule 4906-3-11(B), American Transmission Systems, Incorporated (“ATSI”), a FirstEnergy company, transmits the enclosed application to amend the Certificate of Environmental Compatibility and Public Need (“Amendment Application”) issued for the Beaver-Wellington 138 kV Transmission Line Project (“Project”). This filing is made pursuant to O.A.C. Chapters 4906-2 and 4906-5.

ATSI is proposing two engineering shifts to the Project route that was approved by the Ohio Power Siting Board in Case No. 20-0004-EL-BTX. Neither is expected to result in impacts greater than those covered by ATSI’s Certificate for this Project. The Amendment Application covers portions of the Project in Brownhelm Township, Lorain County, Ohio.

Pursuant to OAC Rule 4906-2-04(A)(3), please be advised of the following:

a) Name and address of the applicant:

American Transmission Systems, Incorporated
76 South Main Street
Akron, Ohio 44308

b) Name and location of proposed facilities:

Beaver-Wellington 138 kV Transmission Line Project

Proposed amendments to certificated route in Brownhelm Township, Lorain County, Ohio.

c) Applicant’s representative:

Nataliya Bryksenkova, Engineer
Transmission Siting
FirstEnergy Service Company
76 South Main Street
Akron, OH 44308-1890

Attorney for Applicant:

Devan K. Flahive (0097457)
Porter, Wright, Morris & Arthur LLP
41 South High Street, Suite 2900
Columbus, OH 43215-6194
Tel: (614) 227-1989
dflahive@porterwright.com (willing to accept service via e-mail)

d) Not applicable to Amendment.

e) A notarized statement that the information contained in the application is complete and accurate is included as Attachment 1.

ATSI has also served a copy of the Amendment Application in accordance with OAC Rule 4906-3-11(B)(2). As proof of compliance, copies of the letters sent to persons entitled to service in the proposed amendment area pursuant to OAC Rule 4906-3-07, as listed in Attachment 2, are enclosed for your file. Also, a copy of the notice letter sent to the property owners in the proposed amendment area pursuant to OAC Rule 4906-3-11(B)(2), as listed in Attachment 3, is enclosed for your file.¹

In addition, ATSI has provided the main public library for the political subdivision (Brownhelm Township) in which the proposed Project route adjustments will be located with a copy of the Amended Application for public reference. See Attachment 2.

Should the Ohio Power Siting Board desire further information or discussion of this submittal, please contact me at (330) 761-4473.

Sincerely,



Nataliya Bryksenkova, Engineer
Transmission Siting
FirstEnergy Service Company

Attachments

¹ The Lorain County Board of Commissioners requested a single copy be served on the Commission President.

**Amendment to the
Beaver-Wellington 138 kV Transmission Line Project
Case Number 22-0494-EL-BTA**

Date: October 20, 2022

**Attachment 1
Acknowledgement of Nataliya Bryksenkova**

**B-W 138kV T-Line Amendment 1-Acknowledgement-E-Notary.docx**

DocVerify ID: F31FDD32-A2E4-458C-9B1F-F5DE1518C204
Created: October 20, 2022 05:45:36 -8:00
Pages: 1
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E-Signature Summary**E-Signature 1: Nataliya Bryksenkova (NB)**

October 20, 2022 05:52:26 -8:00 [4BEBB2367DEB] [98.27.152.234]
nbryksenkova@firstenergycorp.com (Principal) (Personally Known)

E-Signature Notary: Matthew J. Albright (MJA)

October 20, 2022 05:52:26 -8:00 [F5A34E213FD6] [76.34.169.133]
malbright@firstenergycorp.com
I, Matthew J. Albright, did witness the participants named above electronically sign this document.



BEFORE THE
OHIO POWER SITING BOARD

In The Matter Of:)
The Application of American)
Transmission Systems, Incorporated for)
an Amendment to the Certificate of)
Environmental Compatibility and Public)
Need for the Construction of the)
Amendment to the Beaver-Wellington)
138 kV Transmission Line Project)

Case No. 22-0494-EL-BTA

ACKNOWLEDGEMENT OF NATALIYA BRYKSENKOVA

I, Nataliya Bryksenkova, state the following:

Pursuant to Ohio Administrative Code Rule 4906-2-04(A)(3)(e), I am the authorized representative of the Applicant in this case, and I affirm that the Amendment application filed in this matter is true and accurate to the best of my information and belief.

Nataliya Bryksenkova

Signed on 2022/10/20 05:52:26 -8:00

Nataliya Bryksenkova
FirstEnergy Service Company

State of Ohio)
County of Summit) ss:

Sworn and subscribed before me this 10/20/2022 day of October 2022.

Matthew J Albright

Signed on 2022/10/20 05:52:26 -8:00

Notary Public



Notary Stamp 2022/10/20 05:52:26 PST

PSA34E213FD6



Attachment 2
Officials Served Copy of Amendment to the
Beaver-Wellington 138 kV Transmission Line Project
Case No. 22-0494-EL-BTA

Lorain County

Commissioner Matt Lundy,
President
Lorain County Commissioners
226 Middle Avenue, 4th Floor
Elyria, OH 44035

Commissioner Michelle Hung,
Vice-President
Lorain County Commissioners
226 Middle Avenue, 4th Floor
Elyria, OH 44035

Commissioner David J. Moore,
Lorain County Commissioners
226 Middle Avenue, 4th Floor
Elyria, OH 44035

Mr. Ken Carney, P.E., P.S.
Lorain County Engineer
247 Hadaway Street
Elyria, OH 44035

Mr. J.R. White
Lorain County Administrator
226 Middle Avenue, 4th Floor
Elyria, OH 44035

Mr. Rob Duncan, Director
Lorain County Community
Development Department
226 Middle Avenue, 5th Floor
Elyria, OH 44035

Mr. James Ziemnik, Director
Lorain County Metro Parks
12882 Diagonal Road
LaGrange, OH 44050

Brownhelm Township

Mr. Greg Butchko, Trustee
Brownhelm Township Hall
1940 North Ridge Road
Vermillion, OH 44089

Mr. Tom Rini, Trustee
Brownhelm Township Hall
1940 North Ridge Road
Vermillion, OH 44089

Mr. Gregory Abraham, Trustee
Brownhelm Township Hall
1940 North Ridge Road
Vermillion, OH 44089

Ms. Debra Mastellone,
Fiscal Officer
Brownhelm Township Hall
1940 North Ridge Road
Vermillion, OH 44089

Library

Mr. Donald Dovala,
Library Administrator
Amherst Public Library
221 Spring Street
Amherst, OH 44001

October 20, 2022

Commissioner Matt Lundy, President
Lorain County Commissioners
226 Middle Avenue, 4th Floor
Elyria, OH 44035

**Amendment to the
Beaver-Wellington 138 kV Transmission Line Project
Case No. 22-0494-EL-BTA**

Dear Commissioner Lundy,

This letter pertains to the Beaver-Wellington 138 kV Transmission Line Project (“Project”), for which the Ohio Power Siting Board (“Board”) issued a Certificate of Environmental Compatibility and Public Need (“Certificate”) to American Transmission Systems, Incorporated (“ATSI”) in Case No. 20-0004-EL-BTX.

ATSI is proposing two engineering shifts to the approved Project route—neither of which is expected to result in impacts greater than those covered by ATSI’s Certificate for this Project—and has thus filed an application pursuant to Ohio Administrative Code Rule 4906-3-11(B) to amend the Certificate (“Amendment Application”) that is now pending before the Board in Case No. 22-0494-EL-BTA. The Amendment Application covers portions of the Project in Brownhelm Township, Lorain County, Ohio.

A copy of the Amendment Application is provided on the enclosed compact disc and contains a more detailed description of the requested route changes. I will be happy to answer your questions concerning this matter. You can contact me at (330) 761-4473.

Sincerely,



Nataliya Bryksenкова
Engineer
Transmission Siting
FirstEnergy Service Company

Attachment

October 20, 2022

Mr. Ken Carney, P.E., P.S.
Lorain County Engineer
247 Hadaway Street
Elyria, OH 44035

**Amendment to the
Beaver-Wellington 138 kV Transmission Line Project
Case No. 22-0494-EL-BTA**

Dear Mr. Carney,

This letter pertains to the Beaver-Wellington 138 kV Transmission Line Project (“Project”), for which the Ohio Power Siting Board (“Board”) issued a Certificate of Environmental Compatibility and Public Need (“Certificate”) to American Transmission Systems, Incorporated (“ATSI”) in Case No. 20-0004-EL-BTX.

ATSI is proposing two engineering shifts to the approved Project route—neither of which is expected to result in impacts greater than those covered by ATSI’s Certificate for this Project—and has thus filed an application pursuant to Ohio Administrative Code Rule 4906-3-11(B) to amend the Certificate (“Amendment Application”) that is now pending before the Board in Case No. 22-0494-EL-BTA. The Amendment Application covers portions of the Project in Brownhelm Township, Lorain County, Ohio.

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Sincerely,



Nataliya Bryksenkova
Engineer
Transmission Siting
FirstEnergy Service Company

Attachment

October 20, 2022

Mr. J.R. White
Lorain County Administrator
226 Middle Avenue, 4th Floor
Elyria, OH 44035

**Amendment to the
Beaver-Wellington 138 kV Transmission Line Project
Case No. 22-0494-EL-BTA**

Dear Mr. White,

This letter pertains to the Beaver-Wellington 138 kV Transmission Line Project (“Project”), for which the Ohio Power Siting Board (“Board”) issued a Certificate of Environmental Compatibility and Public Need (“Certificate”) to American Transmission Systems, Incorporated (“ATSI”) in Case No. 20-0004-EL-BTX.

ATSI is proposing two engineering shifts to the approved Project route—neither of which is expected to result in impacts greater than those covered by ATSI’s Certificate for this Project—and has thus filed an application pursuant to Ohio Administrative Code Rule 4906-3-11(B) to amend the Certificate (“Amendment Application”) that is now pending before the Board in Case No. 22-0494-EL-BTA. The Amendment Application covers portions of the Project in Brownhelm Township, Lorain County, Ohio.

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Sincerely,



Nataliya Bryksenkova
Engineer
Transmission Siting
FirstEnergy Service Company

Attachment

October 20, 2022

Mr. Rob Duncan, Director
Lorain County Community
Development Department
226 Middle Avenue, 5th Floor
Elyria, OH 44035

**Amendment to the
Beaver-Wellington 138 kV Transmission Line Project
Case No. 22-0494-EL-BTA**

Dear Mr. Duncan,

This letter pertains to the Beaver-Wellington 138 kV Transmission Line Project (“Project”), for which the Ohio Power Siting Board (“Board”) issued a Certificate of Environmental Compatibility and Public Need (“Certificate”) to American Transmission Systems, Incorporated (“ATSI”) in Case No. 20-0004-EL-BTX.

ATSI is proposing two engineering shifts to the approved Project route—neither of which is expected to result in impacts greater than those covered by ATSI’s Certificate for this Project—and has thus filed an application pursuant to Ohio Administrative Code Rule 4906-3-11(B) to amend the Certificate (“Amendment Application”) that is now pending before the Board in Case No. 22-0494-EL-BTA. The Amendment Application covers portions of the Project in Brownhelm Township, Lorain County, Ohio.

A copy of the Amendment Application is provided on the enclosed compact disc and contains a more detailed description of the requested route changes. I will be happy to answer your questions concerning this matter. You can contact me at (330) 761-4473.

Sincerely,



Nataliya Bryksenkova
Engineer
Transmission Siting
FirstEnergy Service Company

Attachment

October 20, 2022

Mr. James Ziemnik, Director
Lorain County Metro Parks
12882 Diagonal Road
LaGrange, OH 44050

**Amendment to the
Beaver-Wellington 138 kV Transmission Line Project
Case No. 22-0494-EL-BTA**

Dear Mr. Ziemnik,

This letter pertains to the Beaver-Wellington 138 kV Transmission Line Project (“Project”), for which the Ohio Power Siting Board (“Board”) issued a Certificate of Environmental Compatibility and Public Need (“Certificate”) to American Transmission Systems, Incorporated (“ATSI”) in Case No. 20-0004-EL-BTX.

ATSI is proposing two engineering shifts to the approved Project route—neither of which is expected to result in impacts greater than those covered by ATSI’s Certificate for this Project—and has thus filed an application pursuant to Ohio Administrative Code Rule 4906-3-11(B) to amend the Certificate (“Amendment Application”) that is now pending before the Board in Case No. 22-0494-EL-BTA. The Amendment Application covers portions of the Project in Brownhelm Township, Lorain County, Ohio.

A copy of the Amendment Application is provided on the enclosed compact disc and contains a more detailed description of the requested route changes. I will be happy to answer your questions concerning this matter. You can contact me at (330) 761-4473.

Sincerely,



Nataliya Bryksenkova
Engineer
Transmission Siting
FirstEnergy Service Company

Attachment

October 20, 2022

Mr. Greg Butchko, Trustee
Brownhelm Township Hall
1940 North Ridge Road
Vermillion, OH 44089

**Amendment to the
Beaver-Wellington 138 kV Transmission Line Project
Case No. 22-0494-EL-BTA**

Dear Mr. Butchko,

This letter pertains to the Beaver-Wellington 138 kV Transmission Line Project (“Project”), for which the Ohio Power Siting Board (“Board”) issued a Certificate of Environmental Compatibility and Public Need (“Certificate”) to American Transmission Systems, Incorporated (“ATSI”) in Case No. 20-0004-EL-BTX.

ATSI is proposing two engineering shifts to the approved Project route—neither of which is expected to result in impacts greater than those covered by ATSI’s Certificate for this Project—and has thus filed an application pursuant to Ohio Administrative Code Rule 4906-3-11(B) to amend the Certificate (“Amendment Application”) that is now pending before the Board in Case No. 22-0494-EL-BTA. The Amendment Application covers portions of the Project in Brownhelm Township, Lorain County, Ohio.

A copy of the Amendment Application is provided on the enclosed compact disc and contains a more detailed description of the requested route changes. I will be happy to answer your questions concerning this matter. You can contact me at (330) 761-4473.

Sincerely,



Nataliya Bryksenkova
Engineer
Transmission Siting
FirstEnergy Service Company

Attachment

October 20, 2022

Mr. Tom Rini, Trustee
Brownhelm Township Hall
1940 North Ridge Road
Vermillion, OH 44089

**Amendment to the
Beaver-Wellington 138 kV Transmission Line Project
Case No. 22-0494-EL-BTA**

Dear Mr. Rini,

This letter pertains to the Beaver-Wellington 138 kV Transmission Line Project (“Project”), for which the Ohio Power Siting Board (“Board”) issued a Certificate of Environmental Compatibility and Public Need (“Certificate”) to American Transmission Systems, Incorporated (“ATSI”) in Case No. 20-0004-EL-BTX.

ATSI is proposing two engineering shifts to the approved Project route—neither of which is expected to result in impacts greater than those covered by ATSI’s Certificate for this Project—and has thus filed an application pursuant to Ohio Administrative Code Rule 4906-3-11(B) to amend the Certificate (“Amendment Application”) that is now pending before the Board in Case No. 22-0494-EL-BTA. The Amendment Application covers portions of the Project in Brownhelm Township, Lorain County, Ohio.

A copy of the Amendment Application is provided on the enclosed compact disc and contains a more detailed description of the requested route changes. I will be happy to answer your questions concerning this matter. You can contact me at (330) 761-4473.

Sincerely,



Nataliya Bryksenkova
Engineer
Transmission Siting
FirstEnergy Service Company

Attachment

October 20, 2022

Mr. Gregory Abraham, Trustee
Brownhelm Township Hall
1940 North Ridge Road
Vermillion, OH 44089

**Amendment to the
Beaver-Wellington 138 kV Transmission Line Project
Case No. 22-0494-EL-BTA**

Dear Mr. Abraham,

This letter pertains to the Beaver-Wellington 138 kV Transmission Line Project (“Project”), for which the Ohio Power Siting Board (“Board”) issued a Certificate of Environmental Compatibility and Public Need (“Certificate”) to American Transmission Systems, Incorporated (“ATSI”) in Case No. 20-0004-EL-BTX.

ATSI is proposing two engineering shifts to the approved Project route—neither of which is expected to result in impacts greater than those covered by ATSI’s Certificate for this Project—and has thus filed an application pursuant to Ohio Administrative Code Rule 4906-3-11(B) to amend the Certificate (“Amendment Application”) that is now pending before the Board in Case No. 22-0494-EL-BTA. The Amendment Application covers portions of the Project in Brownhelm Township, Lorain County, Ohio.

A copy of the Amendment Application is provided on the enclosed compact disc and contains a more detailed description of the requested route changes. I will be happy to answer your questions concerning this matter. You can contact me at (330) 761-4473.

Sincerely,



Nataliya Bryksenkova
Engineer
Transmission Siting
FirstEnergy Service Company

Attachment

October 20, 2022

Ms. Debra Mastellone, Fiscal Officer
Brownhelm Township Hall
1940 North Ridge Road
Vermillion, OH 44089

**Amendment to the
Beaver-Wellington 138 kV Transmission Line Project
Case No. 22-0494-EL-BTA**

Dear Ms. Mastellone,

This letter pertains to the Beaver-Wellington 138 kV Transmission Line Project (“Project”), for which the Ohio Power Siting Board (“Board”) issued a Certificate of Environmental Compatibility and Public Need (“Certificate”) to American Transmission Systems, Incorporated (“ATSI”) in Case No. 20-0004-EL-BTX.

ATSI is proposing two engineering shifts to the approved Project route—neither of which is expected to result in impacts greater than those covered by ATSI’s Certificate for this Project—and has thus filed an application pursuant to Ohio Administrative Code Rule 4906-3-11(B) to amend the Certificate (“Amendment Application”) that is now pending before the Board in Case No. 22-0494-EL-BTA. The Amendment Application covers portions of the Project in Brownhelm Township, Lorain County, Ohio.

A copy of the Amendment Application is provided on the enclosed compact disc and contains a more detailed description of the requested route changes. I will be happy to answer your questions concerning this matter. You can contact me at (330) 761-4473.

Sincerely,



Nataliya Bryksenkova
Engineer
Transmission Siting
FirstEnergy Service Company

Attachment

October 20, 2022

Mr. Donald Dovala, Library Administrator
Amherst Public Library
221 Spring Street
Amherst, OH 44001

**Amendment to the
Beaver-Wellington 138 kV Transmission Line Project
Case No. 22-0494-EL-BTA**

Dear Mr. Dovala,

Enclosed please find one copy of the Amendment Application of American Transmission Systems, Incorporated ("ATSI"), a FirstEnergy company, for the Beaver-Wellington 138 kV Transmission Line Project ("Project") certificated by the Ohio Power Siting Board ("Board") in Case No. 20-0004-EL-BTX. ATSI has filed this Amendment Application with the Board pursuant to Ohio Administrative Code ("OAC") Rule 4906-3-11(B). Please make a copy available for public reference in the Amherst Public Library as the main public library for the political subdivision (Brownhelm Township) in which the route adjustments will be located.

As fully described in the Amendment Application, ATSI is proposing two engineering shifts to the Project route approved by the Ohio Power Siting Board in Case No. 20-0004-EL-BTX. Neither is expected to result in impacts greater than those covered by ATSI's Certificate for this Project. The Amendment Application covers portions of the Project in Brownhelm Township, Lorain County, Ohio.

Please feel free to call me with any question you have on making the Amendment Application available to your patrons. My phone number is (330) 761-4473.

Sincerely,



Nataliya Bryksenkova
Engineer
Transmission Siting
FirstEnergy Service Company

Attachment 3
Property Owners Served Notice Letters on the Amendment application to the
Beaver-Wellington 138 kV Transmission Line Project
Case No. 22-0494-EL-BTA

Parcel Number(s)	Easement Status
0100040000019; 0100041000020	Owned in Fee
0100041000045	Existing
0100041000049	Existing
0100041000017	Existing
0100041000010	Existing
0100041000059	Existing
0100041000021	Existing
0100056000053	Existing
0100056000090	Existing
0100056000099	Existing
0100056000102	Existing
0100056000086; 0100056000105	Existing
0100056000082	Existing
0100056000077	Existing
0500095000033	Existing
0500094101027; 0500095000086	Existing
0100056000101	Existing
0100056000088	Existing
0100040000019; 0100041000020	Existing



October 20, 2022

XXXXXXXXXXXXX
XXXXXXXXXXXXX
XXXXXXXXXXXXX

Parcel: XXXXXXXXXXX

Amendment to the Beaver-Wellington 138 kV Transmission Line Project
Case No. 22-0494-EL-BTA

Dear Property Owner,

American Transmission Systems, Incorporated (“ATSI”), a FirstEnergy company, is proposing two engineering shifts to the Beaver-Wellington 138 kV Transmission Line Project route, which was approved by the Ohio Power Siting Board (“OPSB”) in Case No. 20-0004-EL-BTX (“Certificated Route”). Neither is anticipated to create additional impacts.

The two engineering shifts affect a distance of 0.94 mile for the portion of the Project in Brownhelm Township in Lorain County, Ohio, and are a result of further engineering analysis. This letter is being sent to you in compliance with OAC Rule 4906-3-11(B)(1)(b) because you have been identified as a property owner along the adjusted route presented in the Amendment Application to construct, operate, and maintain the Project, which is now pending before the OPSB and has been assigned Case No. 22-0494-EL-BTA.

The Amendment Application contains a description of the material changes to the Project, including details on the location of the two engineering shifts, and can be viewed at the following public location:

Amherst Public Library, 221 Spring Street, Amherst, OH 44001

A copy of the Amendment Application is also available for public inspection at the offices of the Ohio Power Siting Board, c/o Public Utilities Commission of Ohio, Utilities Department, 12th Floor, Borden Building, 180 East Broad Street, Columbus, Ohio 43215-3793, or on the website of the OPSB: www.opsb.ohio.gov. The OPSB can also be reached via email at: contactOPSB@puc.state.oh.us.

Finally, a copy of the Amendment Application will be posted on FirstEnergy’s website at www.firstenergycorp.com/about/transmission_project/ohio.html along with information on how to request a hard copy, if you wish to order one.

Please be advised that interested persons may file motions to intervene and/or comments with the Board within ten days of the date of the publication of the public notice of the filing of this Project with the OPSB, as required by OAC Rule 4906-2-12, or later if good cause is shown. Petitions to intervene and comments should be addressed to the Ohio Power Siting Board, 180 East Broad Street, Columbus, Ohio 43215-3793 and reference Case No. 22-0494-EL-BTA.

If you have any questions concerning the Amendment Application or the Project generally, I will be happy to answer them. You can contact me at the transmission projects hotline number 1-888-311-4737 or by email at transmissionprojects@firstenergycorp.com. Please reference Case No. 22-0494-EL-BTA in all communications regarding this Amendment Application.

Sincerely,



Nataliya Bryksenkova, Engineer
Transmission Siting
FirstEnergy Service Company

**AMERICAN TRANSMISSION SYSTEMS, INCORPORATED
A FIRSTENERGY COMPANY**

**AMENDMENT TO THE
BEAVER-WELLINGTON 138 kV TRANSMISSION LINE
PROJECT**

OPSB CASE NO.: 22-0494-EL-BTA

October 20, 2022

**American Transmission Systems, Incorporated
76 South Main Street
Akron, Ohio 44308**

BEFORE THE OHIO POWER SITING BOARD

**Application for Amendment to the
Beaver-Wellington 138 kV Transmission Line Project Certificate**

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Exhibit 2	Approved Route Alignment Adjustments Structures 1-13 – Brownhelm Section

Exhibit 3	Approved Route Alignment Adjustments Structures 2299–2305 – Brownhelm Section
Figure 2-2	Project Overview and Area Features – Brownhelm Section (Revised)
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Figures 8-2A to 8-2B	Approved Route Delineated Wetland and Waterbodies Map – Brownhelm Section (Revised)

APPENDICES

- 7-1 Agency Consultation **(Revised)**
- 8-1 Wetland and Waterbody Delineation Addendum Report **(Revised)**

Acronyms and Abbreviations

ATSI	American Transmission Systems, Incorporated
BMP	best management practice
DOW	Division of Wildlife
FERC	Federal Energy Regulatory Commission
Field Survey Area	133 feet on either side of the centerline for both the Preferred and Alternate Routes
GIS	geographic information system
HHEI	Headwater Habitat Evaluation Index
I-	Interstate
ID	identification
kV	kilovolt
NHL	National Historic Landmark
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NWI	National Wetlands Inventory
OAC	Ohio Administrative Code
OAI	Ohio Archaeological Inventory
ODNR	Ohio Department of Natural Resources
OEPA	Ohio Environmental Protection Agency
OGS	Ohio Genealogical Society
OHI	Ohio Historic Inventory
OHPO	Ohio Historic Preservation Office
OPSB	Ohio Power Siting Board
ORAM	Ohio Rapid Assessment Method
PEM	palustrine emergent
PFO	palustrine forested
PHWH	Primary Headwater Habitat
Project	Beaver-Wellington 138 kV Transmission Line Project
Proposed Route Adjustment	Project centerline shifts presented for the Board's approval herein
PSS	palustrine scrub/shrub
QHEI	Qualitative Habitat Evaluation Index
ROW	right-of-way
SR	Ohio State Route
UNT	unnamed tributary
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey

BROWNHHELM SECTION ROUTE SHIFTS SUMMARY

American Transmission Systems, Incorporated (“ATSI”) (“Applicant”), submitted a Certificate Application to the Ohio Power Siting Board (OPSB) for the Beaver-Wellington 138 kV Transmission Line Project (“Project”) on December 30, 2020, in Case Number 20-0004-EL-BTX (the “Application”). The OPSB approved the Application and issued a Certificate of Environmental Compatibility and Public Need (“Certificate”) for the Project on January 20, 2022.

Since then, ATSI has determined that two shifts to the Brownhelm Section of the Preferred Route—lengthening it by 5 linear feet—are necessary based upon further engineering analysis. These adjustments reduce property impacts as compared to the certificated Project route and are confined within the right-of-way area and surveyed corridor presented in the Application. In this Amendment Application, ATSI has redlined changes to the relevant Application text.

An overview of the proposed route changes is shown in Exhibit 1. Table 1 identifies the structure shifts associated with this Amendment Application.

Table 1. Amendment Structure Shifts

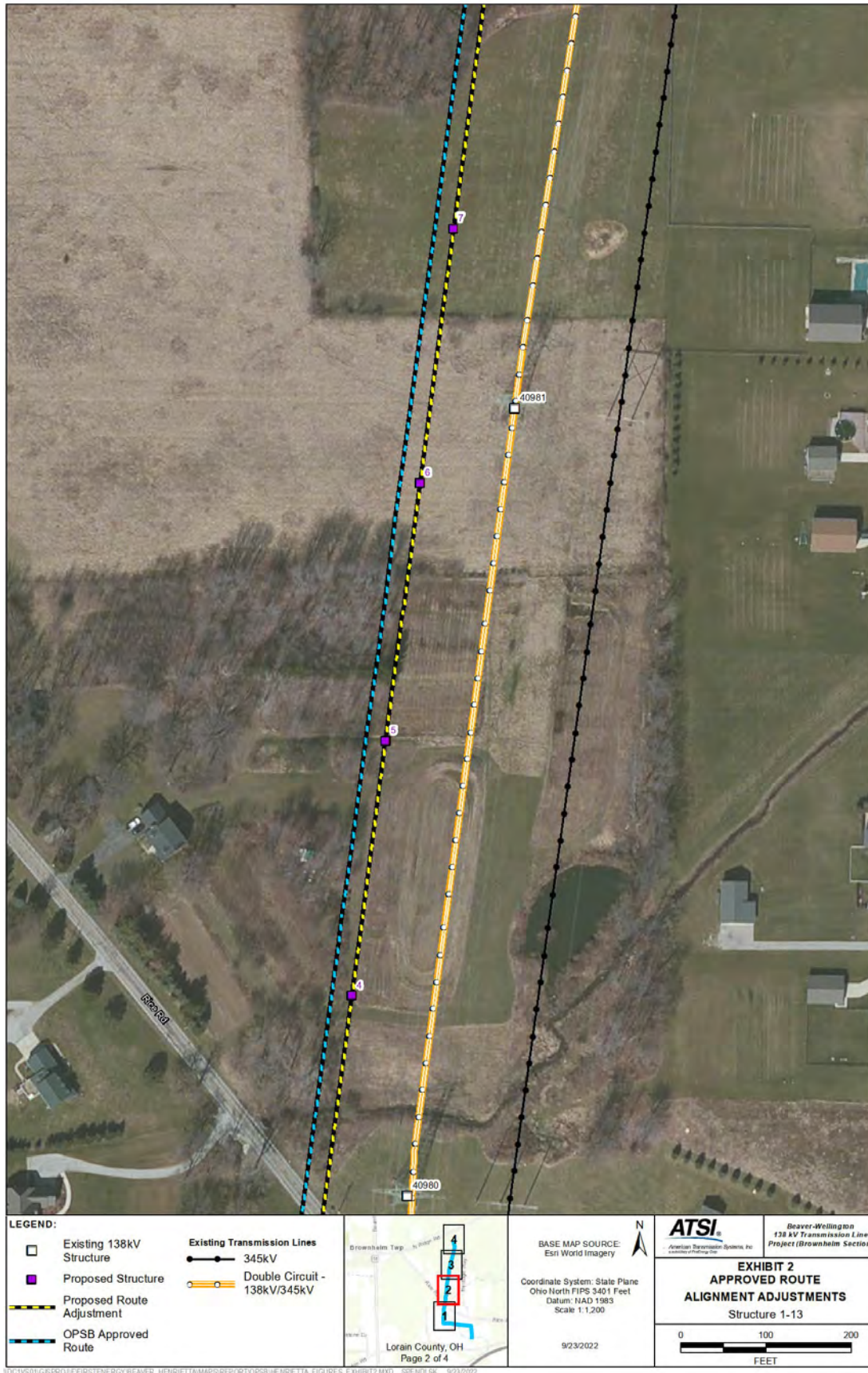
Structure Number	Distance from OPSB-Approved Centerline (feet)
2	12
3	24
4	24
5	24
6	23
7	22
8	22
9	21
11	28
12	55
13	85
2305	44
2304	47
2303	12
2302	9



Brownhelm Section Route Change 1

The first proposed engineering shift is 0.67 mile long, beginning at Structure 1 and extending to Structure 13. It optimizes the centerline alignment by eliminating small angles while staying within the existing right-of-way corridor and reducing impacts to properties. This first proposed route adjustment, shown in Exhibit 2, runs roughly parallel to and east of the approved route from Structure 1 north to Structure 10, where they intersect. Then, from Structure 10 until Structure 13, the proposed route adjustment is still roughly parallel with, but west of, the approved route. The first proposed route adjustment terminates at the next Structure 1112, just north of Structure 13. This proposed route adjustment eliminates some guy wires, which in turn reduces land use impact. No new property owners are impacted by this adjustment.



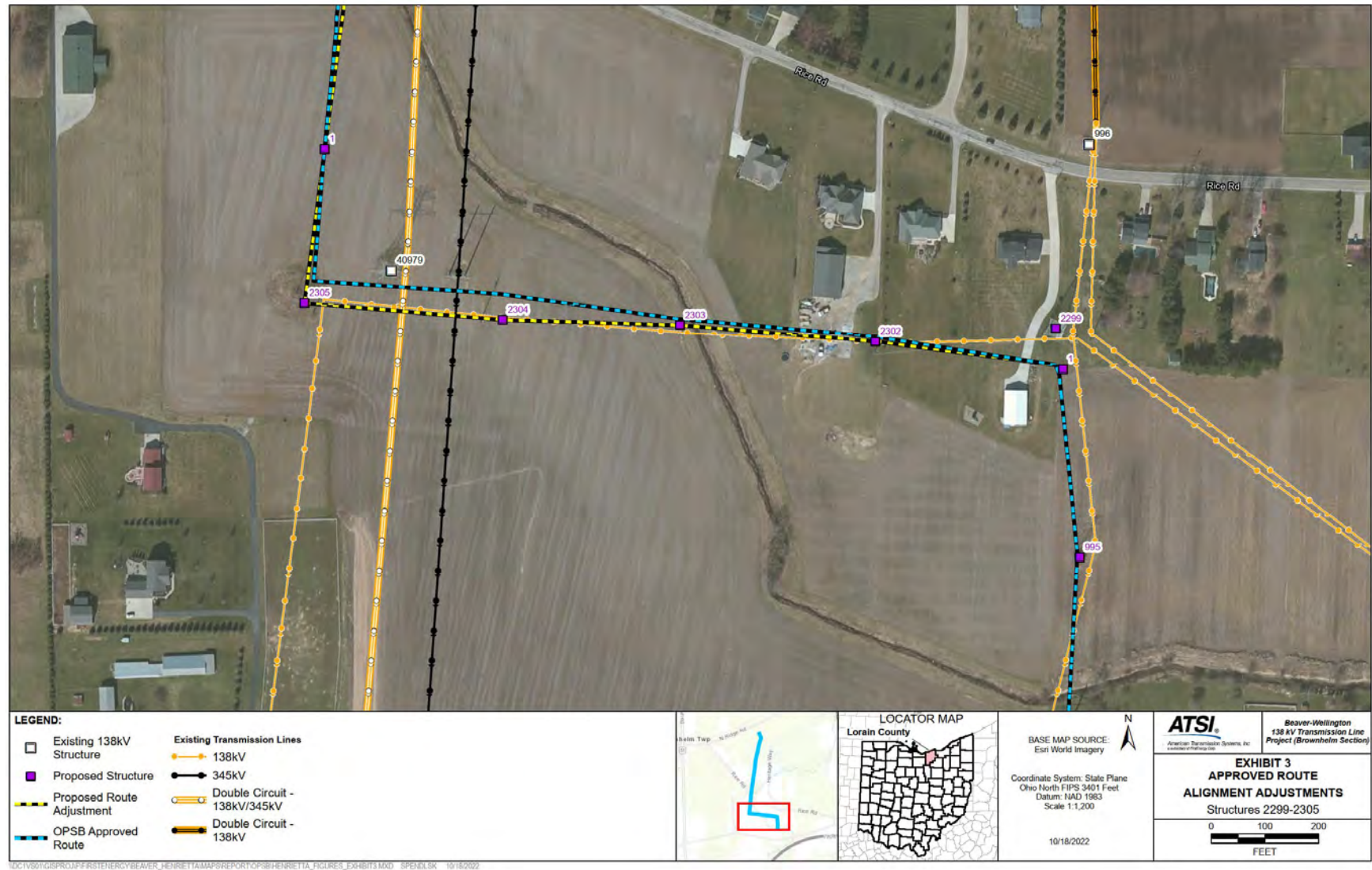






Brownhelm Section Route Change 2

The second proposed engineering shift is 0.27 mile long, beginning at Structure 2305 and extending to Structure 2299. It eliminates small angles and centers the route within ATSI's existing right-of-way based. As shown in Exhibit 3, beginning at Structure 2305 and trending east, the proposed route adjustment runs south of the approved route until it rejoins the OPSB Approved Route at Structure 1. One of the parcels crossed by the OPSB Approved Route has been subdivided since the original Application was filed. As a result, there is one additional property affected by this amendment.



4906-5-02 PROJECT SUMMARY AND APPLICANT INFORMATION**(A) PROJECT SUMMARY**

Amendment does not materially affect this section of the Application.

(1) General Purpose of the Facility

Amendment does not materially affect this section of the Application.

(2) General Location, Size, and Operating Characteristics (Revised)**(a) Brownhelm Section**

The proposed Brownhelm Section begins approximately 2.4 miles west of Amherst, Ohio, at ATSI's existing Structure 1112 on the existing 138 kV transmission line, located approximately 0.5 mile east of the intersection of Rice Road and North Ridge Road. The proposed Brownhelm Section terminates at ATSI's existing Structure 8888 on the existing 138 kV transmission line, located approximately 0.2 miles southeast of the intersection of Rice Road and Heritage Way. The section is approximately 1.2 to 1.3 miles in length, ~~depending on the route selected~~, and will be constructed using primarily wood and steel single-pole structures requiring an approximately 65-foot-wide permanent ROW. No additional ROW would need to be secured. Figure 2-2 (Revision 1) shows the Brownhelm Section, existing ATSI electric transmission lines, the OPSB Approved Route and proposed Project route shifts

(b) Wellington Section

Amendment does not materially affect this section of the Application.

(c) Wellington Substation Expansion

Amendment does not materially affect this section of the Application.

(3) Suitability of Preferred and Alternate Routes

Amendment does not materially affect this section of the Application.

(a) Preferred Route**(i) Brownhelm Section**

Amendment does not materially affect this section of the Application.

(ii) Wellington Section

Amendment does not materially affect this section of the Application.

(b) Alternate Route**(i) Brownhelm Section**

Amendment does not materially affect this section of the Application.

(ii) Wellington Section

Amendment does not materially affect this section of the Application.

(4) Schedule (Revised)

Construction of the Project, with the exception of segments subject to amendments proposed herein, is anticipated to begin in ~~January~~ September 2022 with an anticipated in-service date of June ~~2022~~ 2023. The current Project schedule, including all major activities and milestones, is illustrated in a Gantt schedule bar chart provided in 4906-5-03(F)(1).

(B) APPLICANT DESCRIPTION

Amendment does not materially affect this section of the Application.

4906-5-03 REVIEW OF NEED AND SCHEDULE**(A) NEED FOR PROPOSED FACILITY**

Amendment does not materially affect this section of the Application.

(B) REGIONAL EXPANSION PLANS

Amendment does not materially affect this section of the Application.

(C) SYSTEM ECONOMY AND RELIABILITY

Amendment does not materially affect this section of the Application.

(D) OPTIONS TO ELIMINATE THE NEED FOR THE PROPOSED PROJECT

Amendment does not materially affect this section of the Application.

(E) FACILITY SELECTION RATIONALE

Amendment does not materially affect this section of the Application.

(F) PROJECT SCHEDULE (REVISED)**(1) Gantt Schedule Bar Chart (Revised)**

An updated detailed schedule for the proposed Project is presented in Figure 3-5 (Revision 1).

Figure 3-5. Project Schedule

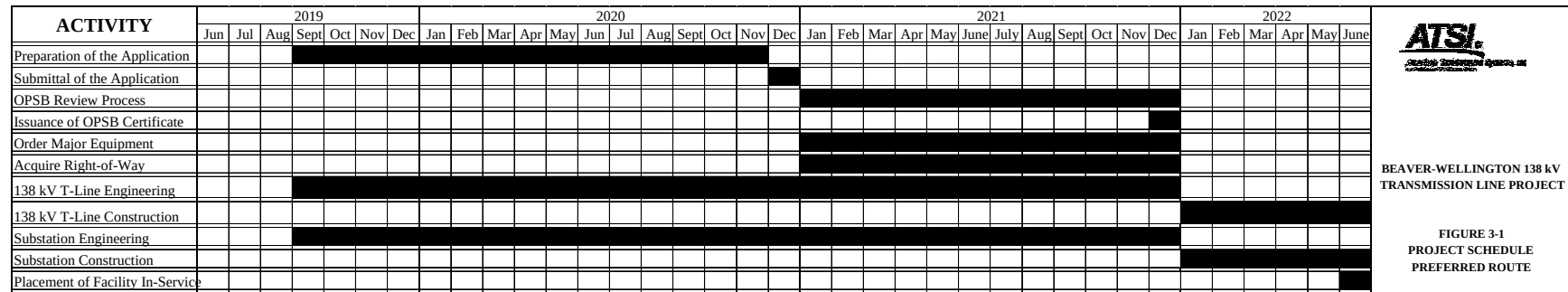
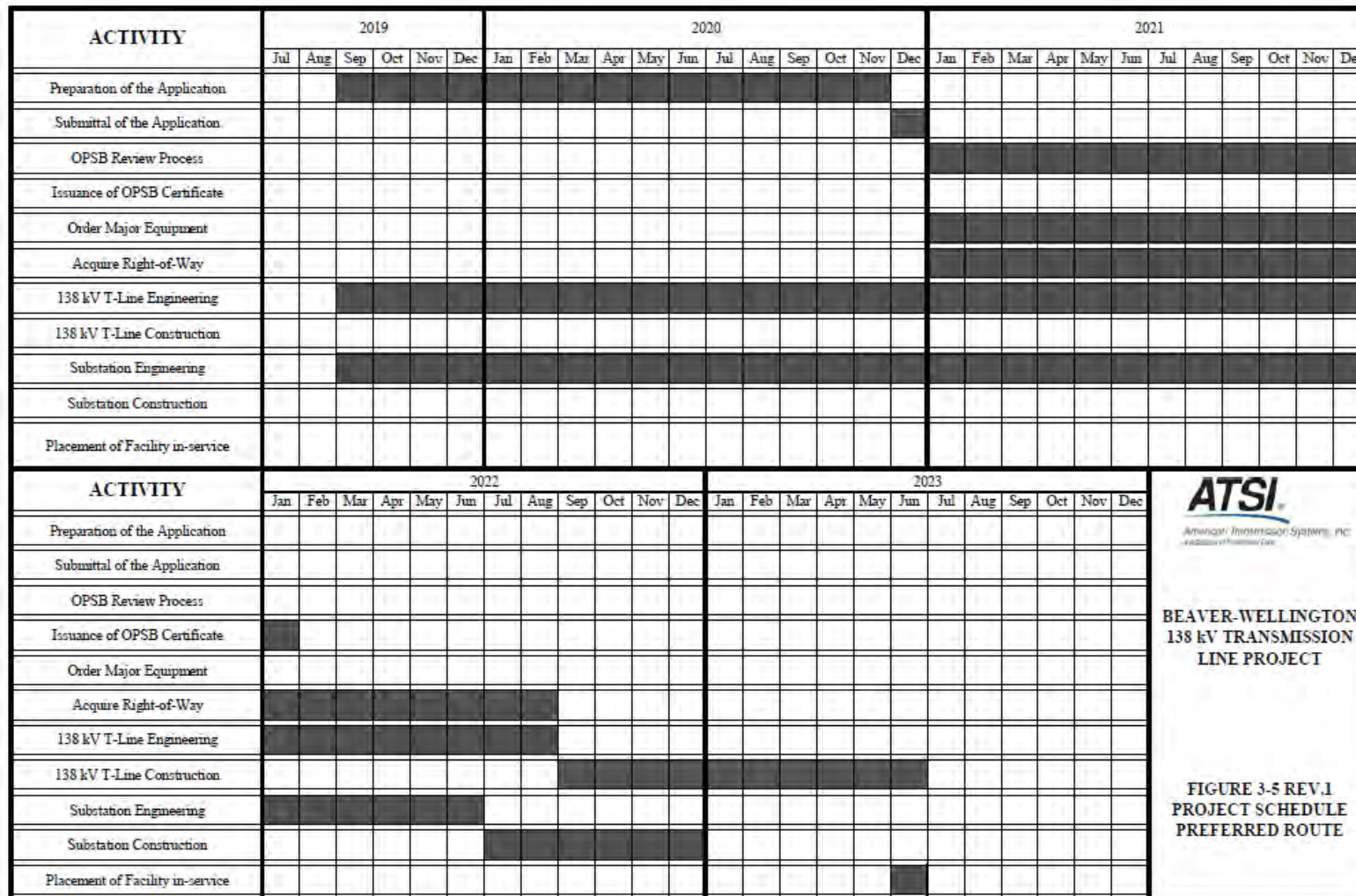


Figure 3-5 (Revision 1). Project Schedule



(2) Impact of Critical Delays

Amendment does not materially affect this section of the Application.

4906-5-04 ROUTE ALTERNATIVES ANALYSIS**(A) ROUTE SELECTION STUDY**

Amendment does not materially affect this section of the Application.

(B) COMPARISON TABLE OF ROUTES, ROUTE SEGMENTS, AND SITE

Amendment does not materially affect this section of the Application.

(C) PUBLIC INVOLVEMENT

Amendment does not materially affect this section of the Application.

4906-5-05 PROJECT DESCRIPTION**(A) PROJECT AREA DESCRIPTION (REVISED)**

The revised map provided in Section 4906-5-07 (Figure 7-1) includes a description of the Project Area's geography, topography, population centers, major industries, and landmarks.

(1) Project Area Map (Revised)

Figures 7-1 and 7-2 (Revision 1) provide maps at 1:24,000-scale, showing the OPSB Approved Route and Alternate proposed Project route shifts. These maps include a 1,000-foot buffer corridor on each side of the certificated Project centerline (hereafter referred to as the 2,000-foot corridor) and depict the certificated Project route, roads and railroads, major institutions, parks, and recreational areas that are publicly owned, existing gas pipeline and electric transmission line corridors, named lakes, reservoirs, streams, canals, and rivers, and population centers and legal boundaries of cities, villages, townships, and counties. The Brownhelm Section maps utilize the Vermilion East, Ohio, U.S. Geological Survey (USGS) 7.5-minute topographic quadrangle as a base map. The Wellington Section maps utilize the Sullivan, Nova, Wellington, and Brighton, Ohio, USGS 7.5-minute topographic quadrangles as base maps.

The information on the map was updated by reviewing digital, georeferenced aerial photography, property parcel data from the Lorain County Auditor's Office, and field reconnaissance trips conducted between September 2019 and February 2020 and October 2021. The aerial photographs are georeferenced, ortho-corrected color images derived from ESRI ArcGIS Online.

(2) Proposed Right-of-Way, Transmission Length, and Properties Crossed (Revised)

The permanent ROW width for both the Brownhelm and Wellington Sections, including the proposed Project route shifts set forth herein, is 65 feet. Table 5-1 provides information about the Preferred and Alternate Routes ROW acreage, length, and properties crossed based on the proposed centerline for the Brownhelm and Wellington Sections.

Table 5-1. Right-of-way Area, Length, and Number of Properties Crossed for the Preferred and Alternate Routes (Revised)

	Route Alternatives	
	Preferred	Alternate
Brownhelm Section		
Proposed ROW area (in acres)	9.3 <u>9.0</u>	10.1
Length (in miles)	1.2	1.3
Number of properties crossed (by ROW)	20 <u>21</u>	15

(B) ROUTE OR SITE ALTERNATIVE FACILITY LAYOUT AND INSTALLATION

Amendment does not materially affect this section of the Application.

(C) DESCRIPTION OF PROPOSED TRANSMISSION LINES OR PIPELINES

Amendment does not materially affect this section of the Application.

4906-5-06 ECONOMIC IMPACT AND PUBLIC INTERACTION**(A) OWNERSHIP OF PROPOSED FACILITY**

Amendment does not materially affect this section of the Application.

(B) CAPITAL AND INTANGIBLE COSTS ESTIMATE FOR ELECTRIC POWER TRANSMISSION FACILITY ALTERNATIVES

Amendment does not materially affect this section of the Application.

Table 6-1. Estimates of Applicable Intangible and Capital Costs for Both the Preferred and Alternate Sites – Entire Project

Amendment does not materially affect this section of the Application.

(C) CAPITAL AND INTANGIBLE COSTS ESTIMATE FOR GAS TRANSMISSION FACILITY ALTERNATIVES

Amendment does not materially affect this section of the Application.

(D) PUBLIC INTERACTION AND ECONOMIC IMPACT

Amendment does not materially affect this section of the Application.

(1) Counties, Townships, Villages, and Cities within 1,000 feet

Amendment does not materially affect this section of the Application.

(2) Public Officials Contacted

Amendment does not materially affect this section of the Application.

(3) Planned Public Interaction

Amendment does not materially affect this section of the Application.

(4) Liability Insurance or Compensation

Amendment does not materially affect this section of the Application.

(5) Tax Revenues

Amendment does not materially affect this section of the Application.

4906-5-07 HEALTH AND SAFETY, LAND USE, AND REGIONAL DEVELOPMENT**(A) HEALTH AND SAFETY**

Amendment does not materially affect this section of the Application.

(B) LAND USE**(1) Map of the Site and Route Alternatives**

Amendment does not materially affect this section of the Application.

(2) Impact on Identified Land Uses (Revised)

Land use in the Project Area (i.e., within 1,000 feet of each transmission centerline) consists of agriculture, commercial/industrial, residential, existing roadway ROW, and institutional (i.e., publicly owned lands). Comparisons of the various land use types and land use features for the Preferred and Alternate Routes for the Brownhelm and Wellington Sections are included in Tables 7-34A through 7-36B. The estimates of each land use type being crossed by the transmission line or land use within the 65- to 100-foot-wide permanent ROW (linear feet, acreage, and percentages) were determined using geographic information system (GIS) software and field observations.

The potential disturbance area during construction activities (vegetation clearing, pole installations, etc.) is limited to the 65 to 100-foot-wide permanent ROW. The ROW will be restored through soil grading, seeding, and mulching; thus, the permanent impact to the ROW will be limited to the removal of existing trees and other vegetation. Property owners may continue to utilize most of the ROW area for general uses that will not affect the safe and reliable operation of the transmission line. These general uses include lawn maintenance, crop cultivation, and maintaining livestock.

Table 7-34A. Length and Percent of Land Uses Crossed by Route Alternatives – Brownhelm Section (Revised)

Land Use	Preferred Route*		Alternate Route*	
	Linear Feet	Percent	Linear Feet	Percent
Agriculture	654 <u>706</u>	10.6 <u>11.4</u>	2,540	37.7
Commercial / Industrial	0	0.0	0	0.0
Institutional	0	0.0	0	0.0
Herbaceous (Old Field)	561 <u>599</u>	9.1 <u>9.7</u>	0	0.0
Pavement	49	0.8	31	0.5
Recreational	0	0.0	0	0.0
Residential	307 <u>315</u>	5.0 <u>5.1</u>	442	6.6
Utility ROW	2,876 <u>2,847</u>	46.6 <u>46.0</u>	1,553	23.0
Woodlot	1,290 <u>1,350</u>	20.9 <u>21.8</u>	2,038	30.2
Delineated Wetland	299 <u>301</u>	4.8 <u>4.9</u>	94	1.4
Delineated Stream	38 <u>29</u>	0.6 <u>0.5</u>	10	0.1
Delineated Pond	0	0.0	0	0.0
Open Water	93 <u>0</u>	1.5 <u>0.0</u>	37	0.5
Total**	6,167 <u>6,196</u>	100.0	6,744	100.0

* Numbers in the table are for the route centerlines.

** Total may vary slightly from the sum of their parts due to rounding.

Table 7-34B. Length and Percent of Land Uses Crossed by Route Alternatives – Wellington Section

Amendment does not materially affect this section of the Application.

Table 7-35A. Acreage and Percent of Land Uses Crossed by Route Alternatives – Brownhelm Section (Revised)

Land Use	Preferred Route*		Alternate Route*	
	Acreage	Percent	Acreage	Percent
Agriculture	1.2 <u>1.1</u>	13.1 <u>11.7</u>	2.9	28.5
Commercial / Industrial	0.0	0.0	0.0	0.0
Institutional	0.0	0.0	0.0	0.0
Herbaceous (Old field)	1.4 <u>0.9</u>	14.6 <u>9.8</u>	0.0	0.0
Pavement	0.1	0.8	0.1	0.6
Recreational	0.0	0.0	0.0	0.0
Residential	0.7 <u>0.5</u>	7.3 <u>5.9</u>	0.6	6.4
Utility ROW	3.9	42.1 <u>43.5</u>	3.5	34.3
Woodlot	1.4 <u>2.0</u>	15.0 <u>22.4</u>	2.4	24.2
Delineated Wetland	0.5	5.2 <u>5.4</u>	0.5	5.4
Delineated Stream	0.1	0.6 <u>0.5</u>	<0.1	0.2
Delineated Pond	0.0	0.0	0.0	0.0
Open Water	0.1 <u>0</u>	1.3 <u>0.0</u>	0.1	0.5
Total	9.3 <u>9.0</u>	100.0	10.1	100.0

*Numbers in the table are for the planned potential disturbance area which is a nominal 65-foot-wide corridor centered on the route.

** Total may vary slightly from the sum of their parts due to rounding.

Table 7-35B. Acreage and Percent of Land Uses Crossed by Route Alternatives – Wellington Section

Amendment does not materially affect this section of the Application.

(a) Residential

(i) Brownhelm Section

Preferred Route: The Preferred Route is located within 1,000 feet of 89 residences, none of which are within the planned potential disturbance area. As shown in Table 7-35A, residential land makes up ~~7.3~~ 5.9 percent of the Preferred Route ROW (65 feet wide).

Alternate Route: The Alternate Route is located within 1,000 feet of 69 residences, none of which are within the planned potential disturbance area. As shown in Table 7-35A, residential land makes up 6.4 percent of the Alternate Route ROW (65 feet wide).

(ii) Wellington Section

Amendment does not materially affect this section of the Application.

(b) Commercial**(i) Brownhelm Section**

Amendment does not materially affect this section of the Application.

(ii) Wellington Section

Amendment does not materially affect this section of the Application.

(c) Industrial

Amendment does not materially affect this section of the Application.

(d) School and Hospitals

Amendment does not materially affect this section of the Application.

(e) Churches and Civic Buildings

Amendment does not materially affect this section of the Application.

(f) Recreational

Amendment does not materially affect this section of the Application.

(g) Agricultural**(i) Brownhelm Section**

As shown in Table 7-35A, approximately ~~13.1~~ 11.7 percent (~~1.2~~ 1.1 acres) of the Preferred Route and 28.5 percent (2.9 acres) of the Alternate Route cross agricultural land. A discussion of agricultural land and Agricultural District Land is provided in Section (C) below.

(ii) Wellington Section

Amendment does not materially affect this section of the Application.

(3) Impact on Identified Nearby Structures

Amendment does not materially affect this section of the Application.

(C) AGRICULTURAL LAND IMPACTS (REVISED)

The potential impacts of the Project on agricultural land use include potential damage to crops that may be present, disturbance of underground field drainage systems, compaction of soils and potential for temporary reduction of crop productivity.

Brownhelm Section

Agricultural land used for crop cultivation within the Preferred and Alternate Routes ROW is estimated at ~~1.2~~ 1.1 acres and 2.9 acres, respectively. Other herbaceous land that could be used for grazing comprises ~~1.4~~ 0.9 acres of the Preferred Route and none of the Alternate Route ROW.

Wellington Section

Amendment does not materially affect this section of the Application.

(1) Agricultural Land Map

Amendment does not materially affect this section of the Application.

(2) Impacts to Agricultural Lands and Agricultural Districts (Revised)

The Lorain County Auditor's Office was contacted to obtain information on current Agricultural District lands records. The data was received from the Lorain County Auditor's Office on ~~November 9, 2020~~ July 22, 2022. The provided data fulfills the requirement of OAC 4906-5-07 (C)(1)(b), which states this data must be collected not more than 60 days prior to submittal.

Brownhelm Section

Amendment does not materially affect this section of the Application.

Wellington Section

Amendment does not materially affect this section of the Application.

(a) Acreage Impacted

Tables 7-35A and 7-35B provide the quantification of the acreage impacted for agricultural land use (crop cultivation and herbaceous land). The agricultural land use was based on aerial imagery and field observations. ~~No Agricultural District Lands are located within 1,000 feet of the Preferred and Alternate Routes for both sections.~~

(b) Evaluation of Construction, Operation, and Maintenance Impacts

Amendment does not materially affect this section of the Application.

(i) Field Operations

Amendment does not materially affect this section of the Application.

(ii) Irrigation

Amendment does not materially affect this section of the Application.

(iii) Field Drainage Systems

Amendment does not materially affect this section of the Application.

(iv) Structures Used for Agricultural Operations

Amendment does not materially affect this section of the Application.

(v) Agricultural Land Viability for Agricultural Districts

Amendment does not materially affect this section of the Application.

(c) Mitigation Procedures

Amendment does not materially affect this section of the Application.

(D) LAND USE PLANS AND REGIONAL DEVELOPMENT

Amendment does not materially affect this section of the Application.

(E) CULTURAL AND ARCHAEOLOGICAL RESOURCES (REVISED)

Amendment does not materially affect this section of the Application.

(1) Cultural Resources Map

Amendment does not materially affect this section of the Application.

(2) Cultural Resources in Study Corridor (Revised)

Cultural resources studies to date have involved background research utilizing data files from the OHPO online mapping system and Phase I archaeological reconnaissance surveys and architectural and historical resources surveys for the Preferred Routes. Separate reports summarizing these efforts for the Preferred Route will be filed with the OPSB.

For the background research, a 1-mile buffer was used around both the Preferred and Alternate Routes to identify previously recorded cultural resources and to provide information on the probability of identifying cultural resources within the potential disturbance area. The OHPO online mapping database included a review of the OAI, the OHI, Determination of Eligibility files, the NRHP, Ohio Genealogical Society (OGS)-recorded cemeteries, historic bridges, National Historic Landmarks (NHLs), and previous cultural resources surveys.

Brownhelm Section

No known cultural resources were identified within the potential disturbance area of the Preferred Route from the desktop review; however, the OHI-listed Herbert Gammons House (OHI #LOR0001326) and the OAI-listed archaeological site 33LN0277 are within 1,000 feet of the Preferred Route. The Herbert Gammons House is located along North Ridge Road and has been recommended ineligible for the NRHP. The archaeological site is a historic-era site that is recommended ineligible for the NRHP.

A Phase I archaeological reconnaissance survey was completed along the Preferred Route for the Brownhelm Section in November 2019 and July 2020. No new archaeological sites were identified during the field investigation and no additional archaeological survey is recommended.

Cultural resources investigations and reports were prepared and submitted to the Ohio Historic Preservation Office (OHPO) in January 2021 for the Preferred Route presented in the original Application, which encompasses the route shifts proposed in this Amendment. No further archaeological work was recommended for the Project. OHPO concurred with this finding in a letter dated January 28, 2021. A copy of the correspondence letter is provided in Appendix 7-1.

Due to the proposed centerline shifts, an additional cultural resources investigation and report was performed. Investigations took place in November 2021 and involved shovel testing and pedestrian survey of areas not included in previous surveys. No sites were identified in the segment and no further work was recommended in a letter report submitted to OHPO dated November 22, 2021. OHPO concurred with this finding in a letter dated December 13, 2021. A copy of the correspondence letter is provided in Appendix 7-1.

The architectural and historical resources field investigation identified five resources within 1,000 feet of the Preferred Route. These consist of residences and a former farmstead. None of the resources is recommended eligible for the NRHP; therefore, no historic properties will be impacted by the Project and no additional work is required.

Wellington Section

Amendment does not materially affect this section of the Application.

(3) Construction, Operation, and Maintenance Impacts on Cultural Resources

Amendment does not materially affect this section of the Application.

(4) Mitigation Procedures

Amendment does not materially affect this section of the Application.

(5) Aesthetic Impact

Amendment does not materially affect this section of the Application.

4906-5-08 ECOLOGICAL INFORMATION AND COMPLIANCE WITH PERMITTING REQUIREMENTS

ATSI conducted a study to assess the potential effects of construction and operation of the proposed Project on the ecology of the Project Area. A map and literature search were conducted for a 1,000-foot corridor on either side of the centerline of both the Preferred and Alternate Routes of the Brownhelm and Wellington Sections. A field survey of ecological habitat and features was performed within 133 to 150 feet on either side of the centerline for both the Preferred and Alternate Routes of the Brownhelm and Wellington Sections (hereafter referred to as the Field Survey Area). Field surveys on both sections were conducted from September 2019 to July 2020 and October 2021. Information in the following paragraphs addresses ATSI's ecological study conducted for both the Preferred and Alternate Routes for the Brownhelm and Wellington Sections of the Project.

(A) ECOLOGICAL MAP (REVISED)

Maps at a scale of 1:24,000 (1 inch = 2,000 feet) including the corridor 1,000 feet on either side of the centerline (referred to as the 2,000-foot corridor) of the OPSB Approved Route and Proposed Route Adjustments for the Brownhelm Section is presented in Figure 7-1 (Revision 1). ~~Preferred and Alternate Routes for both the Wellington and Brownhelm Sections are presented as Figures 7-1 and 7-2. These maps~~ This map depicts the certificated Project centerline, proposed route shifts, substation locations, and land use classifications, including vegetative cover. Features within 1,000 feet of the proposed routes were identified from published data and, where accessible, verified by the field ecological survey.

Ecological overview maps of the Brownhelm and Wellington Sections are provided in Figures 8-1 and 8-4, respectively. More detailed maps at 1:2,400 and 1:6,000 scale depicting field-delineated waterbody and wetland features, lakes, ponds, reservoirs, slopes of 12 percent or greater, wildlife areas, nature preserves, and conservation areas within the 2,000-foot corridor are provided as Figures 8-2A through 8-2B (Brownhelm Preferred Route), Figures 8-3A through 8-3C (Brownhelm Alternate Route), Figures 8-5A through 8-5N (Wellington Preferred Route), and Figures 8-6A through 8-6I (Wellington Alternate Route).

(B) FIELD SURVEY REPORT FOR VEGETATION AND SURFACE WATERS (REVISED)

The ecological survey consisting of the 265- to 300-foot-wide field survey area of both the Preferred and Alternate Routes of the Brownhelm and Wellington Sections were conducted September 2019 to July 2020 and October 2021. The field survey was preceded by review of published mapping, aerial photography, protected Federal and State-listed species, and ecological information for at least 1,000 feet on either side of the Preferred and Alternate Route centerlines. Map sources included USGS 7.5-minute quadrangle topographic maps, U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) maps, and U.S. Department of Agriculture Natural Resources Conservation Service (NRCS) soil survey maps. A copy of the Wetland and Waterbody Delineation Addendum Report summarizing investigations conducted in October 2021 is provided in Appendix 8-1.

(1) Vegetative Communities, Wetlands, and Streams in Study Area (Revised)**(a) Vegetative Communities**

Amendment does not materially affect this section of the Application.

(b) Wetlands

Amendment does not materially affect this section of the Application.

(i) Summary of National Wetland Inventory Data

Amendment does not materially affect this section of the Application.

(ii) Field-Delineated Wetlands**Brownhelm Section**

A total of five wetlands/wetland complexes, totaling ~~1.89~~ 2.33 acres, were delineated within the OPSB Approved Route Field Survey Area. Two of these wetlands are within the 65-foot ROW of the Preferred Route, totaling ~~0.48~~ 0.49 acre. Within the Alternate Route Field Survey Area, two wetland complexes, totaling 2.89 acres, were delineated. Both wetlands are within the 65-foot ROW of the Alternate Route, totaling 0.54 acre. Detailed information for each wetland is provided in Table 8-2A. The wetlands within the potential disturbance area/ROW are identified in Table 8-2A and further discussed in Section 4906-05-08(B)(3)(b). The field-delineated wetlands for both the OPSB Approved Route Preferred and Alternate Proposed Route Adjustment of the Brownhelm Section Routes are mapped on Figures 8-2A and 8-2B (Revision 1) and ~~Figures 8-3A through 8-3C,~~ respectively.

Wellington Section

Amendment does not materially affect this section of the Application.

Wellington Substation

Amendment does not materially affect this section of the Application.

Table 8-2A. Delineated Wetlands within the Preferred and Alternate Route Environmental Field Survey Area and Potential Disturbance Area/ROW – Brownhelm Section (Revised)

Wetland Name	Route	Figure	Cowardin Wetland Type ^a	ORAM Score	ORAM Category	Acreage within Field Survey Area ^b	Acreage within Potential Disturbance Area/ROW ^c	Length Crossed by Centerline (feet)
Preferred Route Wetlands								
Wetland BH-01E	Preferred	8-2 A	PEM	34	Category 2	0.56 <u>0.88</u>	0.16 <u>0.17</u>	83 <u>89</u>
Wetland BH-01S	Preferred	8-2 A	PSS	34	Category 2	0.08	0.00	0
Wetland BH-02	Preferred	8-2 A	PEM	18.5	Category 1	0.02	0.00	0
Wetland BH-03E	Preferred	8-2 A	PEM	46.5	Category 2	0.45 <u>0.55</u>	0.01 <u>0.11</u>	0
Wetland BH-03S	Preferred	8-2 A	PSS	46.5	Category 2	0.71	0.31 <u>0.21</u>	216 <u>215</u>
Wetland BH-04	Preferred	8-2 B	PEM	25	Category 1	0.02	0.00	0
Wetland BH-05	Preferred	8-2 B	PEM	24	Category 1	0.06 <u>0.07</u>	0.00	0
Total^d						1.89 <u>2.33</u>	0.48 <u>0.49</u>	299 <u>304</u>
Alternate Route Wetlands								
Wetland BH-01E	Alternative	8-3 A	PEM	34	Category 2	0.56	0.15	76
Wetland BH-01S	Alternative	8-3 A	PSS	34	Category 2	0.07	0.00	0
Wetland BH-06E	Alternative	8-3 A	PEM	37.5	Category 2	1.74	0.36	0
Wetland BH-06F	Alternative	8-3 A	PFO	37.5	Category 2	0.52	0.03	18
Total^d						2.89	0.54	94

Notes:

a Wetland Type: PEM = palustrine emergent, PSS = palustrine scrub/shrub, PFO = palustrine forested.

b The width of the Field Survey Area was 265 feet on both the Preferred and Alternate Routes.

c The width of the potential disturbance area and the final maintained ROW is planned to be 65 feet.

d Total may vary slightly from the sum of their parts due to rounding.

Table 8-2B. Delineated Wetlands within the Preferred and Alternate Route Environmental Field Survey Area and Potential Disturbance Area/ROW – Wellington Section

Amendment does not materially affect this section of the Application.

(c) Waterbodies**(i) Field-Delineated Streams**

Amendment does not materially affect this section of the Application.

Brownhelm Section

One stream (Stream BH-01) was identified within the Preferred Route Survey Area and is crossed three times by the Preferred Route centerline. Approximately ~~2,574~~ 1,485 linear feet of Stream BH-01 is within the 265-foot wide Preferred Route Field Survey Area and approximately ~~633~~ 271 linear feet is within the 65-foot-wide ROW. Stream BH-01 was evaluated using the QHEI methodology and was given a narrative rating of warmwater habitat. No streams within the Preferred Route Field Survey Area are designated as outstanding state waters, outstanding national resource waters, or Superior High-Quality Waters (OEPA, 2017). Streams were evaluated as close to the route centerline as possible.

Two streams were identified within the Alternate Route Field Survey Area. One of the two streams (Stream BH-01) is crossed by the Alternate Route centerline, while the other stream (Stream BH-02) is not crossed. The total length of streams within the 265-foot wide Alternate Route Field Survey Area is approximately 620 linear feet, while the total length of streams within the 65-foot-wide ROW is approximately 176 linear feet. Stream BH-01 was evaluated using the QHEI methodology and was given a narrative rating of Warmwater habitat. Stream BH-02 was evaluated using the HHEI methodology and was assigned a PHWH class of Modified Class I. No streams within the Alternate Route Field Survey Area are designated as outstanding state waters, outstanding national resource waters, or Superior High-Quality Waters (OEPA, 2017). Streams were evaluated as close to the route centerline as possible.

Streams identified during the ecological survey on the OPSB Approved Route Preferred and Alternate Proposed Route Adjustment of the Brownhelm Section are shown on Figures 8-2A through 8-2B (Revision1) and ~~Figures 8-3A through 8-3C, respectively~~. Detailed information on each delineated stream is included in Table 8-3A. Aquatic life use designations within the Southwest Ohio Tributaries Basin obtained from OAC 3745-1-09 are also provided (OEPA, 2017). Construction impacts on these features are included in Table 8-3A and further discussed in Section 4906-05-08(B)(3)(c).

Wellington Section

Amendment does not materially affect this section of the Application.

Wellington Substation

Amendment does not materially affect this section of the Application.

Table 8-3A. Streams within the Preferred and Alternate Route Environmental Field Survey Area and Potential Disturbance Area/ROW – Brownhelm Section (Revised)

Stream ID Waterbody Name	Figure	Flow Regime	Top of Bank Width (feet)	Maximum Pool Depth (inches)	Form	Score	OEPA Aquatic Life Use Designation	PHWH Class (HHEI)/ Narrative Rating (QHEI)	Crossed by Centerline	Length (linear feet) within Field Survey Area ^a	Length (linear feet) within Potential Disturbance Area/ROW ^b
Preferred Route											
Stream BH-01 Quarry Creek	8-2 A	Intermittent	8.5	16	QHEI	66.5	WWH	Good	Y	2,574 1,485	633 271
Total										2,574 1,485	633 324
Alternate Route											
Stream BH-01 Quarry Creek	8-3 A	Intermittent	8.5	16	QHEI	66.5	WWH	Good	Y	593	149
Stream BH-02 UNT to Quarry Creek	8-3 B	Ephemeral	1	1	HHEI	15	--	Modified Ephemeral Aquatic	N	27	27
Total										620	176

Notes:

^a The width of the Field Survey Area was 265 feet on both the Preferred and Alternate Routes.^b The width of the potential disturbance area and the final maintained ROW is planned to be 65 feet.

UNT = unnamed tributary

WWH = warmwater habitat

Table 8-3B. Streams within the Preferred and Alternate Route Environmental Field Survey Area and Potential Disturbance Area/ROW – Wellington Section

Amendment does not materially affect this section of the Application.

(ii) Lakes, Ponds, and Reservoirs**Brownhelm Section**

No ponds, major lakes, or reservoirs were observed along the OPSB Approved Route and Proposed Route Adjustment ~~proposed Preferred or Alternate Routes~~.

Wellington Section

Amendment does not materially affect this section of the Application.

(2) Map of Facility, Right-of-Way, and Delineated Resources (Revised)

Detailed maps at 1:6,000 scale depicting the delineated water features, Field Survey Area, and proposed ROW for the OPSB Approved Route Preferred and Alternate Proposed Route Adjustment for the Brownhelm Section ~~Routes~~ are provided as Figures 8-2A through 8-2B (Revision 1) and ~~Figures 8-3A through 8-3C, respectively.~~

(3) Construction Impacts on Vegetation and Surface Waters (Revised)**(a) Construction Impacts on Vegetation**

The construction impacts on woody and herbaceous vegetation along both the Preferred and Alternate Routes will be limited to the initial clearing of vegetation within the 65 to 100-foot ROW for the proposed transmission line and access roads. Specific locations for access roads will be identified at the time of ATSI transmission line easement acquisition process. Trees adjacent to the proposed ROW, that are dead, dying, diseased, leaning, significantly encroaching, or prone to failure may require clearing to allow for safe operation of the transmission line. Vegetative wastes (such as tree limbs and trunks) generated during the construction phase will be windrowed or chipped and disposed of appropriately depending on individual landowner requests. The approximate vegetation impacts, based on GIS analysis, along the Preferred and Alternate Route ROWs are provided in Table 8-5A (Brownhelm) and Table 8-5B (Wellington).

Table 8-5A. Approximate Vegetation Impacts along the Potential Disturbance Area/ROW – Brownhelm Section (Revised)

Land Use Type	Length of Route (in feet)	Length of Route (in miles)	Acreage within ROW
Preferred Route			
Agricultural	654 <u>706</u>	0.1	1.2 <u>1.1</u>
Herbaceous (Old Field)	561 <u>599</u>	0.1	1.4 <u>0.9</u>
Residential	307 <u>315</u>	0.1	0.7 <u>0.5</u>
Utility ROW	2,876 <u>2,847</u>	0.5	3.9
Woodlot	1,290 <u>1,350</u>	0.2 <u>0.3</u>	1.4 <u>2.0</u>
Delineated Wetland	299 <u>301</u>	0.1	0.5

Table 8-5A. Approximate Vegetation Impacts along the Potential Disturbance Area/ROW – Brownhelm Section (Revised)

Land Use Type	Length of Route (in feet)	Length of Route (in miles)	Acreage within ROW
Alternate Route			
Agricultural	2,540	0.5	2.9
Herbaceous (Old Field)	0	0.0	0
Residential	442	0.1	0.6
Utility ROW	1,553	0.3	3.5
Woodlot	2,038	0.4	2.4
Delineated Wetland	94	0.0	0.5

Table 8-5B. Approximate Vegetation Impacts along the Potential Disturbance Area/ROW – Wellington Section

Amendment does not materially affect this section of the Application.

(b) Construction Impacts on Wetlands

Brownhelm Preferred Route: During wetland and waterbody delineations, two wetlands were identified along the Preferred Route within the proposed ROW, totaling ~~0.48~~ 0.49 acre. The delineated wetlands are shown on Figures 8-2A through 8-2B. Detailed information about each feature can be found in Table 8-2A in Section 4906-05-08(B)(b)(ii). The two wetlands are crossed by the Preferred Route centerline totaling ~~299~~ 304 linear feet. Impacts to the wetlands would be avoided by placing transmission line structures outside of wetland boundaries, where practical. Where temporary construction access through a wetland cannot be avoided, the crossing would occur during dry conditions or protective construction matting would be used to minimize impacts from construction vehicles.

Wetland ORAM categories delineated in the Brownhelm Preferred Route ROW are detailed below:

- Category 1 wetlands: No Category 1 wetlands would be crossed by the ROW; therefore, no construction impacts are anticipated.
- Category 2 wetlands: Two Category 2 wetlands with ORAM scores of 34 and 46.5 were identified within the ROW, totaling ~~0.48~~ 0.49 acre. One approximately ~~0.31~~ 0.21-acre PSS wetland would be impacted during construction.
- Category 3 wetlands: No Category 3 wetlands would be crossed; therefore, no construction impacts are anticipated.

Brownhelm Alternate Route: Amendment does not materially affect this section of the Application.

Wellington Preferred Route: Amendment does not materially affect this section of the Application.

Wellington Alternate Route: Amendment does not materially affect this section of the Application.

(c) Construction Impacts on Waterbodies

Amendment does not materially affect this section of the Application.

(4) Operation and Maintenance Impacts on Vegetation and Surface Water

Amendment does not materially affect this section of the Application.

(5) Mitigation Procedures

Amendment does not materially affect this section of the Application.

(C) LITERATURE SURVEY OF PLANT AND ANIMAL LIFE POTENTIALLY AFFECTED

Amendment does not materially affect this section of the Application.

(1) Project Vicinity Species Descriptions (Revised)

(a) Protected Species

Brownhelm Section

~~A consultation request was submitted to the USFWS on November 6, 2019, and a response was received on November 15, 2019, regarding the Project preferred route within the Brownhelm section. ATSI has proposed seasonal tree clearing to be conducted between October 1 and March 31 to avoid impact to Indiana bat and Northern Long-Eared bat. Based on the submitted project details and the proposed seasonal tree clearing restrictions, USFWS concluded that they do not anticipate any impact to federally endangered, threatened, proposed, or candidate species.~~

Due to the proposed centerline shifts as well as and the interim expiration of agency consultations, a follow up letter for the Brownhelm Section was submitted to the USFWS on May 23, 2022, to request any relevant updates on their initial response. USFWS provided a response on June 1, 2022, concluding that, with proposed tree clearing dates, no impact to any federally endangered, threatened, proposed, or candidate species is anticipated. A copy of the correspondence letter is provided in Appendix 7-1.

~~A consultation request was submitted to the ODNR-DOW on November 6, 2019, and a response was received on December 17, 2019, regarding the project preferred route within the Brownhelm section. ODNR-DOW states the project is within range of the State-endangered Indiana bat and requests conservation of trees where possible and adherence to seasonal clearing restrictions in the event trees must be cut. ATSI plans to adhere to seasonal clearing restrictions as stated above. Additionally, ODNR-DOW states the Project section is within range of the Ohio lamprey, lake~~

~~sturgeon, channel darter, American eel, and the bigmouth shiner. ATSI will refrain in water work within any perennial streams and therefore ODNR-DOW stated this project is not likely to impact these species. The Brownhelm Section is also within range of the State-threatened spotted and Blanding's turtles, yet ODNR-DOW states that due to the project habitat and type of work proposed, impact to this species is not likely. Lastly, the Project section is within range of the Sandhill crane, a State-endangered bird. ODNR-DOW states that due to the project habitat and type of work proposed, impact to this species is not likely.~~

~~Once the final route is approved, ATSI's consultant will conduct an additional review of the habitat along the route, based on observations recorded during the completed ecological survey, and coordinate with USFWS and ODNR-DOW for additional survey plans, if necessary.~~

Due to the proposed centerline shifts as well as and the interim expiration of agency consultations, a follow up letter for the Brownhelm Section was submitted to the ODNR on May 23, 2022, to request any relevant updates on their initial response. ODNR provided a response dated June 14, 2022 regarding habitat for listed species potentially located in the area. ODNR concluded that, with proposed tree clearing dates, no impact to any federally endangered, threatened, proposed, or candidate species is anticipated. ATSI's environmental consultant then sent a follow-up letter to the ODNR-DOW dated June 28, 2022 providing additional habitat details for the project based on field observations of vegetative communities crossed by the project and opining that, based on lack of suitable habitat within the proposed ROW and tree clearing activities being conducted between October 1st and March 31st, the Project will not impact any state-listed species. In a response from the ODNR-DOW on July 7, 2022, the agency concurred with this assessment and indicated that no further coordination is necessary. Copies of all follow-up correspondence with ODNR are provided in Appendix 7-1.

Wellington Section

Amendment does not materially affect this section of the Application.

(b) Commercial Species

Amendment does not materially affect this section of the Application.

(c) Recreational Species

Amendment does not materially affect this section of the Application.

(2) Construction Impacts on Identified Species

Amendment does not materially affect this section of the Application.

(3) Operation and Maintenance Impacts on Identified Species (Revised)

Minimal impacts are anticipated to protected wildlife during operation and maintenance of the transmission line. Clearing of secondary growth vegetation will be required along some portions of the ROW. Undeveloped land (woodlots) total approximately ~~23.1~~ 22.4 percent of the Preferred Route and approximately 28.6 percent of the Alternate Route for the Brownhelm Section, and 6.6 percent

of the Preferred Route and 18.4 percent of the Alternate Route for the Wellington Section. Operational activities and periodic maintenance of the ROW are not anticipated to impact wildlife significantly because of the minimal permanent ground disturbance and available adjacent habitat available.

(4) Mitigation Procedures (Revised)

~~If areas are identified during the informal consultation process with USFWS and ODNR that are of special concern, ATSI will coordinate with these agencies to develop appropriate mitigation measures. The mitigation measure will be implemented if the area of special concern is located within the route approved by the OPSB. ATSI has proposed avoidance of construction on grassland habitat between April 1 through July 31 and seasonal tree clearing to be conducted between October 1 and March 31 to avoid impact to several bird and bat species, respectively. Based on the proposed avoidance and mitigation measures, USFWS and ODNR have concluded that they do not anticipate any impact to federally or state-listed endangered, threatened, proposed, or candidate species.~~

(D) SITE GEOLOGY

Amendment does not materially affect this section of the Application.

(E) ENVIRONMENTAL AND AVIATION REGULATION COMPLIANCE

Amendment does not materially affect this section of the Application.

REFERENCES

Ohio Environmental Protection Agency (OEPA). 2003. Alphabetical List of Special High Quality Waters contained in Ohio Administrative Code 3745-1-05, effective July 1, 2003. Accessed February 2020. http://epa.ohio.gov/portals/35/rules/antidegHQlist_july03.pdf.

Ohio Environmental Protection Agency (OEPA). 2017. State of Ohio Water Quality Standards. Section 3745-1-17 Southwest Ohio Tributaries Drainage Basin. Accessed March 2020. <http://epa.ohio.gov/Portals/35/rules/01-17.pdf>.

U.S. Geological Survey (USGS). 2019. Brighton quadrangle, Ohio [map]. 7.5-Minute Series. Reston, VA: United States Department of the Interior.

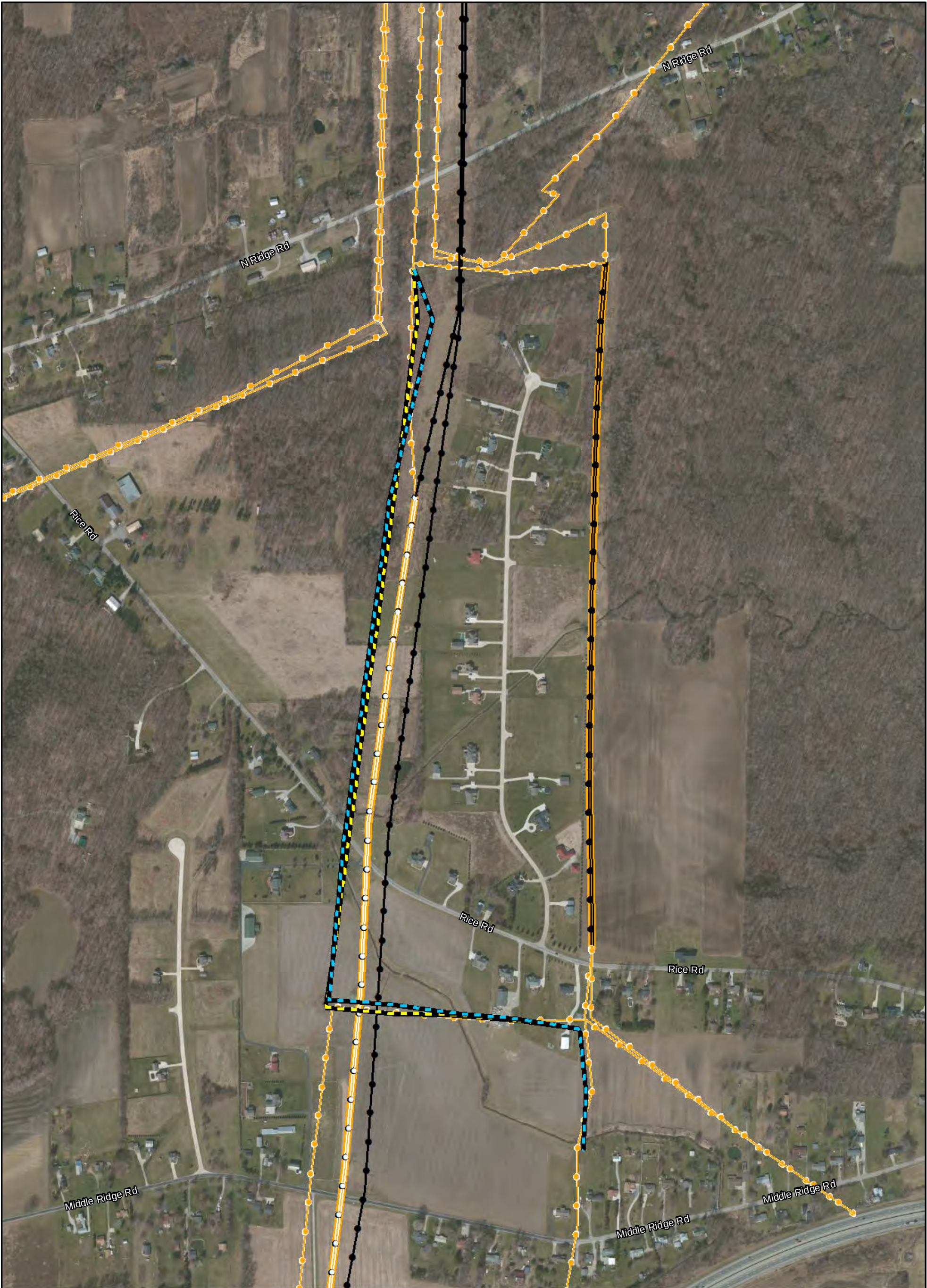
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U.S. Geological Survey (USGS). 2019. Sullivan quadrangle, Ohio [map]. 7.5-Minute Series. Reston, VA: United States Department of the Interior.

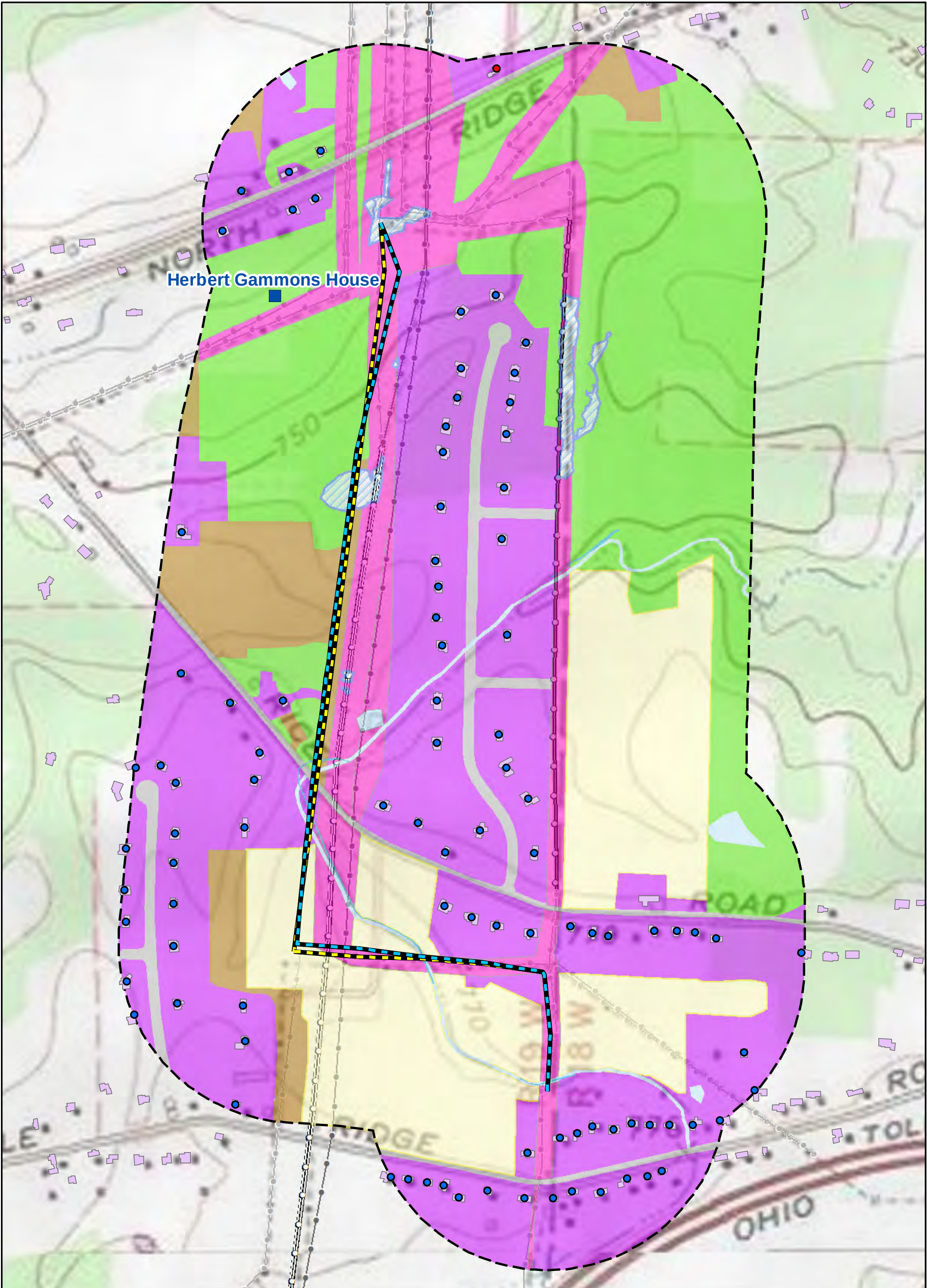
U.S. Geological Survey (USGS). 2019. Wellington quadrangle, Ohio [map]. 7.5-Minute Series. Reston, VA: United States Department of the Interior.

U.S. Geological Survey (USGS). 2019. Vermilion East quadrangle, Ohio [map]. 7.5-Minute Series. Reston, VA: United States Department of the Interior.

Figures



LEGEND: [Dashed Yellow Line with Black Dots] Proposed Route Adjustment [Solid Black Line] OPSB Approved Route	Existing Transmission Lines [Orange Line with Dots] 138kV [Black Line with Dots] 345kV [Double Orange Line with Dots] Double Circuit - 138kV/345kV [Double Black Line with Dots] Double Circuit - 138kV	LOCATOR MAP Lorain County 	BASE MAP SOURCE: Esri World Imagery Coordinate System: State Plane Ohio North FIPS 3401 Feet Datum: NAD 1983 Scale 1:6,000 10/18/2022	 ATSI American Transmission Systems, Inc. a subsidiary of FirstEnergy Corp.	Beaver-Wellington 138 kV Transmission Line Project (Brownhelm Section)	
						FIGURE 2-2 APPROVED ROUTE ALIGNMENT ADJUSTMENTS
						 0 400 800 FEET



LEGEND:

1000 Ft. Buffer

Existing Transmission Lines

- 138kV
- 345kV
- Double Circuit - 138kV/345kV
- Double Circuit - 138kV
- Proposed Route Adjustment
- OPSB Approved Route

Land Use Type

- Agricultural
- Delineated Stream
- Delineated Wetland
- Herbaceous
- Residential
- ROW
- Woodlot
- Water Resources
- Pavement

Structure Type

- Commercial
- Residential
- Historic Structure

LOCATOR MAP

N

BASE MAP SOURCE:
Esri USA Topo Map

ATSI
American Transmission Systems, Inc.
a subsidiary of FirstEnergy Corp.

Beaver-Wellington
138 kV Transmission Line
Project (Brownhelm Section)

Figure 7-1
Approved Route
Alignment Adjustments

0 500 1,000
FEET



LEGEND:			BASE MAP SOURCE: Esri World Imagery		ATSI American Transmission Systems, Inc. a subsidiary of FirstEnergy Corp.	Beaver-Wellington 138 kV Transmission Line Project (Brownhelm Section)
Proposed Route Adjustment	Stream (NHD)					
OPSB Approved Route	Wetland (NWI)					
Access Road	Delineated Stream					
65 Ft. Right of Way	Delineated PEM Wetland					
Survey Corridor	Delineated PFO Wetland					
1000 Ft. Buffer	Delineated PSS Wetland					

*No soil units exceed 12 percent slope

Coordinate System: State Plane
Ohio North FIPS 3401 Feet
Datum: NAD 1983
Scale: 1:2,400

10/18/2022

**FIGURE 8-2 B
APPROVED ROUTE DELINEATED
WETLAND AND WATERBODIES MAP**

0 300 600
FEET

Appendix 7-1
Agency Consultation

Fashingbauer, Karin/CHC

Subject: FW: 22-0557; Beaver-Henrietta 138 kV Transmission Line Project Follow-Up

From: Nathan.Reardon@dnr.ohio.gov <Nathan.Reardon@dnr.ohio.gov>
Sent: Thursday, July 7, 2022 7:59 AM
To: Lubbers, Jake <Jake.Lubbers@jacobs.com>
Cc: Samantha.Robbins@dnr.ohio.gov; Mike.Pettegrew@dnr.ohio.gov; Otto, Ben/CIN <Ben.Otto@jacobs.com>; Ruggiero, Augustine (Jirousek, Michael J.) <Aruggiero@firstenergycorp.com>
Subject: [EXTERNAL] RE: 22-0557; Beaver-Henrietta 138 kV Transmission Line Project Follow-Up

Jake,

The DOW concurs that through implementation of the avoidance/minimization measures outlined in the letter, impacts to state listed species are not expected. No further coordination is necessary.

Thank you,
Nathan



Nathan Reardon
Compliance Coordinator
ODNR Division of Wildlife
2045 Morse Road
Columbus, OH 43229
Phone: 614-265-6741
Email: nathan.reardon@dnr.ohio.gov

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From: Pettegrew, Mike <Mike.Pettegrew@dnr.ohio.gov>
Sent: Saturday, July 2, 2022 2:31 PM
To: Reardon, Nathan <Nathan.Reardon@dnr.ohio.gov>
Cc: Robbins, Samantha <Samantha.Robbins@dnr.ohio.gov>
Subject: FW: 22-0557; Beaver-Henrietta 138 kV Transmission Line Project Follow-Up

Nate

Can you please review and provide a concurrence to the consultants or comments if applicable? Please cc us on response. Thank you.

	Mike Pettegrew <i>Environmental Services Administrator</i> Ohio Department of Natural Resources, Office of Real Estate & Land Management 2045 Morse Road, Building E-2 Columbus, Ohio 43229 Office: (614) 265-6387 mike.pettegrew@dnr.ohio.gov https://ohiodnr.gov/wps/portal/gov/odnr/discover-and-learn/safety-conservation/about-ODNR/real-estate/environmental-review/
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From: Lubbers, Jake <Jake.Lubbers@jacobs.com>
Sent: Wednesday, June 29, 2022 2:14 PM
To: Pettegrew, Mike <Mike.Pettegrew@dnr.ohio.gov>
Cc: Otto, Ben/CIN <Ben.Otto@jacobs.com>; Ruggiero, Augustine (Jirousek, Michael J.) <Aruggiero@firstenergycorp.com>
Subject: 22-0557; Beaver-Henrietta 138 kV Transmission Line Project Follow-Up

Dear Mr. Pettegrew,

On behalf of American Transmission Systems Inc. (ATSI), a subsidiary of FirstEnergy Service Company (FirstEnergy), Jacobs Engineering Group, Inc. (Jacobs) is submitting this follow up letter report to the ODNR in response to comments provided by ODNR on June 14, 2022 regarding the proposed Beaver-Henrietta 138 kV Transmission Line Project (Project) in Lorain County, Ohio. Please find the attached letter report requesting concurrence from the ODNR that the Project, as proposed with the avoidance and minimization measures, will not likely adversely affect state-listed bird and bat species.

Please let us know if you have any questions or need any additional information for your review.

Thank you,

Jake Lubbers | [Jacobs](https://www.jacobs.com) | Environmental Permitting Scientist
859-652-2160 | jake.lubbers@jacobs.com
2 Crowne Point Court, Suite 100 | Cincinnati, OH 45241 | United States

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Ohio Department of Natural Resources

MIKE DeWINE, GOVERNOR

MARY MERTZ, DIRECTOR

Office of Real Estate

John Kessler, Chief
2045 Morse Road – Bldg. E-2
Columbus, OH 43229
Phone: (614) 265-6621
Fax: (614) 267-4764

June 14, 2022

Jake Lubbers
Jacobs Engineering Group, Inc.
2 Crowne Point Court, Suite 100
Cincinnati, OH 45241

Re: 22-0557; Beaver-Henrietta 138 kV Transmission Line Project

Project: The proposed project involves construction of an approximately one-mile-long section of new 138 kV transmission line within a proposed 100-foot-wide right-of-way.

Location: The proposed project is located in Amherst and Brownhelm Townships, Lorain County, Ohio.

The Ohio Department of Natural Resources (ODNR) has completed a review of the above referenced project. These comments were generated by an inter-disciplinary review within the Department. 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 National Environmental Policy Act, the Coastal Zone Management Act, Ohio Revised Code and other applicable laws and regulations. These comments are also based on ODNR's experience as the state natural resource management agency and do not supersede or replace the regulatory authority of any local, state or federal agency nor relieve the applicant of the obligation to comply with any local, state or federal laws or regulations.

Natural Heritage Database: The Natural Heritage Database has the following data at or within one mile of the project area:

Round-leaved Dogwood (*Cornus rugosa*), state potentially threatened

The review was performed on the specified project area as well as an additional one-mile radius. Records searched date from 1980. The species listed above is not recorded within one half-mile of the specified project area.

Please note that Ohio has not been completely surveyed and we rely on receiving information from many sources. Therefore, a lack of records for an area is not a statement that rare species or unique features are absent from that area.

Fish and Wildlife: The Division of Wildlife (DOW) has the following comments.

The DOW recommends that impacts to streams, wetlands and other water resources be avoided and minimized to the fullest extent possible, and that Best Management Practices be utilized to minimize erosion and sedimentation.

The entire state of Ohio is within the range of the Indiana bat (*Myotis sodalis*), a state endangered and federally endangered species, the northern long-eared bat (*Myotis septentrionalis*), a state endangered and federally threatened species, the little brown bat (*Myotis lucifugus*), a state endangered species, and the tricolored bat (*Perimyotis subflavus*), a state endangered species. During the spring and summer (April 1 through September 30), these species of bats predominately roost in trees behind loose, exfoliating bark, in crevices and cavities, or in the leaves. However, these species are also dependent on the forest structure surrounding roost trees. If trees are present within the project area, and trees must be cut, the DOW recommends cutting only occur from October 1 through March 31, conserving trees with loose, shaggy bark and/or crevices, holes, or cavities, as well as trees with DBH ≥ 20 if possible. If trees are present within the project area, and trees must be cut during the summer months, the DOW recommends a mist net survey or acoustic survey be conducted from June 1 through August 15, prior to any cutting. Mist net and acoustic surveys should be conducted in accordance with the most recent version of the "[OHIO DIVISION OF WILDLIFE GUIDANCE FOR BAT SURVEYS AND TREE CLEARING](#)". If state listed bats are documented, DOW recommends cutting only occur from October 1 through March 31. However, limited summer tree cutting may be acceptable after consultation with the DOW (contact Eileen Wyza at Eileen.Wyza@dnr.ohio.gov).

The DOW also recommends that a desktop habitat assessment is conducted, followed by a field assessment if needed, to determine if a potential hibernaculum is present within the project area. Direction on how to conduct habitat assessments can be found in the current USFWS "[Range-wide Indiana Bat Survey Guidelines](#)." If a habitat assessment finds that a potential hibernaculum is present within 0.25 miles of the project area, please send this information to Eileen Wyza for project recommendations. If a potential or known hibernaculum is found, the DOW recommends a 0.25-mile tree cutting and subsurface disturbance buffer around the hibernaculum entrance, however, limited summer or winter tree cutting may be acceptable after consultation with the DOW. If no tree cutting or subsurface impacts to a hibernaculum are proposed, this project is not likely to impact these species.

The project is within the range of the black sandshell (*Ligumia recta*), a state threatened mussel, and the pondhorn (*Unio merus tetralasmus*), a state threatened mussel. Due to the location, and that there is no in-water work proposed in a perennial stream, this project is not likely to impact these species.

The project is within the range of the following listed fish species.

State Endangered

lake sturgeon (*Acipenser fulvescens*)
Ohio lamprey (*Ichthyomyzon bdellium*)
spotted gar (*Lepisosteus oculatus*)

State Threatened

American eel (*Anguilla rostrata*)
bigmouth shiner (*Notropis dorsalis*)
channel darter (*Percina copelandi*)

Due to the location, and that there is no in-water work proposed in a perennial stream, this project is not likely to impact these species.

The project is within the range of the Blanding's turtle (*Emydoidea blandingii*), a state threatened species. This species inhabits marshes, ponds, lakes, streams, wet meadows, and swampy forests. Although essentially aquatic, the Blanding's turtle will travel over land as it moves from one wetland to the next. Due to the location, the type of habitat within the project area, and the type of work proposed, this project is not likely to impact this species.

The project is within the range of the spotted turtle (*Clemmys guttata*), a state threatened species. This species prefers fens, bogs and marshes, but also is known to inhabit wet prairies, meadows,

pond edges, wet woods, and the shallow sluggish waters of small streams and ditches. Due to the location, the type of habitat within the project area, and the type of work proposed, this project is not likely to impact this species.

The project is within the range of the American bittern (*Botaurus lentiginosus*), a state endangered bird. Nesting bitterns prefer large undisturbed wetlands that have scattered small pools amongst dense vegetation. They occasionally occupy bogs, large wet meadows, and dense shrubby swamps. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of May 1 through July 31. If this type of habitat will not be impacted, the project is not likely to impact this species.

The project is within the range of the black-crowned night-heron (*Nycticorax nycticorax*), a state-threatened bird. Night-herons are so named because they are nocturnal, conducting most of their foraging in the evening hours or at night, and roost in trees near wetlands and waterbodies during the day. Night herons are migratory and are typically found in Ohio from April 1 through December 1 but can be found in more urbanized areas with reliable food sources year-round. Black-crowned night-herons primarily forage in wetlands and other shallow aquatic habitats, and roost in trees nearby. These night-herons nest in small trees, saplings, shrubs, or sometimes on the ground, near bodies of water and wetlands. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of May 1 through July 31. If this type of habitat will not be impacted, this project is not likely to impact this species.

The project is within the range of the lark sparrow (*Chondestes grammacus*), a state endangered bird. This sparrow nests in grassland habitats with scattered shrub layers, disturbed open areas, as well as patches of bare soil. These summer residents normally migrate out of Ohio shortly after their young fledge or leave the nest. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of May 1 through July 31. If this habitat will not be impacted, this project is not likely to impact this species.

The project is within the range of the least bittern (*Ixobrychus exilis*), a state threatened bird. This secretive marsh species prefers dense emergent wetlands with dense, tall growths of aquatic or semiaquatic vegetation (particularly cattail, sedge, rushes, arrowheads, or sawgrass) interspersed with clumps of woody vegetation and open water. Nests are made from dried vegetation suspended .5 to 2.5 feet above the water. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of May 1 through July 31. If this type of habitat will not be impacted, this project is not likely to impact this species.

The project is within the range of the northern harrier (*Circus hudsonis*), a state endangered bird. This is a common migrant and winter species. Nesters are much rarer, although they occasionally breed in large marshes and grasslands. Harriers often nest in loose colonies. The female builds a nest out of sticks on the ground, often on top of a mound. Harriers hunt over grasslands. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of April 15 through July 31. If this habitat will not be impacted, the project is not likely to impact this species.

The project is within the range of the sandhill crane (*Grus canadensis*), a state threatened species. Sandhill cranes are primarily a wetland-dependent species. On their wintering grounds, they will utilize agricultural fields; however, they roost in shallow, standing water or moist bottomlands. On breeding grounds, they require a rather large tract of wet meadow, shallow

marsh, or bog for nesting. If grassland, prairie, or wetland habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of April 1 through August 31. If this habitat will not be impacted, this project is not likely to have an impact on this species.

The project is within the range of the trumpeter swan (*Cygnus buccinator*), a state threatened bird. Trumpeter swans prefer large marshes and lakes ranging in size from 40 to 150 acres. They like shallow wetlands one to three feet deep with a diverse mix of plenty of emergent and submergent vegetation and open water. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of April 15 through June 15. If this habitat will not be impacted, this project is not likely to have an impact on this species.

The project is within the range of the upland sandpiper (*Bartramia longicauda*), a state endangered bird. Nesting upland sandpipers utilize dry grasslands including native grasslands, seeded grasslands, grazed and ungrazed pasture, hayfields, and grasslands established through the Conservation Reserve Program (CRP). If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of April 15 through July 31. If this type of habitat will not be impacted, this project is not likely to impact this species.

Due to the potential of impacts to federally listed species, as well as to state listed species, we recommend that this project be coordinated with the US Fish & Wildlife Service.

Water Resources: The Division of Water Resources has the following comment.

The [local floodplain administrator](#) should be contacted concerning the possible need for any floodplain permits or approvals for this project.

ODNR appreciates the opportunity to provide these comments. Please contact Mike Pettegrew at mike.pettegrew@dnr.ohio.gov if you have questions about these comments or need additional information.

Mike Pettegrew
Environmental Services Administrator



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June 28, 2022

Attention: Mike Pettegrew
Environmental Services Administrator
Ohio Department of Natural Resources
2045 Morse Road
Columbus, Ohio 43229

VIA EMAIL

**Subject: 22-0557; Beaver-Henrietta 138 kV Transmission Line Project,
Lorain County, Ohio**

Dear Mr. Pettegrew:

On behalf of American Transmission Systems Inc. (ATSI), a subsidiary of FirstEnergy Service Company (FirstEnergy), Jacobs Engineering Group, Inc. (Jacobs) is submitting this follow up letter report to the Ohio Department of Natural Resources (ODNR) in response to comments provided by ODNR on June 14, 2022, regarding the proposed Beaver-Henrietta 138 kV Transmission Line Project (Project) in Lorain County, Ohio. An original set of comments were provided by ODNR for the Project on December 17, 2019.

As stated in our initial consultation letter, the Project involves construction of an approximately 1-mile long section of new 138 kV transmission line within a proposed 100-foot-wide right-of-way (ROW). The proposed Project will connect two existing sections of transmission line corridor and will allow the newly rehabilitated Beaver-Wellington 138 kV Transmission Line to reroute to the proposed Project ROW. The Project area is primarily rural which includes agricultural land use, existing ROW, residential, and wooded areas. An ecological survey consisting of habitat and wetland/waterbody assessments for the Project was conducted within the environmental survey corridor (ESC) on November 18-19, 2019, January 27-28, 2020, and July 1, 2020. The 265-foot wide environmental survey corridor ESC included the proposed 65-foot right-of-way (ROW) and a 100-foot buffer on each side. Jacobs' ecologists walked the entire length of the ESC to classify the general vegetative communities crossed by the Project. The general habitat observations from this survey are identified within the Land Use Maps provided in Attachment 1.

Within the proposed Project's Limits of Disturbance (LOD) activities will consist of tree clearing and installation of work pads, pull pads, access roads, and materials laydown yard(s) to facilitate transmission line construction efforts. The work will occur within the proposed new 100-foot-wide ROW; therefore, tree clearing will likely to be necessary for portions of the Project. Tree clearing will be conducted for this Project between October 1st and March 31st to minimize direct impacts to the Indiana bat (*Myotis sodalis*) and other bat species. Efforts will be made before, during, and post-construction to minimize the extent and duration of the Project-related disturbances to wetlands, streams and other sensitive habitats.

Within the most recent response letter ODNR Division of Wildlife (DOW) identified that the Project was within the range of the black sandshell (*Ligumia recta*), the pondhorn (*Uniomerus tetralasmus*), Ohio lamprey (*Ichthyomyzon bdellium*), lake sturgeon (*Acipenser fulvescens*), spotted gar (*Lepisosteus oculatus*), channel darter (*Percina copelandi*), American eel (*Anguilla rostrata*) and bigmouth shiner (*Notropis dorsalis*). ODNR DOW stated that the Project is not likely to impact these species due to no in-water work is proposed in perennial streams.

The ODNR DOW also identified the Project is within range of the state-threatened spotted turtle (*Clemmys guttata*) and Blanding's turtles (*Emydoidea blandingii*). Based on location, the type of habitat along the Project route and the type of work proposed, ODNR indicated that the Project is not likely to impact these species.

ODNR noted that the Project lies within the range of the Indiana bat (*Myotis sodalis*) the northern long-eared bat (*Myotis septentrionalis*), the little brown bat (*Myotis lucifugus*) and the tricolored bat (*Perimyotis subflavus*). ODNR recommended that if potential suitable habitat occurs within the Project area, the trees should be conserved wherever possible. If tree clearing cannot be avoided, ODNR recommended clearing only occur from October 1 through March 31, conserving trees with loose, shaggy bark and/or crevices, holes, or cavities, as well as trees with DBH ≥ 20 , if possible. To address any potential bat roosting habitat impacts, construction of the Project will begin with tree and vegetation clearing occurring between October 1st and March 31st to minimize direct impacts to the Indiana bat and other bat species.

Jacobs also conducted a desktop habitat assessment, to determine if there are potential hibernaculum(a) present within 0.25-mile the Project area. Jacobs followed the current USFWS "Range-wide Indiana Bat Survey Guidelines" when conducting this assessment and utilized data obtained from the ODNR Mines of Ohio Viewer, ODNR geologic maps, topographic maps, and aerial photographs. During the desktop analysis, no potential karst features were identified within the ESC. The bedrock geologies in the area consist mainly of sandstone, siltstone, and shale in the Project area. (ODNR DGS, 1997). Overlaying soils are generally loams, with varying amounts of glacial till or deposits. One active sandstone mining area (IRG Amherst, LLC) was identified near the Project area, south of Interstate 80. Since this is an active surface mine it is unlikely that a potential hibernaculum exists at this site based on current operations. During the field survey of the ESC, no evidence of potential hibernaculum consisting of caves, rock outcrops, mines, cliffs, or karst features were observed. In addition to the field survey, coordination with ODNR did not identify any known bat hibernaculum or records of federal or state listed bats within a one-mile radius of the Project. Based on the desktop habitat review and the results of the field survey, it does not appear likely that potential hibernaculum exists within 0.25-mile of the Project area.

ODNR noted that the Project is within the range of the lark sparrow. During the field survey, no grassland habitats with scattered shrub layers, disturbed open areas, with patches of bare soil were identified within the proposed ROW. Based on the lack of potentially suitable habitat for the lark sparrow, no impacts are anticipated for this species.

ODNR noted that the Project is within the range of the black-crowned night-heron. This species roosts in trees near wetlands and waterbodies during the day. Black-crowned night-herons primarily

forage in wetlands and other shallow aquatic habitats, and roost in trees nearby. These night-herons nest in small trees, saplings, shrubs, or sometimes on the ground, near bodies of water and wetlands. During the field survey, no wetlands with open water, ponds, lakes, large streams, or shallow aquatic habitat was identified within the proposed ROW. Based on the lack of potentially suitable habitat for the black-crowned night-heron, no impacts are anticipated for this species.

Two state-endangered bird species were identified within the ODNR response letter which appear to prefer grassland habitats. The specific habitat preferences identified by the ODNR are as follows:

- **Upland sandpiper:** Upland sandpipers prefer to nest in dry grasslands including native grasslands, seeded grasslands, grazed and ungrazed pasture, hayfields, and grasslands established through the Conservation Reserve Program (CRP). If grassland habitat will be impacted, ODNR requests construction should be avoided in this habitat during the upland sandpiper nesting period of April 15th to July 31st.
- **Northern harrier:** The northern harrier is a common migrant species that are rare nesters in Ohio but occasionally breed in large marshes and grasslands. If grassland habitat will be impacted, ODNR requests construction should be avoided in this habitat during the northern harrier nesting period of May 15th to August 1st.

Based on previous discussions with ODNR, it was suggested that locations near residential houses, grasslands within existing ROWs surrounded by forested areas, and smaller grasslands areas less than 1-acre in size were not likely suitable habitat for these species. Based on this ODNR guidance, Jacobs performed a general habitat survey for the Project.

Jacobs' ecologists walked the entire length of the Project survey corridor to classify the general vegetative communities crossed by the Project. The general habitat observations from this survey are identified within the Habitat Land Use Maps provided in Attachment 1. The majority of the proposed ROW is agricultural, residential, and grassland/old field areas situated within a maintained ROW. Based on ODNR-DOW guidance and the field survey, the grassland/old field areas within the maintained ROW are surrounded by woodlots and residential properties and would not be considered suitable habitat for the northern harrier or upland sandpiper.

The remaining species identified within the ODNR response letter were state-threatened or endangered birds that all appear to prefer wetland habitats. The specific habitat preferences identified by the ODNR are as follows:

- **American bittern:** Nesting bitterns prefer large undisturbed wetlands that have scattered small pools amongst dense vegetation. They occasionally occupy bogs, large wet meadows, and dense shrubby swamps. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of May 1 through July 31.
- **Least bittern:** This species prefers dense emergent wetlands with dense, tall growths of aquatic or semiaquatic vegetation (particularly cattail, sedge, rushes, arrowheads, or sawgrass) interspersed with clumps of woody vegetation and open water. Nests are made from dried vegetation suspended .5 to 2.5 feet above the water. ODNR commented that if type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of May 1 through July 31.

June 28, 2022

- **Sandhill Cranes:** Sandhill cranes are primarily a wetland-dependent species. On their wintering grounds, they will utilize agricultural fields; however, they roost in shallow, standing water or moist bottomlands. On breeding grounds, they require a rather large tract of wet meadow, shallow marsh, or bog for nesting. If grassland, prairie, or wetland habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of April 1st to September 1st.
- **Trumpeter swan:** Trumpeter swans prefer large marshes and lakes ranging in size from 40 to 150 acres. They prefer shallow wetlands one to three feet deep with a diverse mix of plenty of emergent and submergent vegetation and open water. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of April 15 through June 15.

During the field survey, no large tracts of undisturbed wet meadows, shallow marshes, bogs or waterbodies with interspersed with areas of standing water were identified which would be potentially suitable nesting habitat for the American bittern, least bittern, sandhill crane or trumpeter swan. Due to the lack of potentially suitable nesting habitat, impacts to these bird species are not likely to occur.

Based on ODNR's comments, the lack of suitable habitat within the proposed ROW and tree clearing activities being conducted between October 1st and March 31st, FirstEnergy and Jacobs believe that the proposed Project will not adversely impact any state-listed species. Please review the Project details provided above and the attached figures. Jacobs requests concurrence from the ODNR that the Project, as proposed with the avoidance and minimization measures, will not likely adversely affect state-listed bird and bat species.

If you have any questions or require additional information, please contact Benjamin Otto at (513) 377-6458 or ben.otto@jacobs.com.

Sincerely,

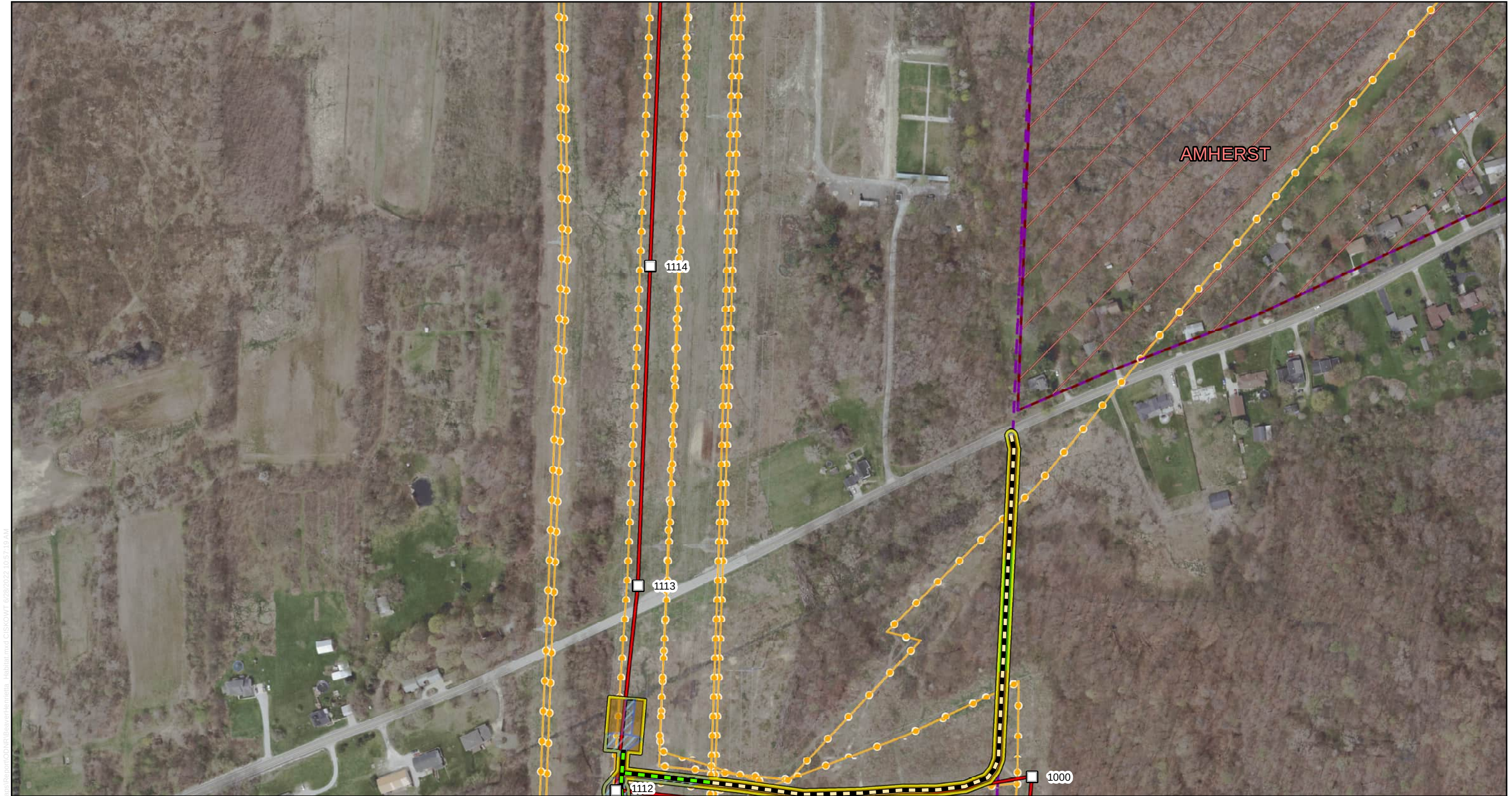


Benjamin Otto
Senior Ecologist/Project Manager

cc: Auggie Ruggiero, FirstEnergy

Attachments:

Attachment 1: Habitat Land Use Maps



LEGEND:

Existing 138kV Structure	Existing Beaver-Wellington 138kV	Land Use
Preferred Route	Existing Transmission Line	Agricultural
Access Road	Timber Matted Access	Delineated Stream
Construction Work Area - 65 ft	Township	Delineated Wetland
Village		Maintained ROW-Grassland/Old Field
		Residential
		Woodlot
		Water Resources
		Pavement

BASE MAP SOURCE:
Lorain County OSIP III
Imagery flown 2017

0 125 250 500
FEET
1 inch = 250 feet

ATSI
American Transmission Systems, Inc.
a subsidiary of FirstEnergy Corp.

**Beaver - Henrietta
(Brownhelm) 138kV**

**Figure 1
Land Use Map**

PN: D3263600	Date: 6/28/2022
CREATED BY: TCC	Jacobs
REVIEWED BY: SS	

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LEGEND:

	Steel Structure with Concrete Foundation		Existing Beaver-Wellington 138kV	Land Use	
	Existing 138kV Structure To Be Worked		Preferred Route		Agricultural
	Proposed Structure		Existing Transmission Line		Delineated Stream
	Existing 138kV Structure		Access Road		Delineated Wetland
	Outlier Structure		Timber Matted Access		Maintained ROW-Grassland/Old Field
	Guy Anchor		Construction Work Area - 65 ft		Residential
	Culvert		Township		Woodlot
					Water Resources
					Pavement

BASE MAP SOURCE:
Lorain County OSIP III
Imagery flown 2017

0 125 250 500
FEET
1 inch = 250 feet

ATSI
American Transmission Systems, Inc.
a subsidiary of FirstEnergy Corp.

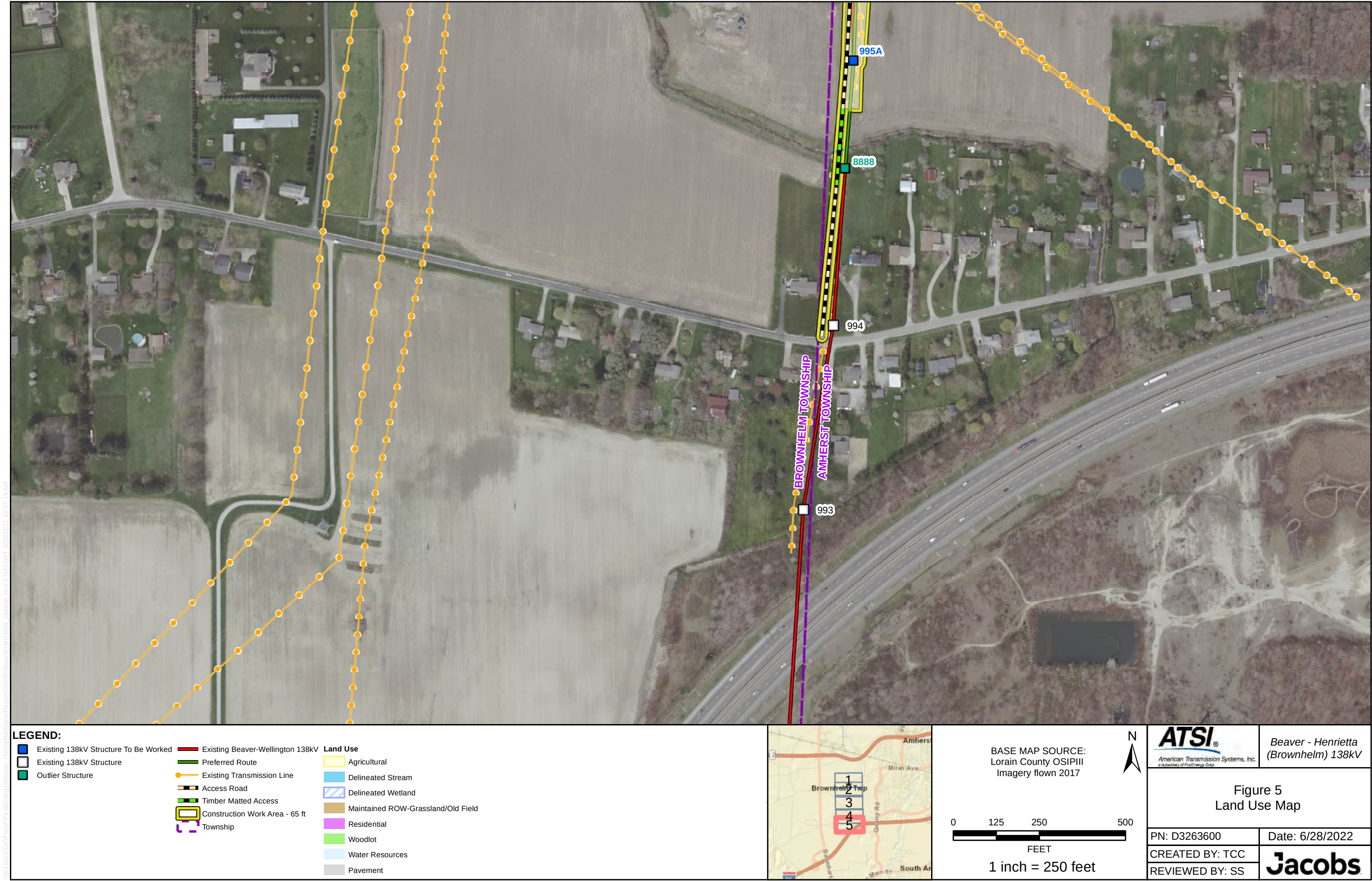
Beaver - Henrietta
(Brownhelm) 138kV

Figure 4
Land Use Map

PN: D3263600
CREATED BY: TCC
REVIEWED BY: SS

Date: 6/28/2022
Jacobs

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LEGEND:

Existing 138kV Structure To Be Worked

Existing 138kV Structure

Outlier Structure

Existing Beaver-Wellington 138kV

Preferred Route

Existing Transmission Line

Access Road

Timber Matted Access

Construction Work Area - 65 ft

Township

Agricultural

Delineated Stream

Delineated Wetland

Maintained ROW-Grassland/Old Field

Residential

Woodlot

Water Resources

Pavement

1

2

3

4

5

Brownhelm Twp

Amherst

Milan Ave

Quincy Rd

South Ar

Main St

0

125

250

500

FEET

1 inch = 250 feet

ATSI

American Transmission Systems, Inc.

a subsidiary of FirstEnergy Corp.

Beaver - Henrietta

(Brownhelm) 138kV

Figure 5

Land Use Map

PN: D3263600

CREATED BY: TCC

REVIEWED BY: SS

Date: 6/28/2022

Jacobs



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May 23, 2022

Attention: Mike Pettegrew
Environmental Services Administrator
Ohio Department of Natural Resources
2045 Morse Road
Columbus, Ohio 43229

VIA EMAIL

**Subject: State-Listed Threatened and Endangered Species Consultation
Request #19-960; Beaver-Henrietta 138 kV Transmission Line Project,
Lorain County, Ohio**

Dear Mr. Pettegrew:

On behalf of American Transmission Systems Inc. (ATSI), a subsidiary of FirstEnergy Service Company (FirstEnergy), Jacobs Engineering Group, Inc. (Jacobs) is requesting an update to the previous comments from the Ohio Department of Natural Resources (ODNR) regarding the proposed Beaver-Henrietta 138 kV Transmission Line Project (Project) in Lorain County, Ohio, received December 17, 2019 (#19-960).

As stated in our initial consultation letter, the Project involves construction of an approximately 1-mile-long section of new 138 kV transmission line within a proposed 100-foot-wide right-of-way (ROW). The proposed Project will connect two existing sections of transmission line corridor and will allow the newly rehabilitated Beaver-Wellington 138 kV Transmission Line to reroute to the proposed Project ROW. The Project begins approximately 1,000 feet north of Middle Ridge Road deviating west from the existing Beaver-Wellington 138 kV Transmission Line and rejoining the existing alignment approximately 500 feet south of North Ridge Road. The Project area is within the Vermillion East U.S. Geological Survey 7.5" topographical quadrangle and is shown on the attached Overview Figure (Attachment 1).

The Project area is primarily rural which includes agricultural land use and wooded areas. Within the proposed Project's Limits of Disturbance (LOD) activities will consist of tree clearing and installation of work pads, pull pads, access roads, and materials laydown yard(s) to facilitate transmission line construction efforts. The work will occur within the proposed new 100-foot-wide ROW; therefore, tree clearing will likely to be necessary for portions of the Project. Tree clearing will be conducted for this Project between October 1st and March 31st to minimize direct impacts to the Indiana bat (*Myotis sodalis*) and other bat species.

Efforts will be made before, during, and post-construction to minimize the extent and duration of the Project-related disturbances to wetlands, streams and other sensitive habitats. To avoid the potential impact to state-listed fish and mussel species, no in-stream water work is proposed for the Project. Additionally, ATSI will utilize best management practices to avoid any indirect impact to streams and

May 23, 2022

wetlands through its use of erosion and sediment controls. Streams will either be avoided or bridged (no work below the ordinary high water mark), and wetlands will be traversed using low ground pressure equipment and/or matted through. Due to the lack of potential habitat and by using best management practices, FirstEnergy and Jacobs believe that the proposed Project will not adversely impact state protected species that could exist within the Project ROW.

In addition to coordinating with ODNR, Jacobs on behalf of ATSI is also soliciting U.S. Fish and Wildlife Service for comments regarding the Project's potential to impact protected federal species.

Please review the Project details provided above, the attached Overview Figure, and ArcGIS shapefile of the Project centerline. Jacobs requests concurrence from the ODNR that the Project, as proposed with the avoidance and minimization measures, will not likely adversely affect state-listed species.

If you have any questions or require additional information, please contact Benjamin Otto at (513) 377-6458 or ben.otto@jacobs.com.

Sincerely,

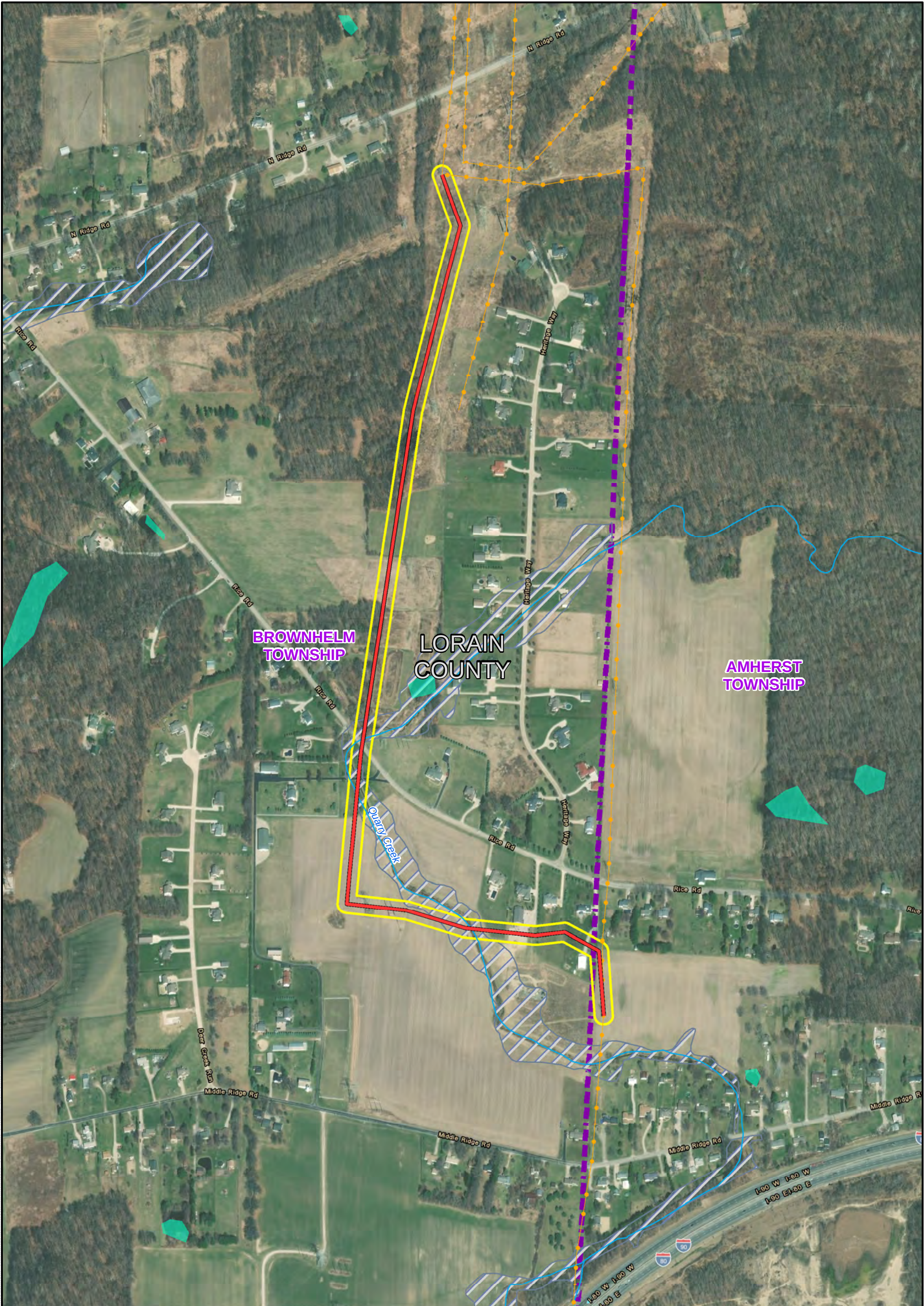
A handwritten signature in black ink, appearing to read "Ben Otto", with a long horizontal flourish extending to the right.

Benjamin Otto
Senior Ecologist/Project Manager

cc: Mike Tallon, FirstEnergy

Attachments:

Attachment 1: Overview Map



LEGEND: Beaver-Henrietta 138kV Existing Transmission Line 100ft Survey Corridor NHD Stream NWI Floodplain Township County	LOCATOR MAP 	BASE MAP SOURCE: ESRI World Imagery Topographic Quadrangle: Vermilion East			FirstEnergy	Beaver Henrietta 138kV Transmission Line Project
					Project Overview	
					PN:D3302500	Date: 9/13/2019
					CREATED BY: RED	JACOBS
REVIEWED BY: BAO						

Lubbers, Jake

From: Ohio, FW3 <ohio@fws.gov>
Sent: Wednesday, June 1, 2022 8:30 AM
To: Lubbers, Jake
Cc: nathan.reardon@dnr.state.oh.us; Otto, Ben/CIN
Subject: [EXTERNAL] Beaver-Henrietta 138 kV Transmission Line Project, Lorain County, Ohio



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

Project Code # 2022-0044450

Dear Ms. Mr. Lubbers,

The U.S. Fish and Wildlife Service (Service) has received your recent correspondence requesting information about the subject proposal. We offer the following comments and recommendations to assist you in minimizing and avoiding adverse impacts to threatened and endangered species pursuant to the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq), as amended (ESA).

Federally Threatened and Endangered Species: Due to the project type, size, location, and the proposed implementation of seasonal tree cutting (clearing of trees ≥ 3 inches diameter at breast height between October 1 and March 31) to avoid impacts to the endangered Indiana bat (*Myotis sodalis*) and threatened northern long-eared bat (*Myotis septentrionalis*), we do not anticipate adverse effects to any other federally endangered, threatened, or proposed species, or proposed or designated critical habitat. Should the project design change, or 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, coordination with the Service should be initiated to assess any potential impacts.

Section 7 Coordination: If there is a federal nexus for the project (e.g., federal funding provided, federal permits required to construct), then 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 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. This letter provides technical assistance only and does not serve as a completed section 7 consultation document.

Stream and Wetland Avoidance: Over 90% of the wetlands in Ohio have been drained, filled, or modified by human activities, thus is it important to conserve the functions and values of the remaining wetlands in Ohio (https://epa.ohio.gov/portals/47/facts/ohio_wetlands.pdf). We recommend avoiding and minimizing project impacts to all wetland habitats (e.g., forests, streams, vernal pools) to the maximum extent possible in order to benefit water quality and fish and wildlife habitat. Additionally, natural buffers around streams and wetlands should be preserved to enhance beneficial functions. If streams or wetlands will be impacted, the U.S. Army 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. Disturbed areas should be mulched and revegetated with native plant species. In addition, prevention of non-native, invasive plant establishment is critical in maintaining high quality habitats.

Thank you for your efforts to conserve listed species and sensitive habitats in Ohio. We recommend coordinating with the Ohio Department of Natural Resources due to the potential for the proposed project to affect state listed species and/or state lands. Contact Mike Pettegrew, Acting Environmental Services Administrator, at (614) 265-6387 or at mike.pettegrew@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,

A handwritten signature in blue ink, appearing to read "Patrice Ashfield". The signature is fluid and cursive, with a large initial "P" and "A".

Patrice Ashfield
Field Office Supervisor



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C +1 513 377 6458
www.jacobs.com

May 23, 2022

Attention: Patrice Ashfield
Ohio Field Office Supervisor
U.S. Fish and Wildlife Service
4625 Morse Road, Suite 104
Columbus, Ohio 43230

VIA EMAIL

**Subject: Federal-Listed Threatened and Endangered Species Consultation
ATSI Beaver-Henrietta 138 kV Transmission Line Project, Lorain County, Ohio
TAILS# 03E15000-2020-TA-0227**

Dear Ms. Ashfield:

On behalf of American Transmission Systems Inc. (ATSI), a subsidiary of FirstEnergy Service Company (FirstEnergy), Jacobs Engineering Group Inc. (Jacobs) is requesting an update to the previous comments from U.S. Fish and Wildlife Service (USFWS) regarding the proposed Beaver-Henrietta 138 kV Transmission Line Project (Project) in Lorain County, Ohio, received November 15, 2019 (TAILS# 03E15000-2020-TA-0227).

As stated in our initial consultation letter, the Project involves construction of an approximately 1-mile-long section of new 138 kV transmission line within a proposed 100-foot-wide right-of-way (ROW). The proposed Project will connect two existing sections of transmission line corridor and will allow the newly rehabilitated Beaver-Wellington 138 kV Transmission Line to reroute to the proposed Project ROW. The Project begins approximately 1,000 feet north of Middle Ridge Road deviating west from the existing Beaver-Wellington 138 kV Transmission Line and rejoining the existing alignment approximately 500 feet south of North Ridge Road. The Project area is within the Vermillion East U.S. Geological Survey 7.5" topographical quadrangle and is shown on the attached Overview Figure (Attachment 1).

The Project area is primarily rural which includes agricultural land use and wooded areas. Within the proposed Project's Limits of Disturbance (LOD) activities will consist of tree clearing and installation of work pads, pull pads, access roads, and materials laydown yard(s) to facilitate transmission line construction efforts. The work will occur within the proposed new 100-foot-wide ROW; therefore, tree clearing will likely to be necessary for portions of the Project. Tree clearing will be conducted for this Project between October 1st and March 31st to minimize direct impacts to the Indiana bat (*Myotis sodalis*) and Northern long-eared bat (*Myotis septentrionalis*).

Efforts will be made before, during, and post-construction to minimize the extent and duration of the Project-related disturbances to wetlands, streams and other sensitive habitats. To avoid the potential impact to federal-listed fish and mussel species, no in-stream water work is proposed for the Project. Additionally, ATSI will utilize best management practices to avoid any indirect impact to streams and

May 23, 2022

wetlands through its use of erosion and sediment controls. Streams will either be avoided or bridged (no work below the ordinary high water mark), and wetlands will be traversed using low ground pressure equipment and/or matted through. Due to the lack of potential habitat and by using best management practices, FirstEnergy and Jacobs believe that the proposed Project will not adversely impact federally protected species that could exist within the Project ROW.

In addition to coordinating with USFWS, Jacobs on behalf of ATSI is also soliciting ODNR for comments regarding the Project's potential to impact protected state species.

Please review the Project details provided above, the attached Overview Figure, and ArcGIS shapefile of the Project centerline. Jacobs requests concurrence from the USFWS that the Project, as proposed with the avoidance and minimization measures, will not likely adversely affect federally-listed species.

If you have any questions or require additional information, please contact Benjamin Otto at (513) 377-6458 or ben.otto@jacobs.com.

Sincerely,

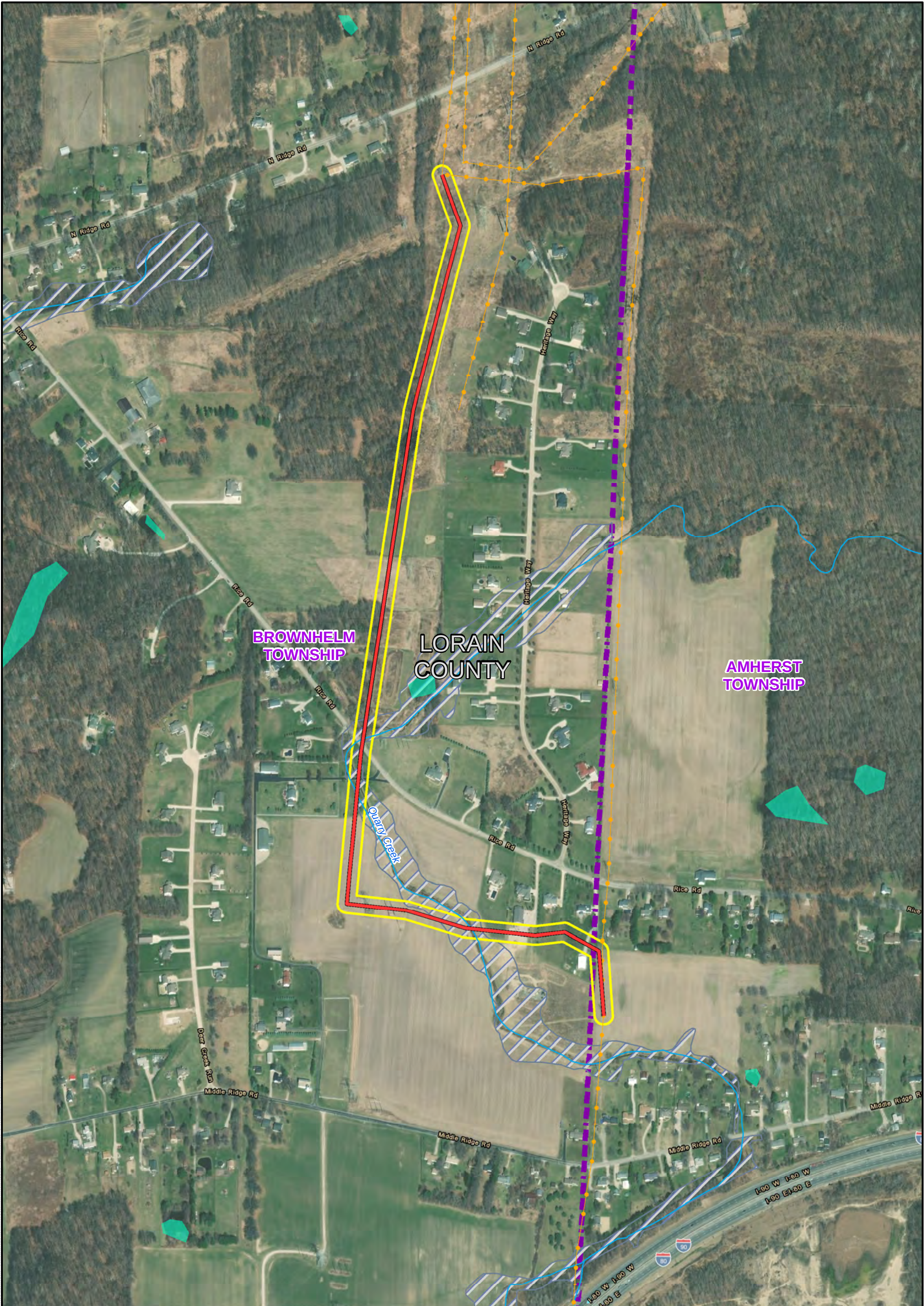
A handwritten signature in black ink, appearing to read "Benjamin Otto", with a long horizontal flourish extending to the right.

Benjamin Otto
Senior Ecologist/Project Manager

cc: Mike Tallon, FirstEnergy

Attachments:

Attachment 1: Overview Map



LEGEND: - Beaver-Henrietta 138kV - Existing Transmission Line 100ft Survey Corridor - NHD Stream - NWI - Floodplain - Township - County	LOCATOR MAP 	BASE MAP SOURCE: ESRI World Imagery Topographic Quadrangle: Vermilion East 0 150 300 600 FEET N	FirstEnergy Beaver Henrietta 138kV Transmission Line Project	
			Project Overview	
			PN:D3302500	Date: 9/13/2019
			CREATED BY: RED	JACOBS
REVIEWED BY: BAO				



In reply refer to:
2020-LOR-47668

January 28, 2021

Amy C. Favret, M.A., RPA
Jacobs Engineering Group, Inc.
2 Crowne Point Court, Suite 100
Cincinnati, Ohio 45241

RE: Section 106 Review-Beaver-Henrietta 138kV Transmission Line Project, Brownhelm Township, Lorain County, Ohio

Dear Ms. Favret:

This letter is in response to the correspondence received on January 4, 2021 regarding the proposed 1.2-mile long Beaver-Henrietta 138kV Transmission Line Project in Brownhelm Township, Lorain County, Ohio. We appreciate the opportunity to comment on this project. The comments of the Ohio State Historic Preservation Office (SHPO) are made pursuant to Section 149.53 of the Ohio Revised Code and the Ohio Power Siting Board rules for siting this project (OAC 4906-5). The comments of the Ohio SHPO are also submitted in accordance with the provisions of Section 106 of the National Historic Preservation Act of 1966, as amended (54 U.S.C. 306108 [36 CFR 800]).

The proposed undertaking involves the installation of a new 138kV transmission line within a proposed 100-ft. wide by 1.2-mile right-of-way (ROW) corridor, including access roads and additional workspaces, which is defined as the direct Area of Potential Effect (APE). The following review and comments pertain only to the *Phase I Archaeological Reconnaissance for the Beaver-Henrietta, 138 kV Transmission Line Project, Brownhelm Section, Lorain County, Ohio* by Jacobs Engineering Group, Inc. (Jacobs) (2020). The architectural component has been submitted in a stand-alone report, and therefore the review will be under a separate cover.

The archaeological survey involved a literature review, shovel test unit excavations, surface collection, and visual inspection of the entire APE, as defined above. A total of 63 shovel test units were excavated within the APE. No cultural deposits were identified within the APE. Therefore, after careful review of the archaeological report, our office concurs with Jacobs that the project, as proposed, will have no effect on significant archaeological resources. No further archaeological investigations are warranted for the 1.2-mile APE. No further coordination in regards to archaeology are required for this project unless the scope of work changes or archaeological remains are discovered during the course of the project. In such a situation, this office should be contacted as required by 36 CFR § 800.13. If you have any questions concerning this review, please contact me via email at sbiehl@ohiohistory.org. Thank you for your cooperation.

Sincerely,

A handwritten signature in blue ink that reads "Stephen M. Biehl".

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

RPR Serial No. 1086744

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



In reply refer to:
2020-LOR-47668

December 13, 2021

Karin S. Fashingbauer, Project Manager
Jacobs Engineering Group, Inc.
2 Crowne Point Court, Suite 100
Cincinnati, Ohio 45241
Email: karin.fashingbauer@jacobs.com

RE: Section 106 Review-Addendum to Beaver-Henrietta 138kV Transmission Line Project, Lorain County, Ohio.

Dear Ms. Fashingbauer:

This letter is in response to the correspondence received on November 30, 2021 regarding the addendum Phase I archaeological reconnaissance survey to the Beaver-Henrietta 138kV Transmission Line Project in Lorain County, Ohio. We appreciate the opportunity to comment on this project. The comments of the Ohio State Historic Preservation Office (SHPO) are made pursuant to Section 149.53 of the Ohio Revised Code (O.R.C.) and the Ohio Power Siting Board rules for siting this project (OAC 4906-5). The comments of the Ohio SHPO are also submitted in accordance with the provisions of Section 106 of the National Historic Preservation Act of 1966, as amended (54 U.S.C. 306108 [36 CFR 800]).

The current addendum project involves the addition of new access roads and work areas totaling approximately 3.89-acres, which was considered to be the direct Area of Potential Effect (APE) for the project. The access roads were considered 50-ft in total width along the entire length. The archaeological survey involved an updated literature review, shovel test unit excavations, surface collection, and visual inspection of the entire APE, as defined above. During the review of the original Phase I survey, which resulted in no new archaeological sites identified, our office concurred that no additional work was warranted unless there was a change in the scope of the project. The current addendum survey also found no new archaeological deposits within the defined APE. Therefore, as proposed, the addendum project will have no effect on historic properties. Furthermore, our office continues to concur with Jacobs that no further archaeological investigations are warranted for the project unless the scope of work changes or archaeological remains are discovered during the course of the project. In such a situation, this office should be contacted as required by O.R.C. and by 36 CFR § 800.13. If you have any questions concerning this review, please contact me via email at sbiehl@ohiohistory.org. Thank you for your cooperation.

Sincerely,

A handwritten signature in blue ink that reads "Stephen M. Biehl".

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

RPR Serial No. 1091046

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

Appendix 8-1
Wetland and Waterbody Delineation
Addendum Report

Wetland and Waterbody Delineation Addendum Report

Beaver-Henrietta 138 kV Transmission Line Project

Lorain County, Ohio

Prepared for



September 2022

Jacobs

Jacobs Engineering Group Inc.
2 Crowne Point Court
Suite 100
Cincinnati, OH 45241

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Appendices

A	USACE Wetland Determination Field Datasheets
B	OEPA ORAM Datasheets

Acronyms and Abbreviations

ATSI	American Transmission Systems Incorporated
ESC	Environmental Survey Corridor
°F	Fahrenheit
GPS	Global Positioning System (GPS)
HHEI	Headwater Habitat Evaluation Index
HUC	Hydrologic Unit Code
Jacobs	Jacobs Engineering Group Inc.
kV	Kilovolt
NHD	National Hydrography Dataset
NRCS	Natural Resource Conservation Service
NWI	National Wetland Inventory
OEPA	Ohio Environmental Protection Agency
OHWM	Ordinary High-Water Mark
ORAM	Ohio Rapid Assessment MethodCWO
PEM	Palustrine emergent
Project	Beaver-Henrietta 138 kV Transmission Line Project
QHEI	Qualitative Habitat Evaluation Index
ROW	Right-of-way
TNW	Traditionally navigable water
USACE	United States Army Corps of Engineers
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey

1 Introduction

This Wetland and Waterbody Delineation Addendum Report (Addendum Report) summarizes the results of a follow up wetland and waterbody delineation survey conducted in October 2021 by Jacobs Engineering Group Inc. (Jacobs), for American Transmission Services Incorporated (ATSI), a FirstEnergy Services Company on the proposed Beaver-Henrietta 138 kV Transmission Line (Project). The Project is located southeast of Vermilion, Ohio as shown on the attached Overview Map (Figure 1).

This report is an addendum to the previously submitted *Wetland and Waterbody Delineation Report - Beaver-Henrietta 138 kV Transmission Line Project – July 2020* (collectively referred to as the July 2020 Report). Since the completion of the July 2020 Report, the Project has expanded to include construction areas and access roads located outside of the previously surveyed corridors. This Addendum Report includes the supplemental delineation which assessed an environmental survey corridor (Addendum ESC) consisting of access roads, pull pads, and adjusted alignment areas located outside of the previously surveyed corridors. Previously identified features, data forms, photographs, and supporting information of the former surveys of the Project are contained within the July 2020 Report and are not discussed in this addendum report. The results of the supplemental delineation are discussed herein.

2 Background Information

This section describes the Addendum ESC and methodology used during the wetland and waterbody delineation field surveys.

2.1 Project Area

Henrietta Section

The Henrietta section of the Project is in Lorain County, Ohio. It begins just south of North Ridge Road (41.3907 latitude, - 82.2685 longitude). The preferred route extends south and then turns east, and the alternate route extends east and then turns south, both ending just south of Rice Road (41.3870 latitude, -82.2648 longitude) as shown in Figure 1.1.

Review of the USGS 7.5-minute topographic maps indicates that the ESC is within the Vermilion East USGS 7.5-minute topographic quadrangle; Quarry Creek drains the ESC. Topographic relief is generally flat, ranging between 730 and 780 feet above sea level throughout the ESC (Figure 1.1).

Land use and natural communities observed within the ESC include agricultural land, old field, upland scrub shrub, upland woodlot, residential, existing roadway, and wetland, in addition to Quarry Creek.

2.1.1 Annual Precipitation

Recent rainfall data for Wellington, Ohio were reviewed prior to completing the environmental survey to determine if climatic conditions were normal at the time of the survey. Wellington, Ohio was the nearest weather station with both historical and recent precipitation records. Rainfall recorded in Wellington, Ohio was approximately normal prior and during to the survey conducted October 2021 (Table 2-1; USDA, 2019), suggesting that climatic conditions were as expected for the region and time of year. This was taken into consideration during the delineation.

TABLE 2-1: Recent Precipitation Data
Beaver-Henrietta 138kV Transmission Line Project (Addendum)

Precipitation Data	September 2021	October 2021
Wellington Monthly Sum ^{1, 3}	3.06	3.49
Wellington Normal Precipitation ^{2, 3}	2.10-3.88	1.77-2.86
Monthly climatic condition	Average	Above Average

¹Monthly weather summary from weather station Wellington 5.5 SW, 2019-2020 (Wellington, OH)

²USDA WETS Station Climate Data 1971-2000 (Fort Wayne, IN (USDA 2000)

³Displayed in inches

2.1.2 Drainage Basins

The Project spans the Black-Rocky (04110001) 8-digit Hydrologic Unit Code (HUC), and the ESC is within one 12-digit HUC, as outlined in Table 2-2 (USGS, 2020).

**TABLE 2-2: 12-Digit Hydrologic Unit Codes Crossed by the Project
Beaver-Henrietta 138 kV Transmission Line Project (Addendum)**

HUC 12-Digit Code	HUC 12-Digit Name
41100010703	Quarry Creek-Frontal Lake Erie

Source: USGS 2020

2.1.3 Traditional Navigable Waters

The U.S. Environmental Protection Agency (EPA) and USACE assert jurisdiction over “all waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce including all waters which are subject to the ebb and flow of the tide” (USACE and EPA, 2008). These waters are considered traditionally navigable waters (TNW). No TNW directly crosses the ESC, yet many of the streams will be considered tributaries to Lake Erie (USACE, 2009).

3 Wetland and Waterbody Delineation

3.1 Desktop Review

Prior to conducting the field investigations, Jacobs reviewed the following resources to identify the potential for wetlands within the Addendum ESC:

- Aerial photo-based maps (ArcGIS Online, World Imagery Map, 2020a)
- Topographic maps (ArcGIS Online, USA Topo Maps, 2020b)
- NRCS Web Soil Survey (USDA-NRCS, 2021)
- NWI shapefile (USFWS, 2020)
- National Hydrography Dataset (NHD) (USGS, 2020)

According to the NRCS soil survey of Lorain County (USDA-NRCS, 2021), the Addendum ESC consists of 13 soil map units (Table 3-1, follows text). Of these, nine soil map units are listed as non-hydric, one unit is listed as predominately non-hydric, and three units are listed as hydric (Figures 2.1 to 2.4).

NWI data were obtained from the USFWS for review of potential wetlands that may occur within the ESC. The NWI data (USFWS, 2020) identify the type of wetland or open water present at a location using the USFWS classification system (Cowardin et al., 1979). The NWI data indicated that there is one mapped riverine wetland (R4SBC) feature located along Quarry Creek (Figures 2.3 and 2.4; USFWS, 2019). The presence of an NWI feature is not a definitive indicator that a wetland or waterbody is present. The information on NWI maps is obtained largely from aerial interpretation, may be outdated, and is only sporadically field-checked.

As shown on the FEMA floodplain panels (Figures 2.1 to 2.4), the floodplain of two waterways (Quarry Creek and one unnamed tributary of Wellington Creek) is within the Addendum ESC (FEMA, 2019).

3.2 Field Survey Methodology

A comprehensive methodology of the field surveys and data reviews completed for this report are included within the July 2020 Report. Therefore, a brief summary of the delineation and agency coordination methodology has been provided below.

The boundaries of each wetland and waterbody within the ESC were delineated and recorded using handheld global positioning system (GPS) units. For waterbodies identified within the Project area, the ordinary high-water mark (OHWM) was used as the jurisdictional boundary. Wetland data were recorded on USACE Northcentral and Northeast Regional Supplement wetland determination data forms; stream data were recorded on QHEI forms and HHEI forms. All other land use, habitat, and other supplemental data were collected in a field notebook during the environmental survey.

4 Field Survey Results

Jacobs biologists surveyed the Project in October 2021 by walking the Addendum ESC and evaluating for wetlands and other waters of the U.S. Select features previously delineated within the Addendum ESC were field verified during the October 2021 survey. A total of one new wetland was delineated within the Addendum ESC. In addition, four wetlands and one stream were extended from the original 2020 survey corridor into the Addendum ESC. These features are displayed and identified on the Wetlands and Waterbodies Delineation Map (Figures 3.1 to 3.4). Detailed information for wetland and waterbody features within the Addendum ESC is provided in Tables 4-1 (follows text) and 4-2 (follows text), respectively.

4.1 Wetlands

One palustrine emergent (PEM) wetland, totaling approximately 0.2 acre, was delineated within the Addendum ESC. This wetland is depicted in Figure 3.1 and the reported wetland acreage only corresponds to areas delineated within the Addendum ESC, as a portion of this wetland extends beyond the survey boundary

Completed USACE wetland and upland determination forms are provided in Appendix A; representative photographs were taken of the wetland during the field survey and are appended to the USACE wetland and upland form. Detailed information for the delineated wetland within the Addendum ESC is provided in Table 4-1 (follows text) and a summary of the delineated wetland is provided in Table 4-3.

4.1.1 Wetland ORAM Results

One Category 1 wetland was identified within the Addendum ESC. No additional Category 2 or 3 wetlands were identified. A completed ORAM form is included in Appendix B. Generally, Category 1 wetlands score low due to factors such as small size, intensity of surrounding land use, habitat alteration, poor habitat development, lack of horizontal interspersion, presence of invasive species, and lack of microtopography.

TABLE 4-3: Wetland Summary Table
Beaver-Henrietta 138 kV Transmission Line Project (Addendum)

Wetland Type	ORAM Category			Number of Wetlands	Acreage within Addendum ESC
	Category 1	Category 2	Category 3		
PEM	1	0	0	1	0.2

4.1.2 Wetland Extensions

Four wetlands originally delineated within the original 2020 survey corridor were extended into the Addendum ESC. A summary of the wetlands is shown in Table 4-4 and detailed information is included in Table 4-1 (follows text). Forms and representative photographs of these wetlands are provided in the July 2020 Reports.

Table 4-4. Wetland Extensions Summary
Beaver-Henrietta 138 kV Transmission Line Project (Addendum)

Wetland ID	Cowardin	ORAM Score, Category	Extension Area (acres) ^{1,2}	Original Area (acres) ^{1,2}	Updated Total Area (acres) ^{1,2}
Wetland BH-01e	PEM	34, Category 2	0.30	0.56	0.86
Wetland BH-03e	PEM	46.5, Category 2	0.10	0.46	0.55
Wetland BH-04	PEM	25, Category 1	0.01	0.06	0.07
Wetland BH-05	PEM	24, Category 1	<0.01	0.02	0.02
Total : 4			0.41	1.09	1.51

¹This acreage only corresponds to the area delineated within the environmental survey corridor.

²Numbers in this table have been rounded for presentation purposes. Thus, the totals may not reflect the exact sum of the addends in all cases.

4.2 Streams

No new streams were identified within the Addendum ESC.

One stream originally delineated within the original 2020 survey corridor was extended into the Addendum ESC. A summary of the updated stream length is shown in Table 4-5 and detailed information is included in Table 4-2 (follows text). Forms and representative photographs of these streams are provided in the July 2020 report.

Table 4-5. Stream Extensions Summary
Beaver-Henrietta 138 kV Transmission Line Project (Addendum)

Stream ID	Flow Regime	Category/Rating/OAC Designation	Extension Length (feet) ^{1,2}	Original Length (feet) ^{1,2}	Updated Total Length (feet) ^{1,2}
Stream BH-01	Intermittent	Good Warmwater	59	1,426	1,485

¹This length only corresponds to the length delineated within the environmental survey corridor.

²Numbers in this table have been rounded for presentation purposes. Thus, the totals may not reflect the exact sum of the addends in all cases.

OAC = Ohio Administrative Code

4.3 Ponds/Open Water

No ponds or open water features were identified within the Addendum ESC.

5 Conclusion

Jacobs conducted an environmental survey of the Addendum ESC of the Beaver-Henrietta 138 kV Transmission Line Project in October 2021. Since the completion of the July 2020 Reports, the Project has expanded to include construction areas located outside of the previously surveyed corridors.

One new PEM wetland, totalling approximately 0.2-acre, was delineated within the Addendum ESC. This delineated wetland was identified as a Category 1 wetland. No Category 2 or Category 3 wetlands were identified. In addition, four wetlands were extended from the original 2020 survey corridor into the Addendum ESC.

No new streams were identified within the Addendum ESC. One stream was extended from the original 2020 survey corridor into the Addendum ESC.

The results of the environmental resource survey described in this Report conducted by Jacobs are limited to the what was identified within the ESC, and depicted in Figure 3.1 to 3.4. The information contained in this wetland delineation report is for a study area that may be much larger than the actual Project limits-of-disturbance for construction; therefore, lengths and acreages listed in this Report may likely not constitute the actual impacts of the Project at the time of construction. If permits are determined to be necessary, actual impacted lengths and/or acreages will be submitted in subsequent permit applications.

The wetland and waterbodies field survey results presented within this Report apply to the site conditions at the time of our assessment. Changes within the environmental survey corridor that may occur with time due to natural processes or human impacts at the project site or on adjacent properties, could invalidate the findings of this Report, especially if Jacobs is unaware and has not had the opportunity to revisit the Project survey corridor. Additionally, changes in applicable standards and regulations may also occur due to legislation or the expansion of knowledge over time. Therefore, the findings of this wetland and waterbodies delineation report may be invalidated, wholly or in part, by changes that are beyond the control of Jacobs.

6 References

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- U.S. Army Corps of Engineers (USACE). 1987. Technical Report Y-87-1, *Corps of Engineers' Wetlands Delineation Manual*.
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- U.S. Army Corps of Engineers (USACE). 2011. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (Version 2.0)*, ed. J. S. Wakeley, R. W. Lichvar, C. V. Noble, and J. F. Berkowitz. ERDC/EL TR-12-1. Vicksburg, MS: U.S. Army Engineer Research and Development Center.
- U.S. Department of Agriculture (USDA). 2021. USDA Field Office Climate Data: OBERLIN, OH WETS Station, 1971-2000. <http://agacis.rcc-acis.org/?fips=39093>. Accessed September 2022.
- U.S. Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS). 2022. Soil Survey Geographic (SSURGO) database for Lorain County, Ohio. <http://SoilDataMart.nrcs.usda.gov/>. Accessed September 2022.
- U.S. Fish and Wildlife Service (USFWS). 2020. National Wetlands Inventory. <http://www.fws.gov/wetlands/Wetlands-Mapper.html>. Accessed September 2022.
- U.S. Geological Survey (USGS). 2020. National Hydrography Dataset, Ohio. <http://nhd.usgs.gov/data.html>. Accessed September 2022.

Tables

TABLE 3-1: Mapped Soil Units

Beaver-Henrietta 138 kV Transmission Line Project (Addendum)

Soil type	Soil type description	Hydric status	Acres (ac) within ESC
ClB	Chili loam, 2 to 6 percent slopes	Nonhydric	0.08
CoB	Conotton gravelly loam, 2 to 6 percent slopes	Nonhydric	0.45
CoC	Conotton gravelly loam, 6 to 12 percent slopes	Nonhydric	0.14
DkB	Dekalb very channery loam, 1 to 6 percent slopes	Nonhydric	0.24
HsA	Haskins loam, 0 to 2 percent slopes	Predominantly Nonhydric	0.33
Hy	Holly silt loam	Hydric	0.19
JsA	Jimtown sandy loam, 0 to 2 percent slopes	Nonhydric	0.34
JtA	Jimtown loam, 0 to 2 percent slopes	Nonhydric	0.70
Mo	Mermill loam	Hydric	0.23
MtA	Mitiwanga silt loam, 0 to 2 percent slopes	Nonhydric	0.99
MtB	Mitiwanga silt loam, 2 to 6 percent slopes	Nonhydric	0.22
Om	Olmsted fine sandy loam	Hydric	0.78
TyB	Tyner loamy sand, 1 to 6 percent slopes	Nonhydric	0.11

Table 4-1: Detailed Delineated Wetland Table
Beaver-Henrietta 138 kV Transmission Line Project (Addendum)

Wetland ID	Location		Wetland Type ¹	Area (ac) within Addendum ESC	ORAM Score, Category
	Latitude	Longitude			
Extended Wetlands					
Wetland BH-01e	41.39134	-82.268591	PEM	0.30	34, Category 2
Wetland BH-03e	41.386867	-82.268728	PEM	0.10	46.5, Category 2
Wetland BH-04	41.383858	-82.269293	PEM	0.01	25, Category 1
Wetland BH-05	41.383615	-82.269349	PEM	<0.01	24, Category 1
Newly Delineated Wetlands					
Wetland BH-07	41.393176	-82.264816	PEM	0.02	26.5, Category 1
Wetland Extension Total				0.41	
Newly Delineated Wetland Total				0.02	

¹Cowardin et al. 1979.

Cells shaded/* = Extension of previously delineated wetland; delineated acreage reflects the extension area only.
ID = identification

TABLE 4-2: Detailed Delineated Stream Table

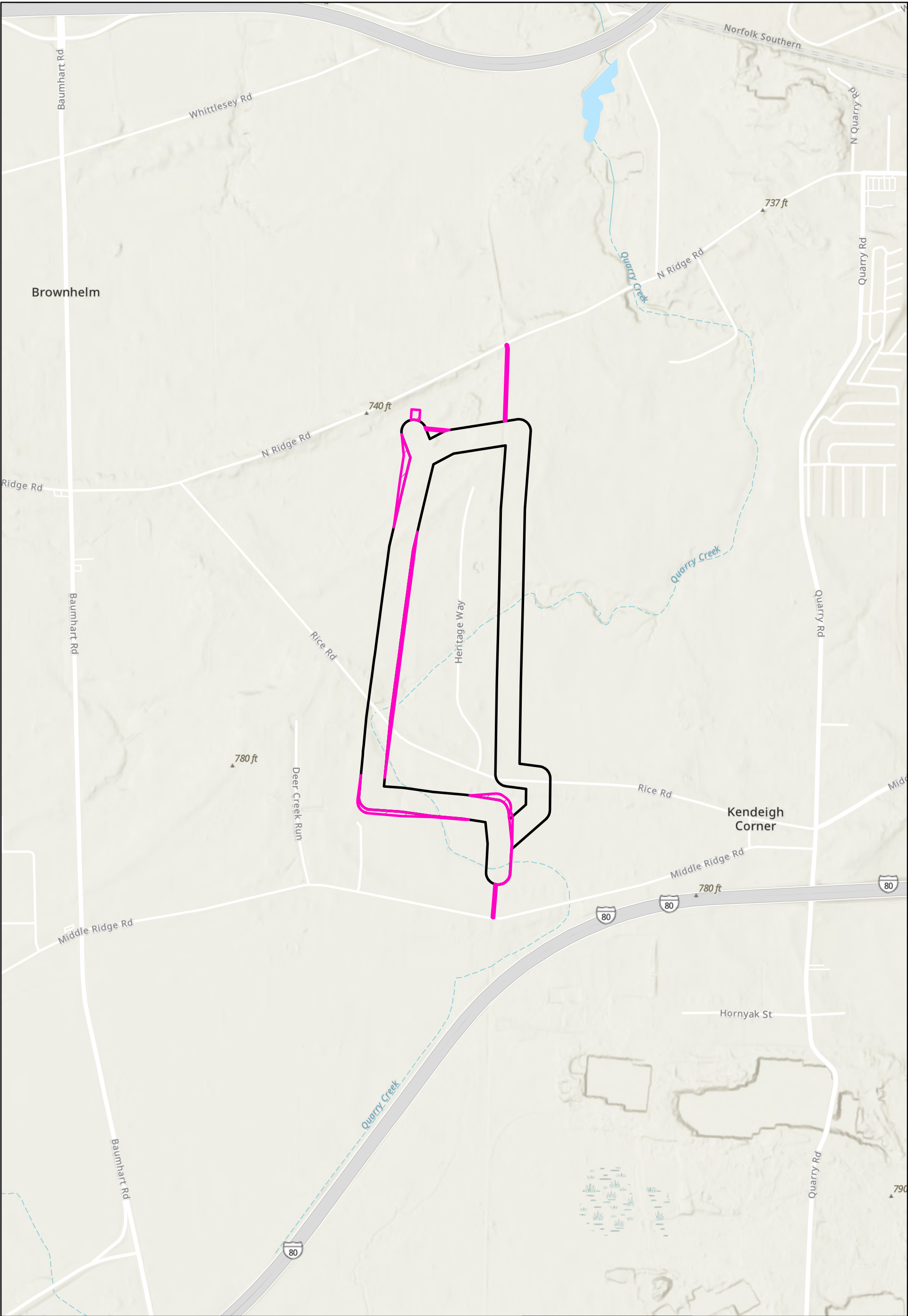
Beaver-Henrietta 138 kV Transmission Line Project (Addendum)

Stream ID	Location		Flow Regime ¹	Length (ft)	Average OHWM Width (ft)	Average TOB Width (ft)	HHEI/QHEI Score	Category/ Designation
	Latitude	Longitude		within Addedndum ESA				
Extended Streams								
Stream BH-01	41.381075	-82.26975	Intermittent	59	7	8.5	66.5	Good Warmwater
Wetland Extension Total				59				

¹Flow regime estimated based on analysis of drainage area, gradient, and observations at the time of survey

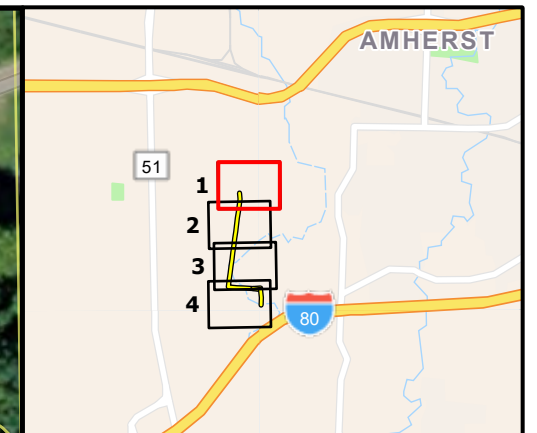
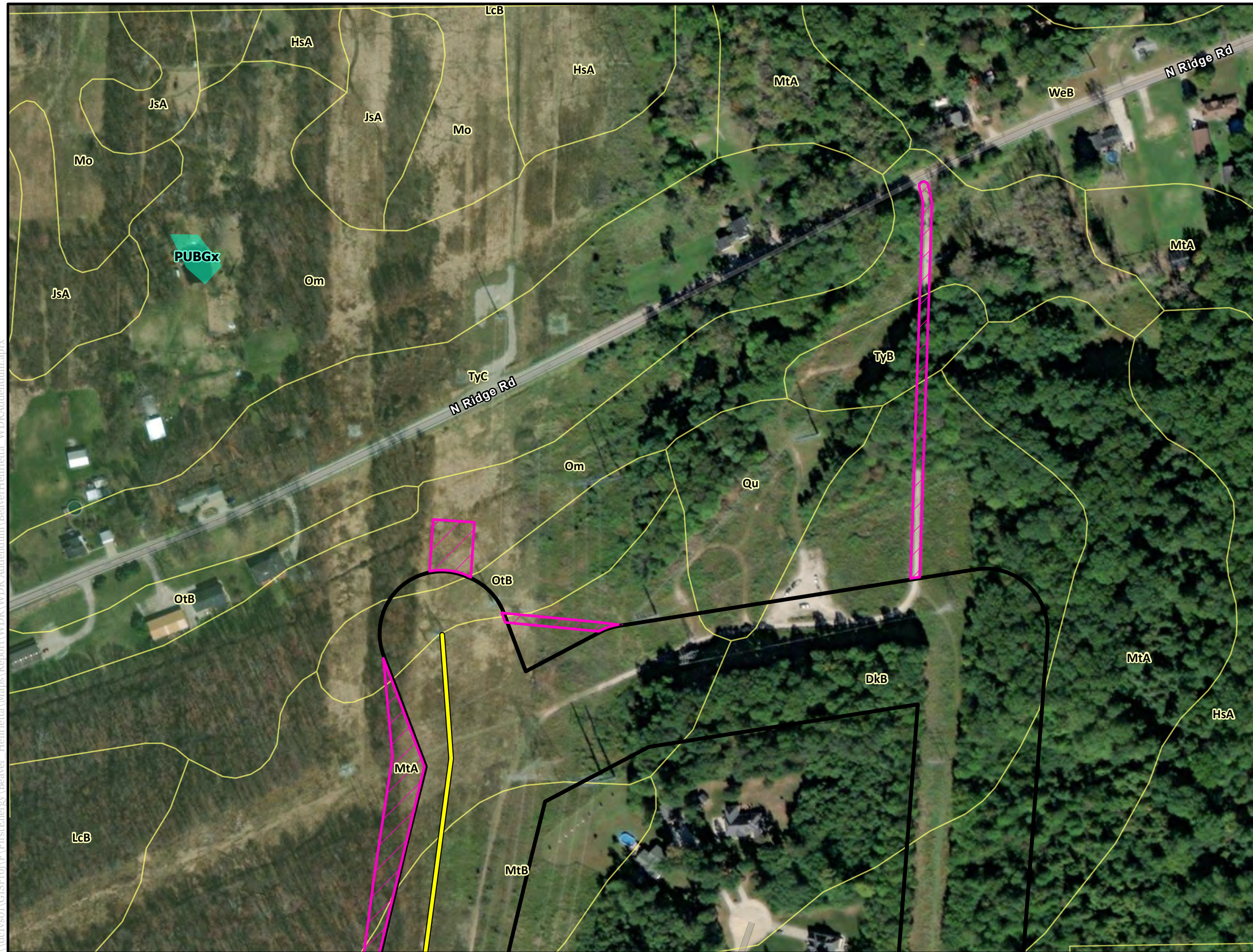
Cells shaded/* = Extension of previously delineated stream; delineated length reflects the extension segment only.

Figures

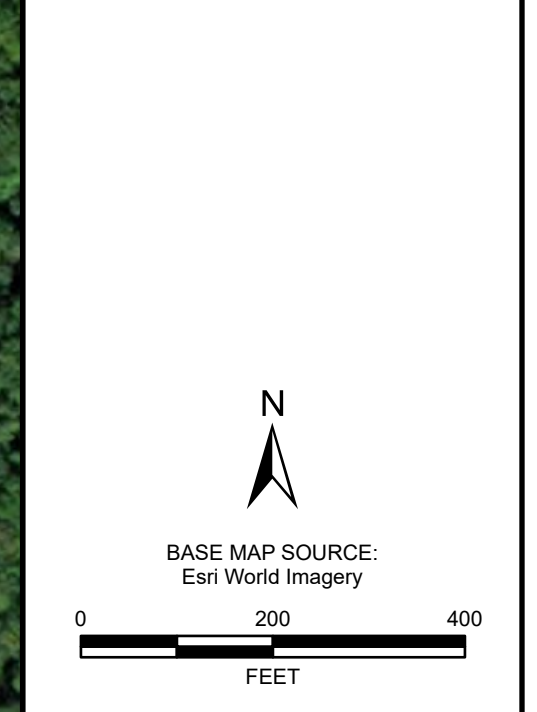


Original Environmental Survey Corridor Survey Addendum Area	Data Sources or Notes: Esri, USGS			Beaver - Henrietta 138kV Transmission Line Project Addendum	
	State Plane Indiana East NAD 1983 (2011)				Figure 1 Overview Map
	September 25, 2022			02505007501,000 Feet	

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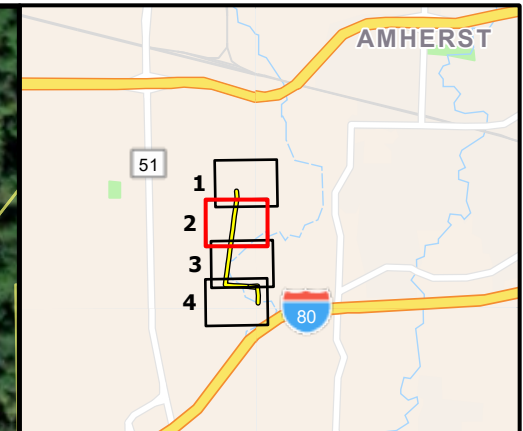
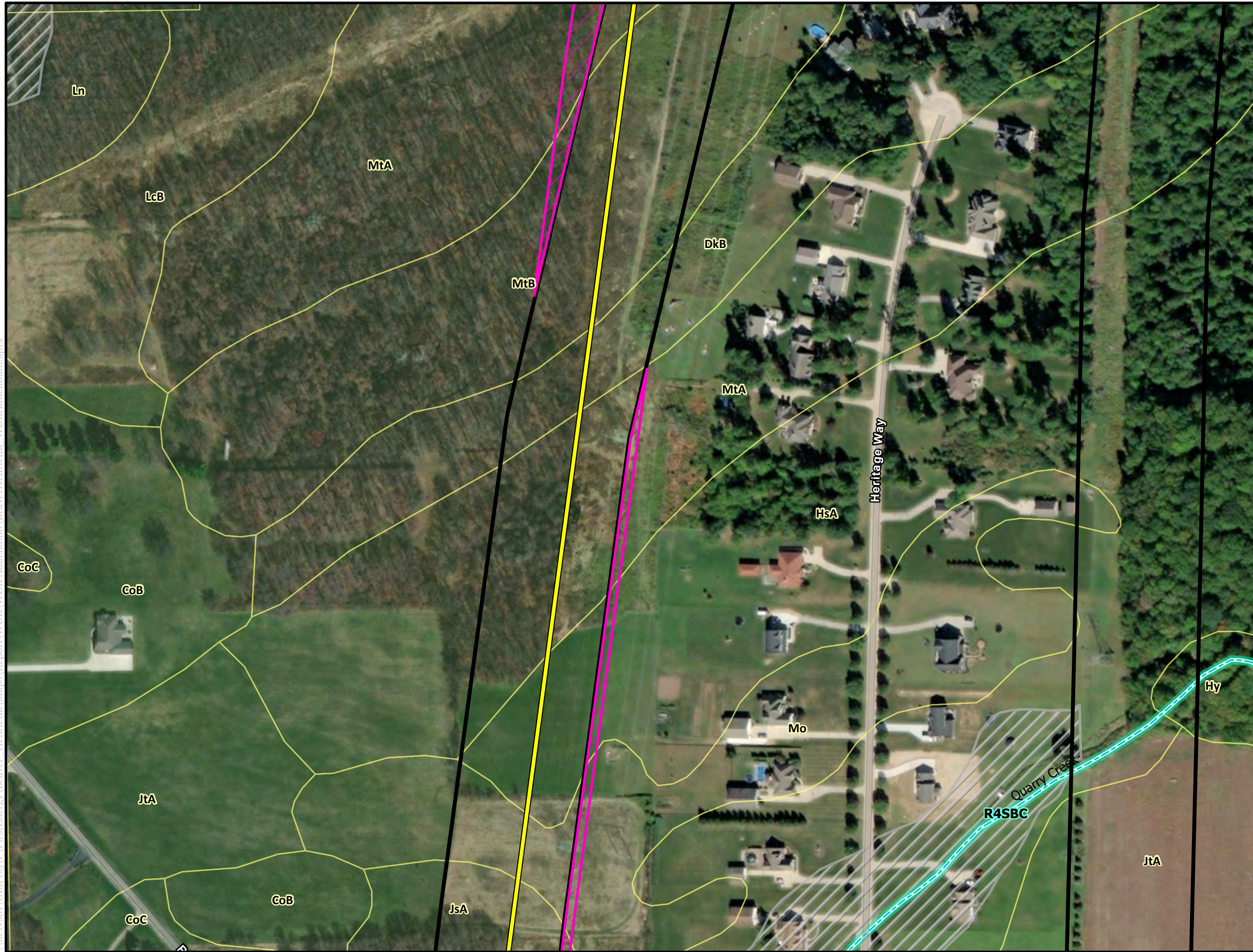


- LEGEND:**
- Beaver-Henrietta 138kV Centerline
 - Addendum Environmental Survey Corridor
 - Original Environmental Survey Corridor
 - Streams (NHD)
 - Wetlands (NWI)
 - USDA Soils
 - FEMA Floodplain



 American Transmission Systems, Inc. a subsidiary of FirstEnergy Group	Beaver-Henrietta 138 kV Transmission Line Project Addendum
Figure 2.1 Soils, NHD, NWI, FEMA Henrietta Section	
9/24/2022	Jacobs

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LEGEND:

- Beaver Henrietta 138kV Centerline
- Addendum Environmental Survey Corridor
- Original Environmental Survey Corridor
- Streams (NHD)
- Wetlands (NWI)
- USDA Soils
- FEMA Floodplain

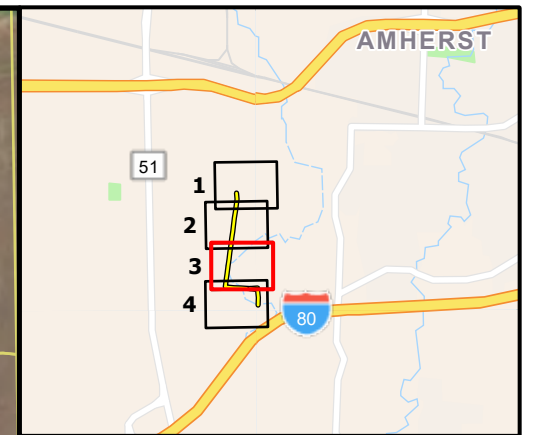
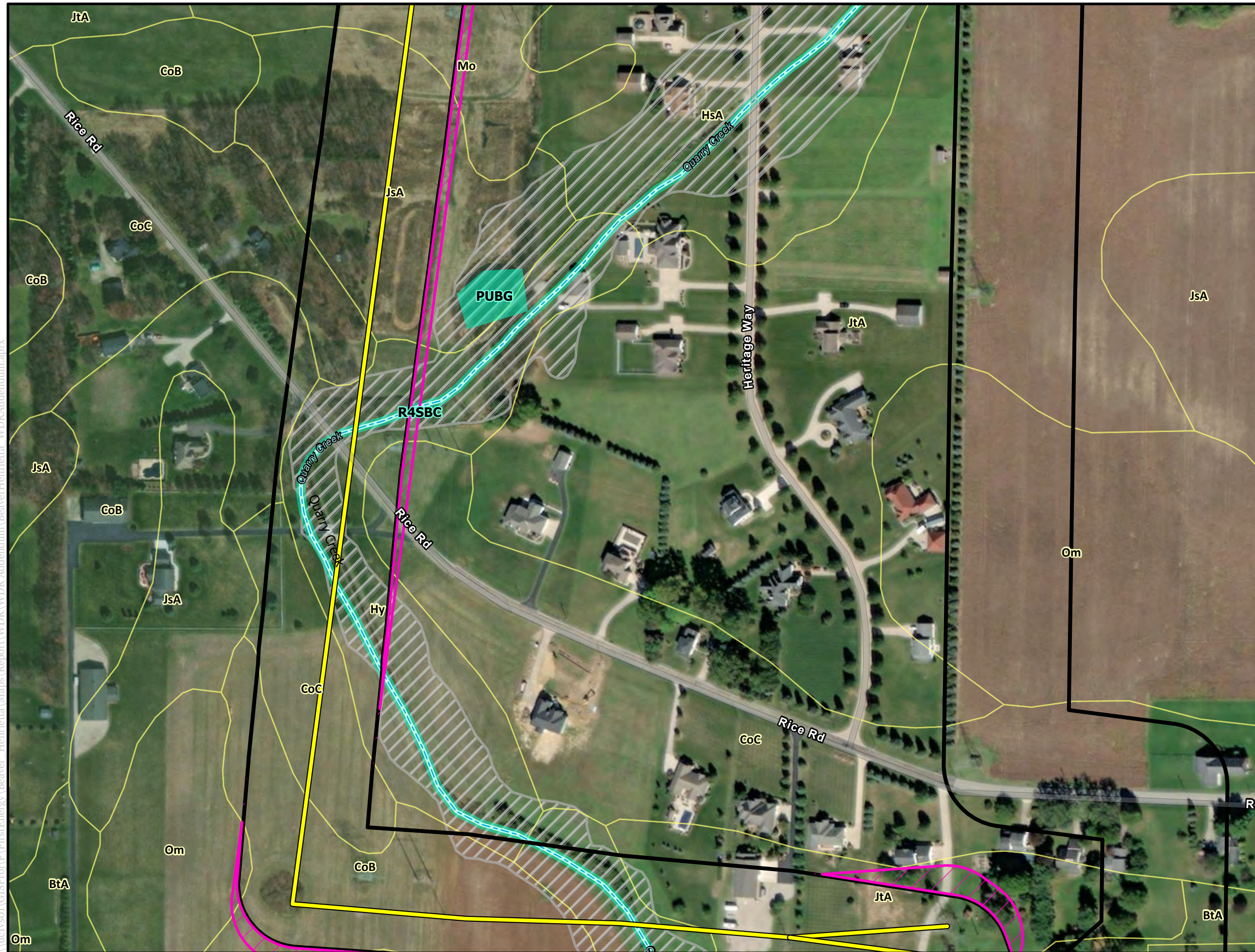
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BASE MAP SOURCE:
Esri World Imagery

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FEET

 American Transmission Systems, Inc. a subsidiary of FirstEnergy Group	Beaver-Henrietta 138 kV Transmission Line Project Addendum
Figure 2.2 Soils, NHD, NWI, FEMA Henrietta Section	
9/24/2022	Jacobs

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LEGEND:

- Beaver Henrietta 138kV Centerline
- Addendum Environmental Survey Corridor
- Original Environmental Survey Corridor
- Streams (NHD)
- Wetlands (NWI)
- USDA Soils
- FEMA Floodplain

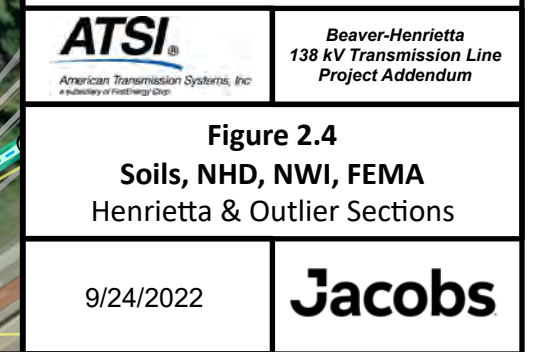
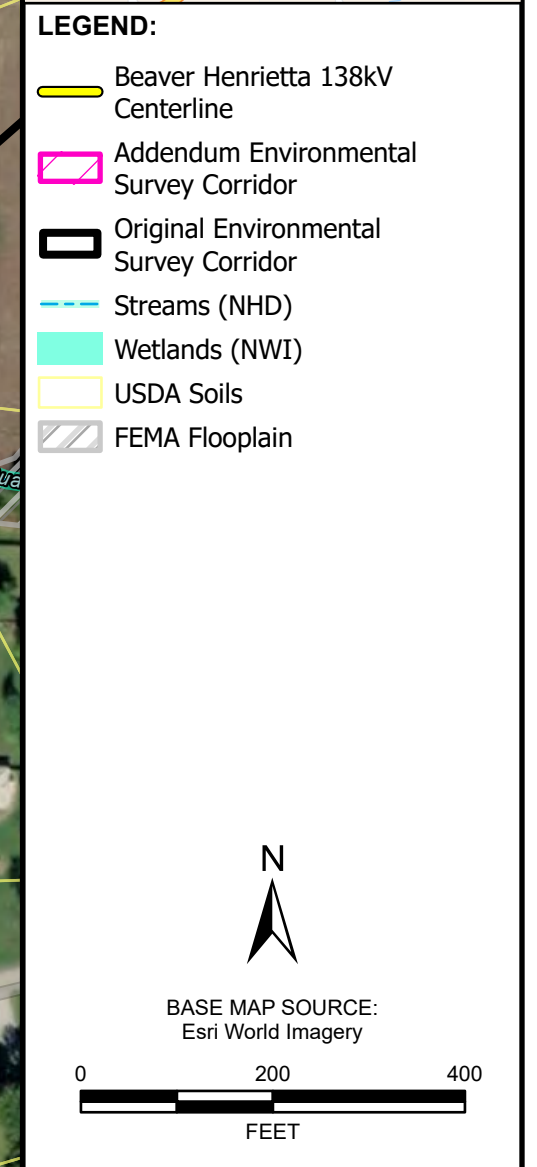
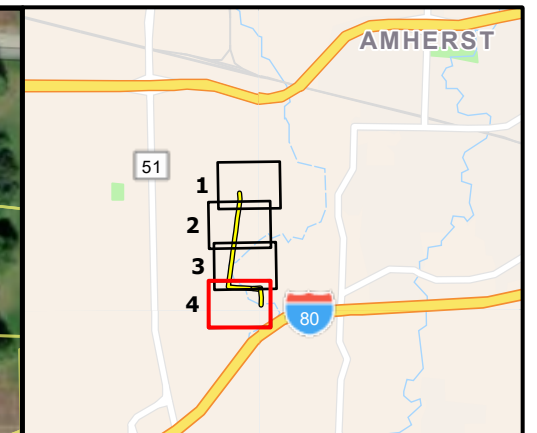
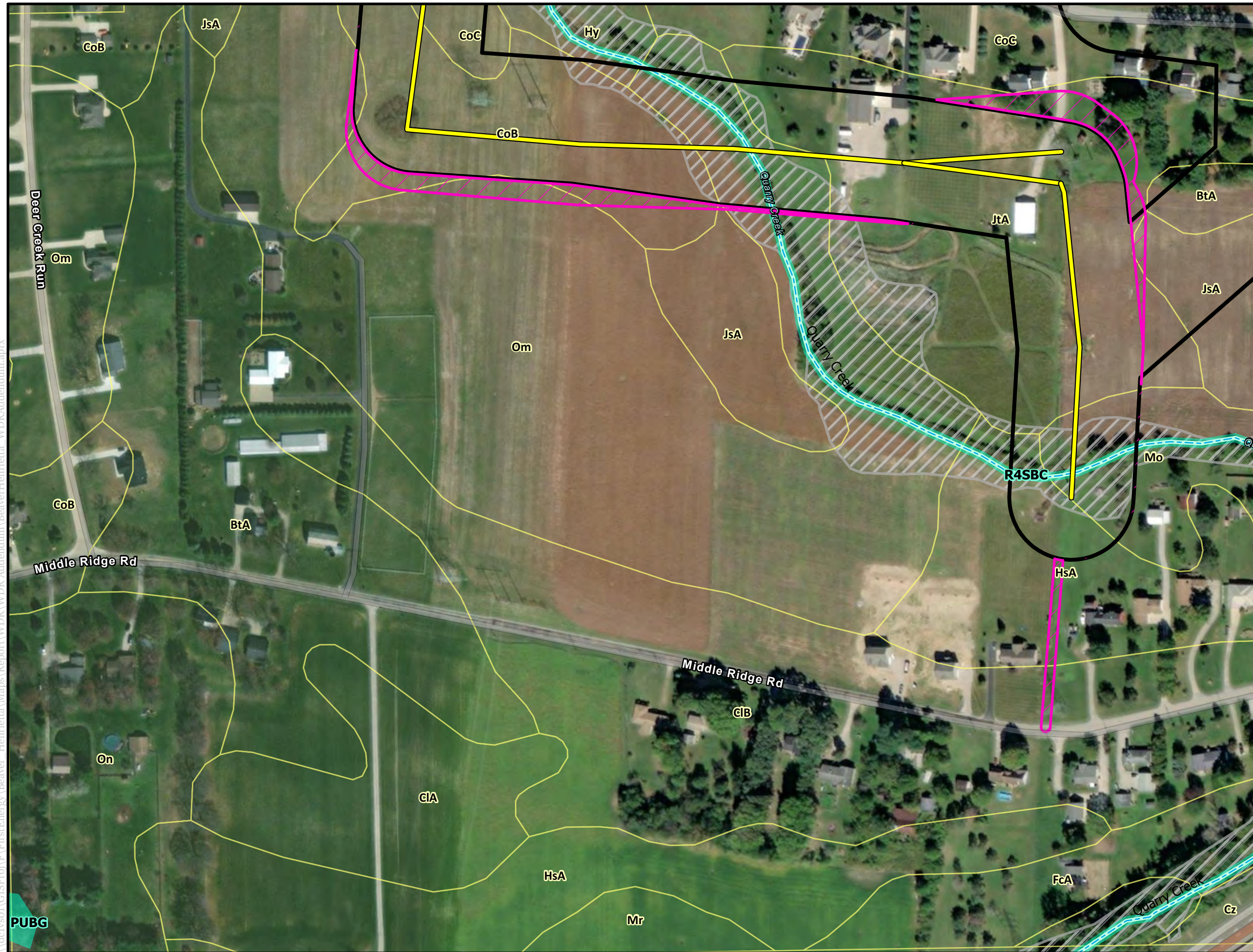
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BASE MAP SOURCE:
Esri World Imagery

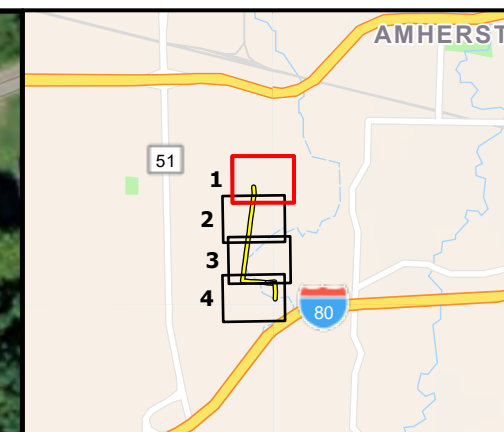
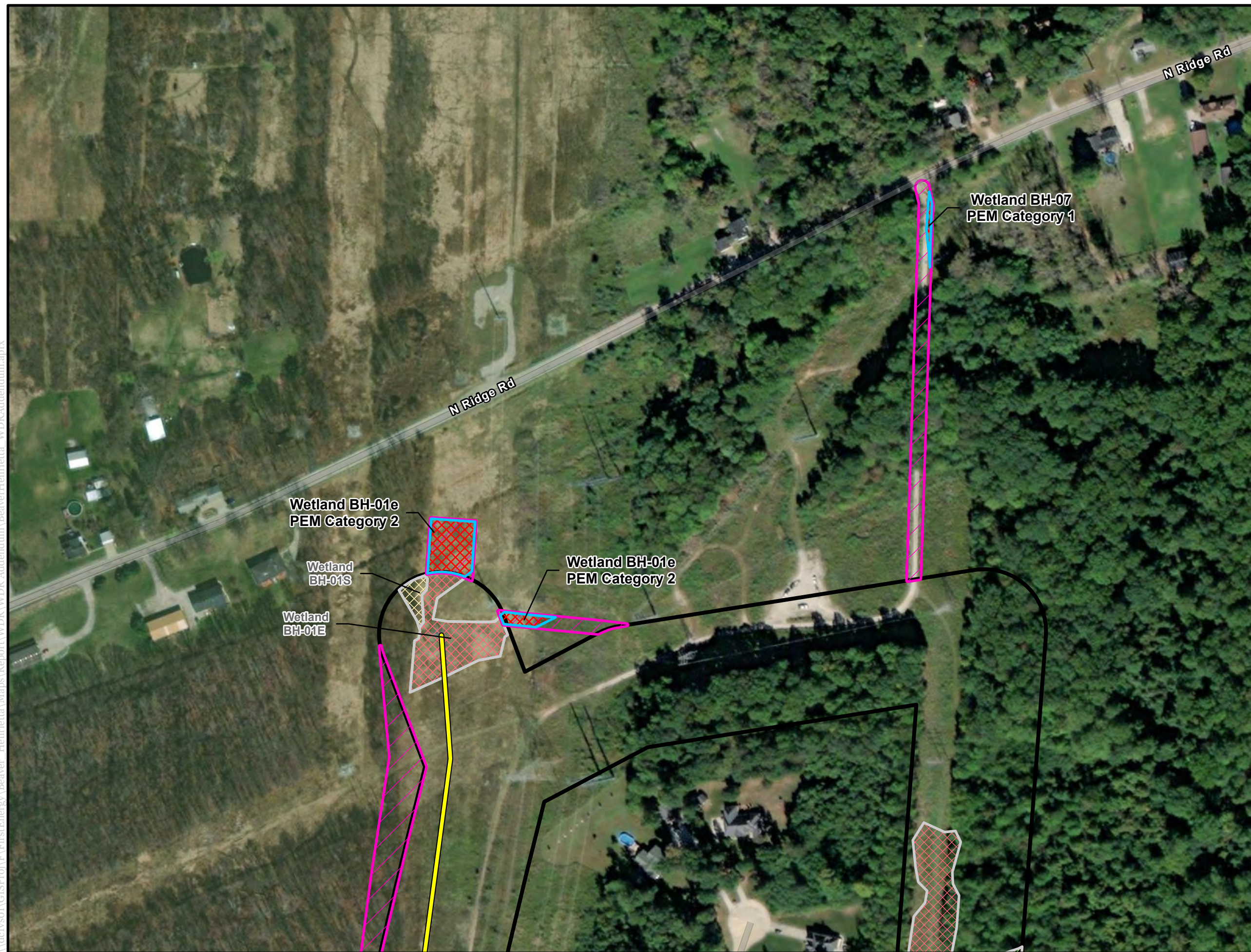
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ATSI American Transmission Systems, Inc. a subsidiary of FirstEnergy Group	Beaver-Henrietta 138 kV Transmission Line Project Addendum
Figure 2.3 Soils, NHD, NWI, FEMA Henrietta Section	
9/24/2022	Jacobs

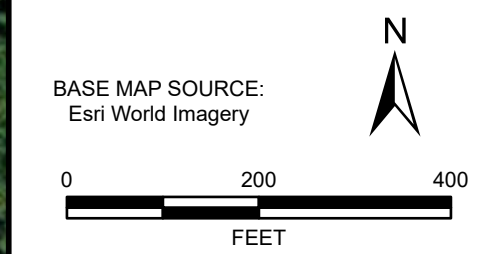
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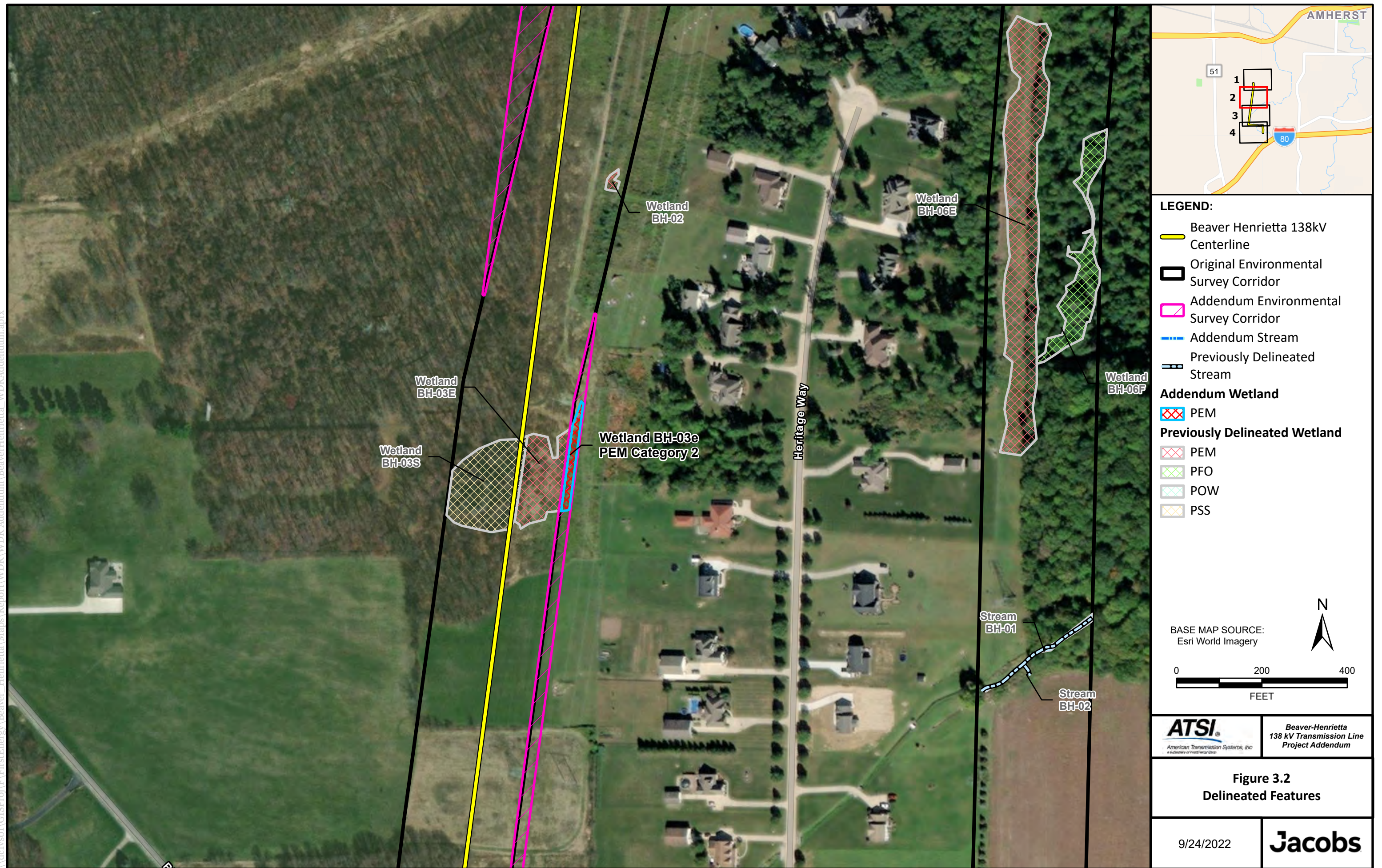


- LEGEND:**
- Beaver Henrietta 138kV Centerline
 - Original Environmental Survey Corridor
 - Addendum Environmental Survey Corridor
 - Addendum Stream
 - Previously Delineated Stream
- Addendum Wetland**
- PEM
- Previously Delineated Wetland**
- PEM
 - PFO
 - POW
 - PSS



 American Transmission Systems, Inc. a subsidiary of FirstEnergy Group	Beaver-Henrietta 138 kV Transmission Line Project Addendum
Figure 3.1 Delineated Features	
9/24/2022	Jacobs

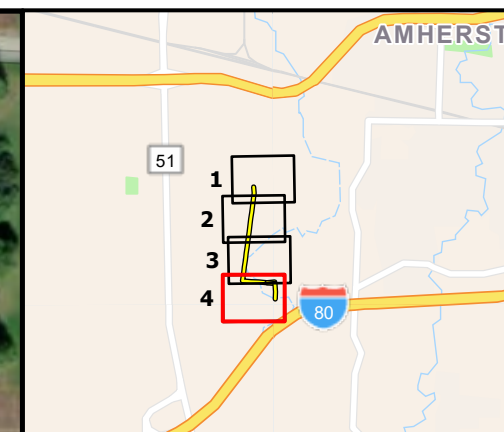
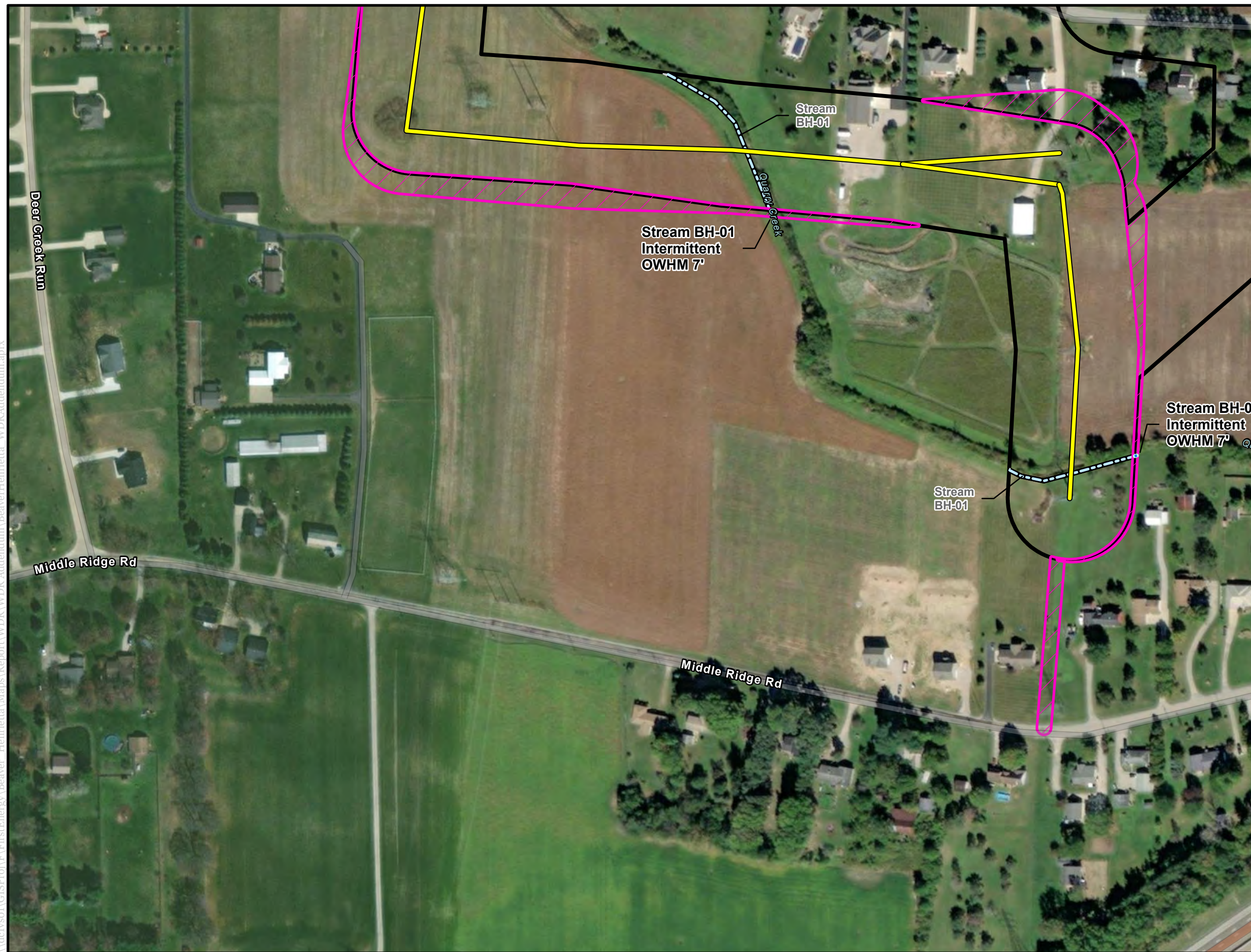
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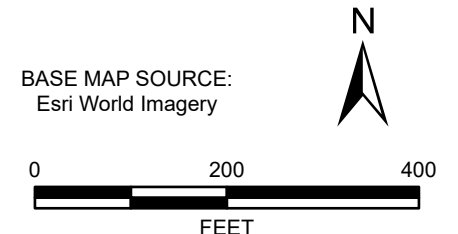
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- LEGEND:**
- Beaver-Henrietta 138kV Centerline
 - Original Environmental Survey Corridor
 - Addendum Environmental Survey Corridor
 - Addendum Stream
 - Previously Delineated Stream
 - Addendum Wetland**
 - PEM
 - Previously Delineated Wetland**
 - PEM
 - PFO
 - POW
 - PSS



 American Transmission Systems, Inc. a subsidiary of FirstEnergy Group	Beaver-Henrietta 138 kV Transmission Line Project Addendum
Figure 3.4 Delineated Features	
9/24/2022	Jacobs

Appendix A
USACE Wetland Determination Field Datasheets

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Beaver Wellington/Henrietta City/County: Lorain Co Sampling Date: 10/26/2021
 Applicant/Owner: First Energy State: OH Sampling Point: Wetland BH-07
 Investigator(s): BCR Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Toeslope Local relief (concave, convex, none): Concave Slope (%): 5
 Subregion (LRR or MLRA): LRR R, MLRA 139 Lat: 41.393027 Long: -82.264955 Datum: WGS 1984
 Soil Map Unit Name: Om: Olmsted fine sandy loam NWI classification: N/A
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u> If yes, optional Wetland Site ID: <u>Wetland BH-07</u>
Hydric Soil Present? Yes <u>X</u> No <u> </u>	
Wetland Hydrology Present? Yes <u>X</u> No <u> </u>	
Remarks: (Explain alternative procedures here or in a separate report.) Wetland BH-07 delineated along access road south of N. Ridge Road	

HYDROLOGY

Wetland Hydrology Indicators:		<u>Secondary Indicators (minimum of two required)</u>	
Primary Indicators (minimum of one is required; check all that apply)			
<u>X</u> Surface Water (A1)	<u> </u> Water-Stained Leaves (B9)	<u>X</u> Surface Soil Cracks (B6)	
<u> </u> High Water Table (A2)	<u> </u> Aquatic Fauna (B13)	<u>X</u> Drainage Patterns (B10)	
<u>X</u> Saturation (A3)	<u> </u> Marl Deposits (B15)	<u> </u> Moss Trim Lines (B16)	
<u> </u> Water Marks (B1)	<u> </u> Hydrogen Sulfide Odor (C1)	<u> </u> Dry-Season Water Table (C2)	
<u> </u> Sediment Deposits (B2)	<u> </u> Oxidized Rhizospheres on Living Roots (C3)	<u> </u> Crayfish Burrows (C8)	
<u> </u> Drift Deposits (B3)	<u> </u> Presence of Reduced Iron (C4)	<u> </u> Saturation Visible on Aerial Imagery (C9)	
<u> </u> Algal Mat or Crust (B4)	<u> </u> Recent Iron Reduction in Tilled Soils (C6)	<u> </u> Stunted or Stressed Plants (D1)	
<u> </u> Iron Deposits (B5)	<u> </u> Thin Muck Surface (C7)	<u>X</u> Geomorphic Position (D2)	
<u> </u> Inundation Visible on Aerial Imagery (B7)	<u> </u> Other (Explain in Remarks)	<u> </u> Shallow Aquitard (D3)	
<u> </u> Sparsely Vegetated Concave Surface (B8)		<u> </u> Microtopographic Relief (D4)	
		<u>X</u> FAC-Neutral Test (D5)	
Field Observations:			
Surface Water Present? Yes <u>X</u> No <u> </u>	Depth (inches): 10	Wetland Hydrology Present? Yes <u>X</u> No <u> </u>	
Water Table Present? Yes <u> </u> No <u>X</u>	Depth (inches):		
Saturation Present? Yes <u>X</u> No <u> </u>	Depth (inches): 0		
(includes capillary fringe)			
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

VEGETATION – Use scientific names of plants.Sampling Point: Wetland BH

<u>Tree Stratum</u> (Plot size: <u>30</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. <u>Salix nigra</u>	<u>5</u>	<u>Yes</u>	<u>OBL</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
<u>5</u> = Total Cover																		
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15</u>)				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <th style="text-align: left;">Total % Cover of:</th> <th style="text-align: left;">Multiply by:</th> </tr> <tr> <td>OBL species <u>140</u></td> <td>x 1 = <u>140</u></td> </tr> <tr> <td>FACW species <u>25</u></td> <td>x 2 = <u>50</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>165</u> (A)</td> <td><u>190</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>1.15</u>	Total % Cover of:	Multiply by:	OBL species <u>140</u>	x 1 = <u>140</u>	FACW species <u>25</u>	x 2 = <u>50</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>165</u> (A)	<u>190</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>140</u>	x 1 = <u>140</u>																	
FACW species <u>25</u>	x 2 = <u>50</u>																	
FAC species <u>0</u>	x 3 = <u>0</u>																	
FACU species <u>0</u>	x 4 = <u>0</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>165</u> (A)	<u>190</u> (B)																	
1. <u>Cephalanthus occidentalis</u>	<u>5</u>	<u>Yes</u>	<u>OBL</u>															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
<u>5</u> = Total Cover																		
<u>Herb Stratum</u> (Plot size: <u>5</u>)				Hydrophytic Vegetation Indicators: <u>X</u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
1. <u>Carex lurida</u>	<u>65</u>	<u>Yes</u>	<u>OBL</u>															
2. <u>Scirpus cyperinus</u>	<u>20</u>	<u>Yes</u>	<u>OBL</u>															
3. <u>Juncus effusus</u>	<u>15</u>	<u>No</u>	<u>OBL</u>															
4. <u>Impatiens capensis</u>	<u>25</u>	<u>No</u>	<u>FACW</u>															
5. <u>Persicaria sagittata</u>	<u>30</u>	<u>No</u>	<u>OBL</u>															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
12. _____	_____	_____	_____															
<u>155</u> = Total Cover																		
<u>Woody Vine Stratum</u> (Plot size: <u>30</u>)				Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.														
1. _____		<u>No</u>																
2. _____																		
3. _____																		
4. _____																		
_____ = Total Cover																		
Remarks: (Include photo numbers here or on a separate sheet.)				Hydrophytic Vegetation Present? Yes <u>X</u> No														

[illegible]



Soil



N



S



E



W

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Beaver Wellington/Henrietta City/County: Lorain Co Sampling Date: 10/26/2021
 Applicant/Owner: FirstEnergy State: OH Sampling Point: Upland BH-07
 Investigator(s): BCR Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Shoulder slope Local relief (concave, convex, none): Convex Slope (%): 8
 Subregion (LRR or MLRA): LRR R, MLRA 139 Lat: 41.393102 Long: -82.264911 Datum: WGS 1984
 Soil Map Unit Name: Om: Olmsted fine sandy loam NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <u>x</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>x</u> If yes, optional Wetland Site ID: <u>Upland BH-07</u>
Hydric Soil Present? Yes _____ No <u>X</u>	
Wetland Hydrology Present? Yes _____ No <u>X</u>	
Remarks: (Explain alternative procedures here or in a separate report.) Upland data point taken along the edge of a gravel roadway and upslope of documented wetland area.	

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)
☐ Surface Water (A1) ☐ High Water Table (A2) ☐ Saturation (A3) ☐ Water Marks (B1) ☐ Sediment Deposits (B2) ☐ Drift Deposits (B3) ☐ Algal Mat or Crust (B4) ☐ Iron Deposits (B5) ☐ Inundation Visible on Aerial Imagery (B7) ☐ Sparsely Vegetated Concave Surface (B8)	☐ Water-Stained Leaves (B9) ☐ Aquatic Fauna (B13) ☐ Marl Deposits (B15) ☐ Hydrogen Sulfide Odor (C1) ☐ Oxidized Rhizospheres on Living Roots (C3) ☐ Presence of Reduced Iron (C4) ☐ Recent Iron Reduction in Tilled Soils (C6) ☐ Thin Muck Surface (C7) ☐ Other (Explain in Remarks)	☐ Surface Soil Cracks (B6) ☐ Drainage Patterns (B10) ☐ Moss Trim Lines (B16) ☐ Dry-Season Water Table (C2) ☐ Crayfish Burrows (C8) ☐ Saturation Visible on Aerial Imagery (C9) ☐ Stunted or Stressed Plants (D1) ☐ Geomorphic Position (D2) ☐ Shallow Aquitard (D3) ☐ Microtopographic Relief (D4) ☐ FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>X</u> Depth (inches): _____ Saturation Present? Yes _____ No <u>X</u> Depth (inches): _____ (includes capillary fringe)		Wetland Hydrology Present? Yes _____ No <u>X</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

[illegible]



Soil



N

Appendix B

OEPA ORAM Datasheets

Site: Wetland BH-07	Rater(s): BCR	Date: 2021-10-26
----------------------------	----------------------	-------------------------

2.0

2.0

Metric 1. Wetland Area (size).

max 6 pts.

subtotal

Select one size class and assign score.

- ☐ >50 acres (>20.2ha) (6 pts)
- ☐ 25 to <50 acres (10.1 to <20.2ha) (5 pts)
- ☐ 10 to <25 acres (4 to <10.1ha) (4 pts)
- ☐ 3 to <10 acres (1.2 to <4ha) (3 pts)
- ☒ 0.3 to <3 acres (0.12 to <1.2ha) (2pts)
- ☐ 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)
- ☐ <0.1 acres (0.04ha) (0 pts)

8.0

10.0

Metric 2. Upland buffers and surrounding land use.

max 14 pts.

subtotal

2a. Calculate average buffer width. Select only one and assign score. Do not double check.

- ☐ WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)
- ☒ MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)
- ☐ NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)
- ☐ VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)

2b. Intensity of surrounding land use. Select one or double check and average.

- ☐ VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)
- ☒ LOW. Old field (>10 years), shrubland, young second growth forest. (5)
- ☒ MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3)
- ☐ HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)

7.5

17.5

Metric 3. Hydrology.

max 30 pts.

subtotal

3a. Sources of Water. Score all that apply.

- ☐ High pH groundwater (5)
- ☐ Other groundwater (3)
- ☒ Precipitation (1)
- ☐ Seasonal/Intermittent surface water (3)
- ☐ Perennial surface water (lake or stream) (5)

3c. Maximum water depth. Select only one and assign score.

- ☐ >0.7 (27.6in) (3)
- ☐ 0.4 to 0.7m (15.7 to 27.6in) (2)
- ☒ <0.4m (<15.7in) (1)

3e. Modifications to natural hydrologic regime. Score one or double check and average.

- ☐ None or none apparent (12)
- ☐ Recovered (7)
- ☒ Recovering (3)
- ☐ Recent or no recovery (1)

3b. Connectivity. Score all that apply.

- ☐ 100 year floodplain (1)
- ☐ Between stream/lake and other human use (1)
- ☒ Part of wetland/upland (e.g. forest), complex (1)
- ☐ Part of riparian or upland corridor (1)

3d. Duration inundation/saturation. Score one or dbl check.

- ☐ Semi- to permanently inundated/saturated (4)
- ☐ Regularly inundated/saturated (3)
- ☒ Seasonally inundated (2)
- ☒ Seasonally saturated in upper 30cm (12in) (1)

Check all disturbances observed

- | | |
|---|--|
| ☒ ditch
☐ tile
☐ dike
☐ weir
☐ stormwater input | ☐ point source (nonstormwater)
☒ filling/grading
☒ road bed/RR track
☐ dredging
☐ other _____ |
|---|--|

8.0

25.5

Metric 4. Habitat Alteration and Development.

max 20 pts.

subtotal

4a. Substrate disturbance. Score one or double check and average.

- ☐ None or none apparent (4)
- ☒ Recovered (3)
- ☐ Recovering (2)
- ☐ Recent or no recovery (1)

4b. Habitat development. Select only one and assign score.

- ☐ Excellent (7)
- ☐ Very good (6)
- ☐ Good (5)
- ☐ Moderately good (4)
- ☐ Fair (3)
- ☒ Poor to fair (2)
- ☐ Poor (1)

4c. Habitat alteration. Score one or double check and average.

- ☐ None or none apparent (9)
- ☐ Recovered (6)
- ☒ Recovering (3)
- ☐ Recent or no recovery (1)

Check all disturbances observed

- | | |
|---|---|
| ☐ mowing
☐ grazing
☐ clearcutting
☒ selective cutting
☐ woody debris removal
☐ toxic pollutants | ☒ shrub/sapling removal
☐ herbaceous/aquatic bed removal
☐ sedimentation
☐ dredging
☐ farming
☐ nutrient enrichment |
|---|---|

25.5

subtotal this page

Site: Wetland BH-07	Rater(s): BCR	Date: 2021-10-26
----------------------------	----------------------	-------------------------

25.5

subtotal first page

0.0	25.5
-----	------

max 10 pts.

subtotal

Metric 5. Special Wetlands.

Check all that apply and score as indicated.

- ☐ Bog (10)
- ☐ Fen (10)
- ☐ Old growth forest (10)
- ☐ Mature forested wetland (5)
- ☐ Lake Erie coastal/tributary wetland-unrestricted hydrology (10)
- ☐ Lake Erie coastal/tributary wetland-restricted hydrology (5)
- ☐ Lake Plain Sand Prairies (Oak Openings) (10)
- ☐ Relict Wet Prairies (10)
- ☐ Known occurrence state/federal threatened or endangered species (10)
- ☐ Significant migratory songbird/water fowl habitat or usage (10)
- ☐ Category 1 Wetland. See Question 1 Qualitative Rating (-10)

1.0	26.5
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max 20 pts.

subtotal

Metric 6. Plant communities, interspersions, microtopography.

6a. Wetland Vegetation Communities.

Score all present using 0 to 3 scale.

- ☐ 0 Aquatic bed
- ☐ 1 Emergent
- ☐ 0 Shrub
- ☐ 0 Forest
- ☐ 0 Mudflats
- ☐ 0 Open water
- ☐ 0 Other _____

6b. horizontal (plan view) Interspersion.

Select only one.

- ☐ High (5)
- ☐ Moderately high(4)
- ☐ Moderate (3)
- ☒ Moderately low (2)
- ☒ Low (1)
- ☐ None (0)

6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage

- ☐ Extensive >75% cover (-5)
- ☒ Moderate 25-75% cover (-3)
- ☐ Sparse 5-25% cover (-1)
- ☐ Nearly absent <5% cover (0)
- ☐ Absent (1)

6d. Microtopography.

Score all present using 0 to 3 scale.

- ☒ 1 Vegetated hummocks/tussocks
- ☐ 0 Coarse woody debris >15cm (6in)
- ☐ 0 Standing dead >25cm (10in) dbh
- ☒ 1 Amphibian breeding pools

2

Vegetation Community Cover Scale

0	Absent or comprises <0.1ha (0.2471 acres) contiguous area
1	Present and either comprises small part of wetland's vegetation and is of moderate quality, or comprises a significant part but is of low quality
2	Present and either comprises significant part of wetland's vegetation and is of moderate quality or comprises a small part and is of high quality
3	Present and comprises significant part, or more, of wetland's vegetation and is of high quality

Narrative Description of Vegetation Quality

low	Low spp diversity and/or predominance of nonnative or disturbance tolerant native species
mod	Native spp are dominant component of the vegetation, although nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp
high	A predominance of native species, with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always, the presence of rare, threatened, or endangered spp

Mudflat and Open Water Class Quality

0	Absent <0.1ha (0.247 acres)
1	Low 0.1 to <1ha (0.247 to 2.47 acres)
2	Moderate 1 to <4ha (2.47 to 9.88 acres)
3	High 4ha (9.88 acres) or more

Microtopography Cover Scale

0	Absent
1	Present very small amounts or if more common of marginal quality
2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality
3	Present in moderate or greater amounts and of highest quality

26.5

GRAND TOTAL (max 100 pts)

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10/20/2022 12:53:18 PM

in

Case No(s). 22-0494-EL-BTA

Summary: Amended Application for the Beaver Wellington 138kV Transmission
Line Project electronically filed by Mr. Christopher K Riedel on behalf of American
Transmission Systems Incorporated