AMENDMENT TO THE APPLICATION TO THE OHIO POWER SITING BOARD FOR A CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY AND PUBLIC NEED

OPSB CASE NO. 19-1780-EL-BTA

Buckley Road-Fremont Center 138 kV Transmission Line Project

September 2019

American Electric Power Ohio Transmission Company, Inc.



BOUNDLESS ENERGY™

BEFORE THE OHIO POWER SITING BOARD Certificate Application for Electric Transmission Facilities Table of Contents

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AMENDMENT CHANGE SUMMARY

AEP Ohio Transmission Company, Inc. ("AEP Ohio Transco") submitted a Certificate Application to the Ohio Power Siting Board ("OPSB") on January 30, 2018, for the Buckley Road-Fremont Center 138 kV Transmission Line Rebuild Project ("Project") in Case No. 17-2085-EL-BTX. On September 20, 2018, the OPSB issued its Certificate of Environmental Compatibility and Public Need (Certificate) for the Alternate Route (referred to as the OPSB-Approved Route or Approved Route herein).

The purpose of this amendment is to document the changes to the Approved Route alignment and seek OPSB approval of the revised alignment. The revised alignment is referred to as the Amended Approved Route.

As detailed engineering of the transmission line progressed after submittal of the Certificate Application in January 2018, AEP Ohio Transco identified eleven adjustments to the Approved Route. All eleven adjustments are engineering adjustments (within the 100-foot right-of-way (ROW) of the OPSB-approved alignment) and are necessary to 1) improve line angles, 2) reduce impacts to an agricultural field, 3) avoid road ROW, 4) avoid impacts to an outbuilding, 5) avoid impacts to a nearby stream, 6) optimize structure alignment, 7) avoid existing railroad and pipeline ROWs, and 8) avoid a previously unidentified drainage ditch. Table 1 identifies the structures shifts AEP Ohio Transco proposes as part of this Amendment Application.

	Table 1												
Engineering Adjustment Structure Shifts													
	Distance from OPSB-Approved Centerline												
Structure	(feet)												
15	5												
16	10												
17	6												
19	10												
21	12												
26	5												
27	6												
28	7												
30	7												
31	5												
34	75												
91	9												
92	15												
102	9												
103	16												
104	22												
105	21												
106	21												
107	19												
109	5												
110	7												
111	8												
112	10												
113	12												
114	14												
129	6												
139	26												
140	21												
141	16												
142	11												
143	5												
145	5												
146	11												
140	13												
148	13												
175	8												
182	16												
183	8												
186	8												
189	<u> </u>												
189	<u> </u>												
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191	IU												



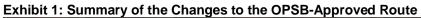


Exhibit 2: Engineering Adjustment 1

Engineering Adjustment 1 is approximately 0.4 mile long and occurs between Structures 14 and 19. Structure 17 shifted 6 feet to improve the line angle to Structure 19. Because of this shift, it was necessary to shift Structures 15, 16, and 19 distances ranging from 5 to 10 feet to maintain the tangent alignment. There are no additional property owners affected by this shift, and there are no additional environmental impacts.

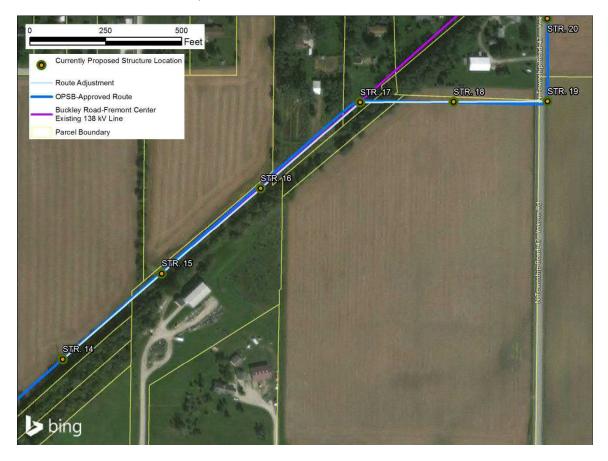


Exhibit 3: Engineering Adjustment 2

Engineering Adjustment 2 is approximately 0.9 mile long and occurs between Structures 21 and 31. Structure 21 shifted to optimize the structure alignment and reduce the tension on Structure 19. As a result of the shift back to the existing centerline, it was necessary to shift Structure 30 seven feet to improve the line angle. AEP Ohio Transco was also required to shift Structures 26, 27, 28, and 31 distances ranging from 5 to 7 feet to maintain design requirements for tangent structures. There are no additional property owners affected by this shift, and there are no additional environmental impacts.



Exhibit 4: Engineering Adjustment 3

Engineering Adjustment 3 is approximately 0.1 mile long and occurs between Structures 33 and 34. Both structures remain on the OPSB-approved centerline, but, to accommodate a property owner request, Structure 34, an angle structure, shifted 75 feet to reduce impacts to the agricultural field. There are no additional property owners affected by this shift, and there are no additional environmental impacts.

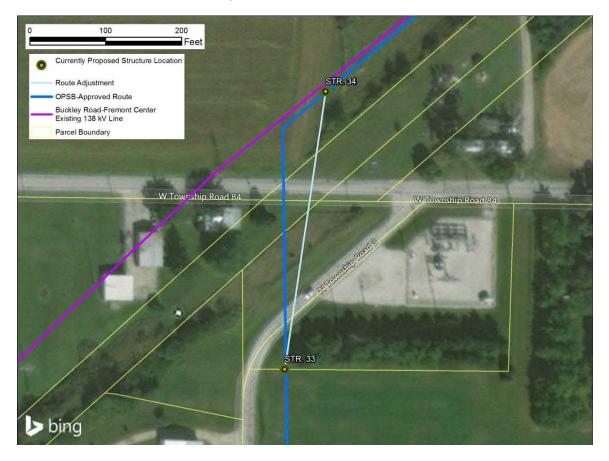


Exhibit 5: Engineering Adjustment 4

Engineering Adjustment 4 is approximately 0.1 mile long and occurs between Structures 91 and 92. AEP Ohio Transco shifted these structures west 9 and 15 feet respectively to avoid road rightof-way (ROW) on N Township Road 103 and improve the design line angle. There are no additional property owners affected by this shift, and there are no additional environmental impacts.

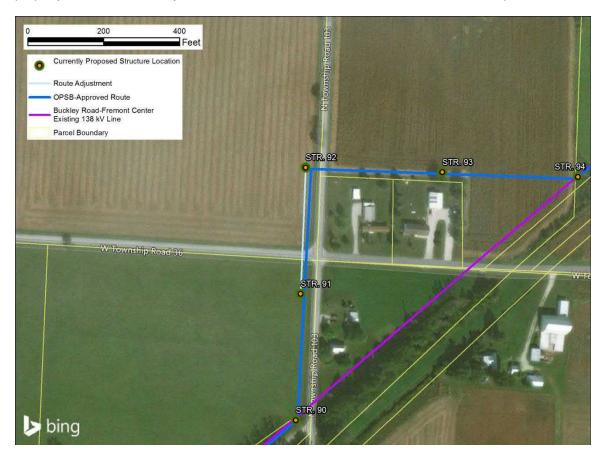


Exhibit 6: Engineering Adjustment 5

Engineering Adjustment 5 is approximately 1.0 mile long and occurs between Structures 102 and 114. AEP Ohio Transco shifted Structure 104 to avoid impacts to an outbuilding identified during detailed engineering. It was also necessary to shift Structures 105 through 107 north to avoid this outbuilding. Structure 114 moved 14 feet east to avoid placing the structure within road ROW. As a result of these shifts, tangent Structures 102, 103, 109, 110, 111, 112, and 113 were shifted distances ranging from 9 to 22 feet to maintain tangent alignment. There are no additional environmental impacts.

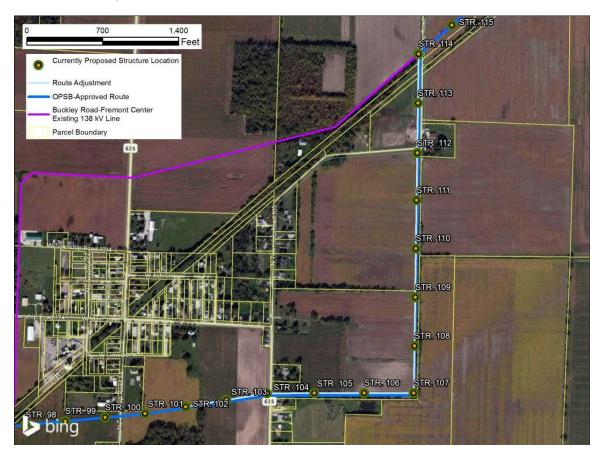


Exhibit 7: Engineering Adjustment 6

Engineering Adjustment 6 is approximately 0.2 mile long and occurs between Structures 128 and 130. AEP Ohio Transco shifted Structure 129 six feet to avoid impacts to an adjacent stream. There are no additional property owners affected by this shift, and environmental impacts have been reduced.

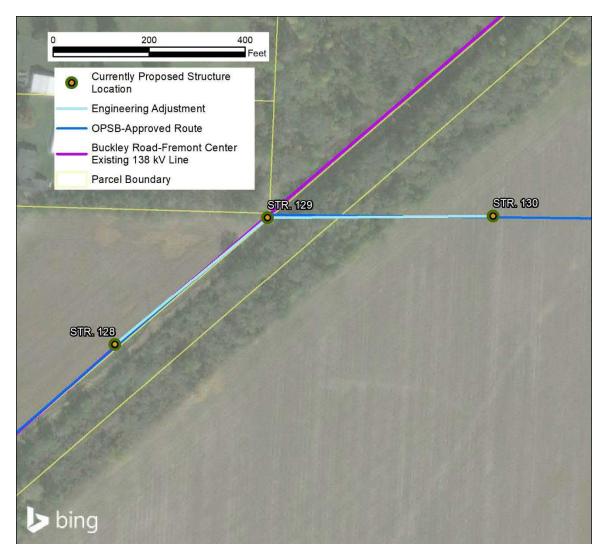


Exhibit 8: Engineering Adjustment 7

Engineering Adjustment 7 is approximately 0.3 mile long and occurs between Structures 139 and 143. As a result of detailed engineering, Structures 139 through 143 were shifted to optimize the structure alignment and reduce stress on tangent poles. The shifted distances range from 5 to 26 feet. There are no additional property owners affected by this shift, and there are no additional environmental impacts.



Exhibit 9: Engineering Adjustment 8

Engineering Adjustment 8 is approximately 0.4 mile long and occurs between Structures 145 and 149. As a result of detailed engineering, Structures 145 through 149 were shifted to optimize the structure alignment and reduce stress on tangent poles. The shifted distances range up to 13 feet. There are no additional property owners affected by this shift, and there are no additional environmental impacts.

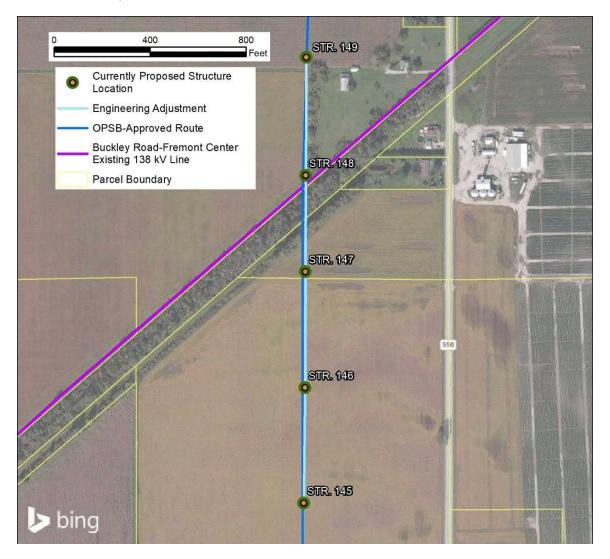


Exhibit 10: Engineering Adjustment 9

Engineering Adjustment 9 is approximately 0.1 mile long and occurs between Structures 174 and 176. It was necessary to shift Structure 175 eight feet to avoid railroad and pipeline ROWs that were identified during detailed engineering. There are no additional property owners affected by this shift, and there are no additional environmental impacts.

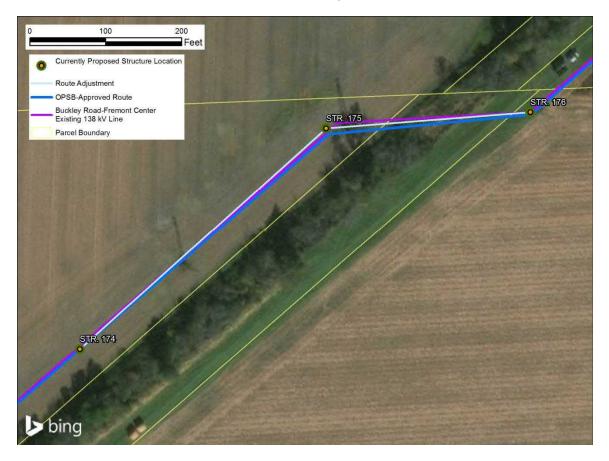


Exhibit 11: Engineering Adjustment 10

Engineering Adjustment 10 is approximately 0.4 mile long and occurs between Structures 182 and 187. Structures 182 and 183 were shifted 16 and 8 feet respectively to avoid a pipeline easement identified during detailed engineering. It was also necessary to shift Structure 186 eight feet to avoid a drainage ditch that was identified during detailed engineering. There are no additional property owners affected by this shift, and there are no additional environmental impacts.

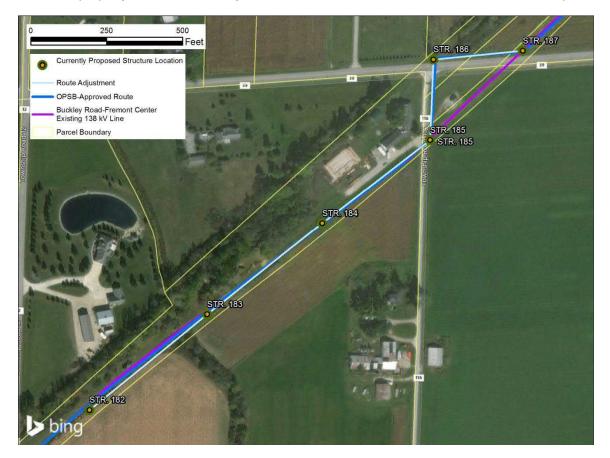
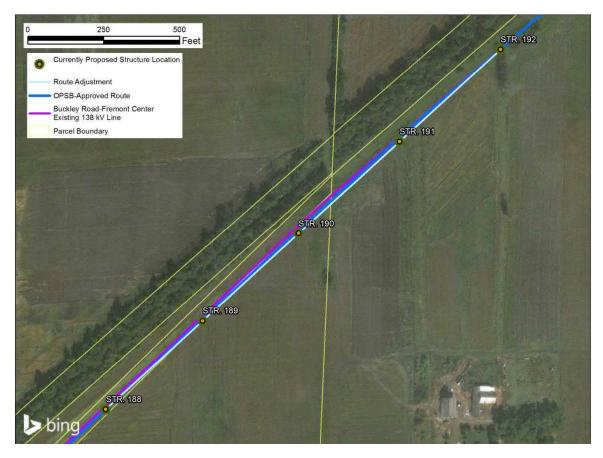


Exhibit 12: Engineering Adjustment 11

Engineering Adjustment 11 is approximately 0.3 mile long and occurs between Structures 188 and 192. As a result of detail engineering, Structures 189 through 191 were shifted distances ranging from 5 to 10 feet to optimize the structure alignment and to reduce stress on tangent poles. There are no additional property owners affected by this shift, and there are no additional environmental impacts.



4906-5-02 PROJECT SUMMARY AND APPLICANT INFORMATION

(A) PROJECT SUMMARY AND FACILITY OVERVIEW

Text provided in the January 30, 2018 Application filing remains unchanged.

(1) General Purpose of the Facility

Text provided in the January 30, 2018 Application filing remains unchanged.

(2) General Location, Size, and Operating Characteristics

Text provided in the January 30, 2018 Application filing remains unchanged. <u>A revised Project</u> overview is provided in **Revised Figure 02-1**.

(3) Suitability of the Preferred and Alternate Routes

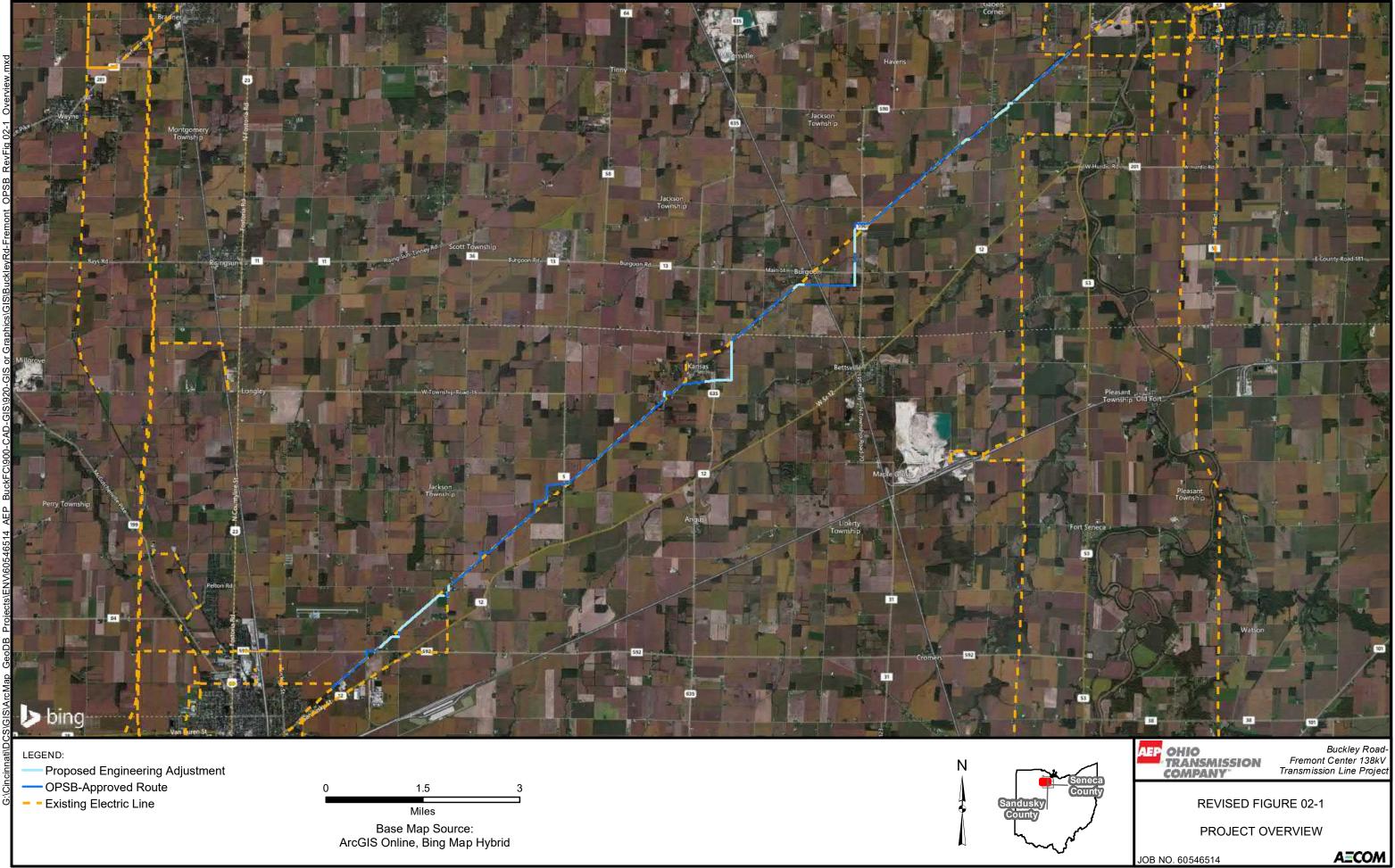
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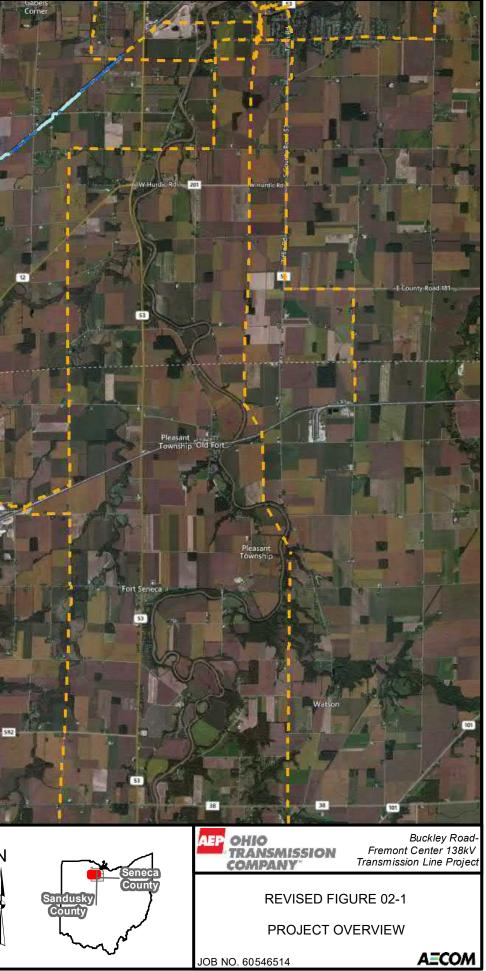
(4) **Project Schedule Summary**

AEP Ohio Transco started construction on approved portions of the transmission line in early 2019, with an estimated in-service date in the fourth quarter of 2020. <u>**Revised Figure 03-1**</u> provides additional details regarding the proposed Project schedule.

(B) APPLICANT INFORMATION

Text provided in the January 30, 2018 Application filing remains unchanged.





4906-5-03 REVIEW OF NEED AND SCHEDULE

(A) NEED FOR PROPOSED FACILITY

Text provided in the January 30, 2018 Application filing remains unchanged.

(B) REGIONAL EXPANSION PLANS

Text provided in the January 30, 2018 Application filing remains unchanged.

(C) SYSTEM ECONOMY AND RELIABILITY

Text provided in the January 30, 2018 Application filing remains unchanged.

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

Text provided in the January 30, 2018 Application filing remains unchanged.

(E) FACILITY SELECTION RATIONALE

Text provided in the January 30, 2018 Application filing remains unchanged.

(F) FACILITY SCHEDULE

(1) Schedule Gantt Chart

The major scheduled activities associated with the Preferred and <u>Amended</u> Alternate Routes, and Rebuild Sections are shown in bar chart form on <u>Revised</u> Figure 03-1.

(2) Impact of Critical Delays

Text provided in the January 30, 2018 Application filing remains unchanged.

Revised Figure 03-1

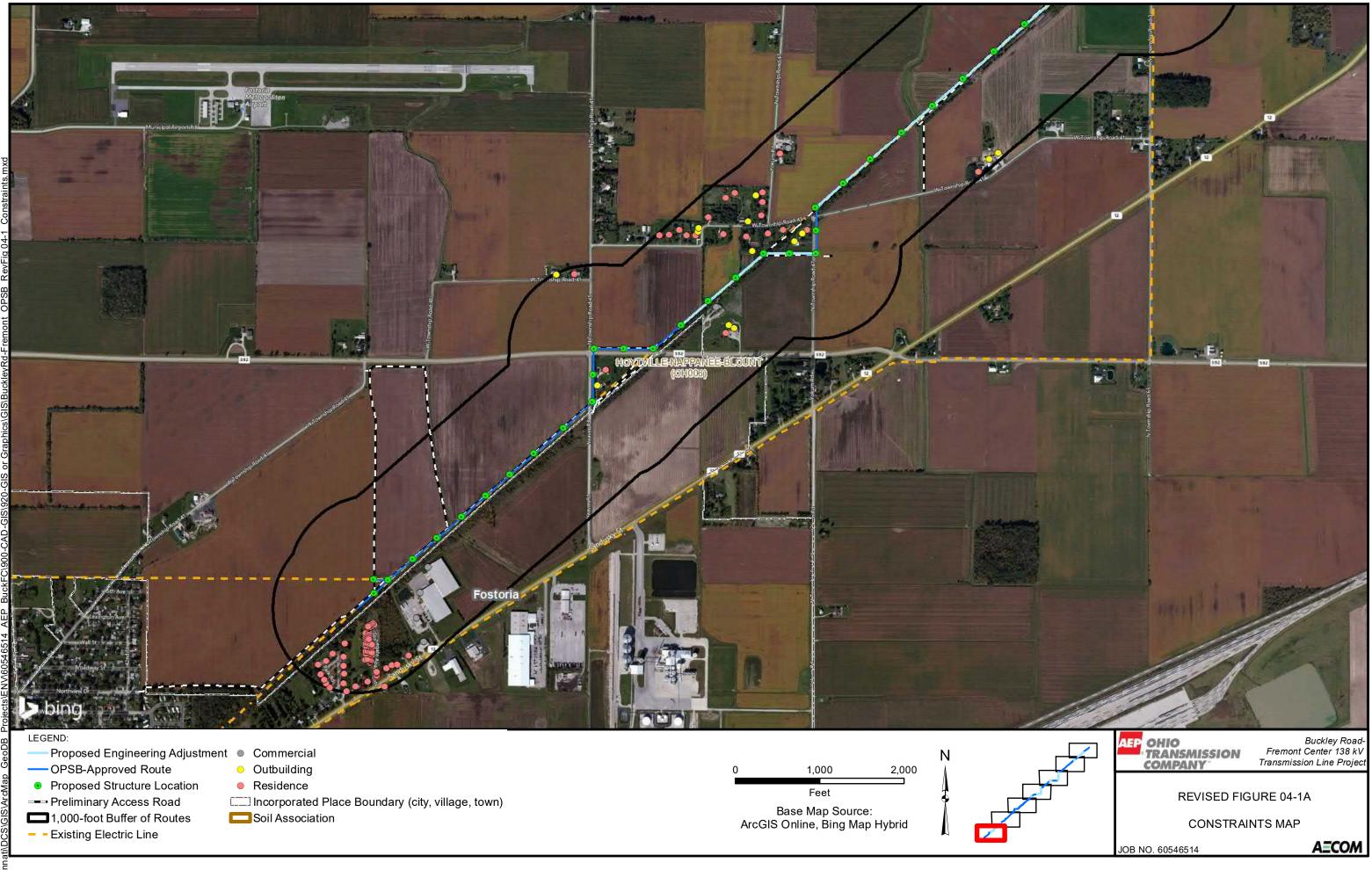
Project Schedule

Buckley Road-Fremont Center 138 kV Transmission Line Rebuild Project

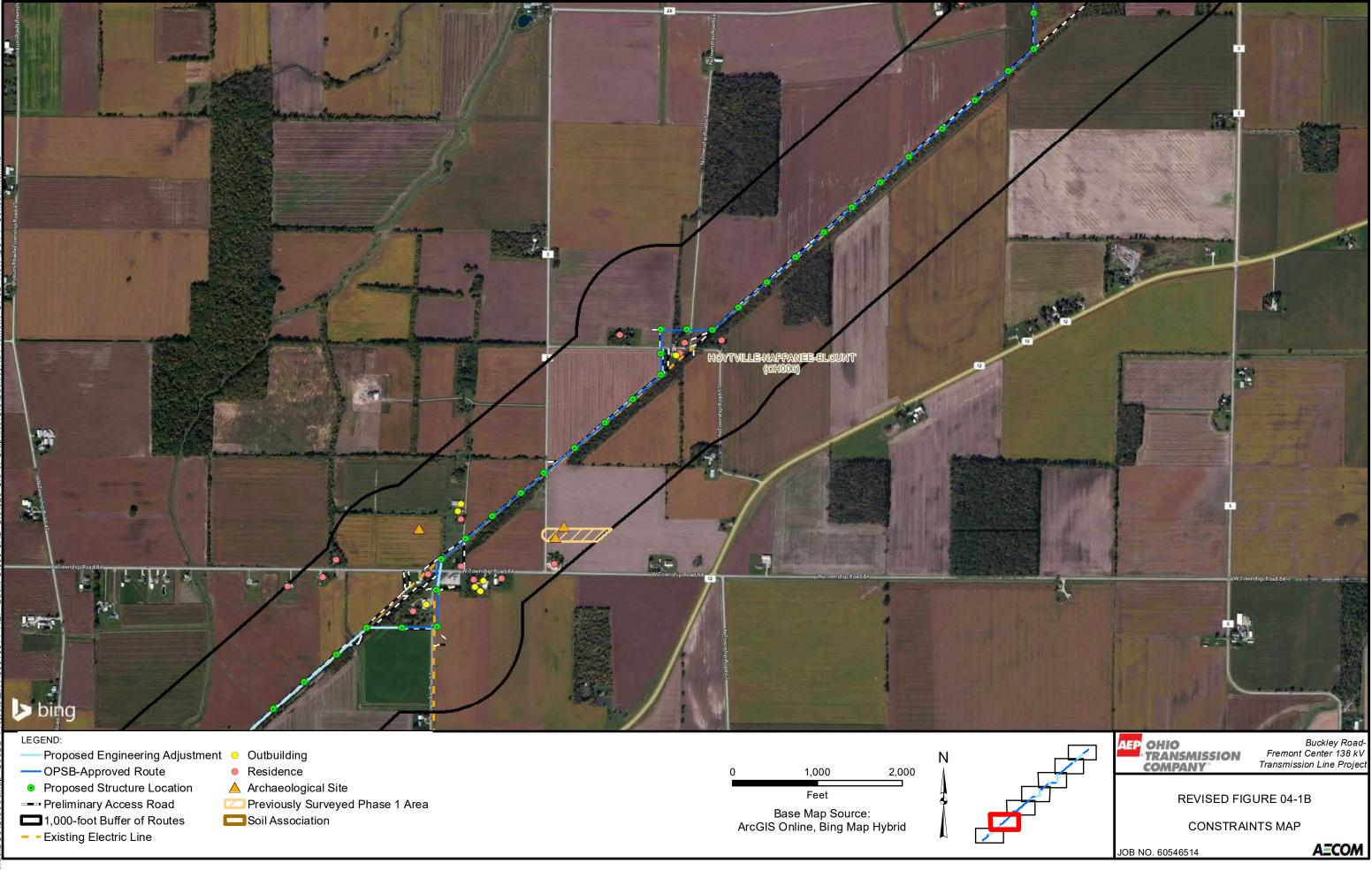
Activity Description		2018				2019												2020												2021		
	S	0	Ν	D	J	F	Μ	Α	М	J	J	Α	S	0	Ν	D	J	F	Μ	Α	Μ	J	J	Α	S	0	Ν	D	J	F	Μ	
Original Certificate																																
Prepare Amendment												nn	nn																			
Submit Amendment													nn																			
Public Notice													nn																			
OPSB Staff Review													nn	nn	nn	nn																
Issue Amended Certificate																nn	1															
Engineering	nn	nn r	n ni	ſ	nn	nn	nn	nn	nn	nn	nn	nn	nn	nn	nn	nn	nn	nn	nn													
Acquistion of Rights-of-way	nn	nn r	n ni	h	nn	nn	nn	nn	nn	nn	nn	nn	nn	nn	nn	nn	nn	nn	nn	nn	nn	nn	nn	nn	1							
Construction					nn	nn	nn	nn	nn	nn	nn	nn	nn	nn	nn	nn	nn	nn	nn	nn	nn	nn	nn	nn	nn	nn	nn	nn	nn			

4906-5-04 ROUTE ALTERNATIVES ANALYSIS

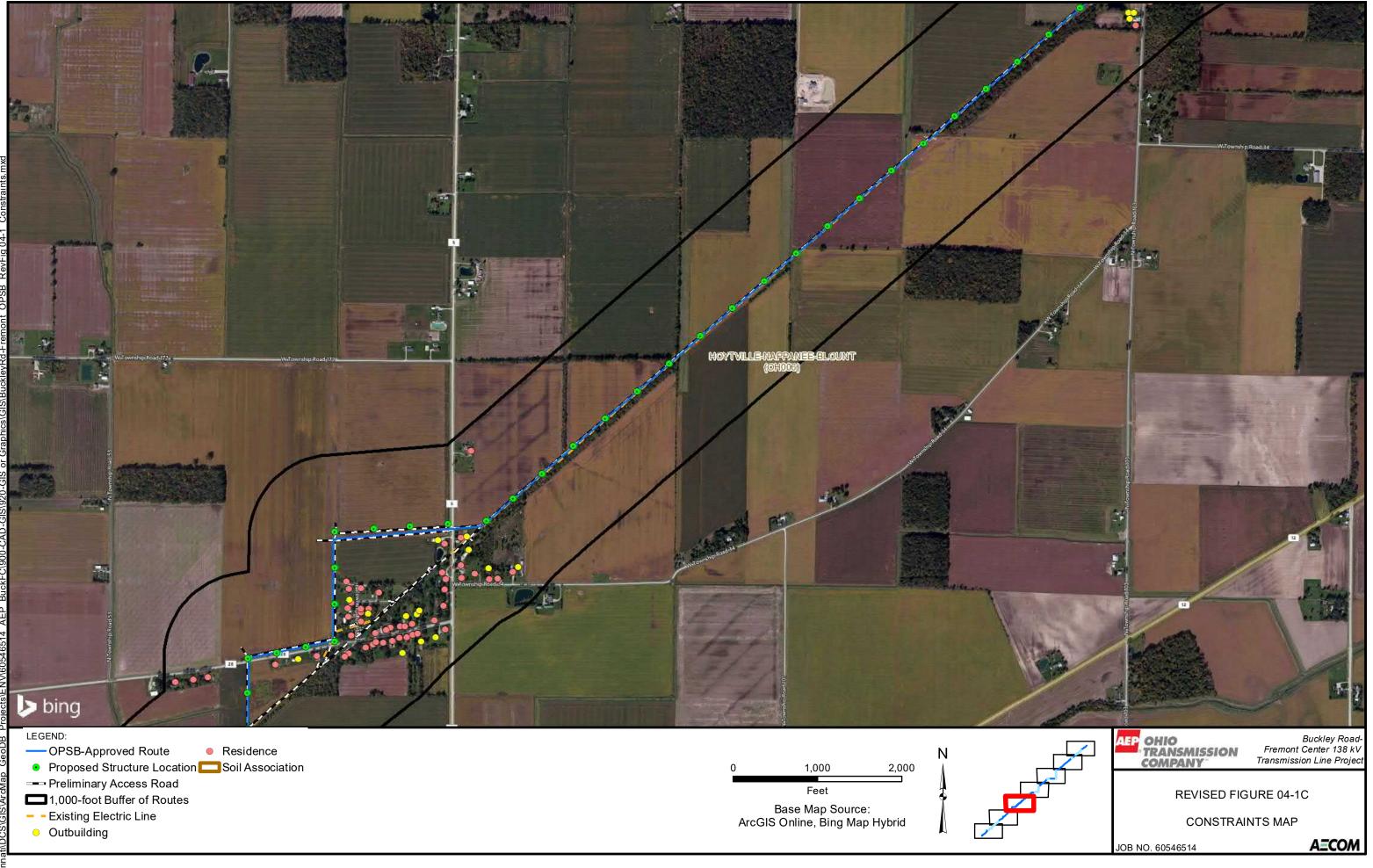
Text provided in the January 30, 2018 Application filing remains unchanged. **Revised Figures 04-1A through 04-1G** provide maps of the siting constraints specific to the Approved Route and proposed Engineering Adjustments.



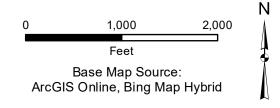




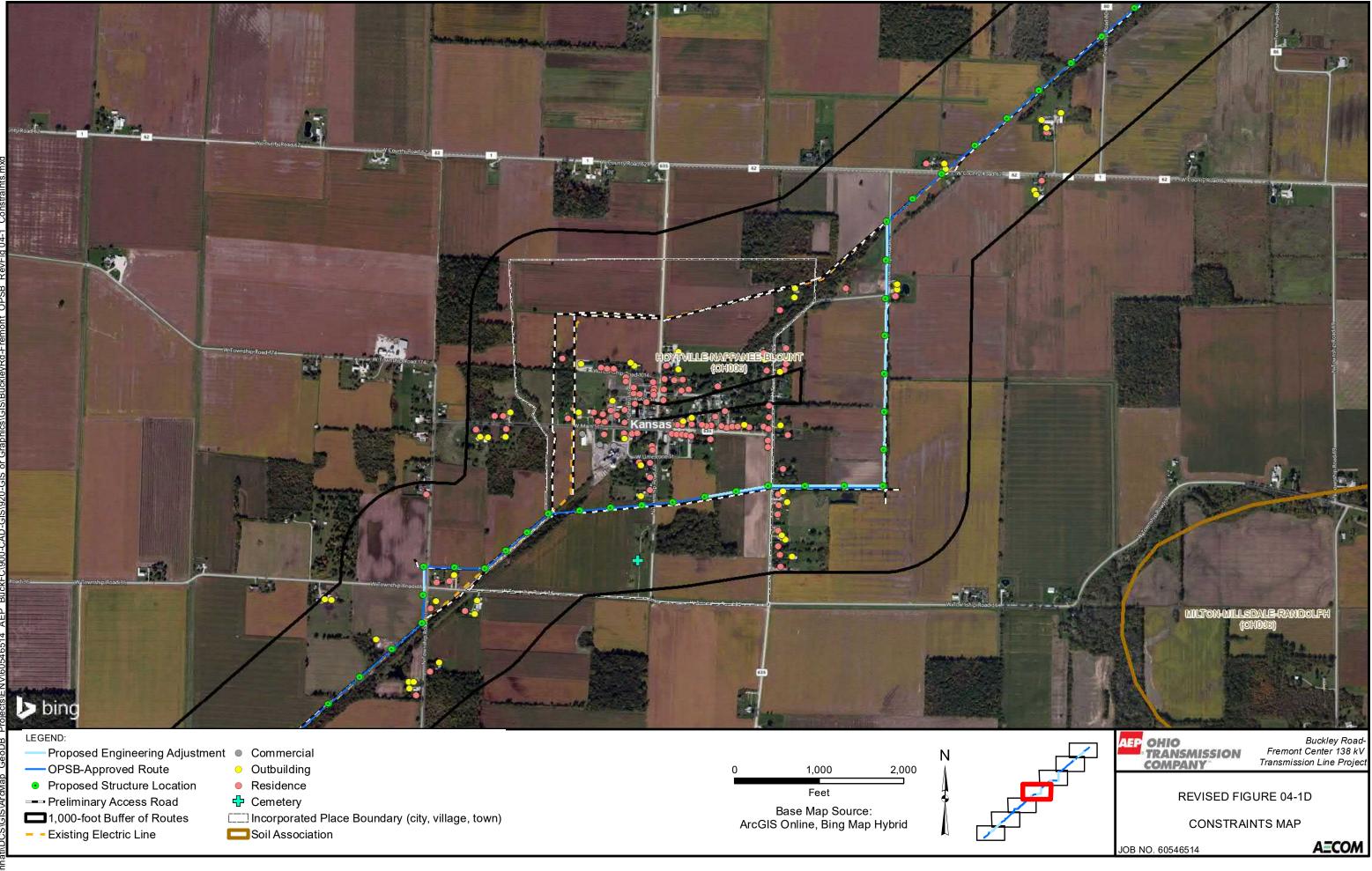


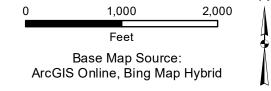




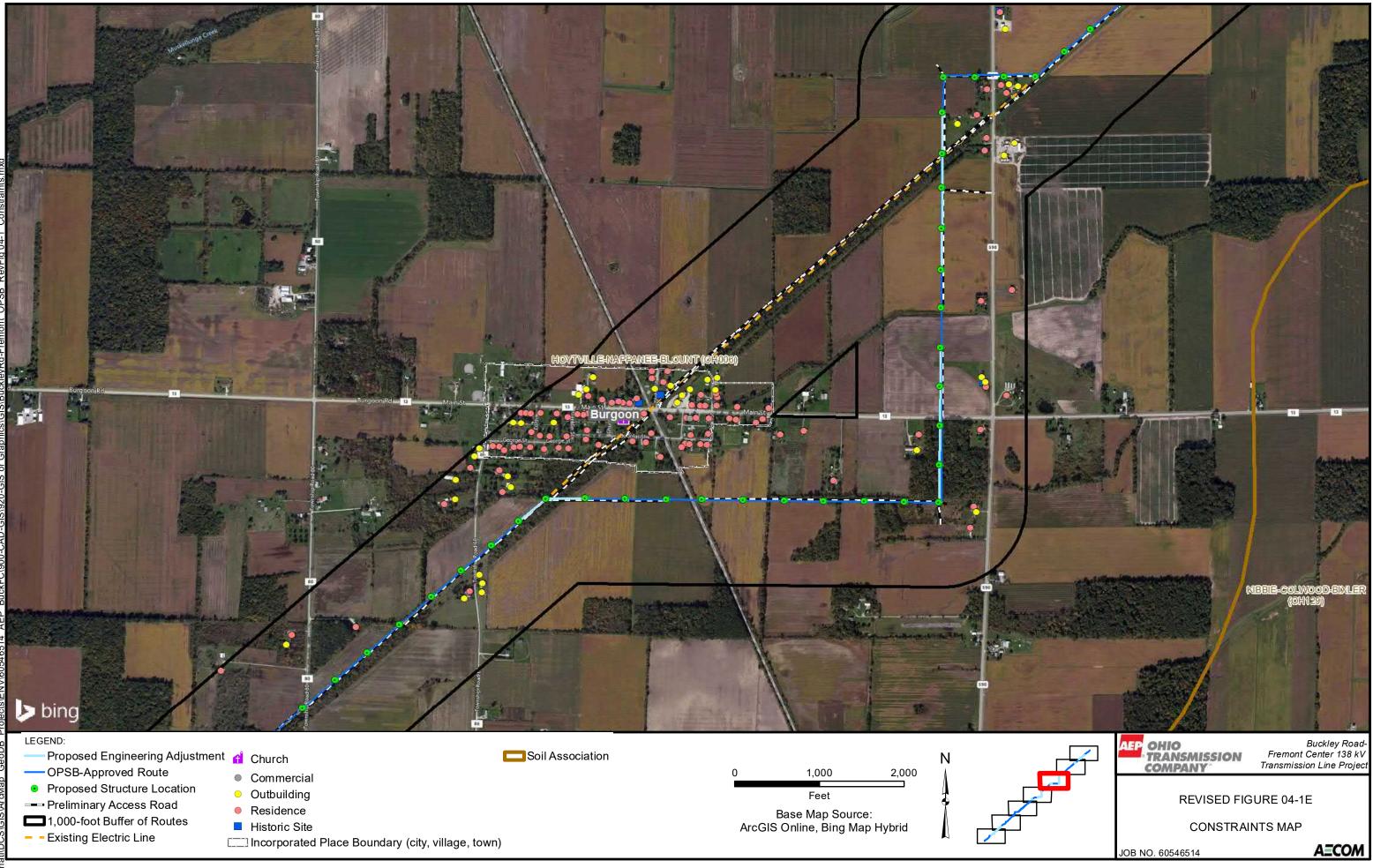






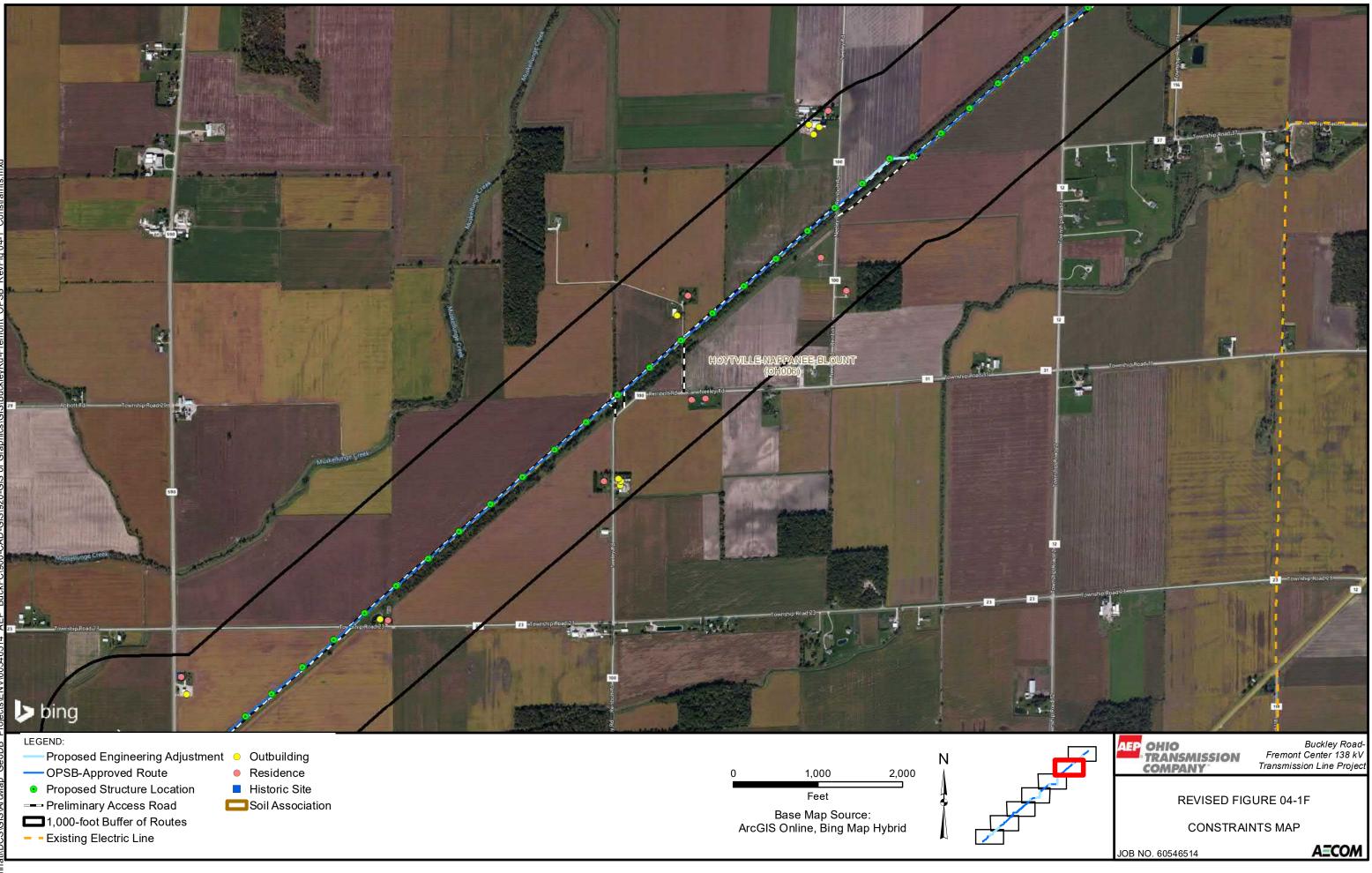


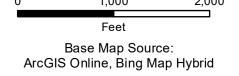




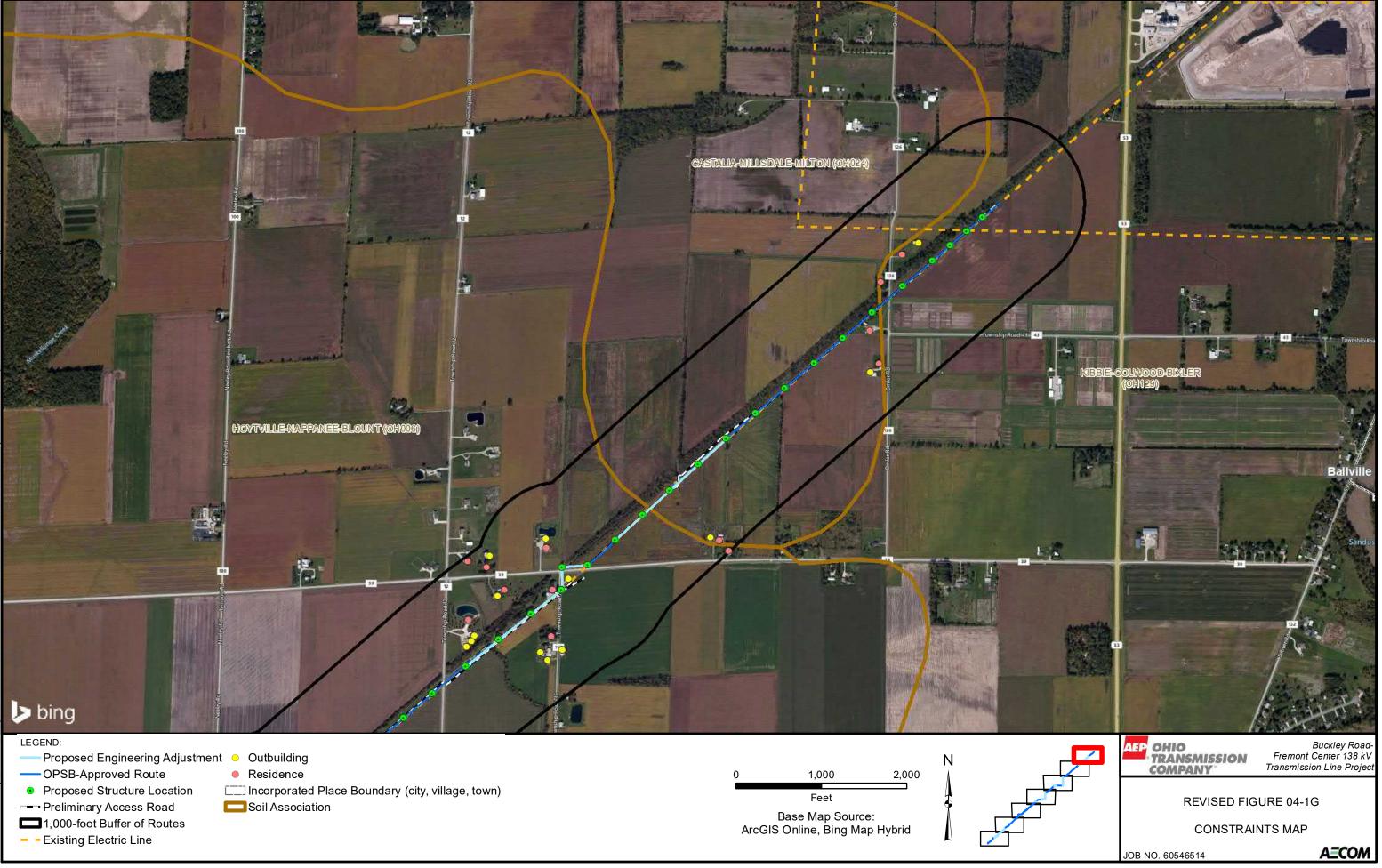


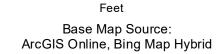














4906-5-05 PROJECT DESCRIPTION

(A) DESCRIPTION OF PROJECT AREA

(1) Geography and Topography

Text provided in the January 30, 2018 Application filing remains unchanged. Maps at 1:24,000-scale showing the Approved Route and proposed Engineering Adjustments for the Project are presented as **Revised Figures 05-1A through 05-1D**.

(2) Transmission Acreage, Length, and Properties Crossed

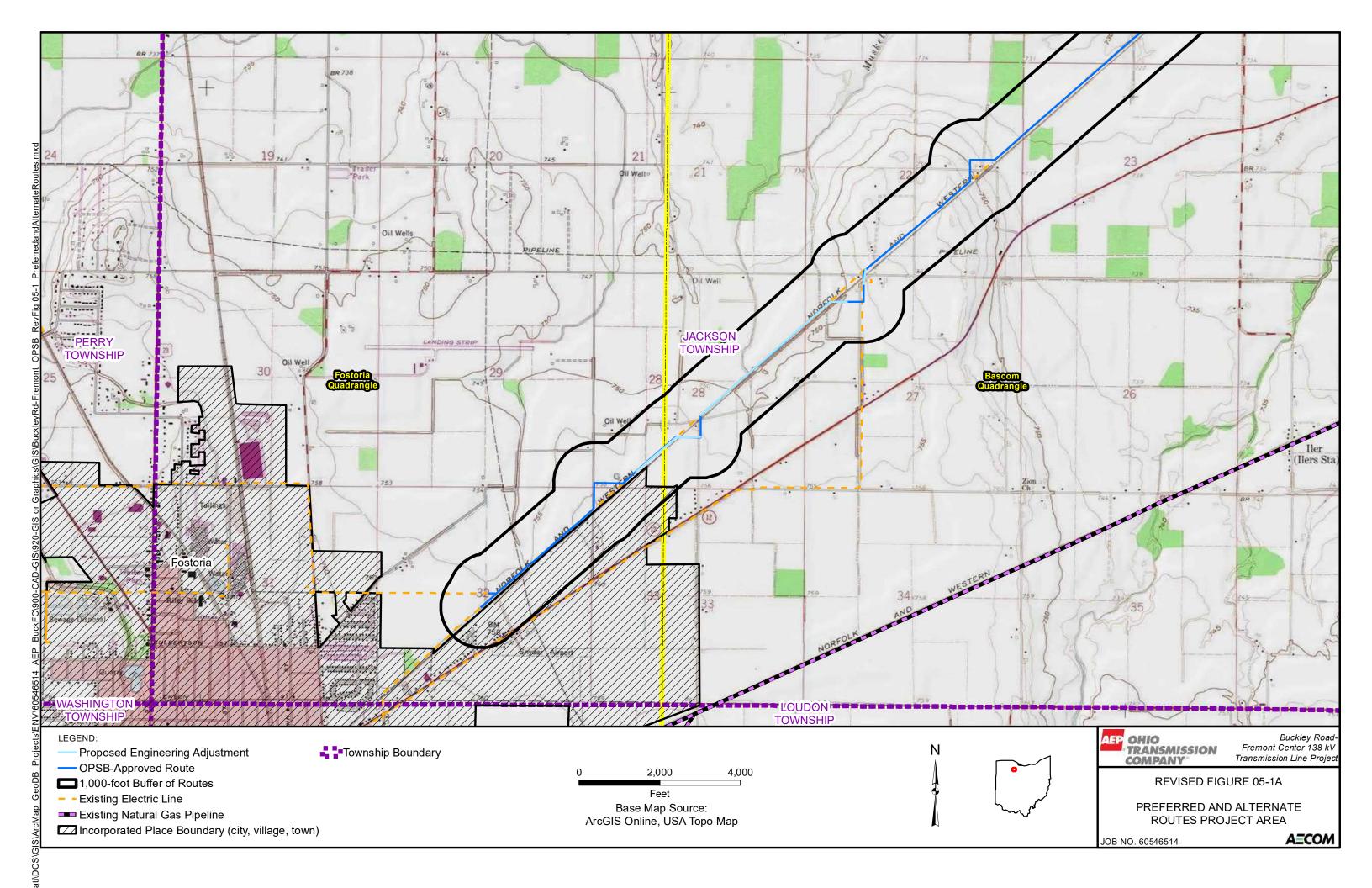
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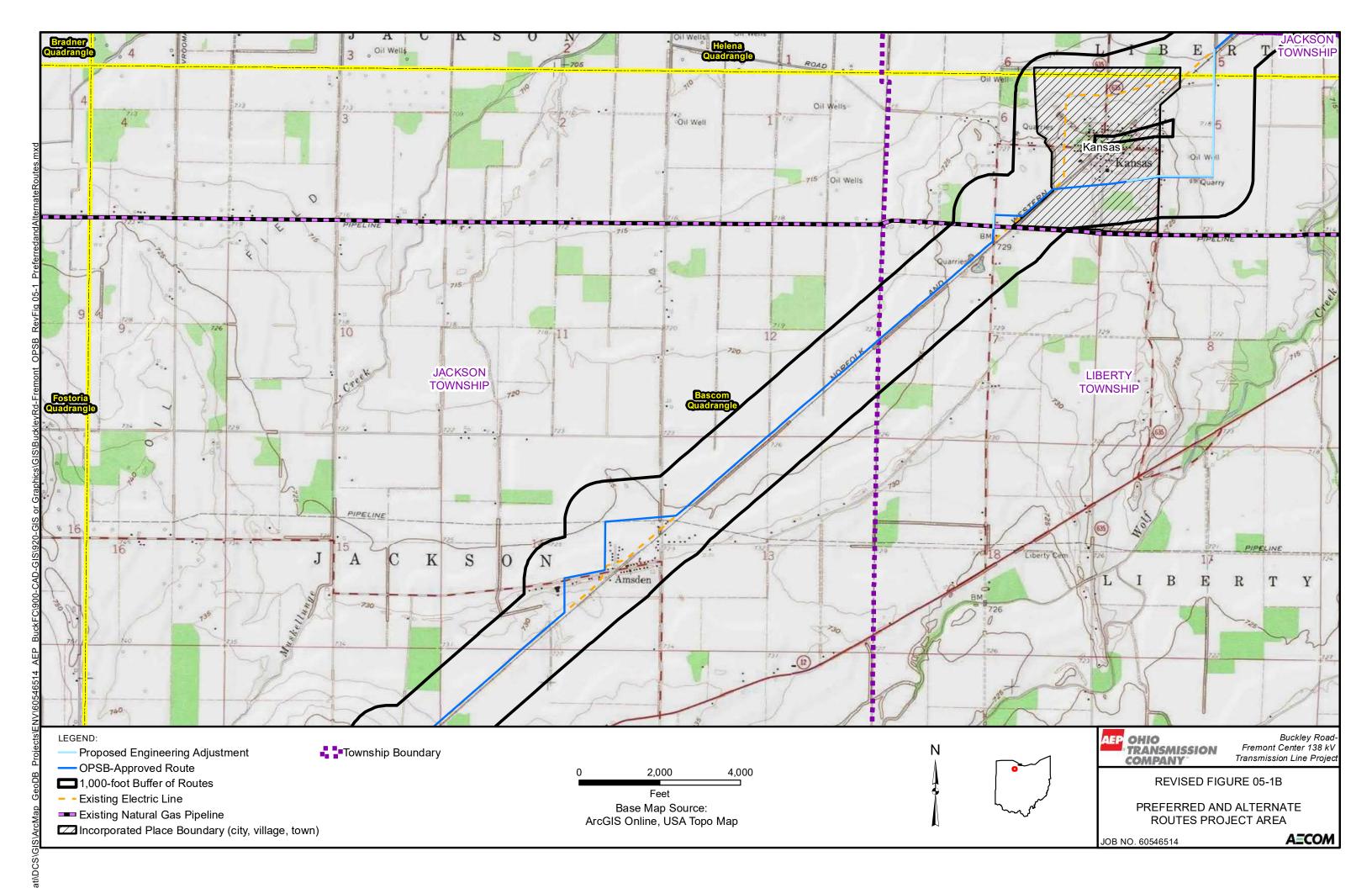
(B) LAYOUT AND CONSTRUCTION

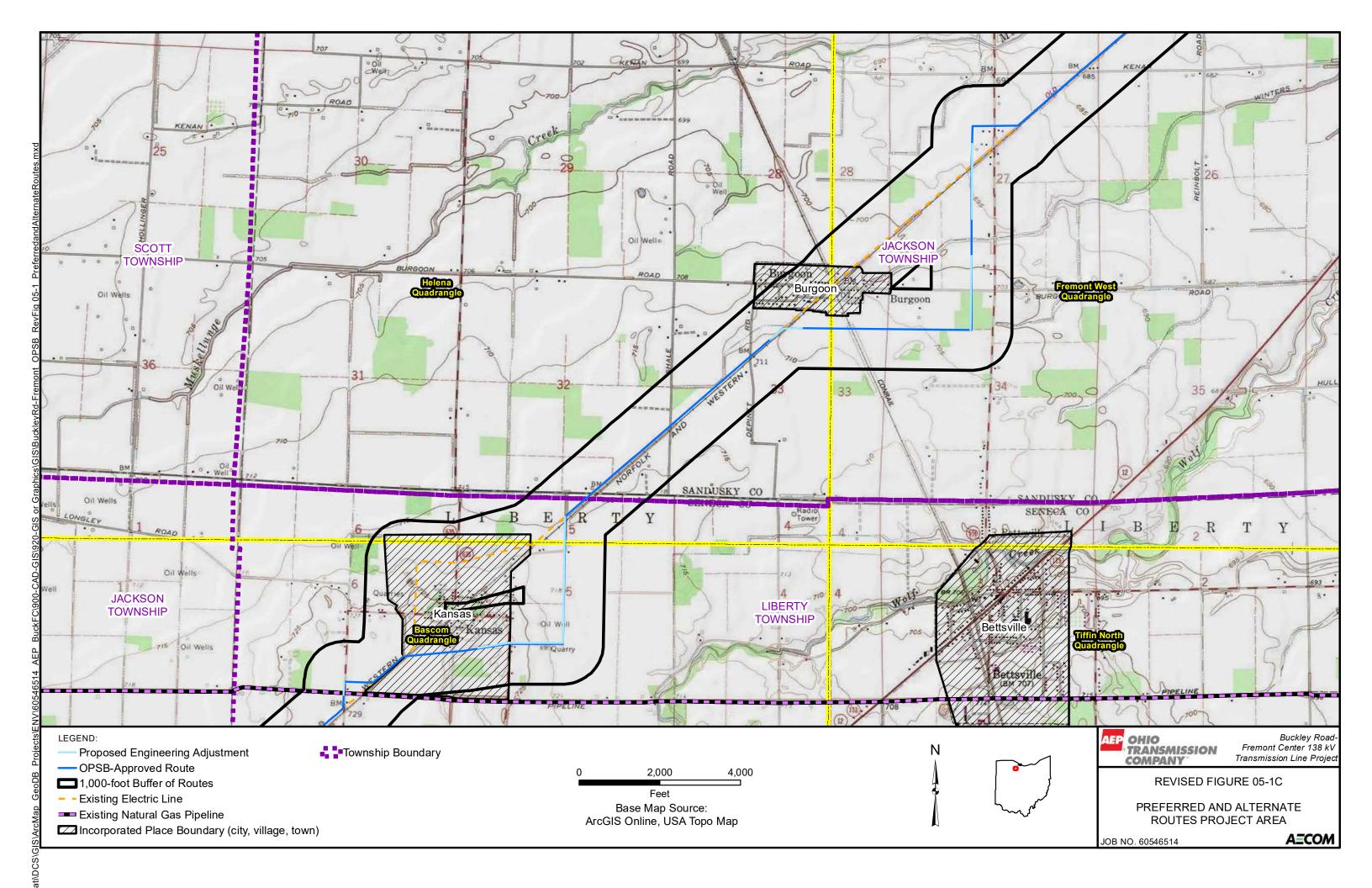
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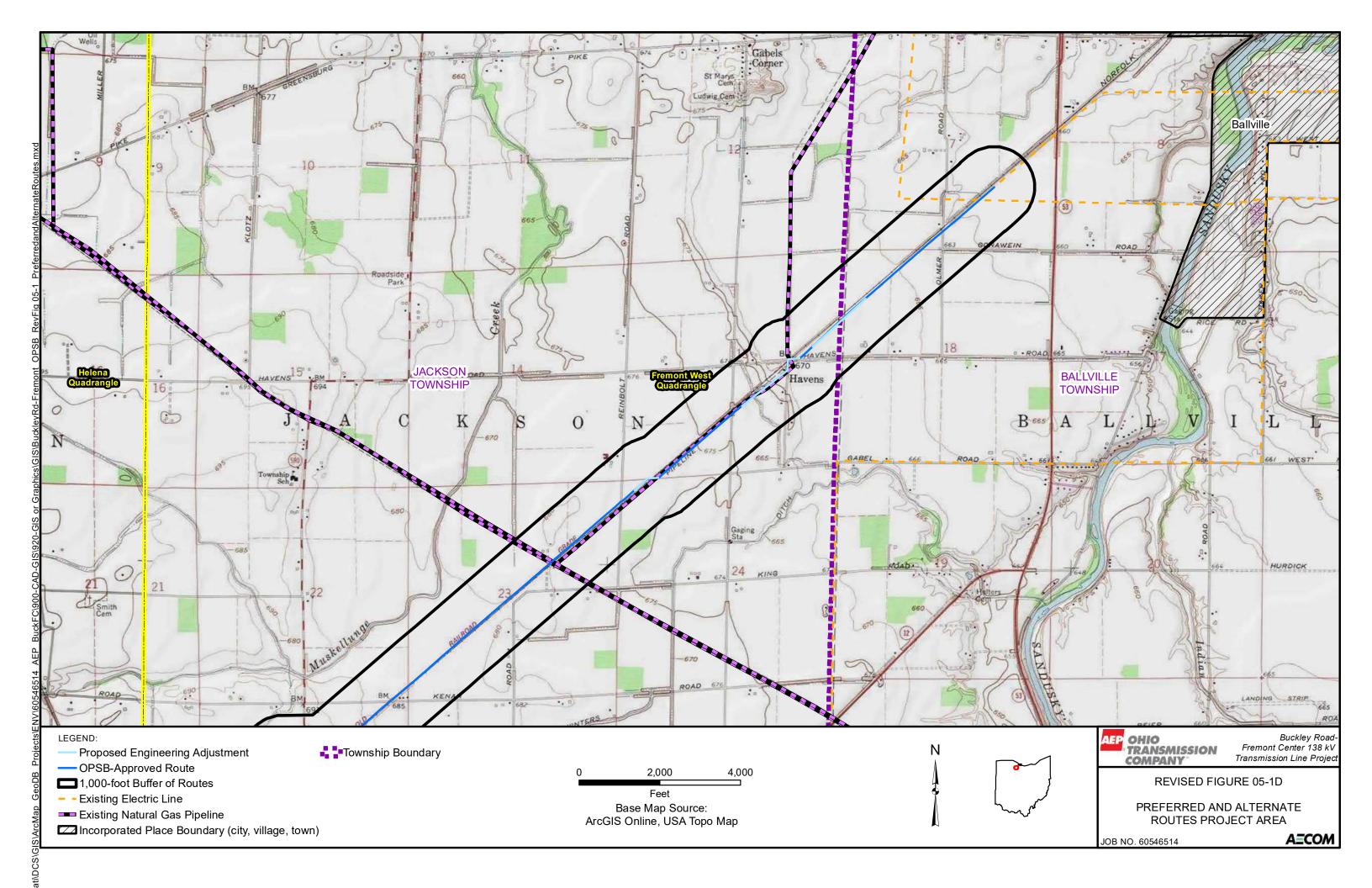
(C) TRANSMISSION EQUIPMENT

Text provided in the January 30, 2018 Application filing remains unchanged.









4906-5-06 ECONOMIC IMPACT AND PUBLIC INTERACTION

Text provided in the January 30, 2018 Application filing remains unchanged

4906-5-07 HEALTH AND SAFETY, LAND USE, AND REGIONAL DEVELOPMENT

(A) HEALTH AND SAFETY

Text provided in the January 30, 2018 Application filing remains unchanged.

(B) LAND USE

(1) **Proposed Routing Alignments and Existing Land Uses**

Text provided in the January 30, 2018 Application filing remains unchanged. Maps at 1:12,000scale, including the area 1,000 feet on either side of the Approved Route and proposed Engineering Adjustments are presented as **Revised Figures 04-1A** through **04-1G**.

(2) Impact of Construction

Text provided in the January 30, 2018 Application filing remains unchanged.

(3) Structures

(a) Structures within 200 feet of Proposed ROW:

Preferred Route: Text provided in the January 30, 2018 Application filing remains unchanged.

Alternate Route: Fifty-four structures were identified within 200 feet of the proposed ROW of the Alternate Route between 5 and 200 feet away. These structures include 34 single-family residences and 20 outbuildings. No buildings were identified within the Alternate Route ROW. An additional 18 structures were identified within 200 feet of the proposed ROW of the corresponding Alternate Route Rebuild Sections between 0 and 190 feet away. These structures include seven single-family residences, one multi-family residence, eight <u>nine</u> outbuildings, and two commercial buildings. One of the outbuildings is located within the proposed ROW of the Rebuild Section, and is being negotiated for removal with the property owner.

(C) AGRICULTURAL LAND USE AND DISTRICTS

(1) Agricultural Land and Districts Map

(a) Agricultural Land Use: Agricultural land use along the Preferred and Alternate Routes, as well as the Rebuild Sections, consists of pasture and hay fields and row crops. Agricultural land is shown on <u>Revised</u> Figures 07-1A through 07-1G.

(b) Agricultural District Land: AEP Ohio Transco's consultant contacted the Seneca and Sandusky County auditors via phone on December 15, 2017 July 25, 2019 to obtain information

on Agricultural District land. Sixty-four agricultural district land parcels were identified within 1,000 feet of the Project, 25 of which are crossed, as shown on **Revised Figures 07-1A** through **07-1G**.

(2) Acreage and Impacts

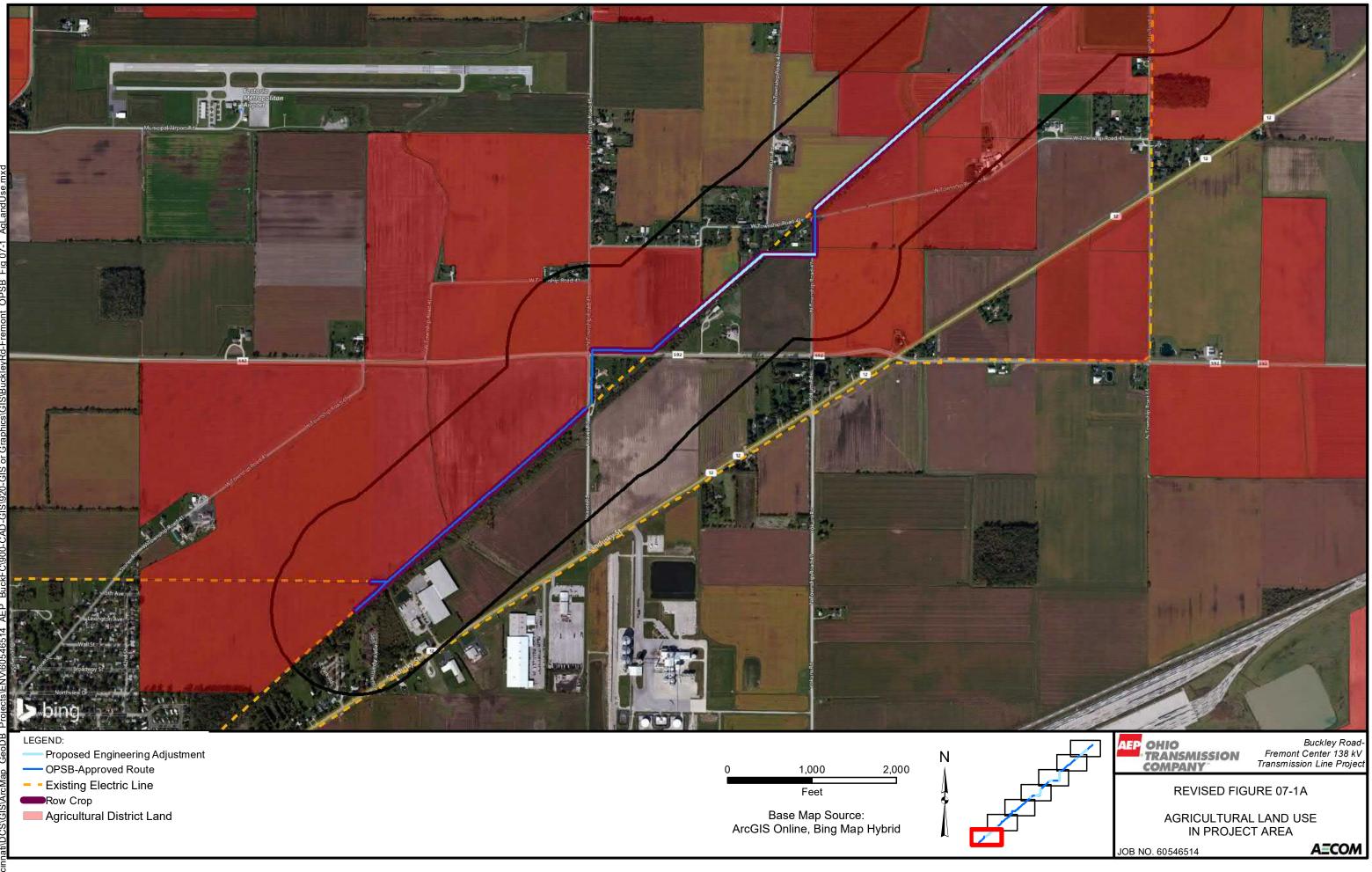
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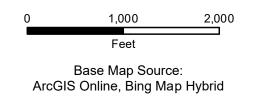
(D) REGIONAL LAND USE PLANS

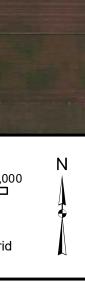
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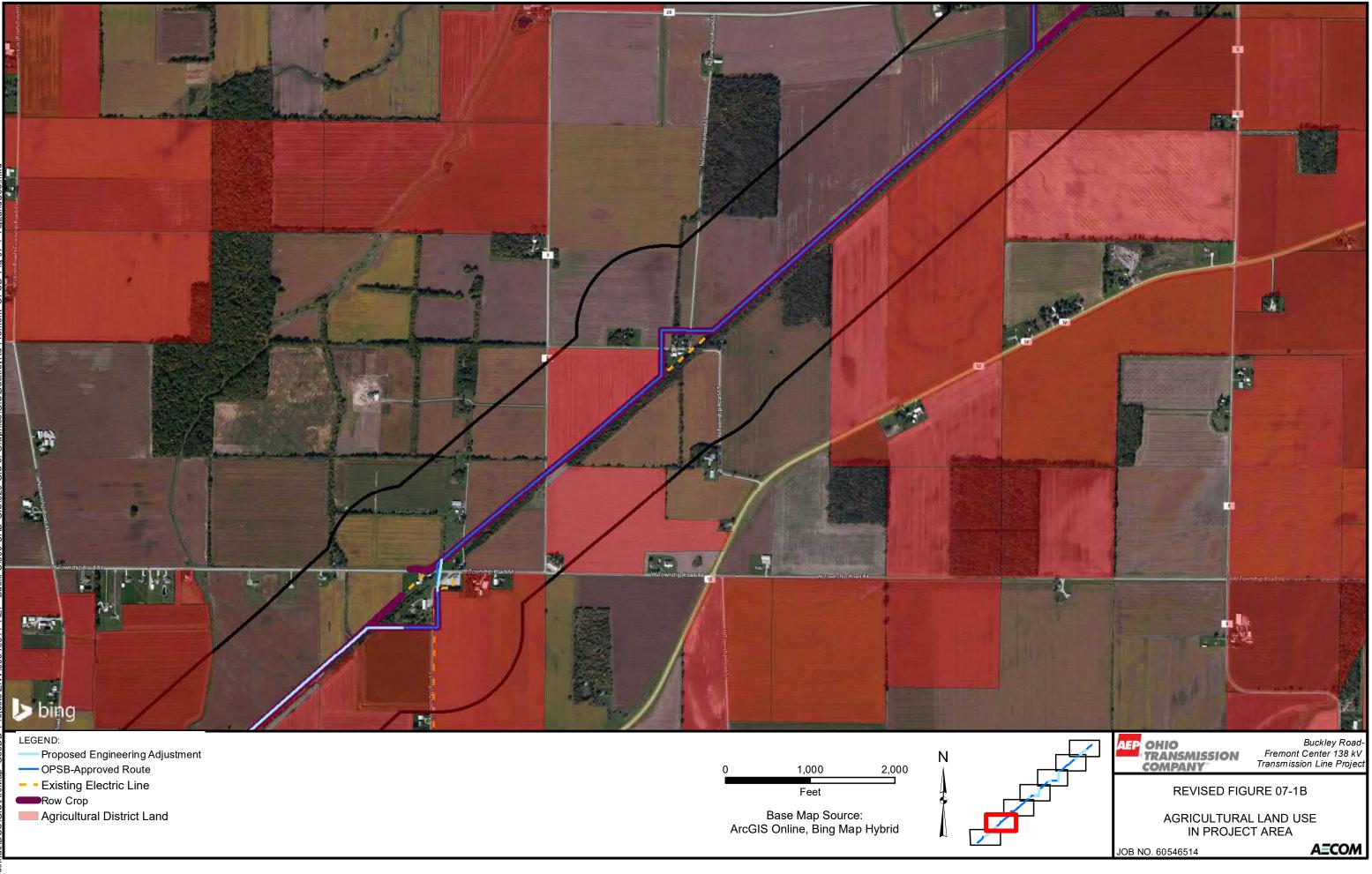
(E) CULTURAL IMPACTS OF THE PROPOSED PROJECT

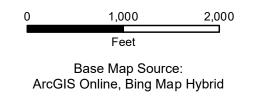
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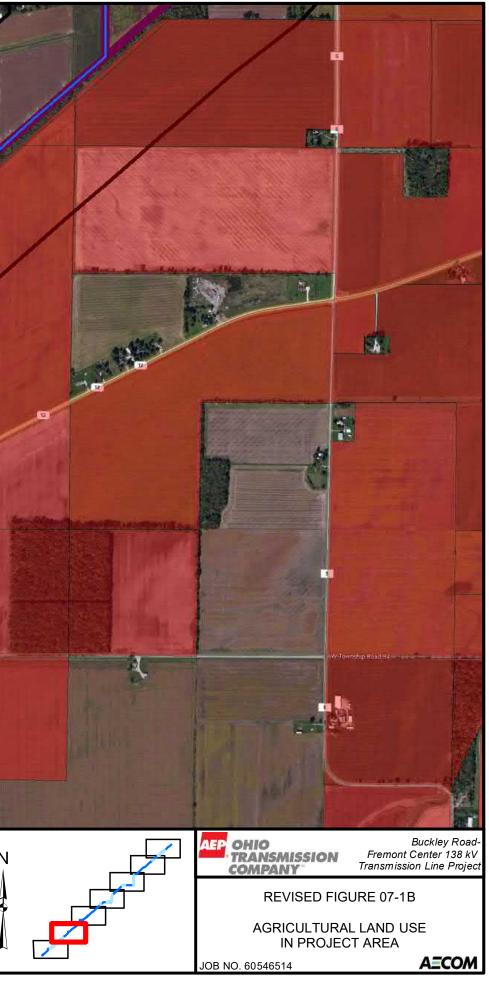


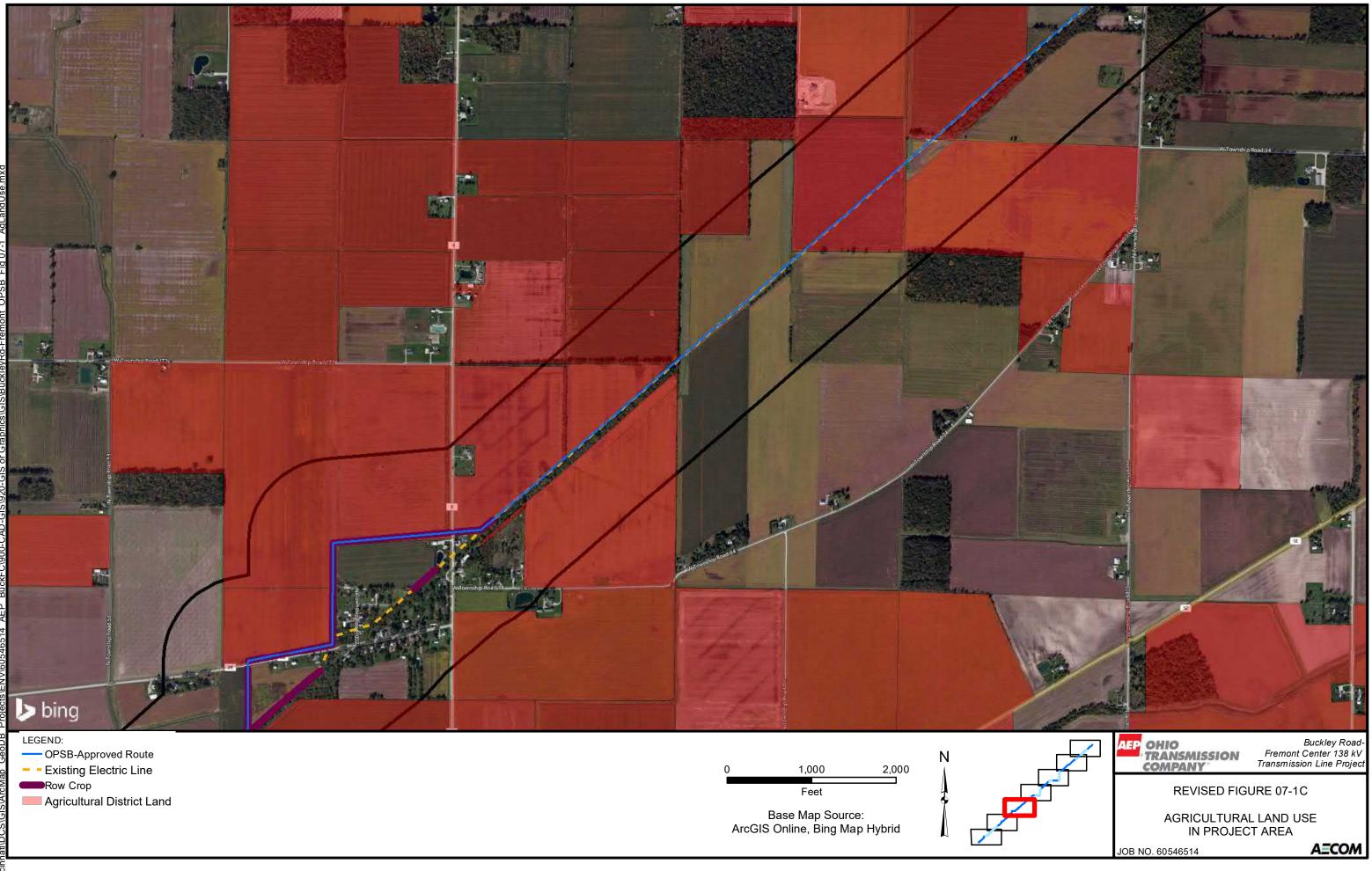


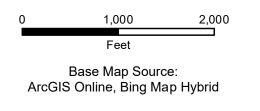


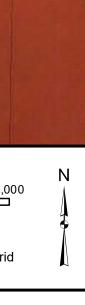


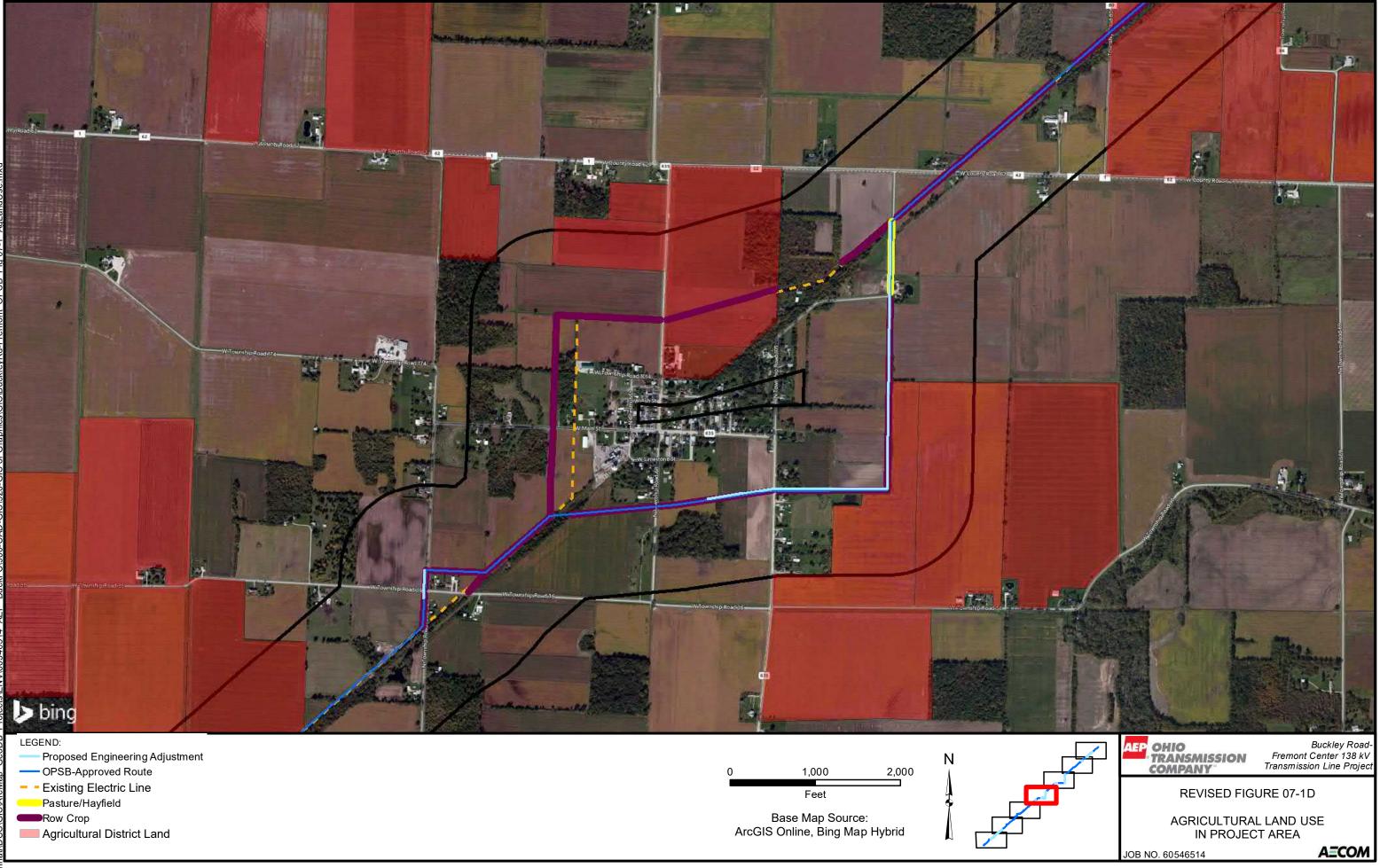


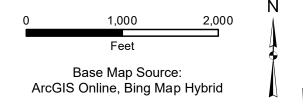


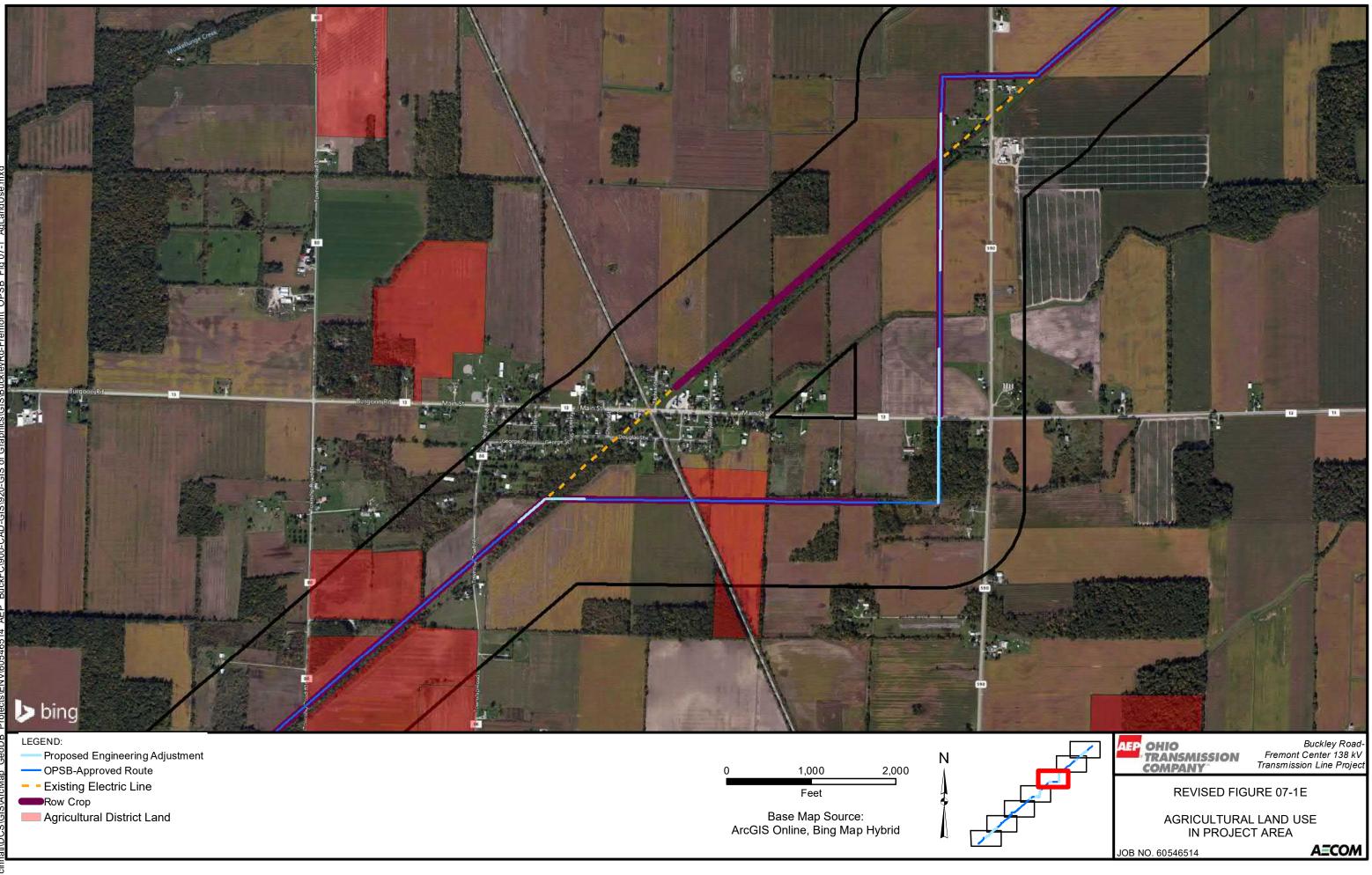


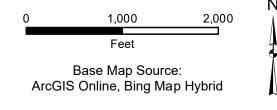


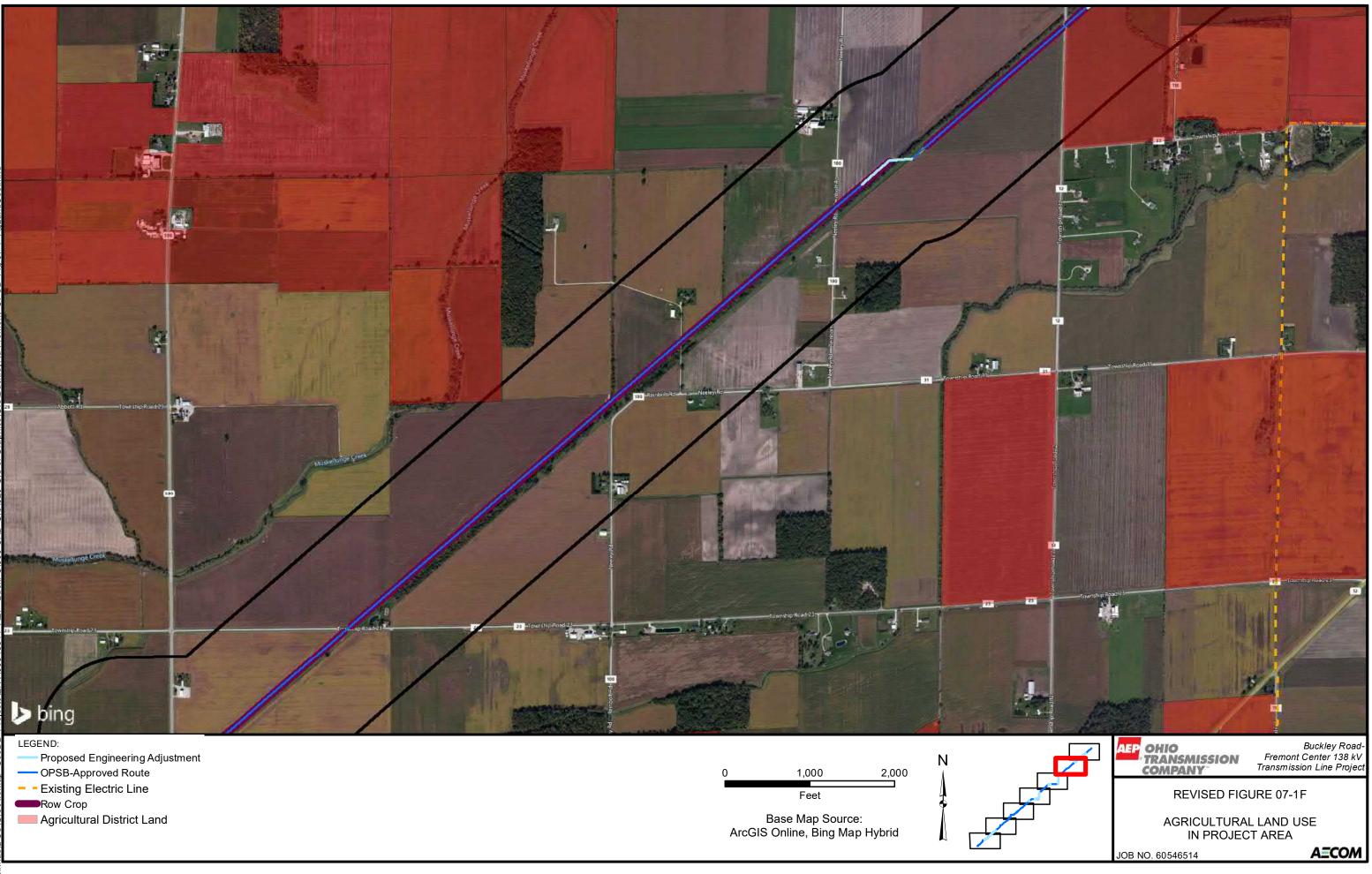


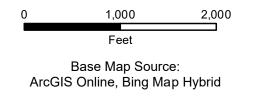




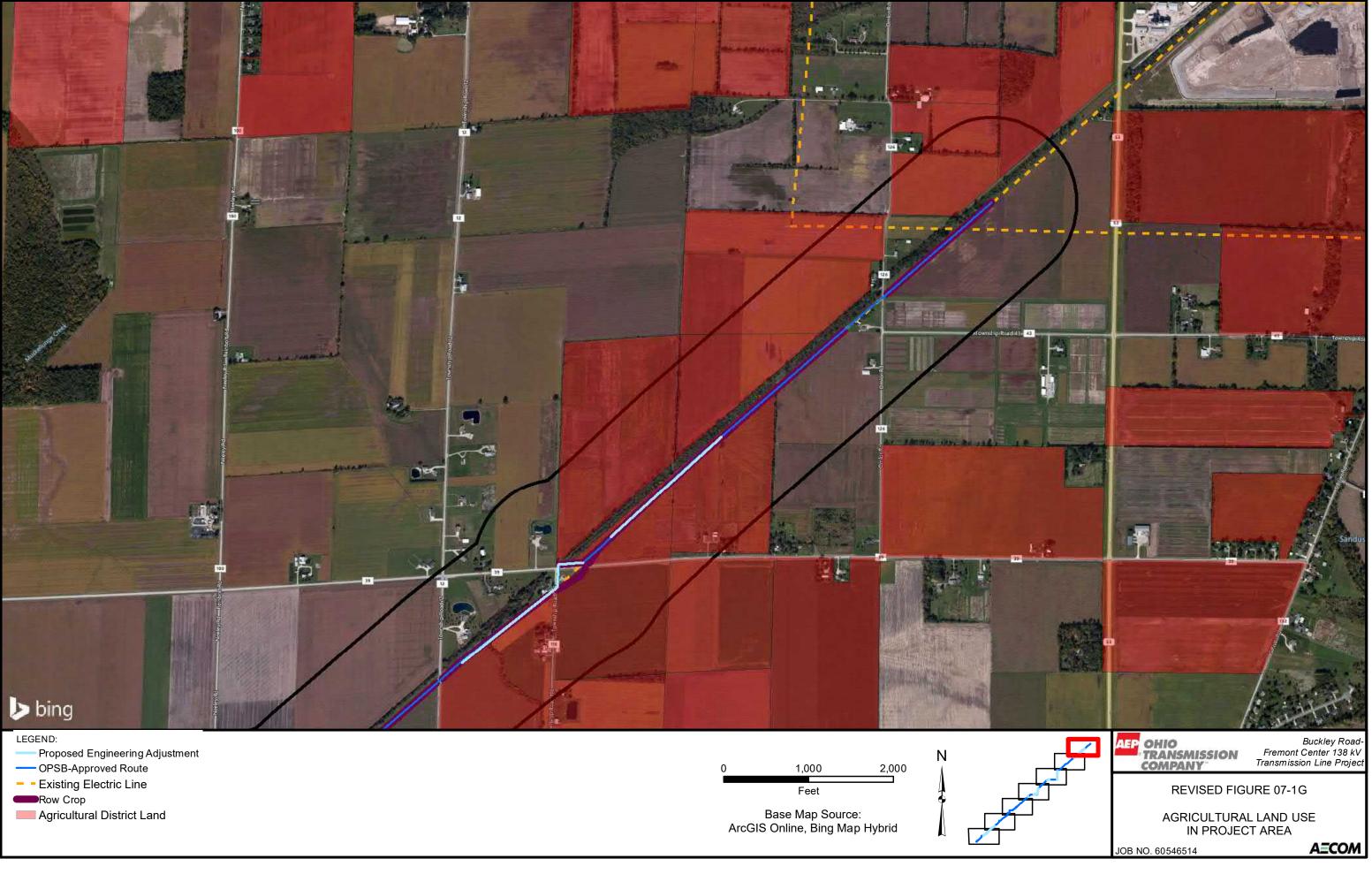


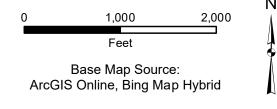










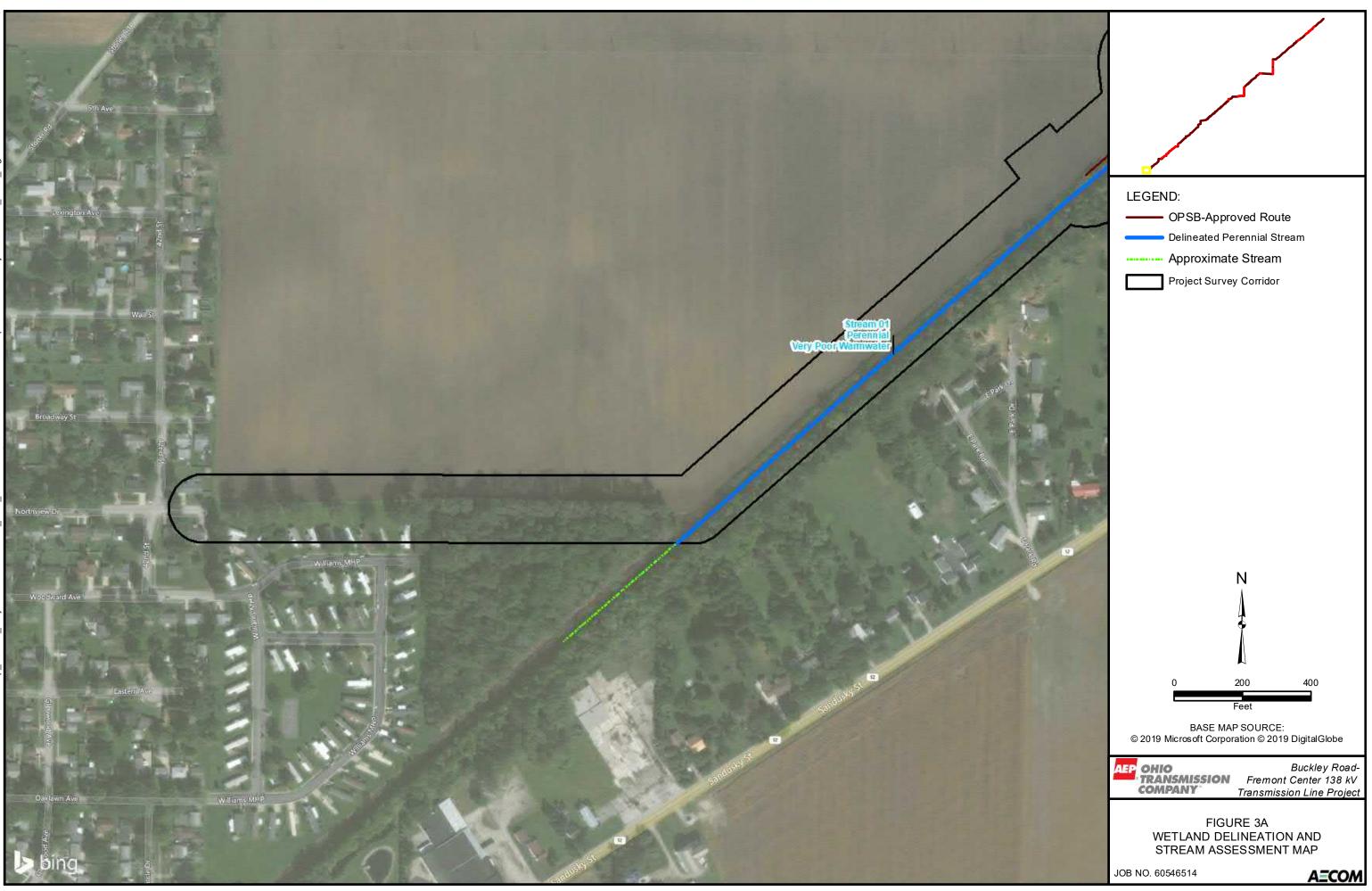


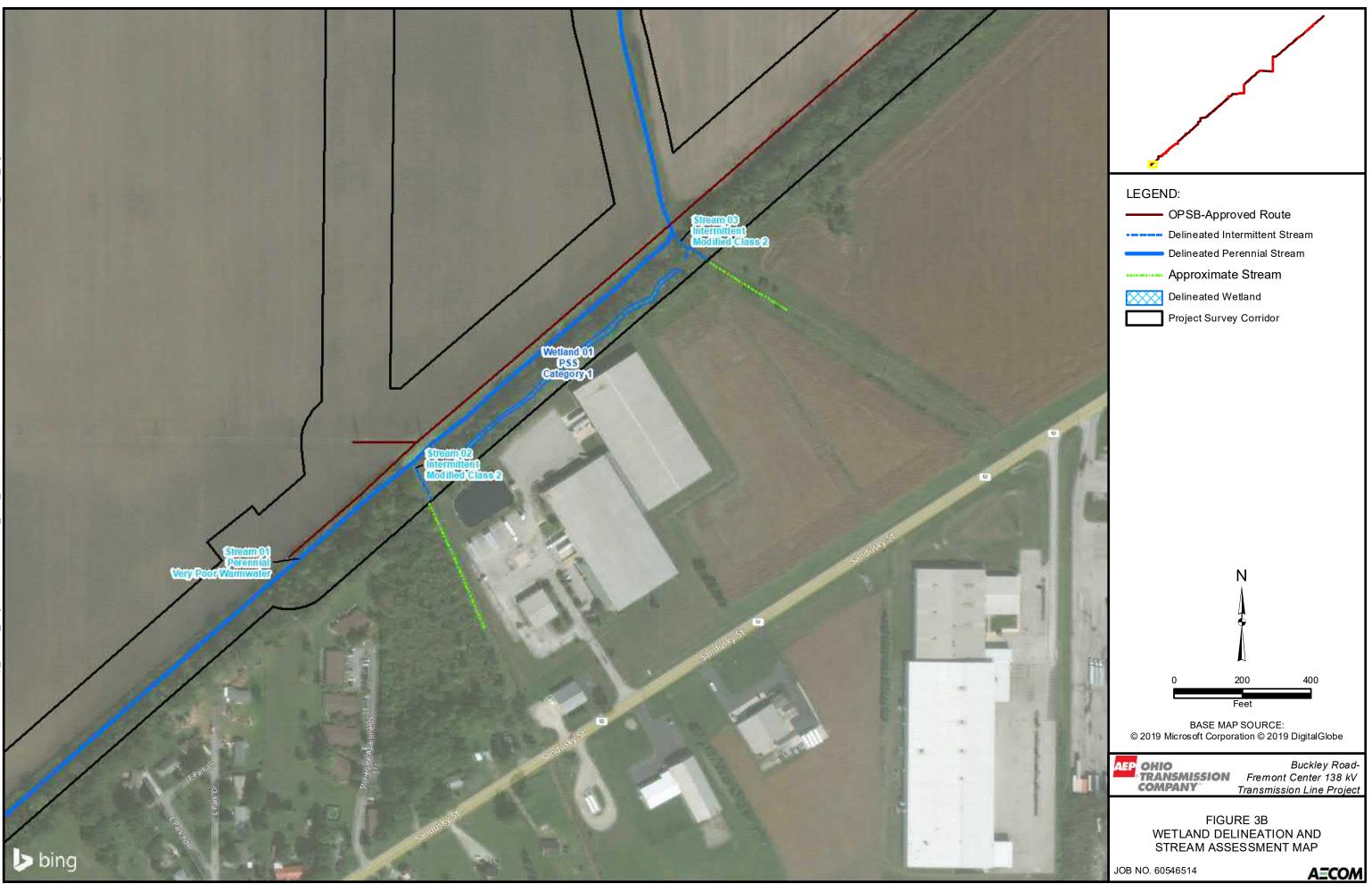
4906-5-08 ECOLOGICAL INFORMATION AND COMPLIANCE WITH PERMITTING REQUIREMENTS

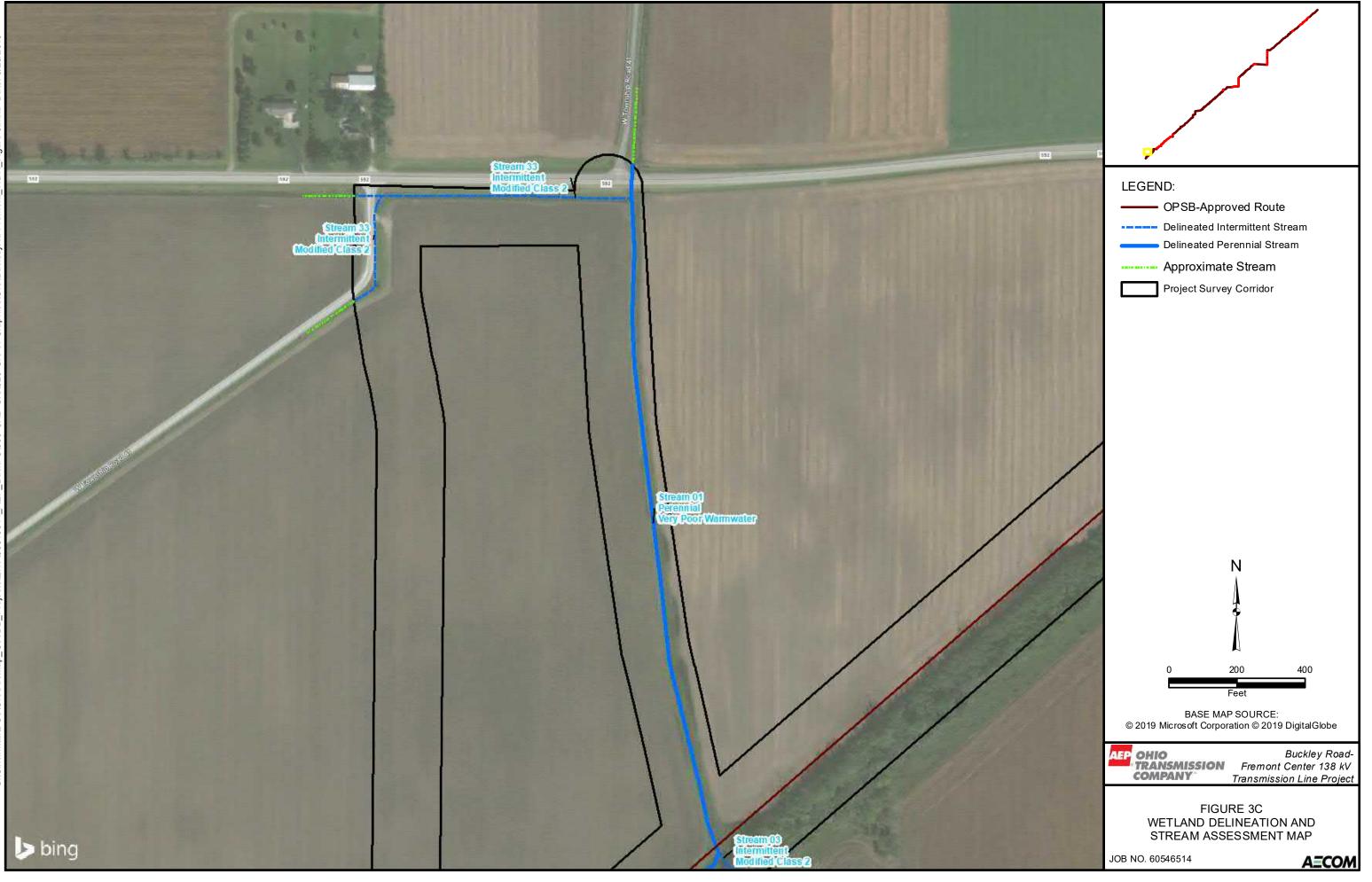
Text provided in the January 30, 2018 Application filing remains unchanged. Maps at a scale of 1:24,000 illustrating areas within 1,000 feet of the Approved Route and proposed Engineering Adjustments are presented as **Revised Figures 05-1A through 05-1D**. The proposed route alignments, including proposed turning points, are also presented in **Revised Figures 05-1A through 05-1D**. More detailed maps at 1:6,000-scale depicting delineated features within the survey corridor are provided as **Figures 3A through 3II of Appendix 08-1** for the Approved Route and proposed Engineering Adjustments. No additional impacts to delineated features result from the proposed Engineering Adjustments.

APPENDIX 08-1

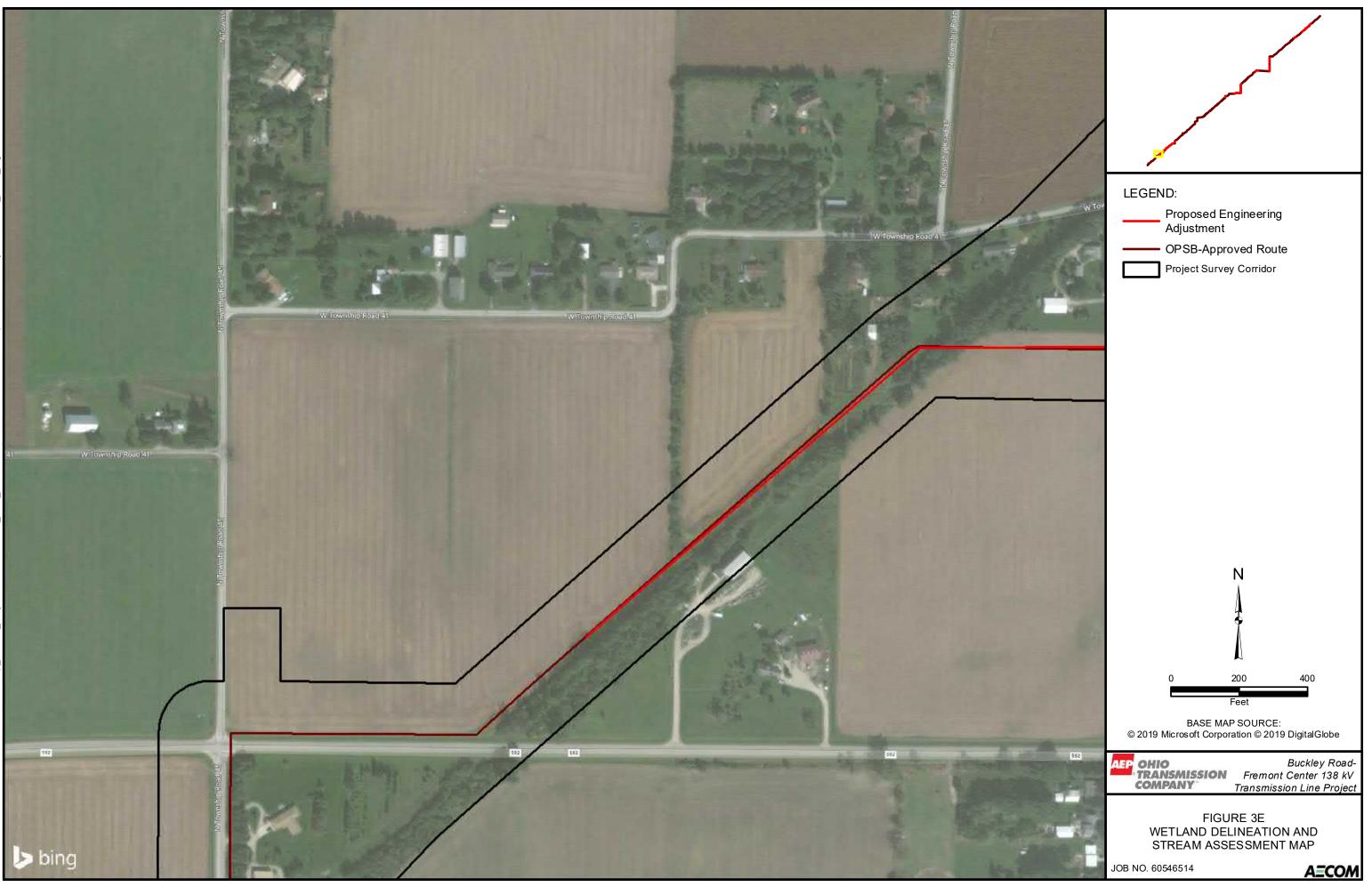
WETLAND DELINEATION AND STREAM ASSESSMENT MAPS

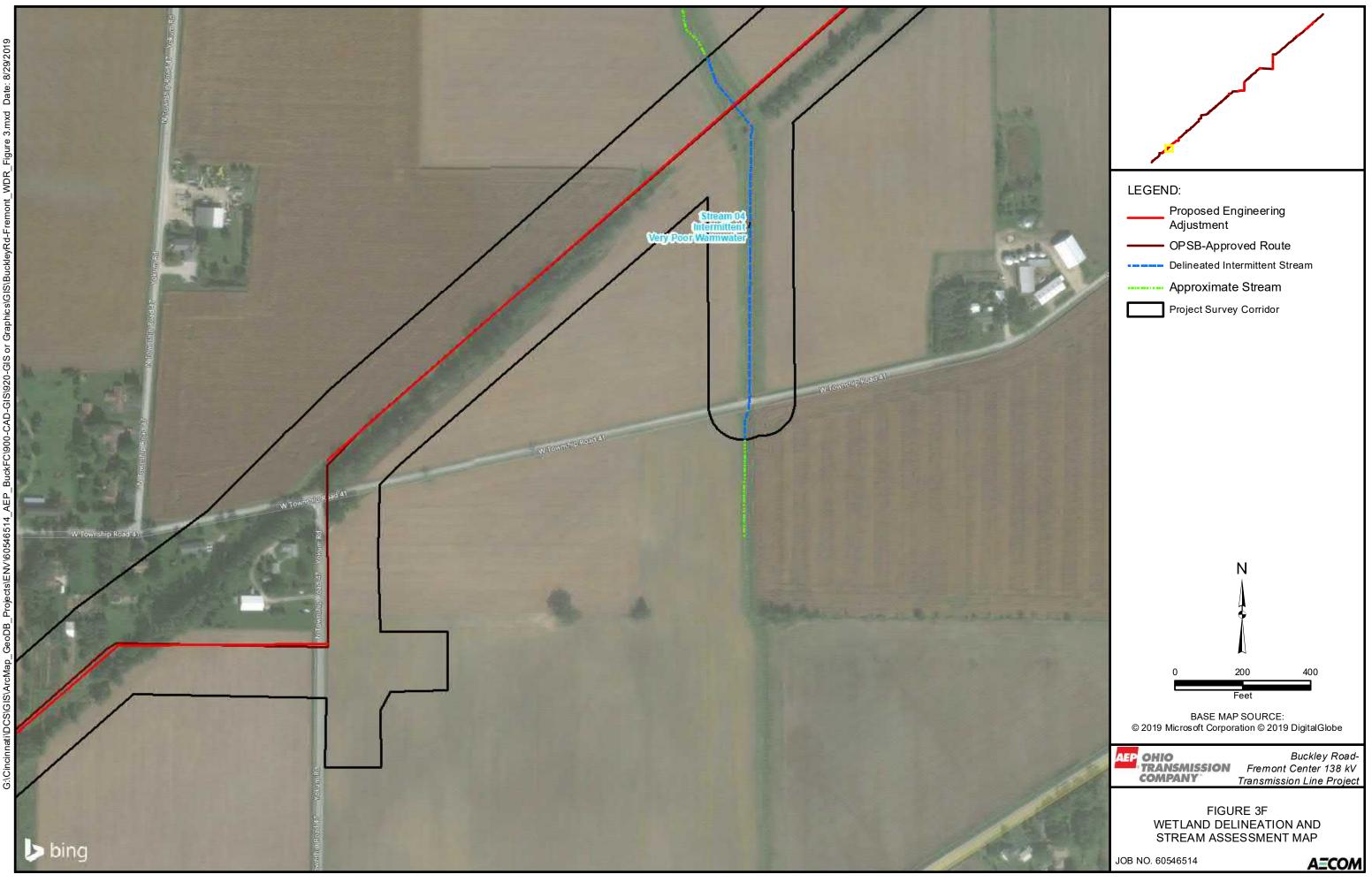




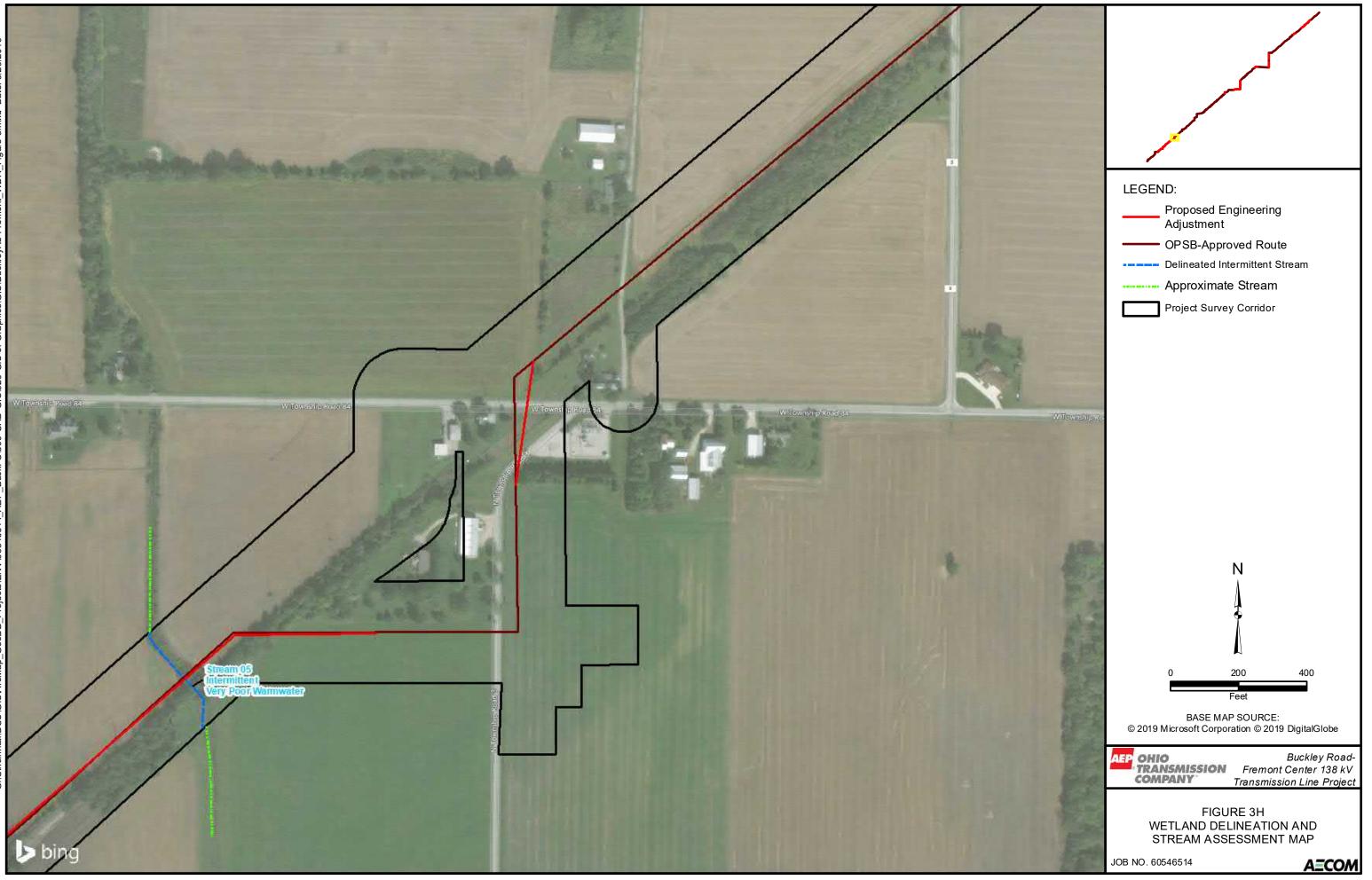






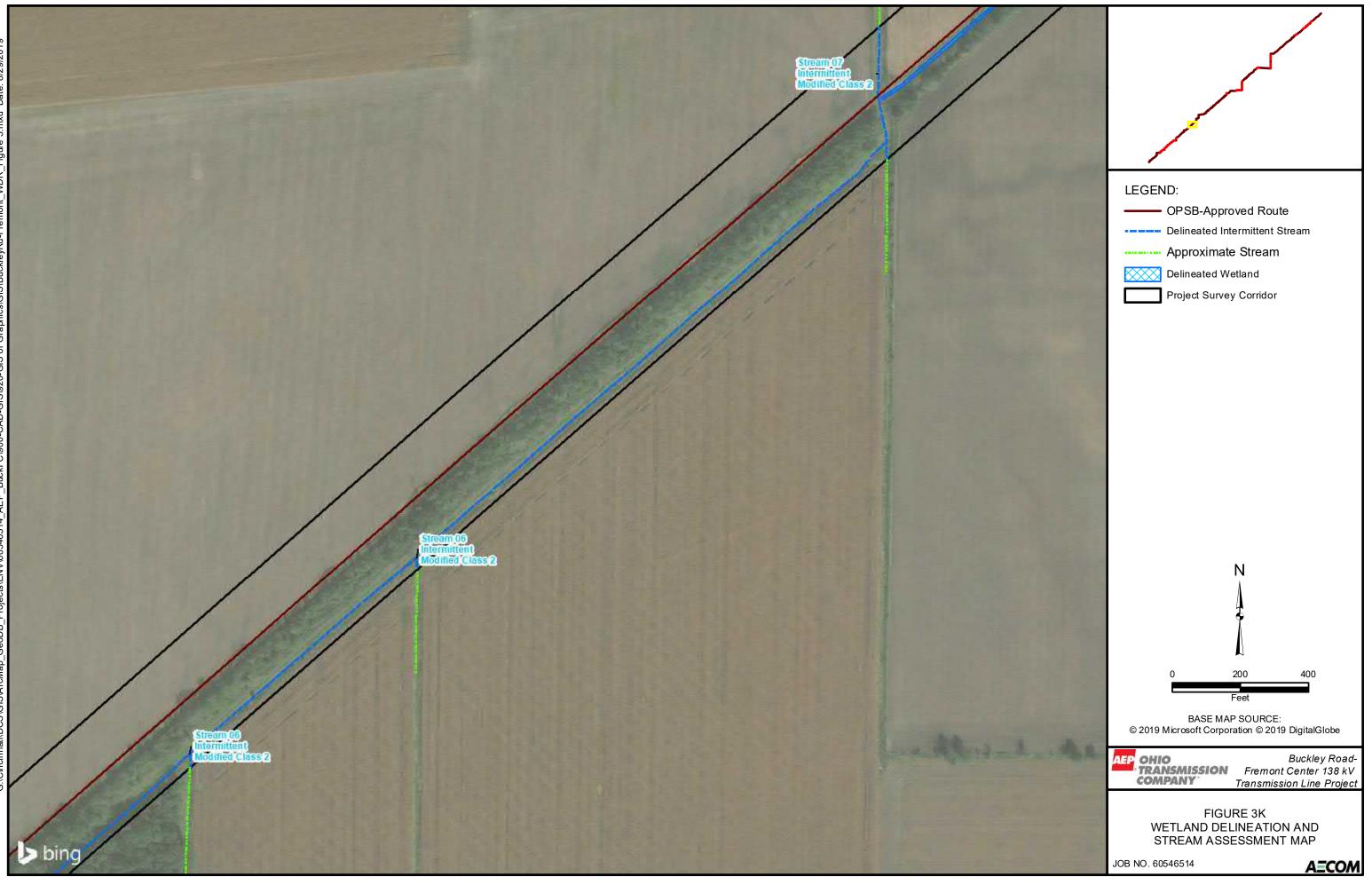


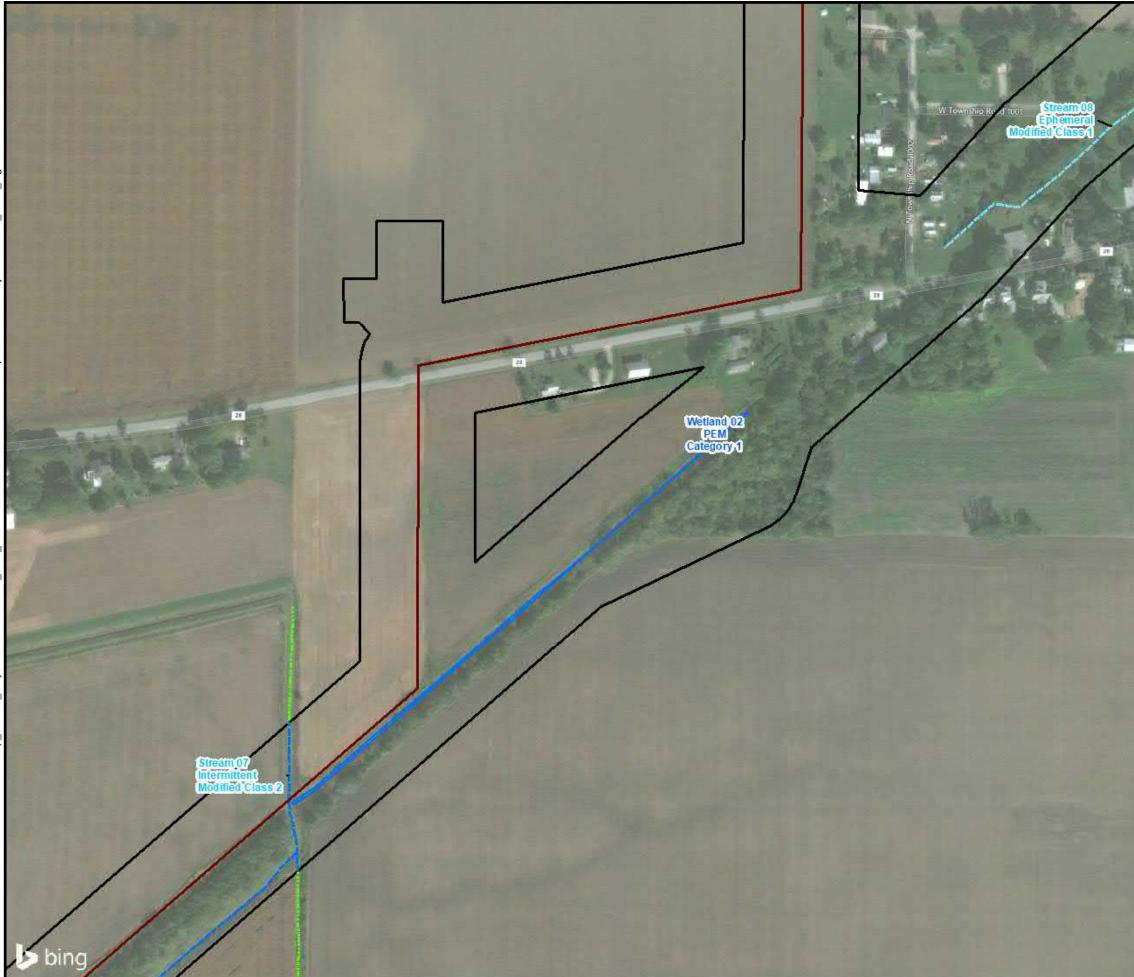


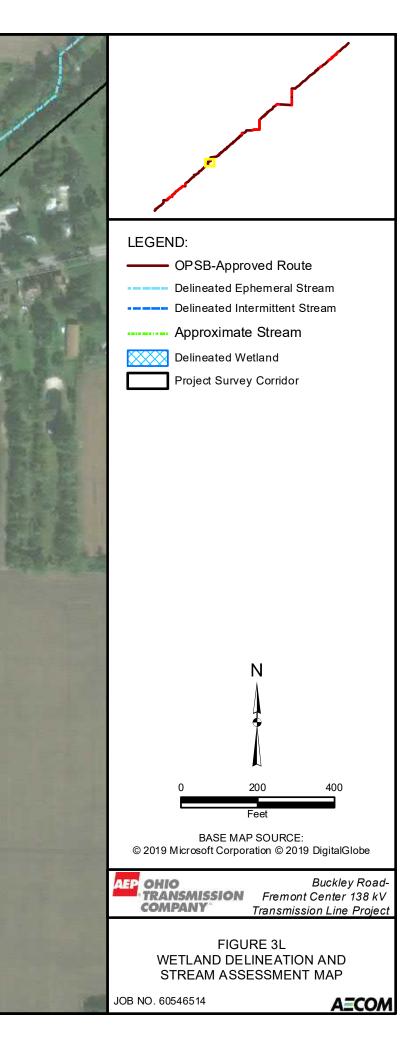


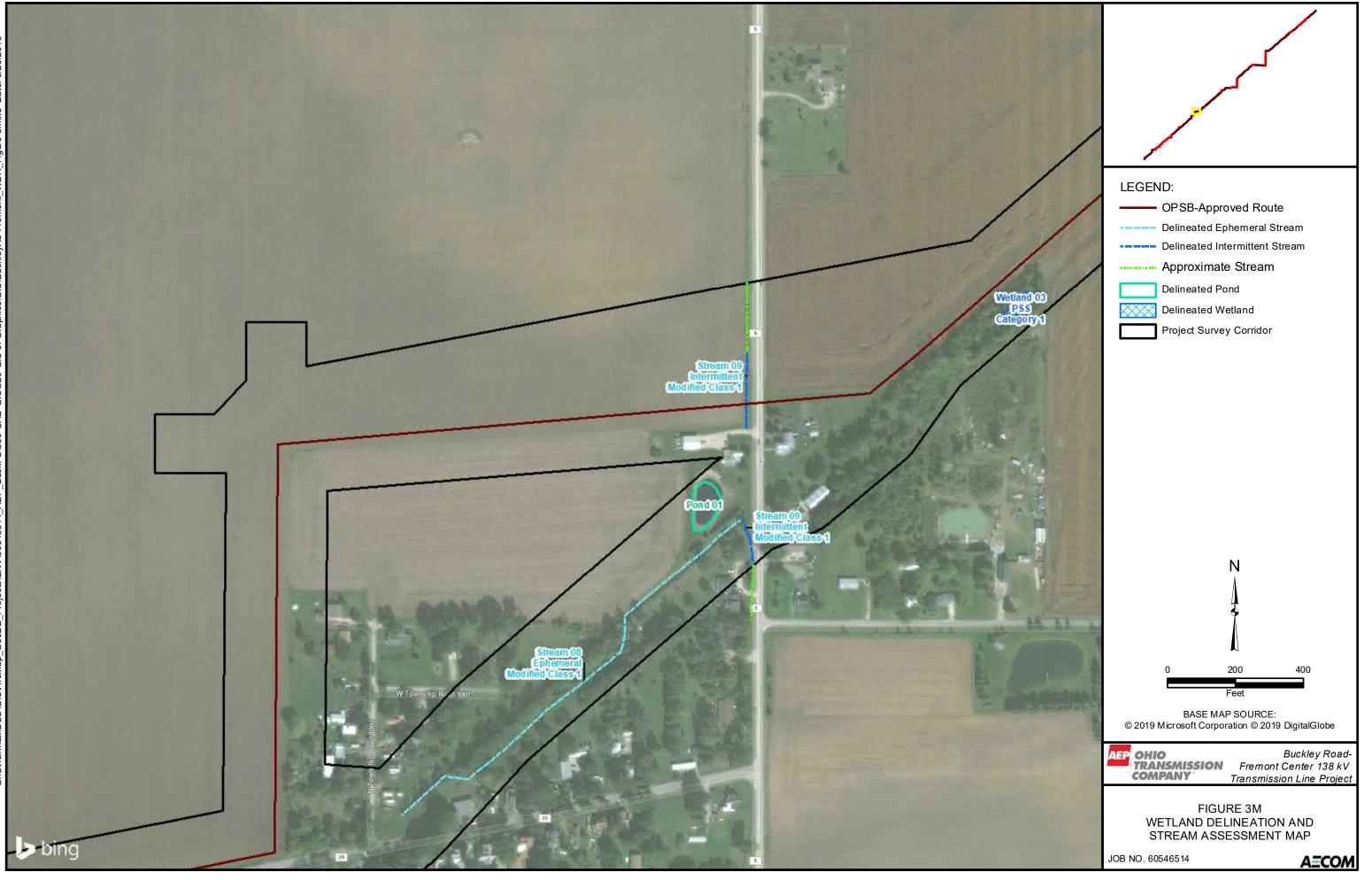




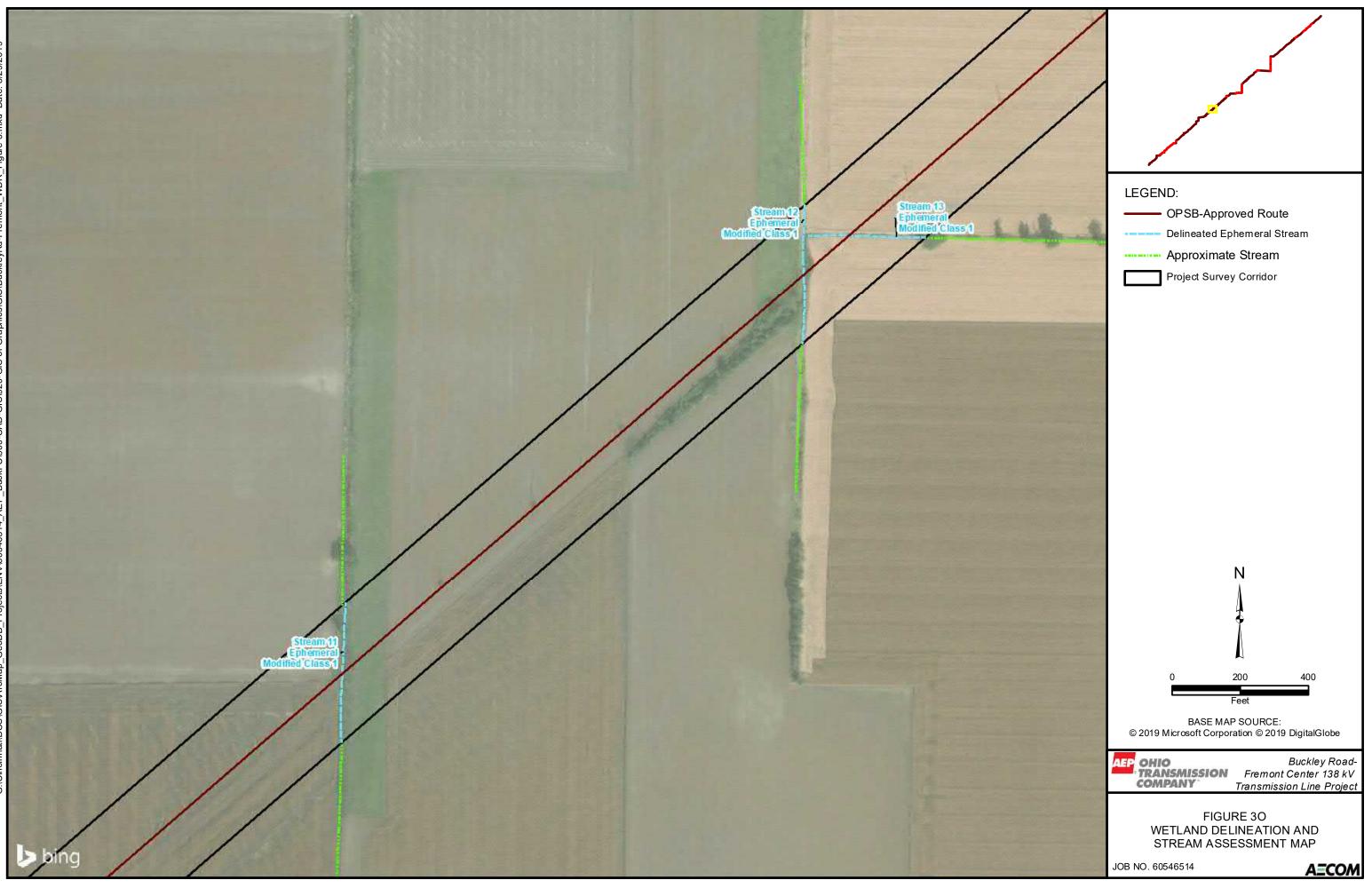






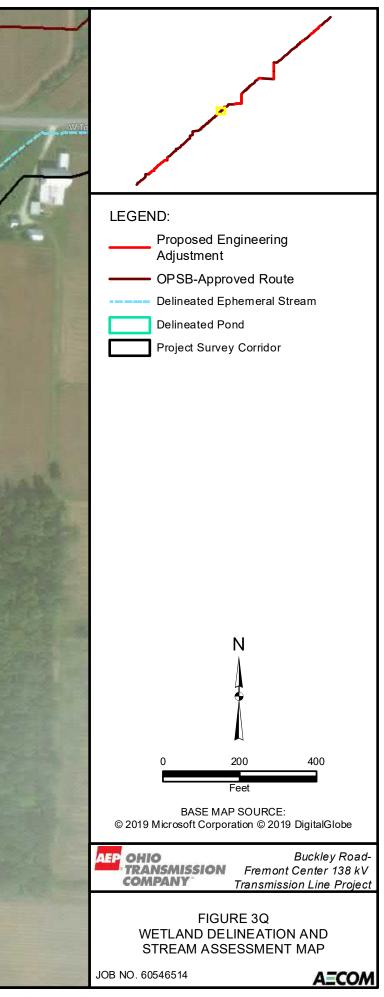


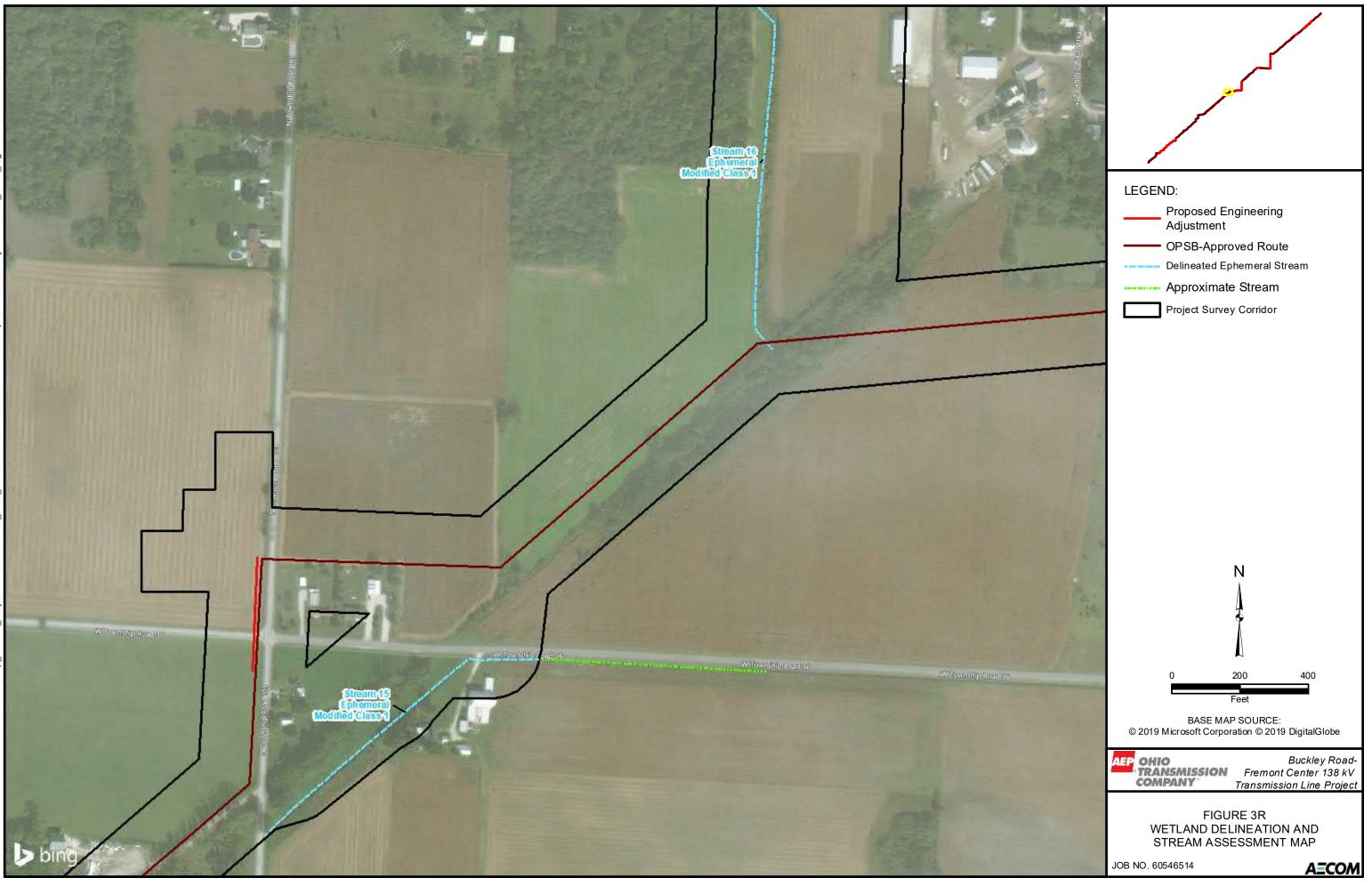


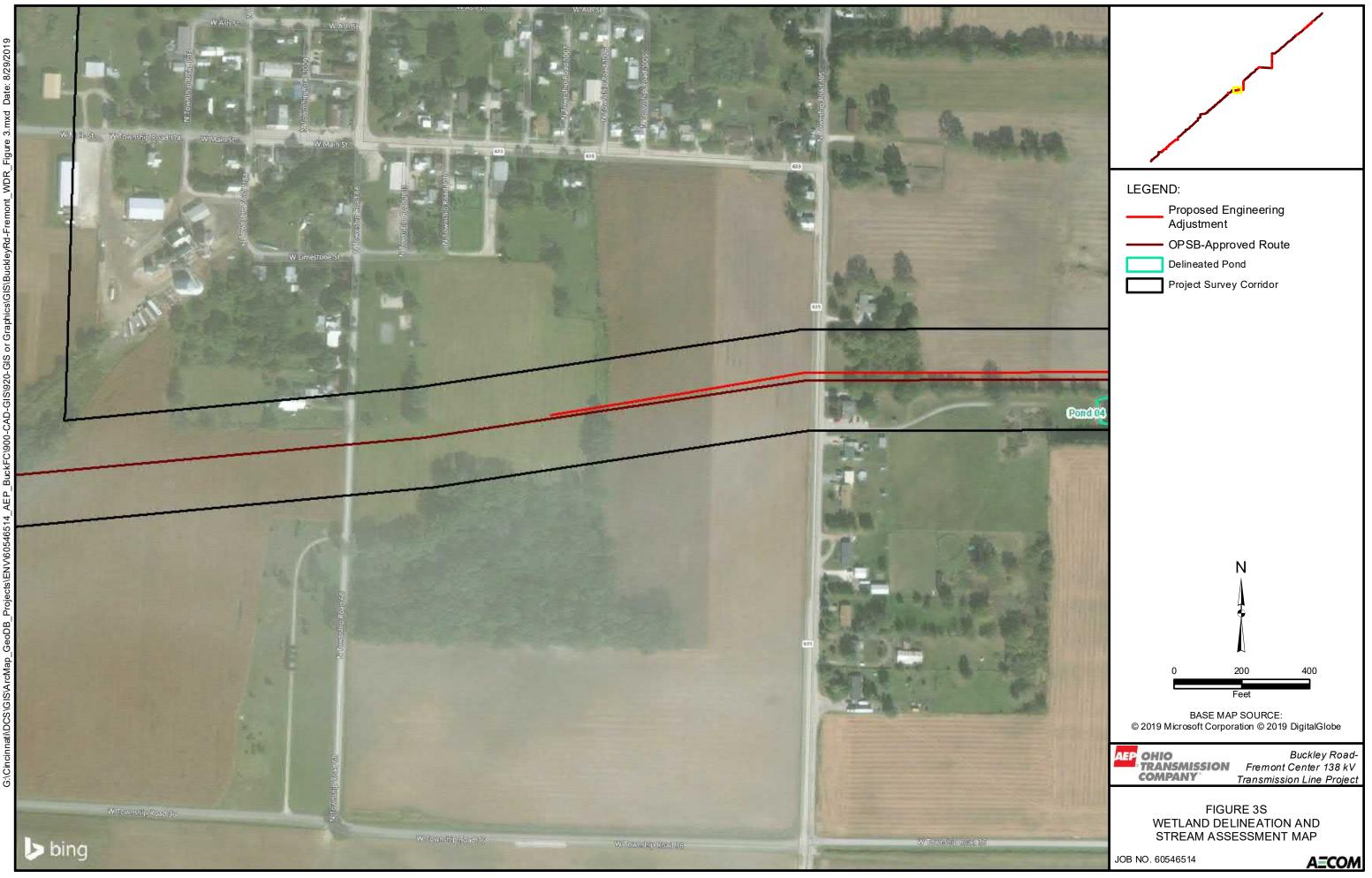




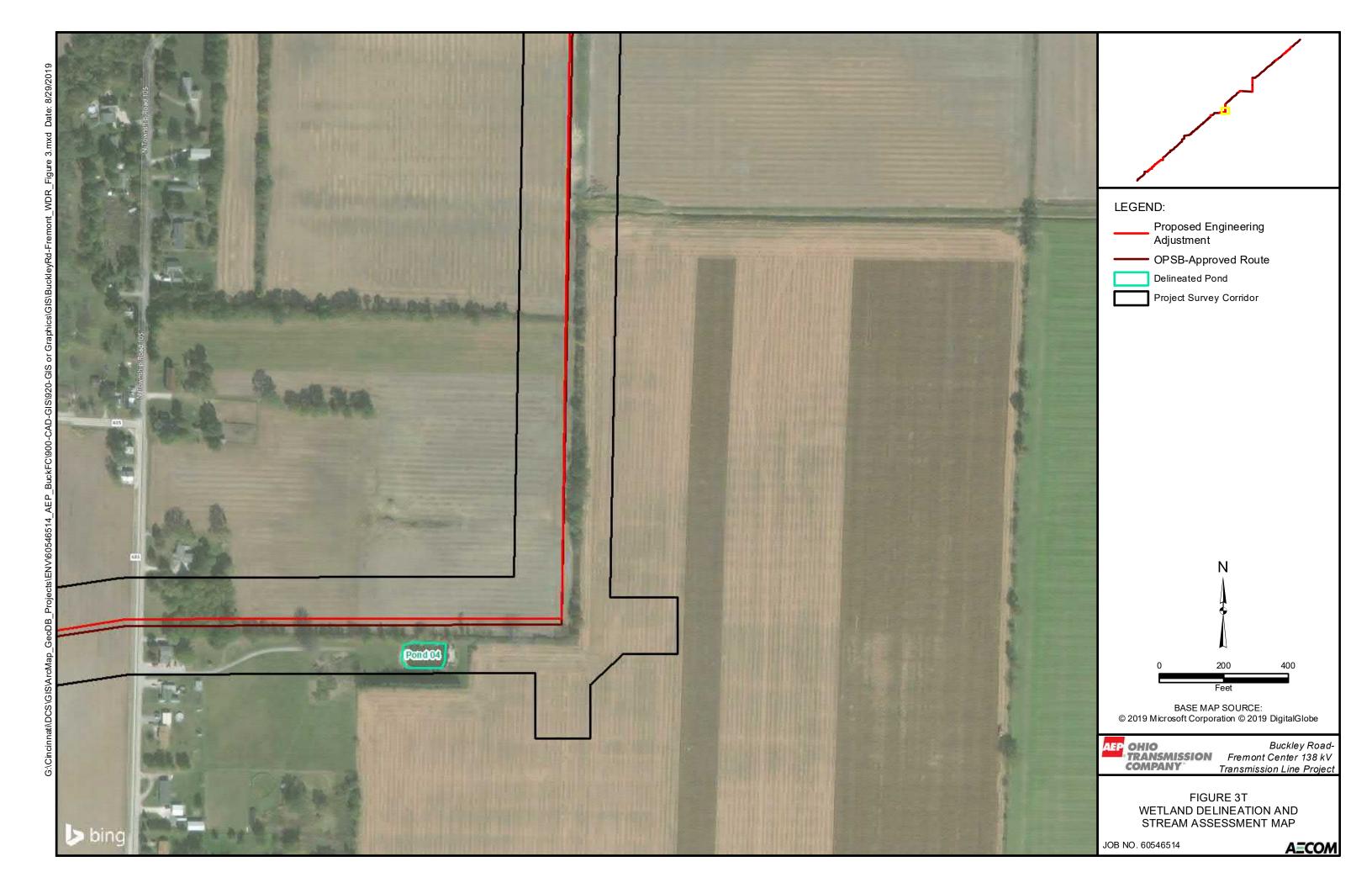


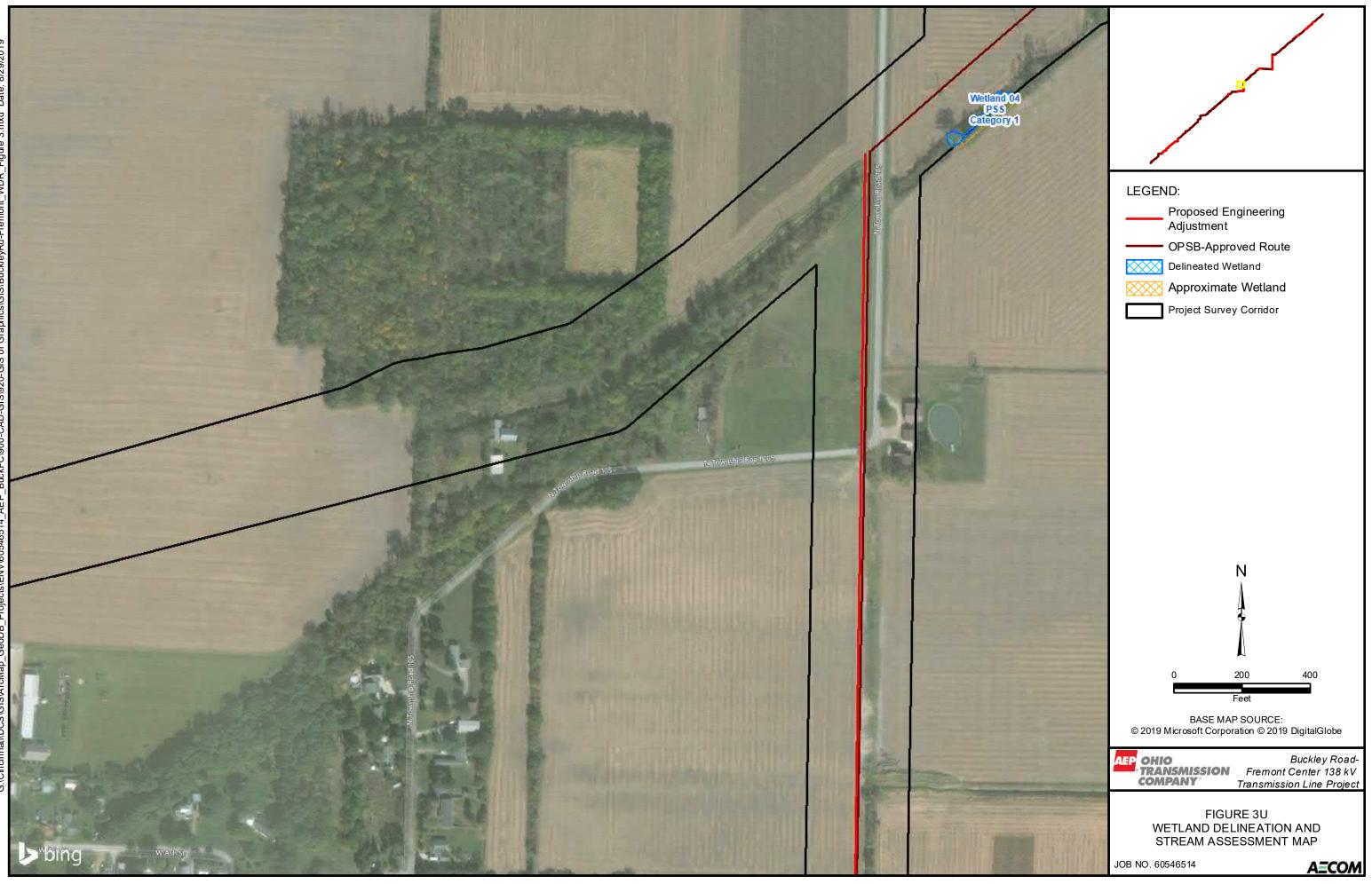


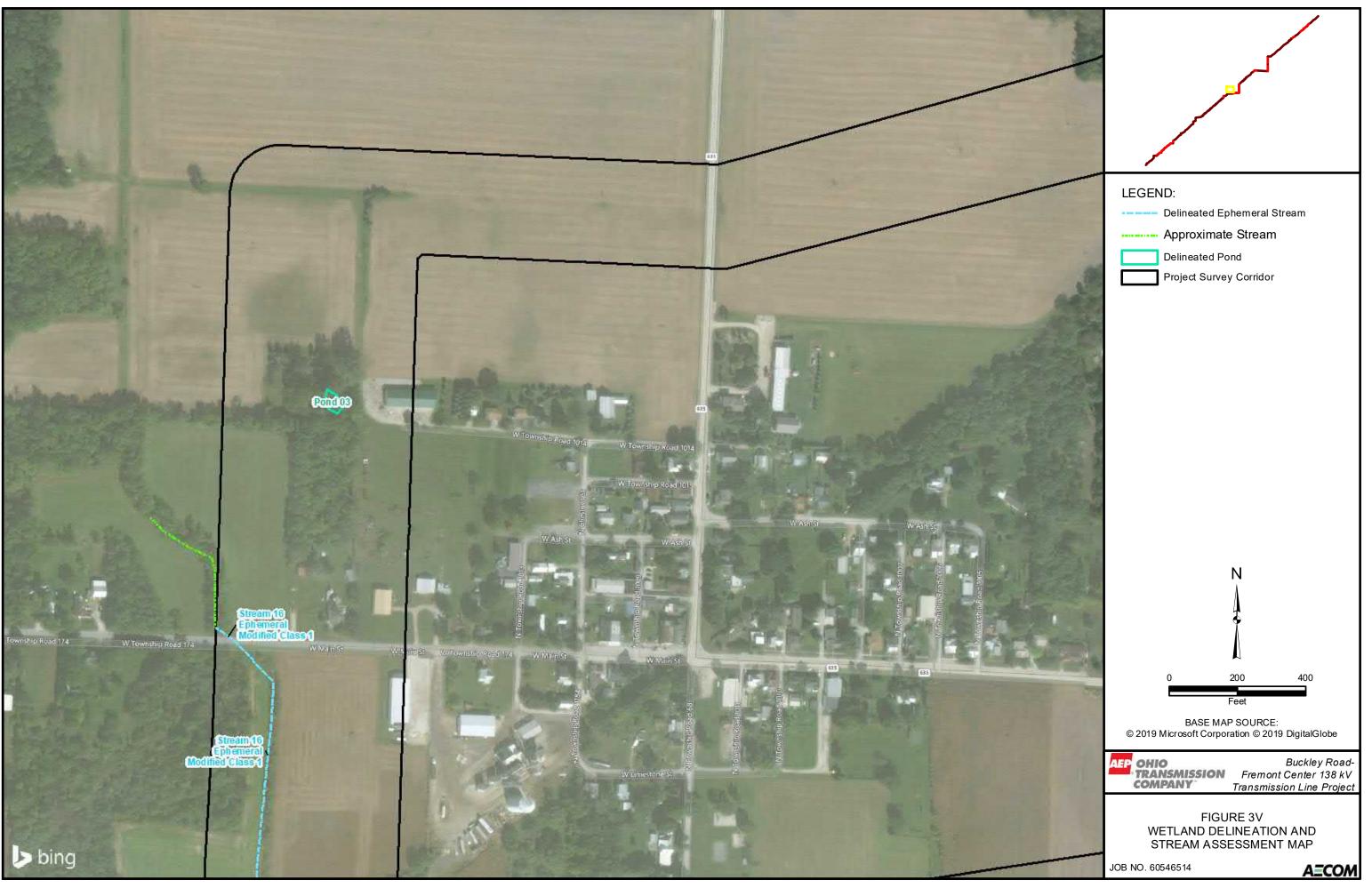


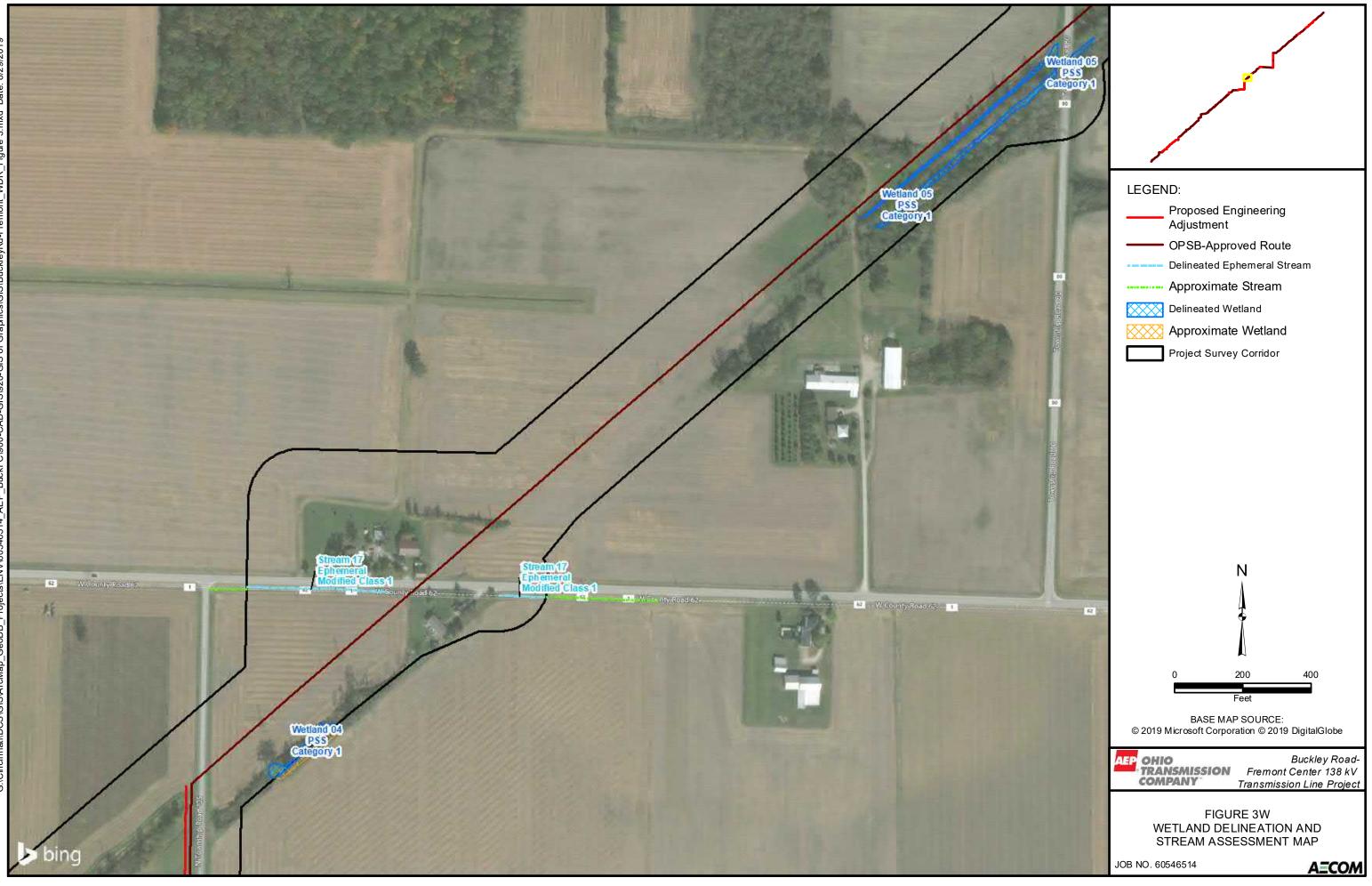


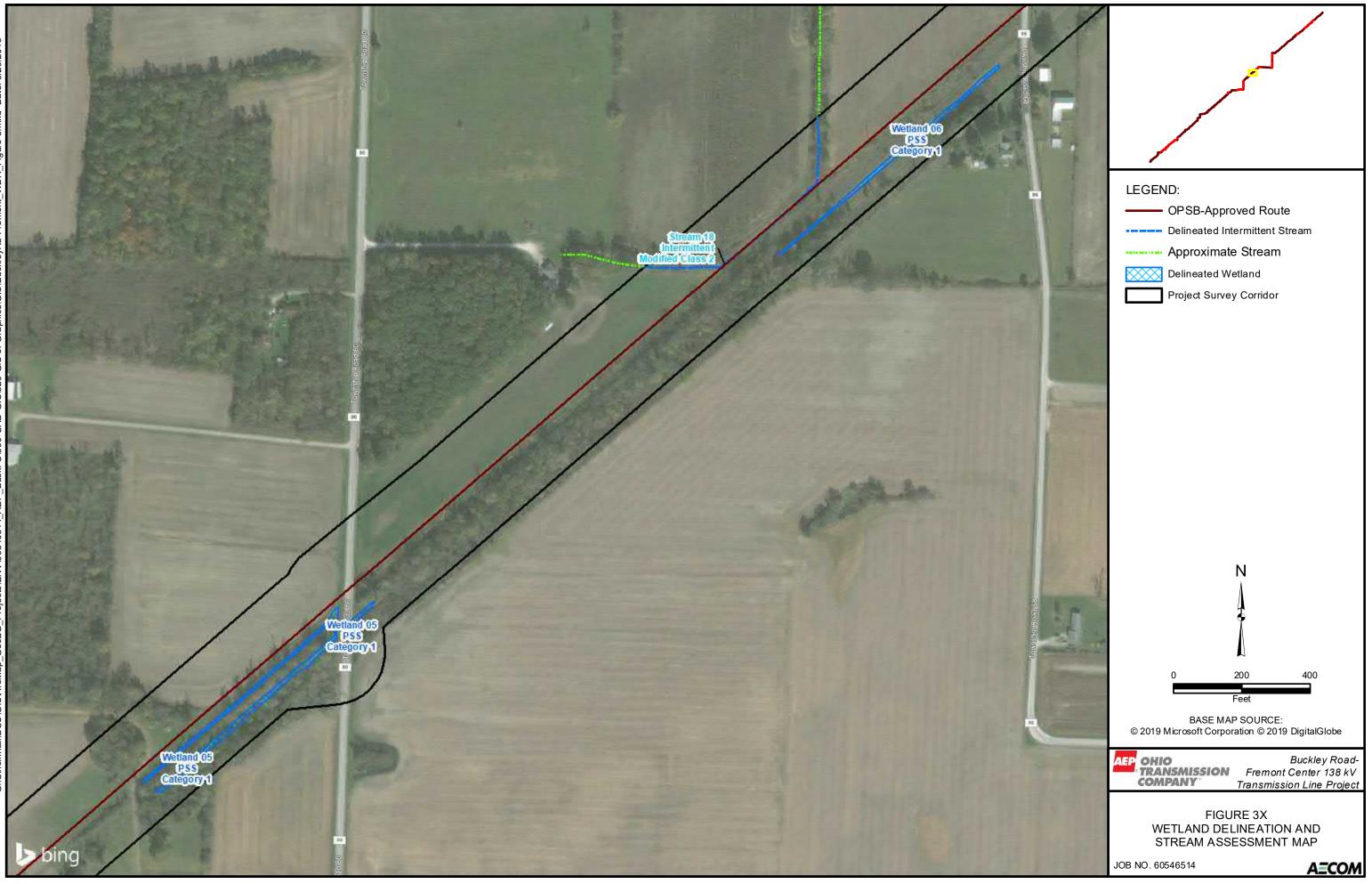
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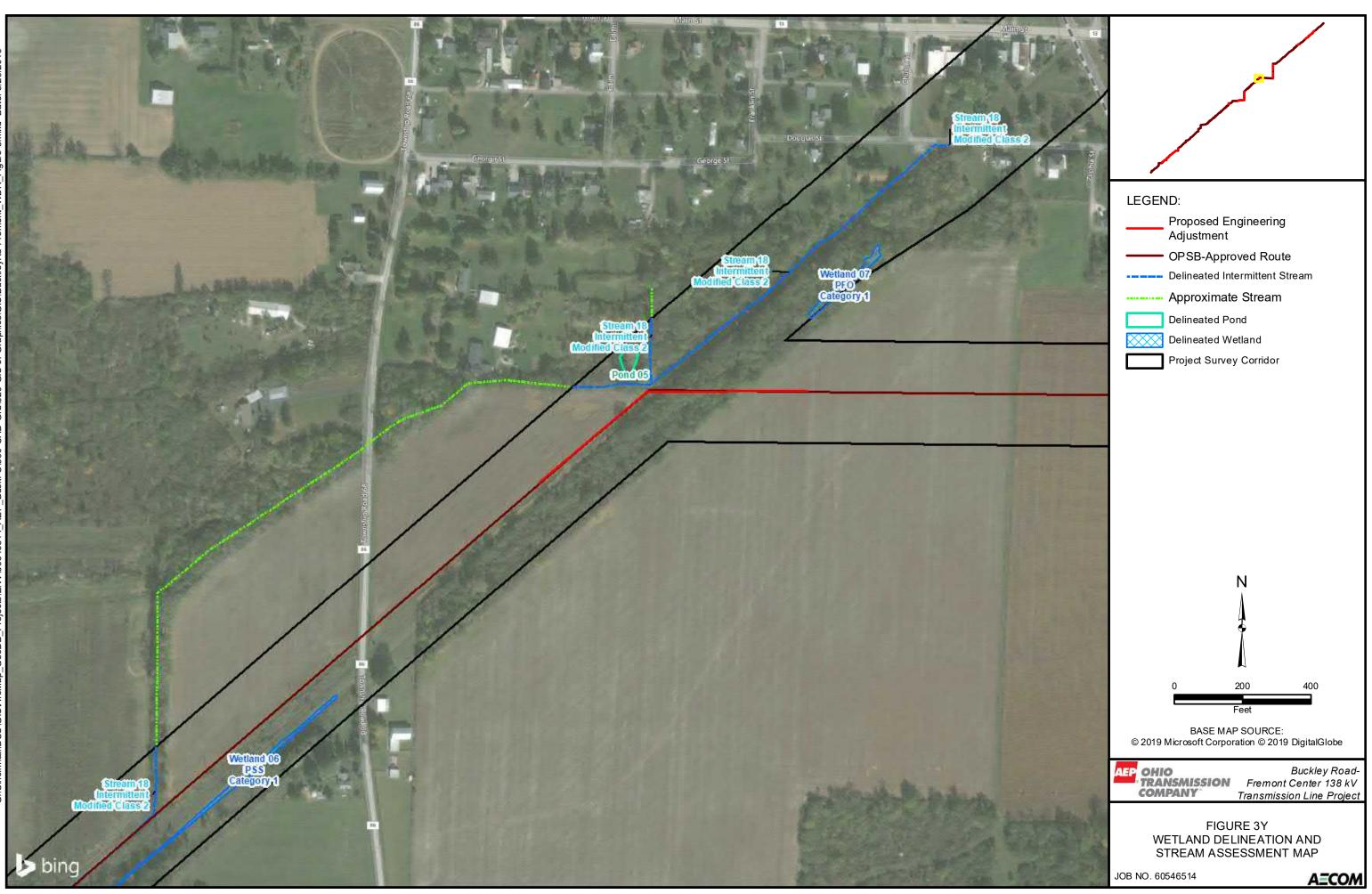


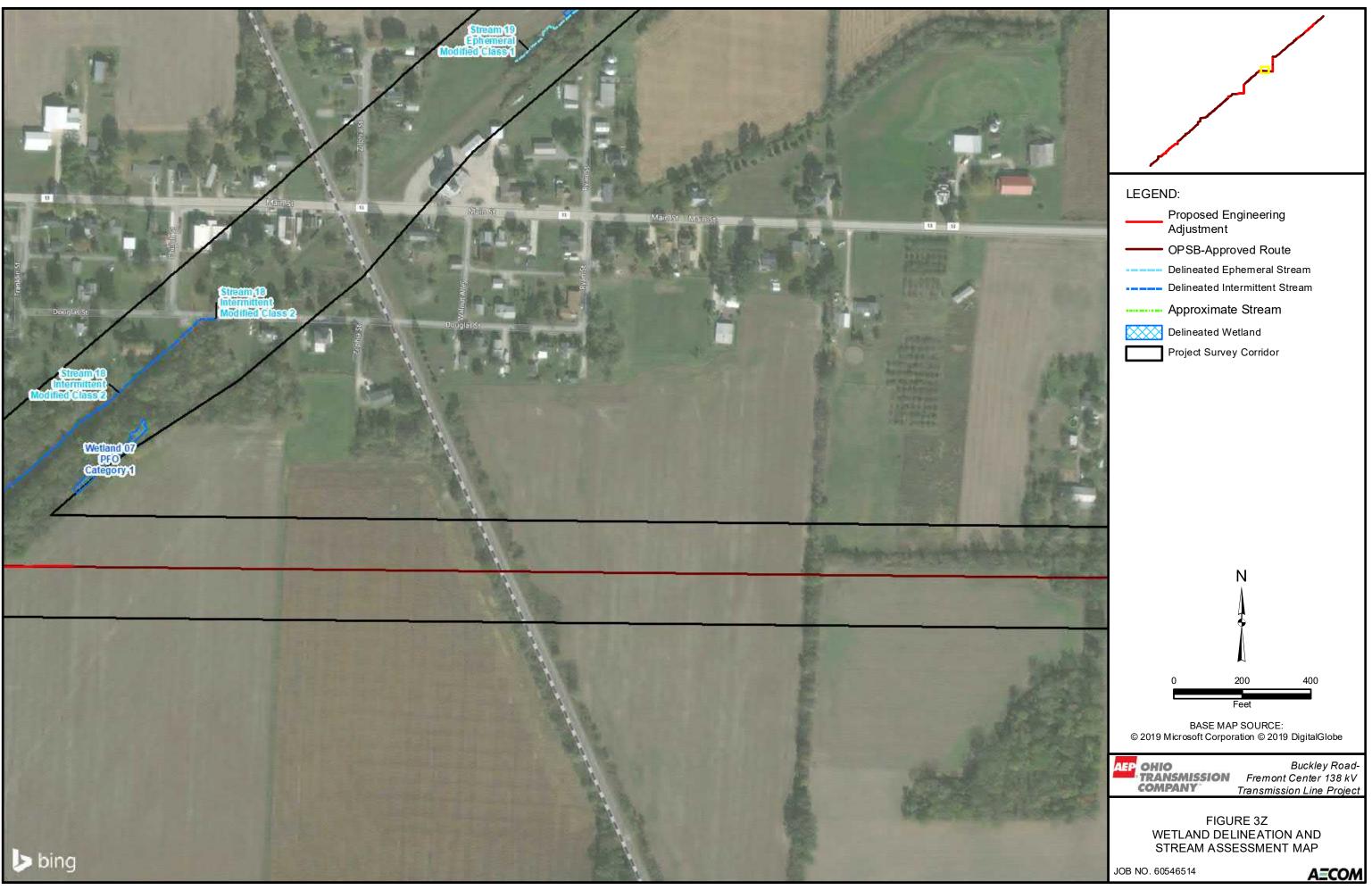


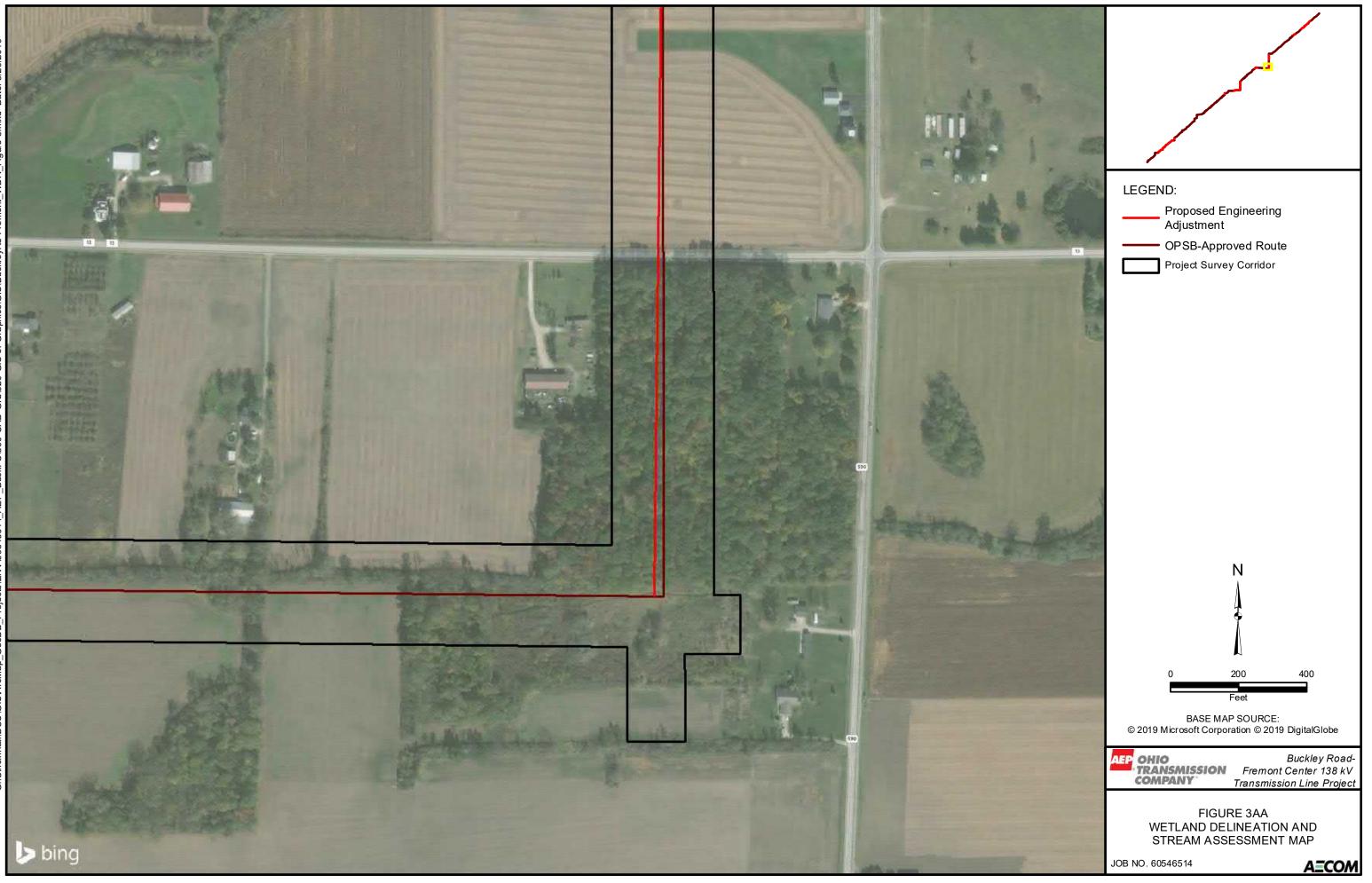




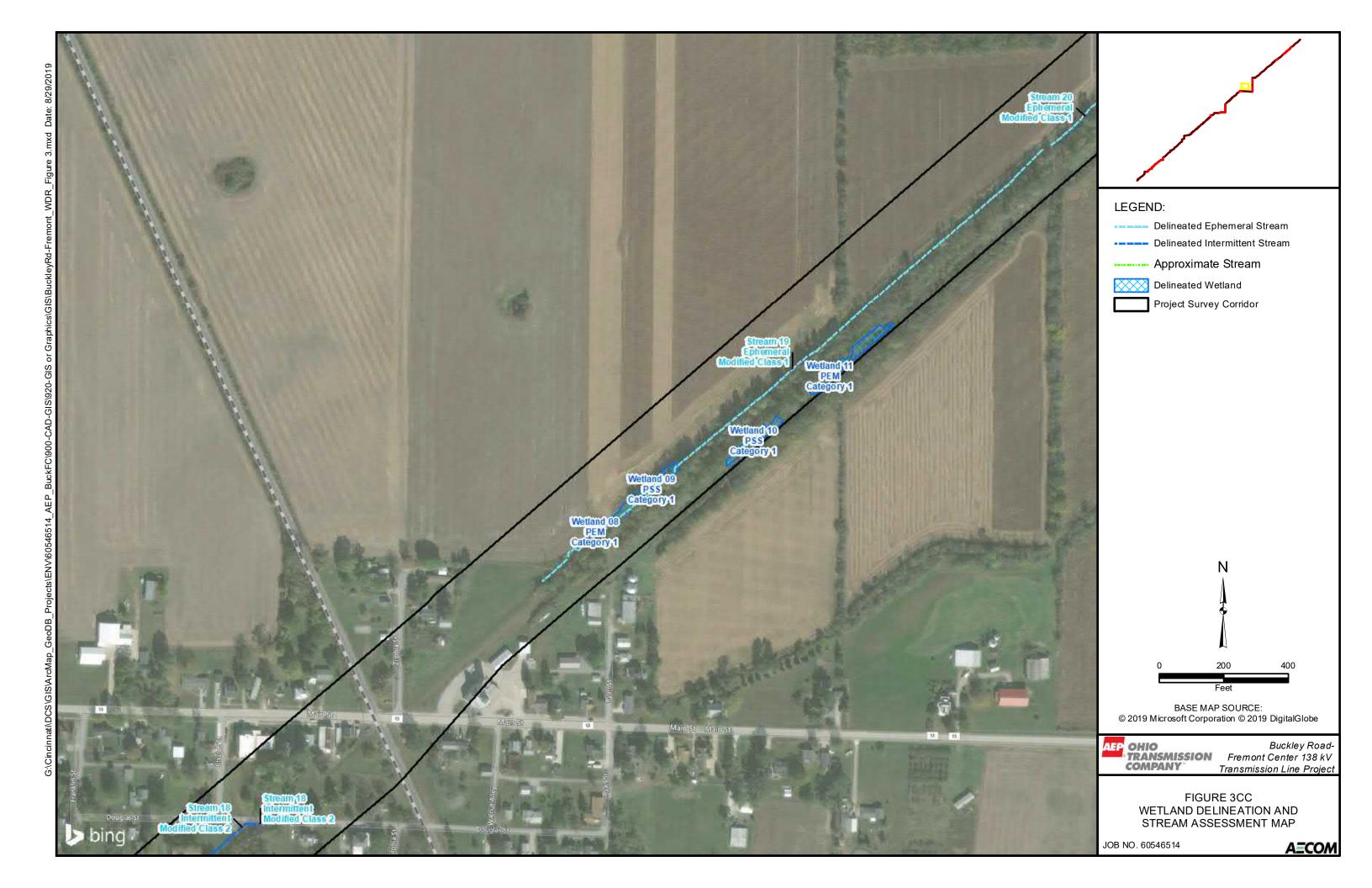


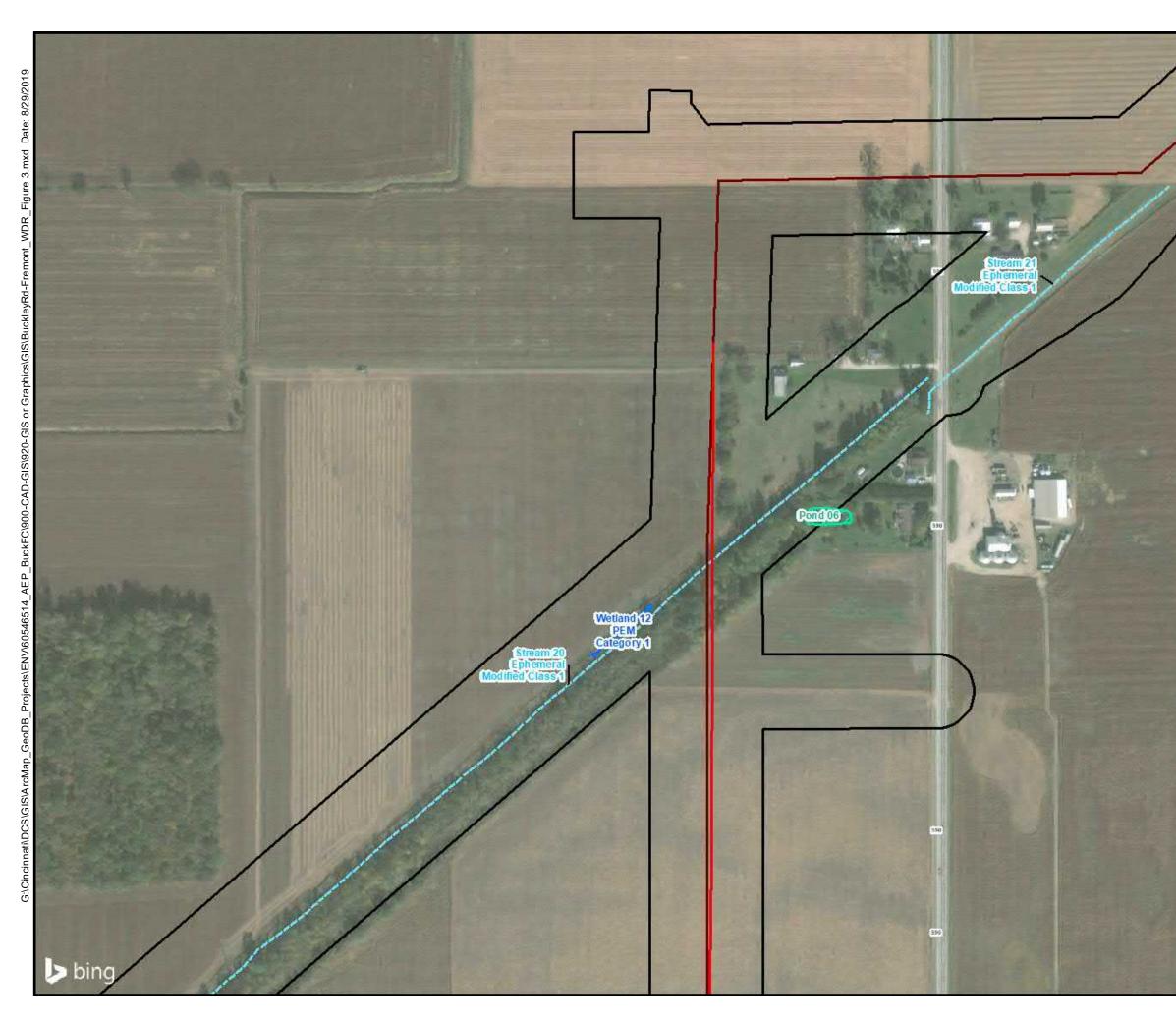


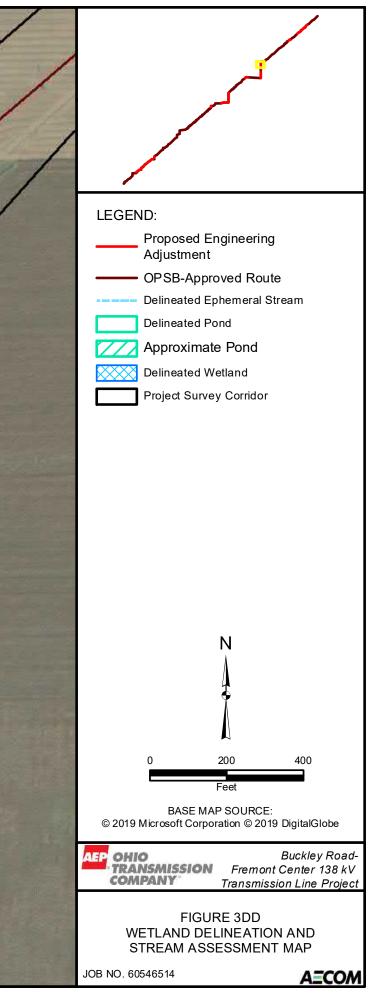










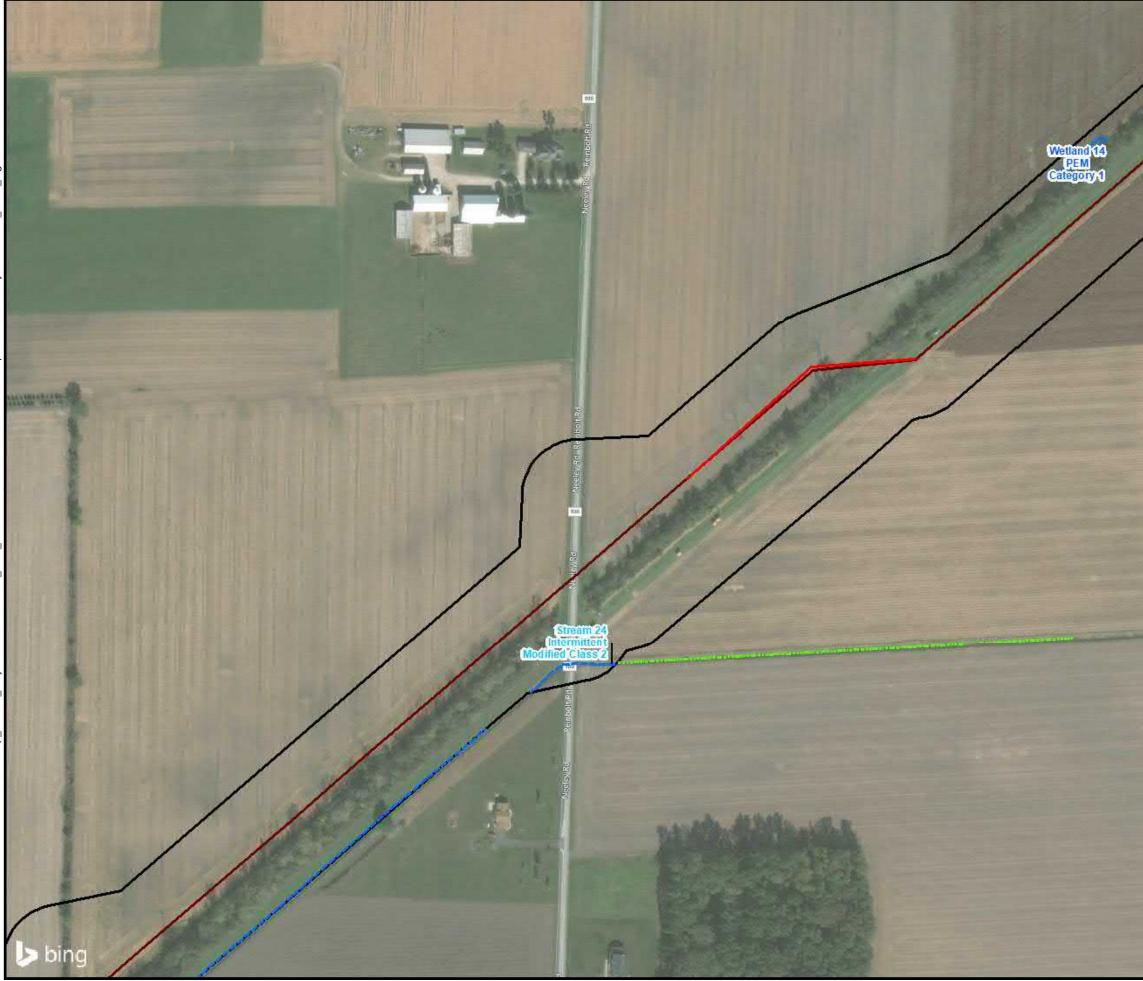


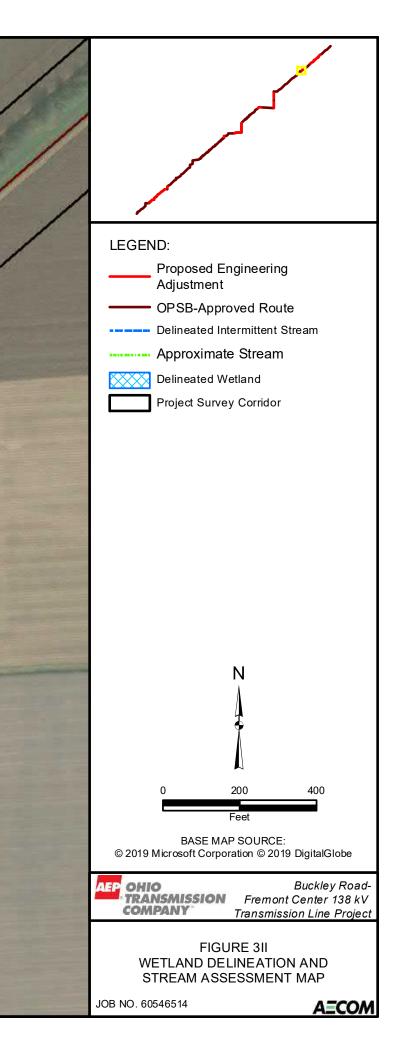


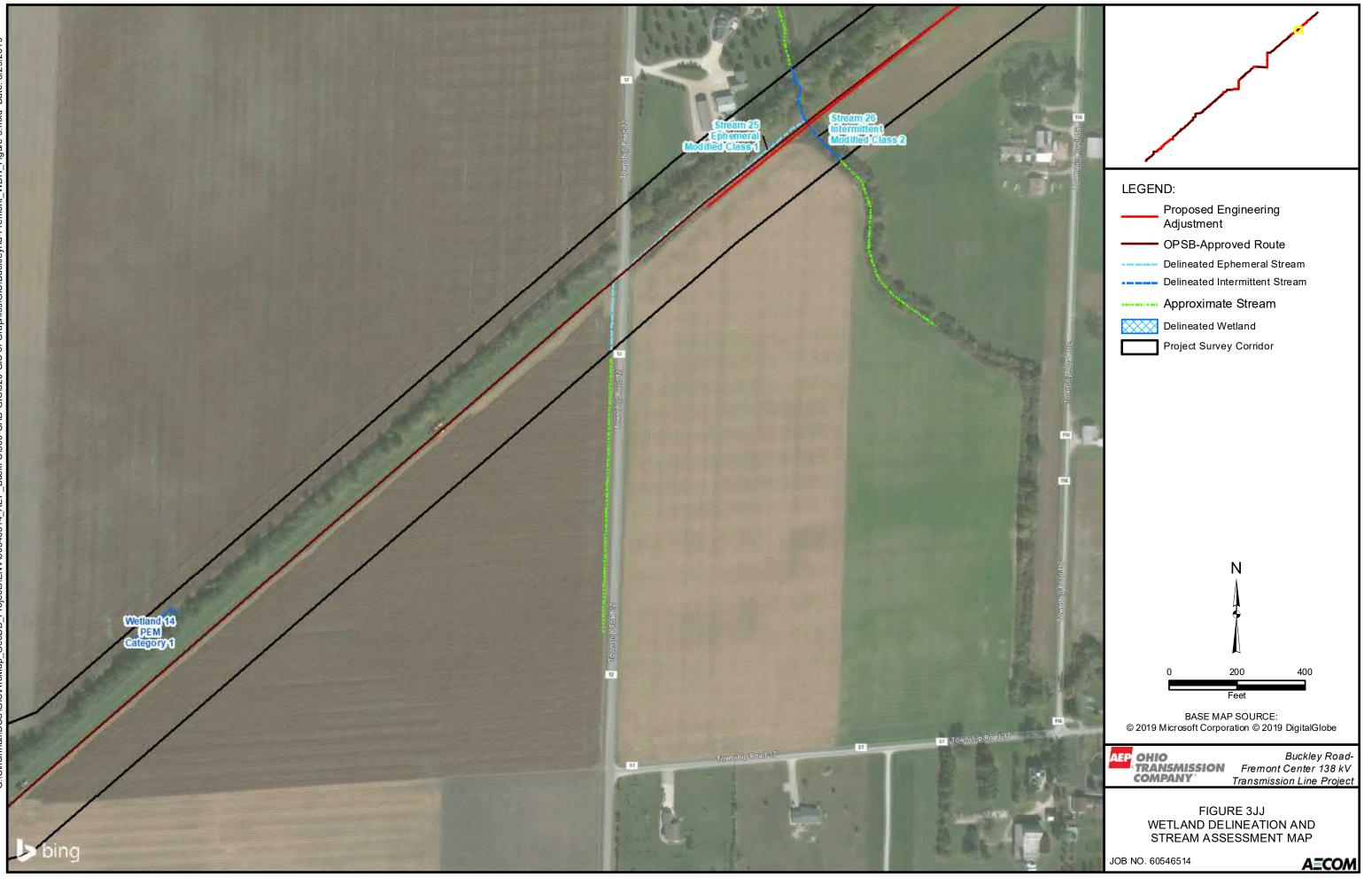


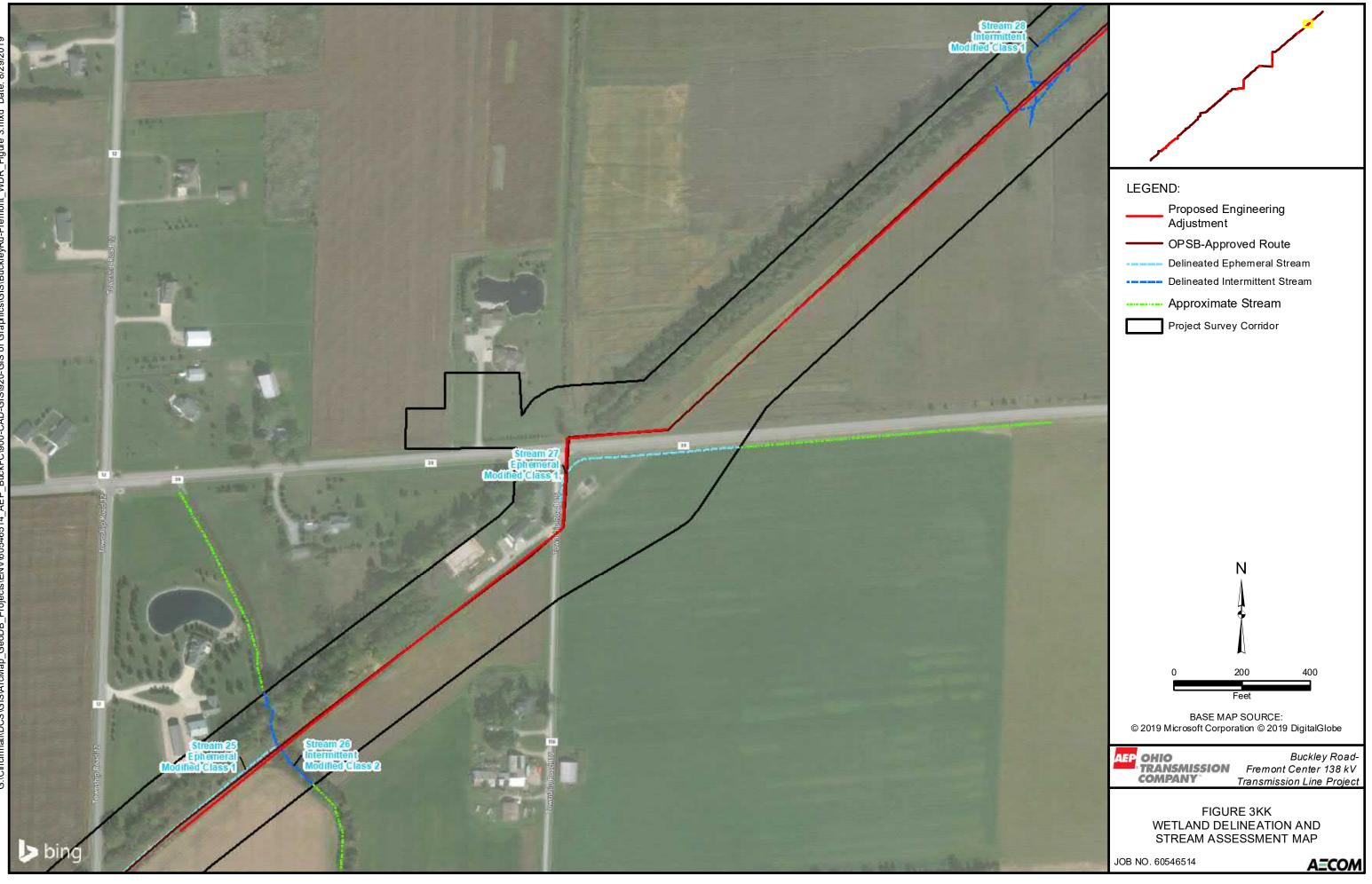


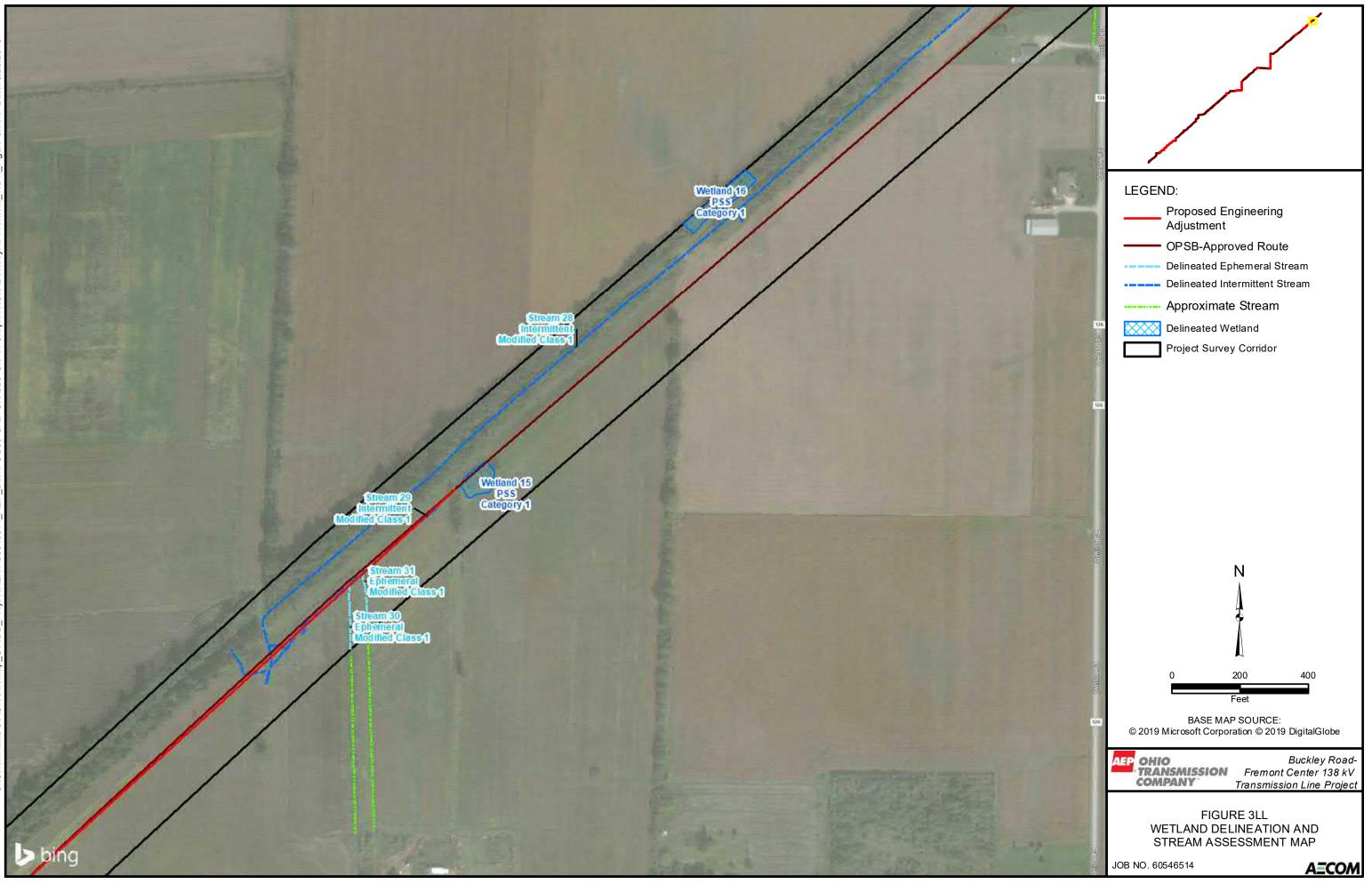


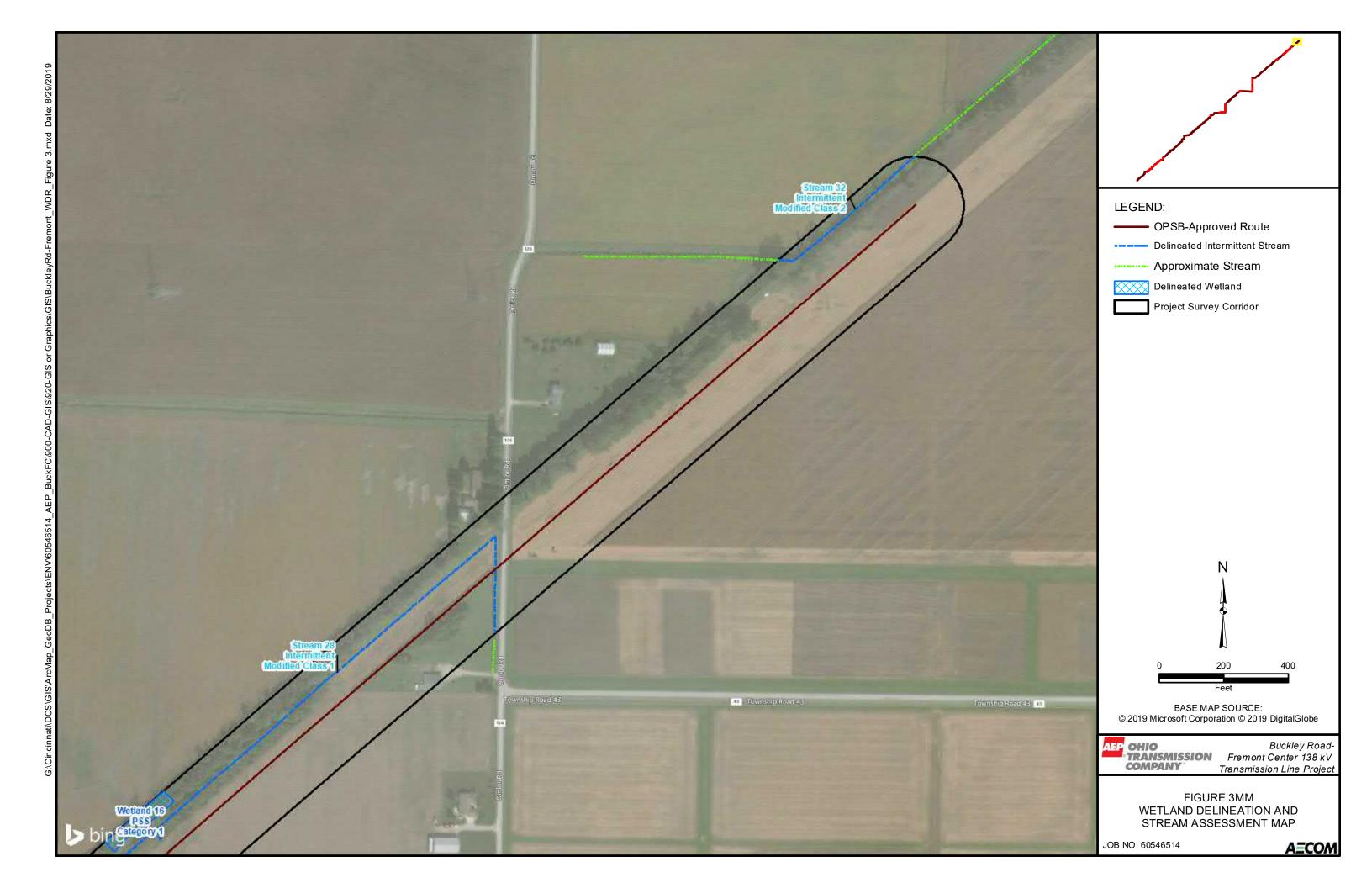












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in

Case No(s). 19-1780-EL-BTA

Summary: Notice Amendment Application for the Buckley Road – Fremont Center 138 kV Transmission Line Project electronically filed by Tanner Wolffram on behalf of AEP Ohio Transmission Company, Inc.