



Lake Erie Connector Project

Final Environmental Assessment Volume II-Appendices

U.S. Department of Energy
Office of Electricity Delivery and Energy Reliability
Washington DC

October 2016

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FINAL

**LAKE ERIE CONNECTOR PROJECT
ENVIRONMENTAL ASSESSMENT**

Volume II Appendices

DOE/EA-2019

**U.S. DEPARTMENT OF ENERGY
OFFICE OF ELECTRICITY DELIVERY
AND ENERGY RELIABILITY**



COOPERATING AGENCY

U.S. ARMY CORPS OF ENGINEERS

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APPENDIX A ENVIRONMENTAL ASSESSMENT DISTRIBUTION LIST

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Name	Title	Agency/Organization	Address 1	City	State	Zip
Nancy Mullen	Northern Area Section Chief	US Army Corps of Engineers; Regulatory Branch	1000 Liberty Avenue	Pittsburgh	PA	15222-4186
Michael Fodse		U.S. Army Corps of Engineers; Pittsburgh District	1000 Liberty Avenue	Pittsburgh	PA	15222-4186
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LTJG Amanda Garcia	Waterways Management Division Chief, Sector Buffalo	United States Coast Guard	1 Fuhrmann Blvd	Buffalo	NY	14203
John C. Furry		U.S. Army Corps of Engineers	1849 C Street, NW	Washington	DC	20240-0001
John M. Fowler		Advisory Council on Historic Preservation	401 F Street, Suite 308	Washington	DC	20001-2637
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Karl M. Gross, P.E.	Permitting Chief	Pennsylvania Department of Environmental Protection, Waterways and Wetlands; Northwest Regional Office	230 Chestnut Street	Meadville	PA	16335
Scott Dudzic	Water Pollution Biologist	Pennsylvania Department of Environmental Protection, Waterways and Wetlands; Northwest Regional Office	230 Chestnut Street	Meadville	PA	16335
Jacob Moore	Environmental Planner 2	Pennsylvania Department of Environmental Protection, Coastal Resources Management Program	301 Peninsula Drive, Suite 4	Erie	PA	16505
Jason Ryndock	Ecological Information Specialist	PA Department of Conservation & Natural Resources; Bureau of Forestry, Natural Heritage Section	400 Market Street	Harrisburg	PA	17105
John Taucher		Pennsylvania Game Commission; Bureau of Wildlife Habitat Management; Division of Environmental Planning & Habitat Protection	2001 Elmerton Avenue	Harrisburg	PA	17110
Christopher A. Urban	Nongame & Endangered Species Coordinator Chief Natural Diversity Section	Pennsylvania Fish and Boat Commission	450 Robinson Lane	Bellefonte	PA	16823
Doug Fischer	Nongame Fisheries Biologist	Pennsylvania Fish and Boat Commission, Division of Environmental Services	450 Robinson Lane	Bellefonte	PA	16823

Name	Title	Agency/Organization	Address 1	City	State	Zip
	Natural Diversity Section					
Daniel Ryan	Encroachment Biologist	Pennsylvania Fish and Boat Commission	450 Robinson Lane	Bellefonte	PA	16823
Michele Morningstar, P.E.	District Permit Manager	Pennsylvania Department of Transportation, Engineering District 1-0	255 Elm Street, P.O. Box 398	Oil City	PA	16301
Jan H. Freeman	Executive Director	Pennsylvania Public Utility Commission	Commonwealth Keystone Building, P.O. Box 3265	Harrisburg	PA	17105
Barbara Frederick		Pennsylvania State Historic Preservation Office	Commonwealth Keystone Building 400 North Street 2nd Floor	Harrisburg	PA	17120
Kira Heinrich		Pennsylvania State Historic Preservation Office	Commonwealth Keystone Building, 400 North Street 2nd Floor	Harrisburg	PA	17120
Doug McLearn		Pennsylvania State Historic Preservation Office	Commonwealth Keystone Building, 400 North Street 2nd Floor	Harrisburg	PA	17120
Edwina Butler-Wolfe	Governor	Absentee-Shawnee Tribe of Oklahoma	2025 S. Gordon Cooper Drive	Shawnee	OK	74801
Kerry Holton	Tribal President	Delaware Nation	P.O. Box 825	Anadarko	OK	73005
Joseph Blancard		Absentee-Shawnee Tribe of Oklahoma	2025 S. Gordon Cooper Drive	Shawnee	OK	74801
Jason Ross		Delaware Nation	31064 State Highway 281	Anadarko	OK	73005
Carol Butler		Absentee-Shawnee Tribe of Oklahoma	2025 S. Gordon Cooper Drive	Shawnee	OK	74801
Clint Halftown	Chief	Cayuga Nation	P.O. Box 803	Seneca Falls	NY	13148
Timothy Two Guns		Cayuga Nation	P.O. Box 803	Seneca Falls	NY	13148
Chet Brooks	Chief	Delaware Tribe of Indians	170 N Barbara Avenue	Bartlettsville	OK	74003
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Susan Bachor		Delaware Tribe Historic Preservation Representatives	P.O. Box 64	Pocono Lake	PA	18347

Name	Title	Agency/Organization	Address 1	City	State	Zip
Blair Fink		Delaware Tribe Historic Preservation Representatives	P.O. Box 64	Pocono Lake	PA	18347
Glenna Wallace		Eastern Shawnee Tribe of Oklahoma	P.O. Box 350	Seneca	MO	64865
Robin Dushane	Cultural Preservation Officer	Eastern Shawnee Tribe of Oklahoma	P.O. Box 350	Seneca	MO	64865
Roxane Weldon	EPA Director	Eastern Shawnee Tribe of Oklahoma	P.O. Box 350	Seneca	MO	64865
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Jesse Bergevin	Historian	Oneida Indian Nation	1256 Union Street P.O. Box 662	Oneida	NY	13421-0662
Stephen J. Selden, Esq.		Oneida Indian Nation	5218 Patrick Road	Verona	NY	13478
Corina Williams	THPO	Oneida Nation of Wisconsin	P.O. Box 365	Oneida	WI	54155-0365
Tony Gonyea	Faithkeeper	Onondaga Nation	RR#1 Box 245	Nedrow	NY	13120
Maurice A John, Sr.	President	Seneca Nation of Indians	P.O. Box 231	Salamanca	NY	14779
Scott Abrams	Action THPO	Seneca Nation of Indians	90 O:Hi'yoh Way	Salamanca	NY	14779
William L. Fisher	Chief	Seneca-Cayuga Tribe of Oklahoma	23701 S. 655 Road	Grove	OK	74344
Paul Barton	Historic Preservation Officer	Seneca-Cayuga Tribe of Oklahoma	23701 S. 655 Road	Grove	OK	74344
Beverly Cook	Chief	St. Regis Mohawk Tribe	412 State Route 37	Hogansburg	NY	13655
Arnold Printup	Historic Preservation Officer	St. Regis Mohawk Tribe	412 State Route 37	Hogansburg	NY	13655
Ken Jocks	Director Environmental Division	St. Regis Mohawk Tribe	RR#1 Box 8a	Hogansburg	NY	13655
Ron Sparkman	Chairman	Shawnee Tribe	29 South 69a Highway	Miami	OK	74354
Kim Jumper	Tribal Historic Preservation Office	Shawnee Tribe	29 South 69a Highway	Miami	OK	74354
Wally Miller	Tribal President	Stockbridge-Munsee Band of Mohican Nation of Wisconsin	Route 1, P.O. Box 70	Bowler	WI	54416
Sherry White	THPO	Stockbridge-Munsee Band of Mohican Nation of Wisconsin	W13447 Camp 14 Road	Bowler	WI	54416
Greg Bunker		Stockbridge-Munsee Band of Mohican Nation of Wisconsin	W13447 Camp 14 Road	Bowler	WI	54416

Name	Title	Agency/Organization	Address 1	City	State	Zip
Darwin Ill	Chief	Tonawanda Seneca Nation	7027 Meadville Road	Basom	NY	14013
Leo Henry	Chief	Tuscarora Nation	2006 Mt. Hope Road	Lewiston	NY	14092
Bryan Printup		Tuscarora Nation	5226 Walmore Road	Lewiston	NY	14092
Neil Patterson, Jr.	Director	Tuscarora Nation	2045 Upper Mountain Road, Tuscarora Nation	Sanborn	NY	14132
		Preservation Erie	10 East Fifth Street, Box 3	Erie	PA	16507
Jeanette Schnars		Regional Science Consortium and PASST	301 Peninsula Drive #1	Erie	PA	16505
Gene R. Clemente	Technical Manager	Erie County Conservation District	1927 Wager Road	Erie	PA	16509
Raymond Camp	Chairman	Springfield Township	13300 Ridge Road	West Springfield	PA	16443
Jeff Eaton	Supervisor	Springfield Township	13300 Ridge Road	West Springfield	PA	16443
Luke Weldon	Supervisor	Springfield Township	13300 Ridge Road	West Springfield	PA	16443
Meredith Borstorff	Secretary/Zoning Officer	Springfield Township	13300 Ridge Road	West Springfield	PA	16443
Sandra Anderson	Chairperson	Girard Township	10140 Ridge Road	Girard	PA	16417
Paul Pangratz	Supervisor	Girard Township	10140 Ridge Road	Girard	PA	16417
William Felege	Supervisor	Girard Township	10140 Ridge Road	Girard	PA	16417
Becky Hosack	Secretary/Zoning Administrator	Girard Township	10140 Ridge Road	Girard	PA	16417
Sarah McCabe	Supervisor	Conneaut Township	12500 U.S. Route 6N	Albion	PA	16401
Dan Tercho	Supervisor	Conneaut Township	12500 U.S. Route 6N	Albion	PA	16401
Greg West	Supervisor	Conneaut Township	12500 U.S. Route 6N	Albion	PA	16401
Denise Shumake	Secretary	Conneaut Township	12500 U.S. Route 6N	Albion	PA	16401
Kathy Wyrosdick	Director	Erie County Department of Planning	150 East Front Street, Suite 300	Erie	PA	16507
Hon. Parke Wentling		Pennsylvania House of Representatives	142 Main Street, Suite 1W	Girard	PA	16417
Sean Wiley	Senator	Pennsylvania State Senate	1314 Griswold Plaza, Suite 101	Erie	PA	16501
Robert P. Casey, Jr.	Senator	U.S. Senate	17 South Park Row, Suite B-150	Erie	PA	16501
Pat Toomey	Senator	U.S. Senate	17 South Park Row, Suite B-120	Erie	PA	16501

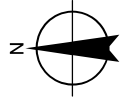
Name	Title	Agency/Organization	Address 1	City	State	Zip
Mike Kelly	U.S. Representative	U.S. House of Representatives	208 E. Bayfront Parkway, Suite 102	Erie	PA	16507
Ryan Kennedy	Chief	Cranesville Volunteer Fire Department	9920 Beadville Street	Cranesville	PA	16410
Scott Hyde	Chief	Albion Volunteer Fire Department	19 Smock Avenue	Albion	PA	16401
Jerry Skrypzak	President	S.O.N.S. of Lake Erie Fishing Club	PO Box 3605	Erie	PA	16508
Tom Fuhrman	President	Lake Erie Conservancy	1501 Sasafress Street	Erie	PA	16502
Katrina J. Vincent	President & CEO	Develop Erie	5240 Knowledge Parkway	Erie	PA	16510-4658
Mark Reider	Area Environmental Manager	Erie Sand and Gravel	3 Clear Springs Road	Annville	PA	17003
Kevin R Rodgers	Sr. Business Analyst, Agreements Support	FirstEnergy	800 Cabin Hill Drive, G-CH-C201	Greensburg	PA	15601
Hal Gibson	Public Projects Principal Eng.	CSX Transportation, Incorporated	6737 Southport Drive South, J180	Jacksonville	FL	32216
Joseph Lala	NS Pipe and Wire Administrator	AECOM (<i>on behalf of Norfolk Southern</i>)	1700 Market Street, 16th Floor	Philadelphia	PA	19103
David M. Egan	Manager, Interconnection Projects, PJM System Planning Division	PJM Interconnection	2750 Monroe Blvd.	Audubon	PA	19403
Tom Wolf	Governor	Governor's Correspondence Office	508 Main Capitol Building	Harrisburg	PA	17120
Brian Mills		U.S. Department of Energy	Office of Electricity Delivery and Energy Reliability, OE -20	Washington	DC	20585
Lynn Alexander		U.S. Department of Energy	Office of Electricity Delivery and Energy Reliability, OE -20	Washington	DC	20585
Marthea Rountree	Office of Federal Activities	Environmental Protection Agency	Mail Code 2252-A 1200 Pennsylvania Avenue	Washington	DC	20460
Mary Hassell, CEP	Bureau of Oceans and International Environment and Scientific Affairs	United States Department of State	2201 C Street, NW, Suite 2727	Washington	DC	20520
Willie R. Taylor	Director	Department of the Interior - Office of Environmental Policy and Compliance	1849 C Street, NW, Mail Stop 2462	Washington	DC	20240
		Historical Society of Pennsylvania	1300 Locust Street	Philadelphia	PA	19107

Name	Title	Agency/Organization	Address 1	City	State	Zip
		Lake Erie Islands Historical Society	441 Catawba Avenue	Put In Bay	OH	43456
		Erie Maritime Museum	150 East Front Street	Erie	PA	16507
		Miller Boat Line	5174 E Water Street	port Clinton	OH	43452
		Historical Society of Erie County	356 West 6th Street	Erie	PA	16501
		Girard Historical Society	1011 N. State Street	Girard	OH	44420
		Harborcreek Historical Society	5451 Merwin Lane	Erie	PA	16510
		Springfield Township Historical Society	P.O. Box 564	Flourtown	PA	19031
		Conneaut Area Historical Society	501 Sandusky Street	Conneaut	OH	44030
		Conneaut Historical Railroad Society	363 Depot Street	Conneaut	OH	44030
		Albion Area Public Library	111 E Pearl Street	Albion	PA	16401
		Erie County Public Library	160 E Front Street	Erie	PA	16507
		Rice Avenue Community Public Library	705 Rice Avenue	Girard	PA	16417
		Springfield Township Library	70 Powell Road	Springfield	PA	19064

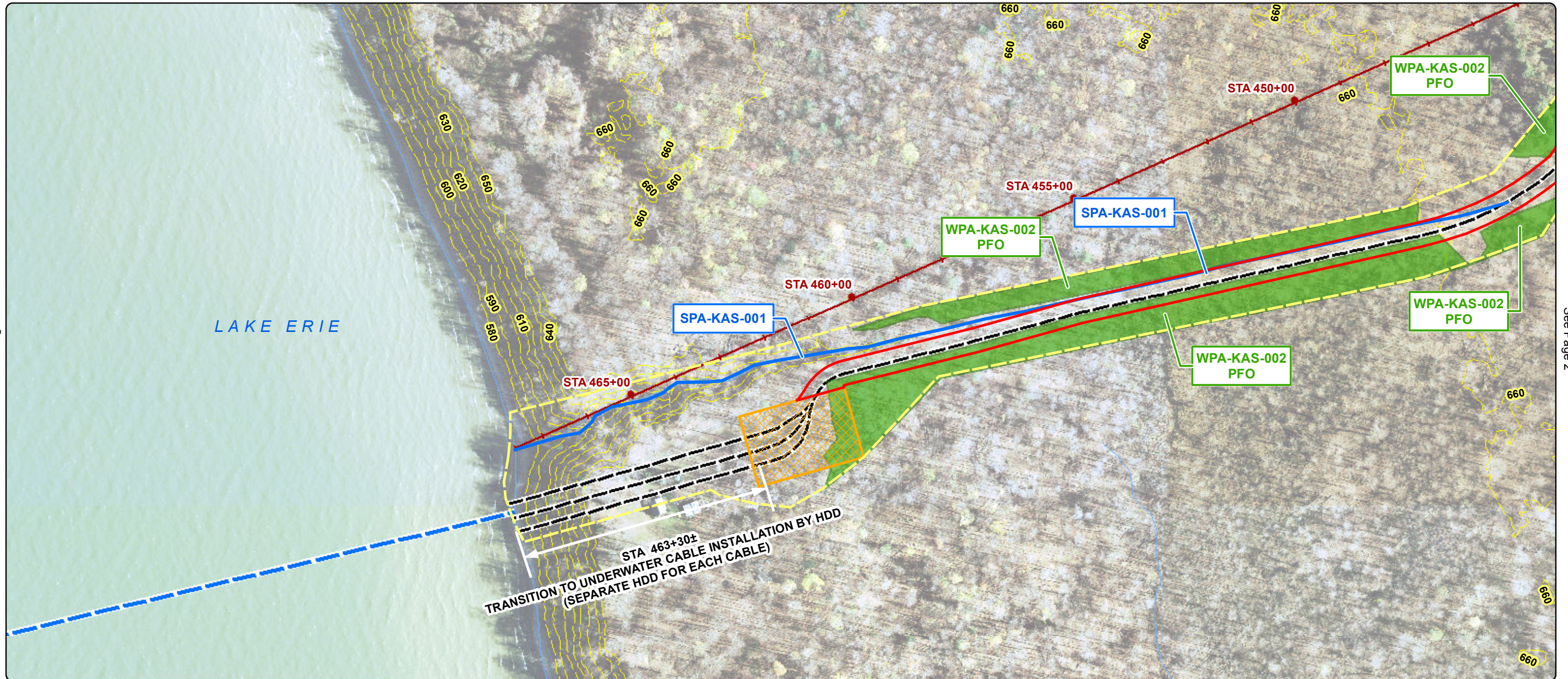
APPENDIX B DETAILED MAPS OF LAKE ERIE CONNECTOR TRANSMISSION SYSTEM

Source: ITC Lake Erie, 2016 - Joint Permit Application, Volume 3 Appendix A Underground Segment Alignment

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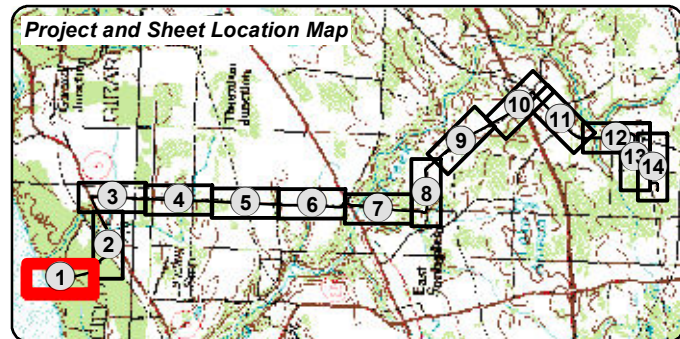
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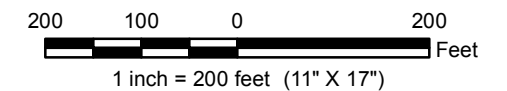


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| Proposed Underground Cable Route | Wetlands | Env. Field Survey Corridor | US Highway |
| Proposed AC Cable Route | PUB | Wetland Shovel Test | US Route |
| Proposed Underwater Cable Route | PSS | Upland | State Route |
| Cable Route LOD | PFO | Wetland | Local Road |
| Construction Laydown LOD | PEM | River Stream | Railroad |
| Proposed Converter Station Site | | Pond | PASDA River Stream |
| | | | Contour (10ft.) |

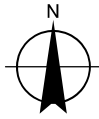
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ERIE COUNTY, PENNSYLVANIA**

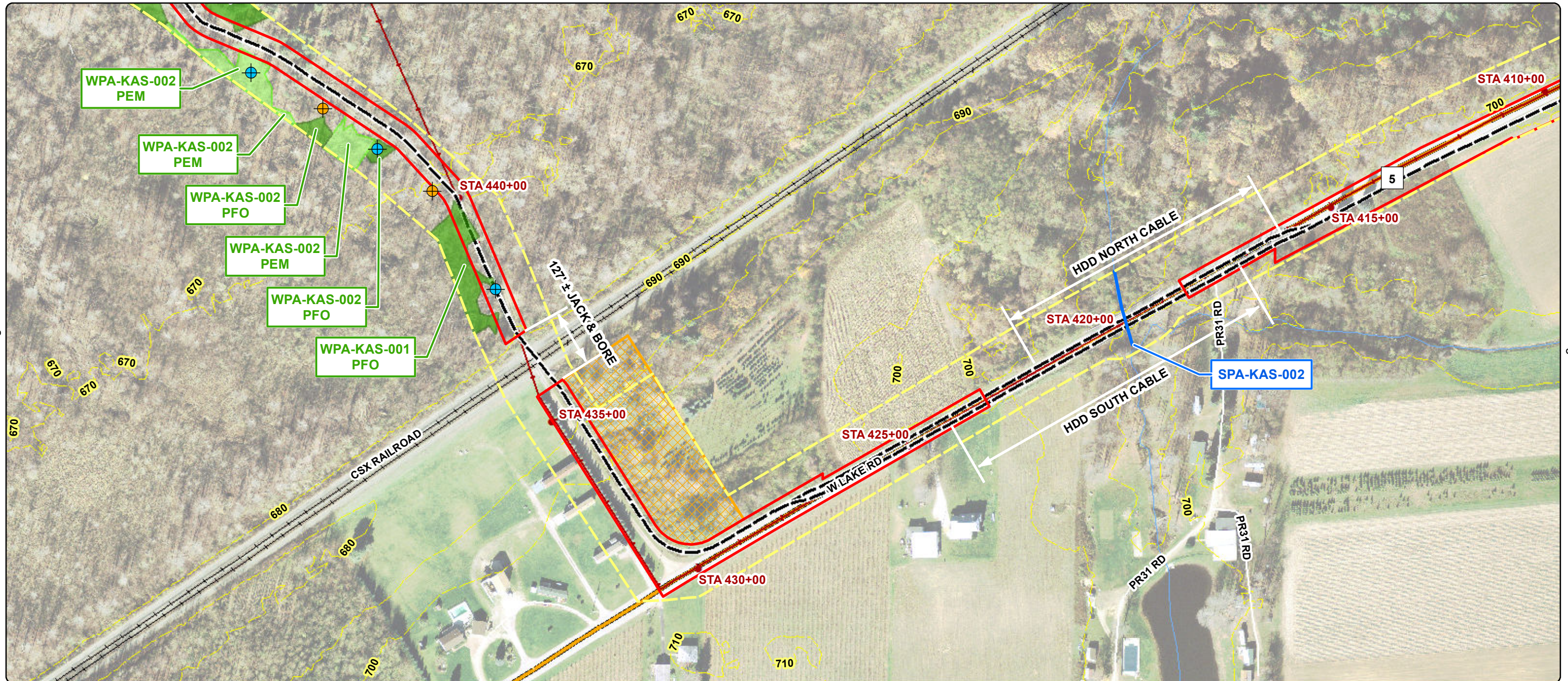
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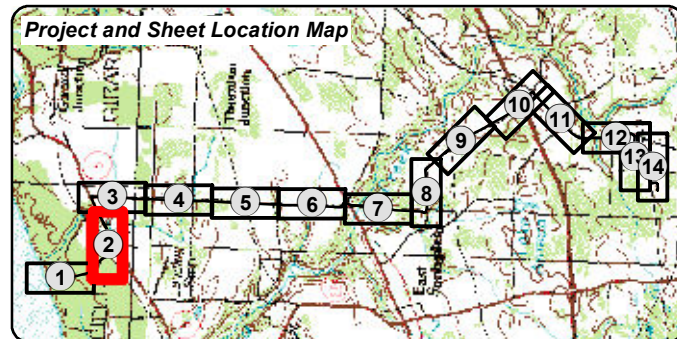
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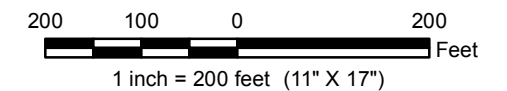
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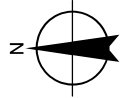


<ul style="list-style-type: none"> Proposed Underground Cable Route Proposed AC Cable Route Proposed Underwater Cable Route Cable Route LOD Construction Laydown LOD Proposed Converter Station Site 	<p>Wetlands</p> <ul style="list-style-type: none"> PUB PSS PFO PEM 	<p>Wetland Shovel Test</p> <ul style="list-style-type: none"> Upland Wetland River Stream Pond 	<ul style="list-style-type: none"> Env. Field Survey Corridor US Highway US Route State Route Local Road Railroad PASDA River Stream Contour (10ft.)
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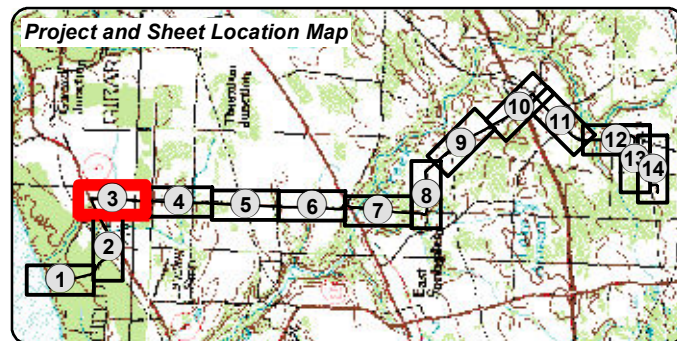
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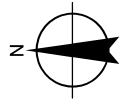
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Proposed Underwater Cable Route	PSS	Upland	State Route
Cable Route LOD	PFO	Wetland	Local Road
Construction Laydown LOD	PEM	River Stream	Railroad
Proposed Converter Station Site		Pond	PASDA River Stream
			Contour (10ft.)

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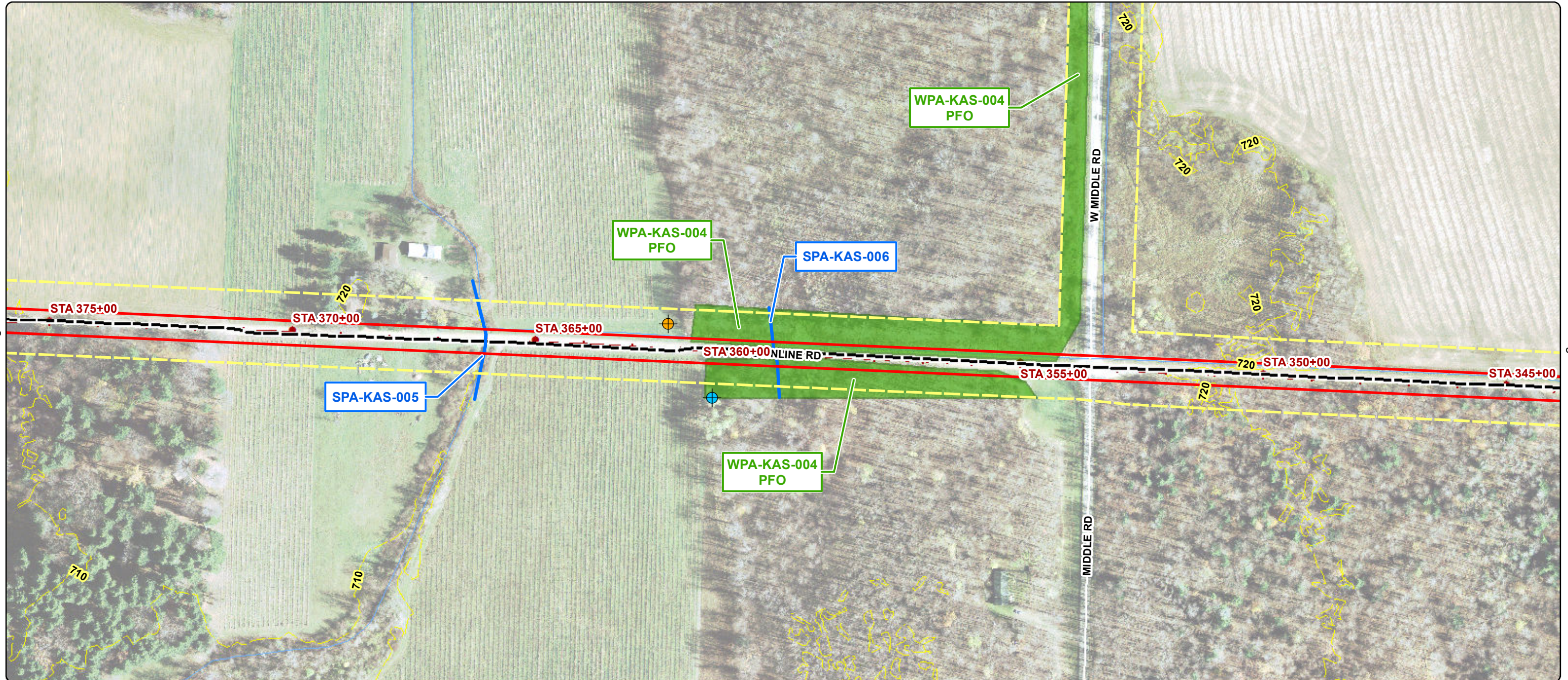
**ALIGNMENT MAPS
ERIE COUNTY, PENNSYLVANIA**

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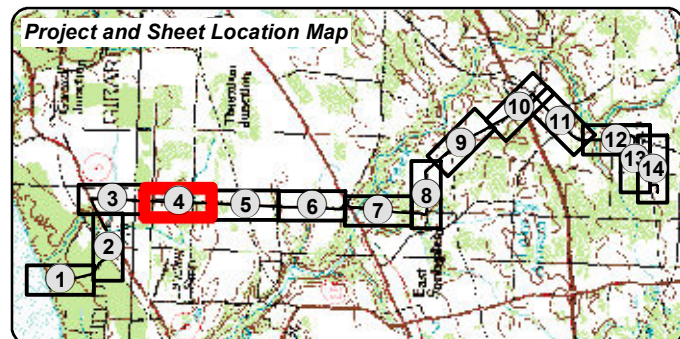
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Proposed Underground Cable Route	Wetlands	Env. Field Survey Corridor	US Highway
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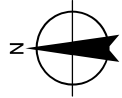
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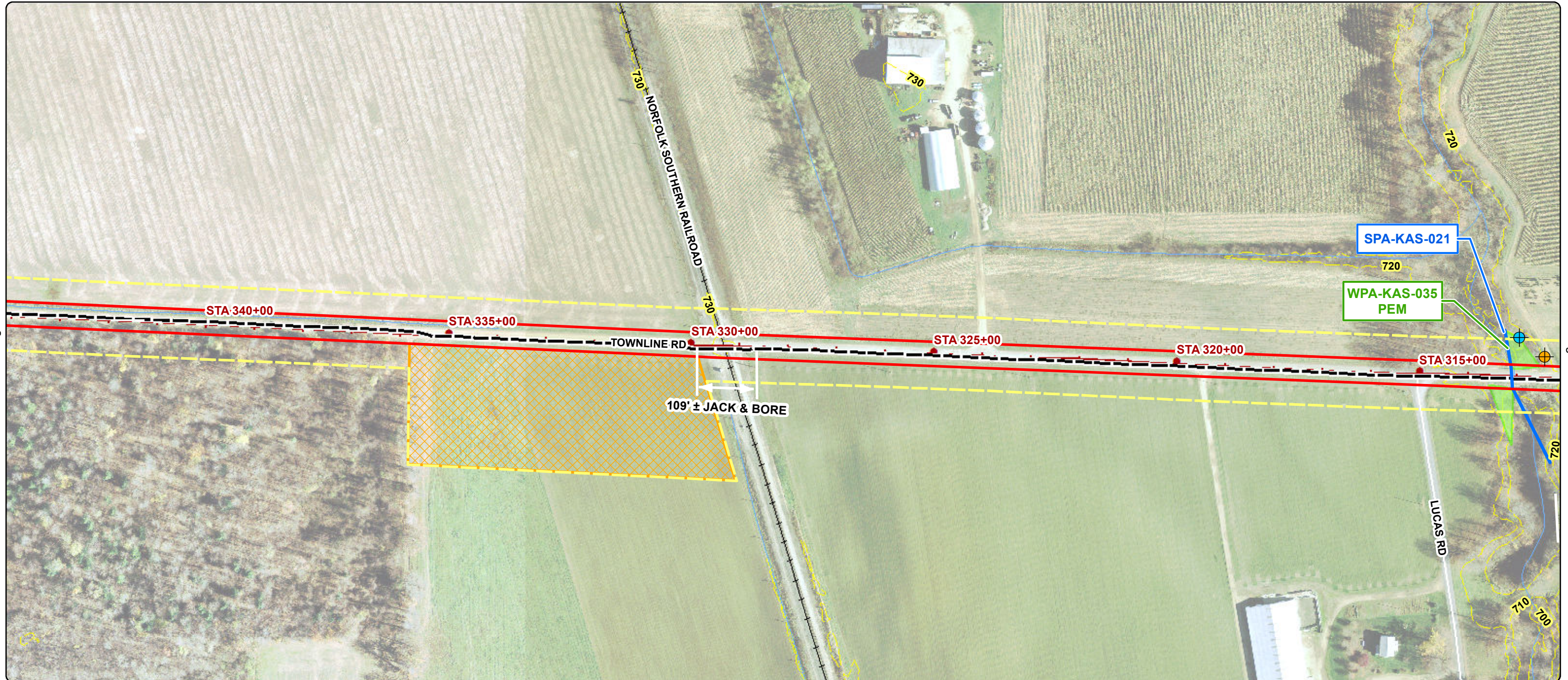
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1 inch = 200 feet (11" X 17")

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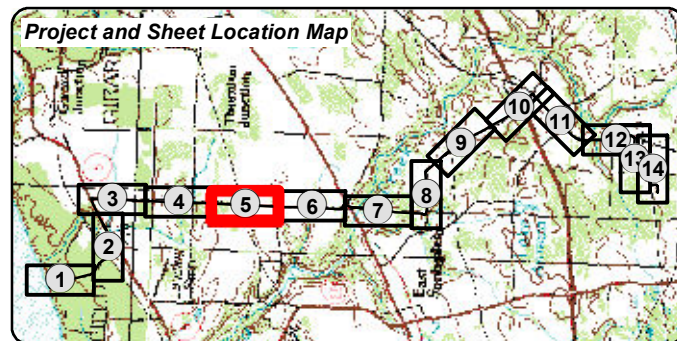
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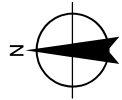
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Proposed Converter Station Site		Pond	PASDA River Stream
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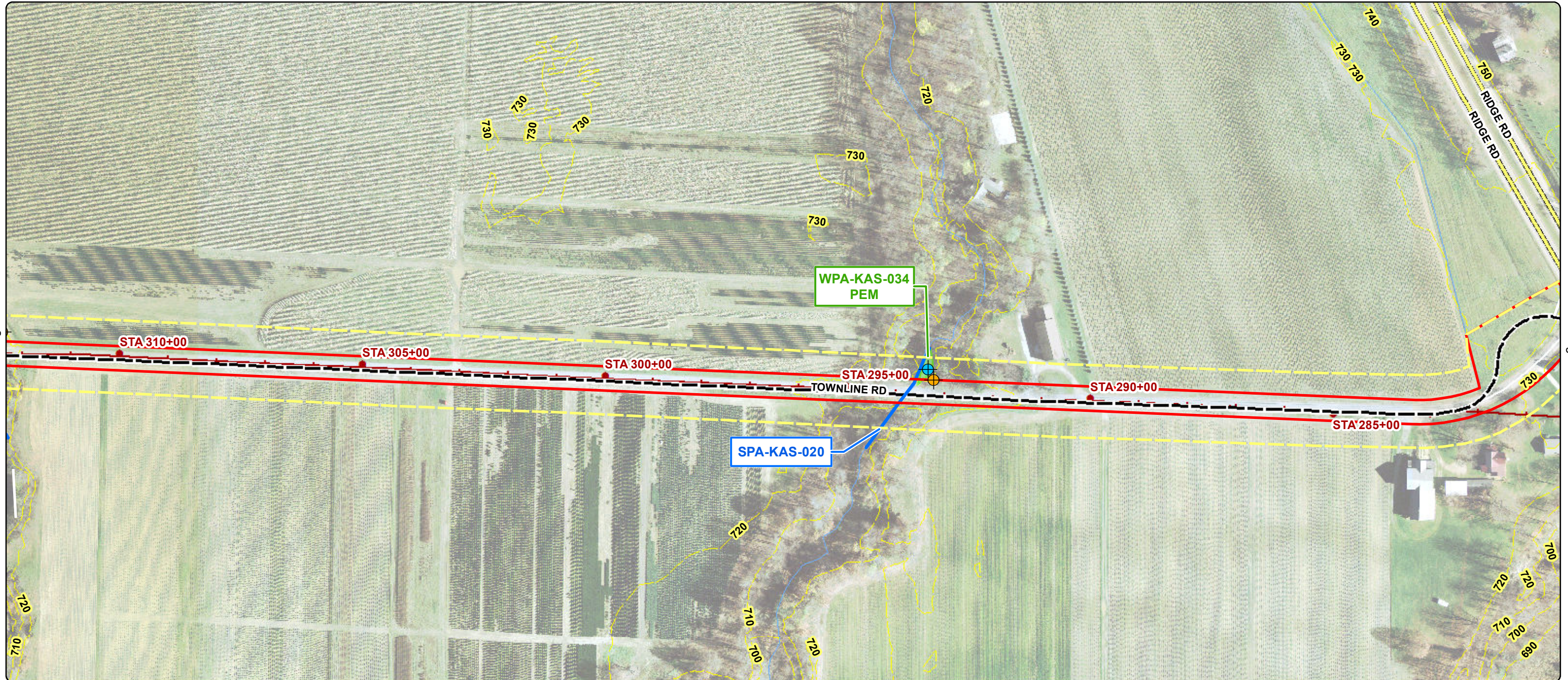
**ALIGNMENT MAPS
ERIE COUNTY, PENNSYLVANIA**

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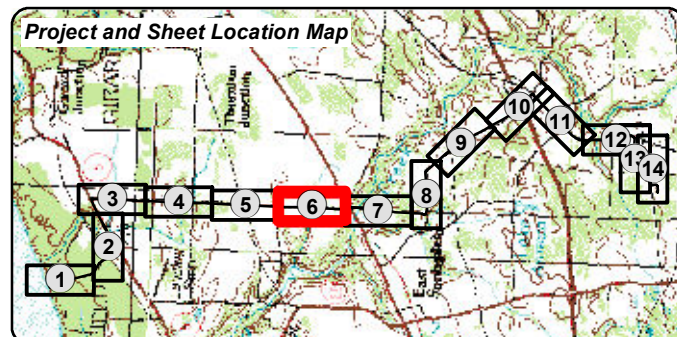
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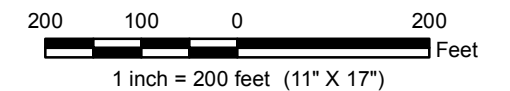


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| | | | Contour (10ft.) |

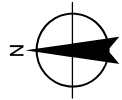
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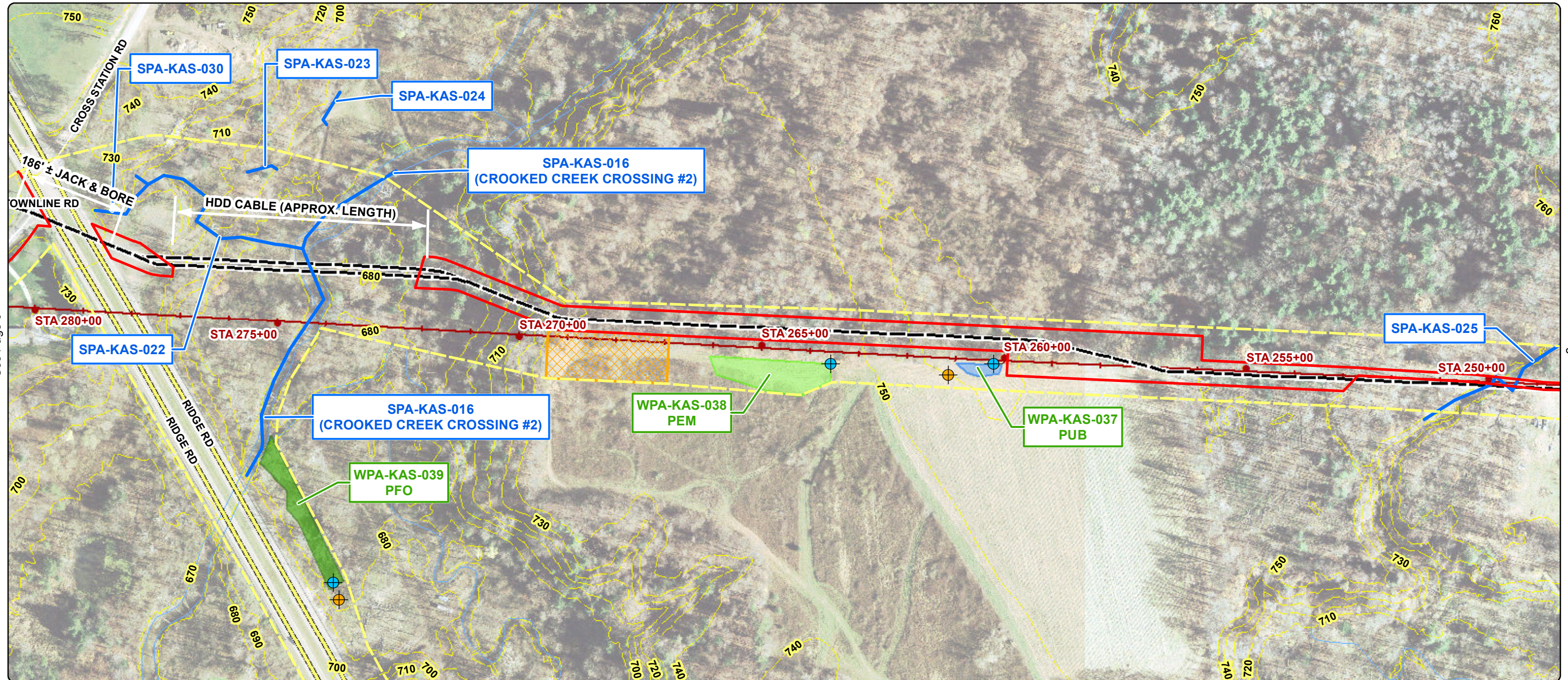
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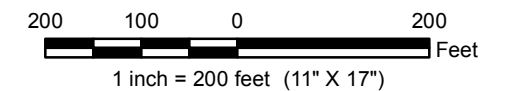
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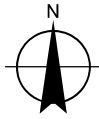


<ul style="list-style-type: none"> Proposed Underground Cable Route Proposed AC Cable Route Proposed Underwater Cable Route Cable Route LOD Construction Laydown LOD Proposed Converter Station Site 	<p>Wetlands</p> <ul style="list-style-type: none"> PUB PSS PFO PEM 	<p>Wetland Shovel Test</p> <ul style="list-style-type: none"> Upland Wetland River Stream Pond 	<ul style="list-style-type: none"> Env. Field Survey Corridor US Highway US Route State Route Local Road Railroad PASDA River Stream Contour (10ft.)
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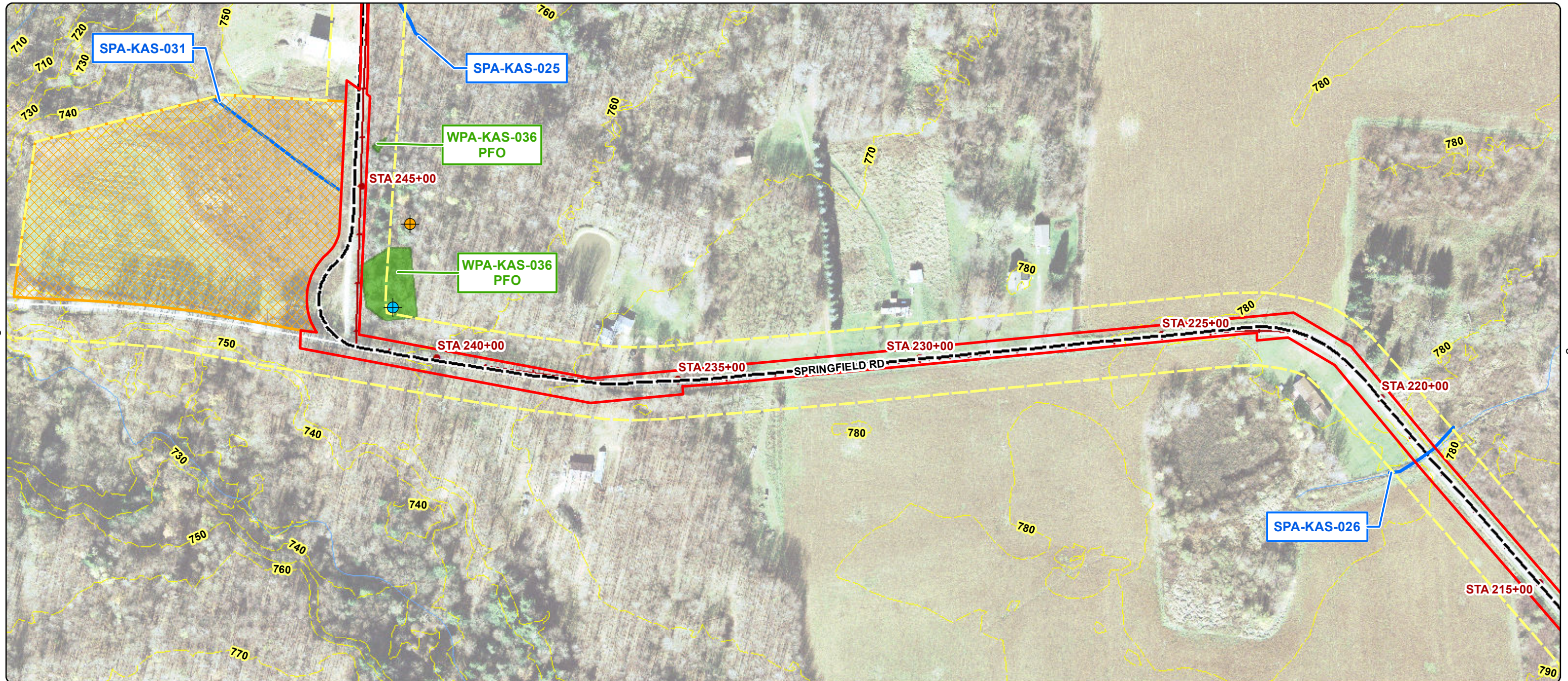
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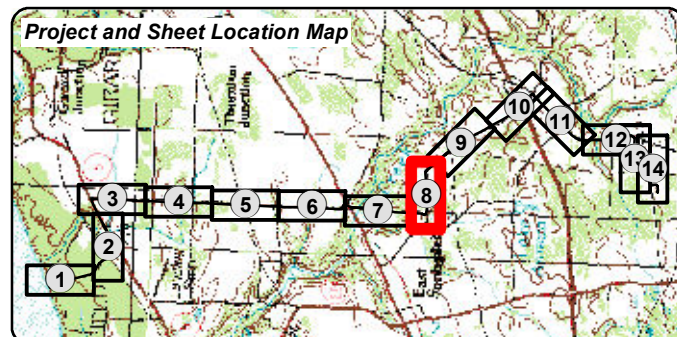
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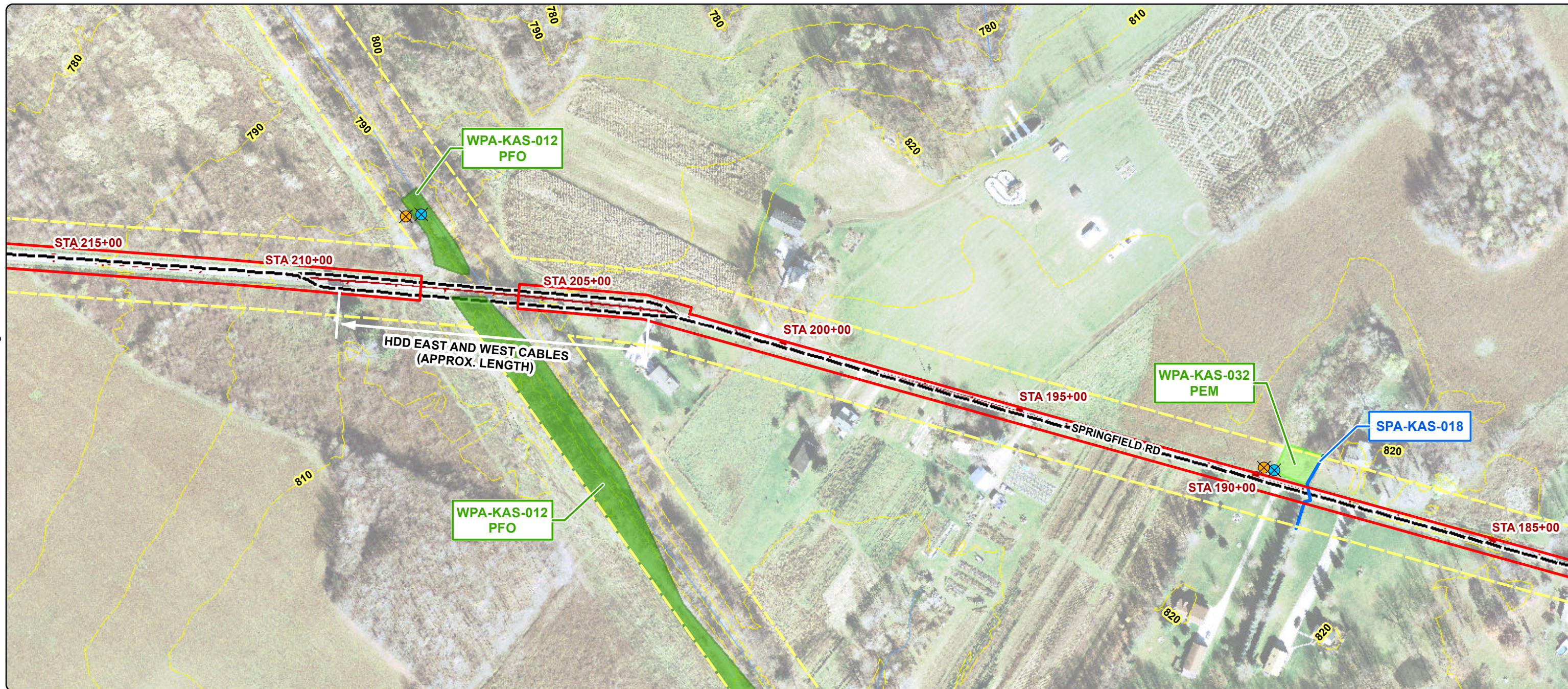
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Feet
1 inch = 200 feet (11" X 17")

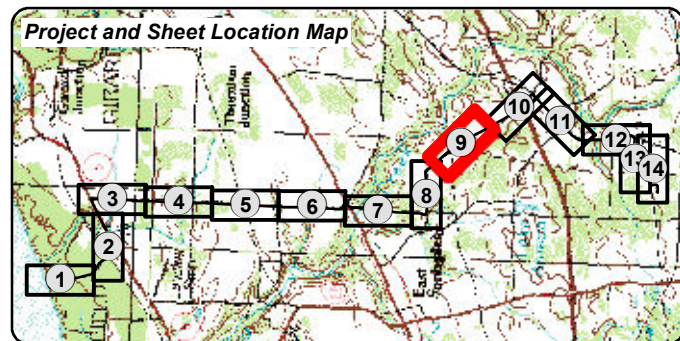
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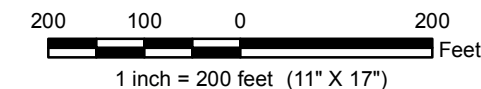


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| Proposed AC Cable Route | PUB | Wetland Shovel Test | US Route |
| Proposed Underwater Cable Route | PSS | Upland | State Route |
| Cable Route LOD | PFO | Wetland | Local Road |
| Construction Laydown LOD | PEM | River Stream | Railroad |
| Proposed Converter Station Site | | Pond | PASDA River Stream |
| | | | Contour (10ft.) |

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**ALIGNMENT MAPS
ERIE COUNTY, PENNSYLVANIA**

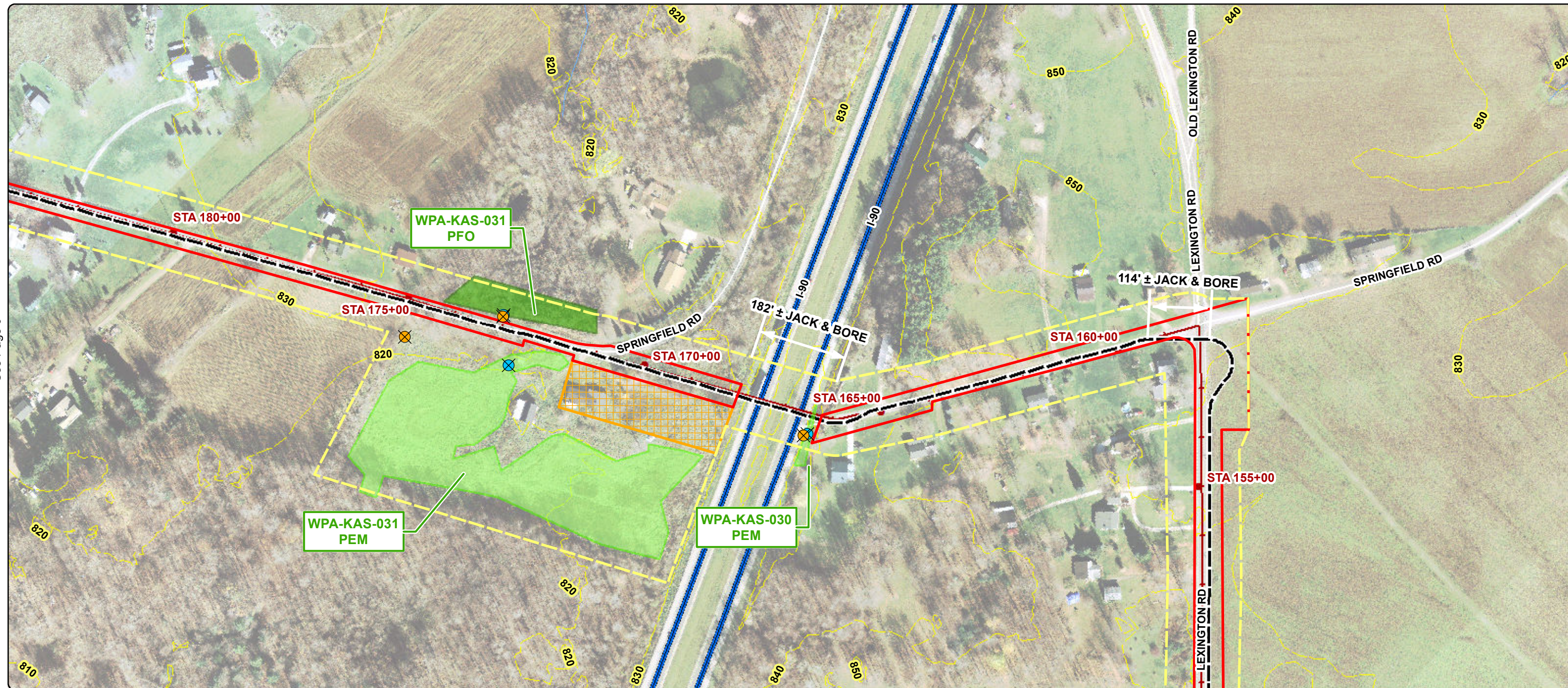
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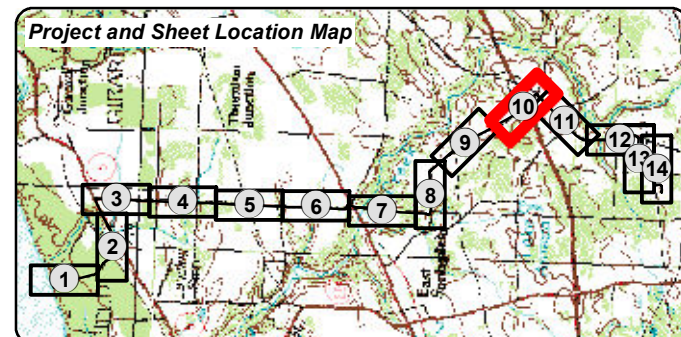
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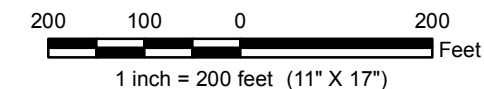


- Proposed Underground Cable Route
 - Proposed AC Cable Route
 - Proposed Underwater Cable Route
 - Cable Route LOD
 - Construction Laydown LOD
 - Proposed Converter Station Site
- Wetlands**
 - PUB
 - PSS
 - PFO
 - PEM
- Env. Field Survey Corridor
 - Wetland Shovel Test**
 - Upland
 - Wetland
 - River | Stream
 - Pond
- US Highway
 - US Route
 - State Route
 - Local Road
 - Railroad
 - PASDA River | Stream
 - Contour (10ft.)

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**ALIGNMENT MAPS
ERIE COUNTY, PENNSYLVANIA**

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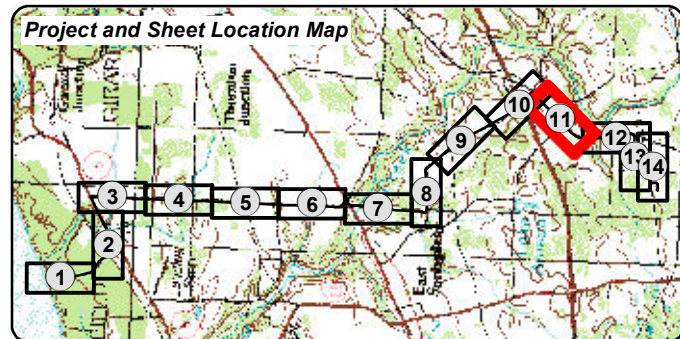
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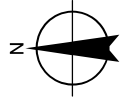
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Proposed AC Cable Route	PUB	Wetland Shovel Test	US Route
Proposed Underwater Cable Route	PSS	Upland	State Route
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Construction Laydown LOD	PEM	River Stream	Railroad
Proposed Converter Station Site		Pond	PASDA River Stream
			Contour (10ft.)

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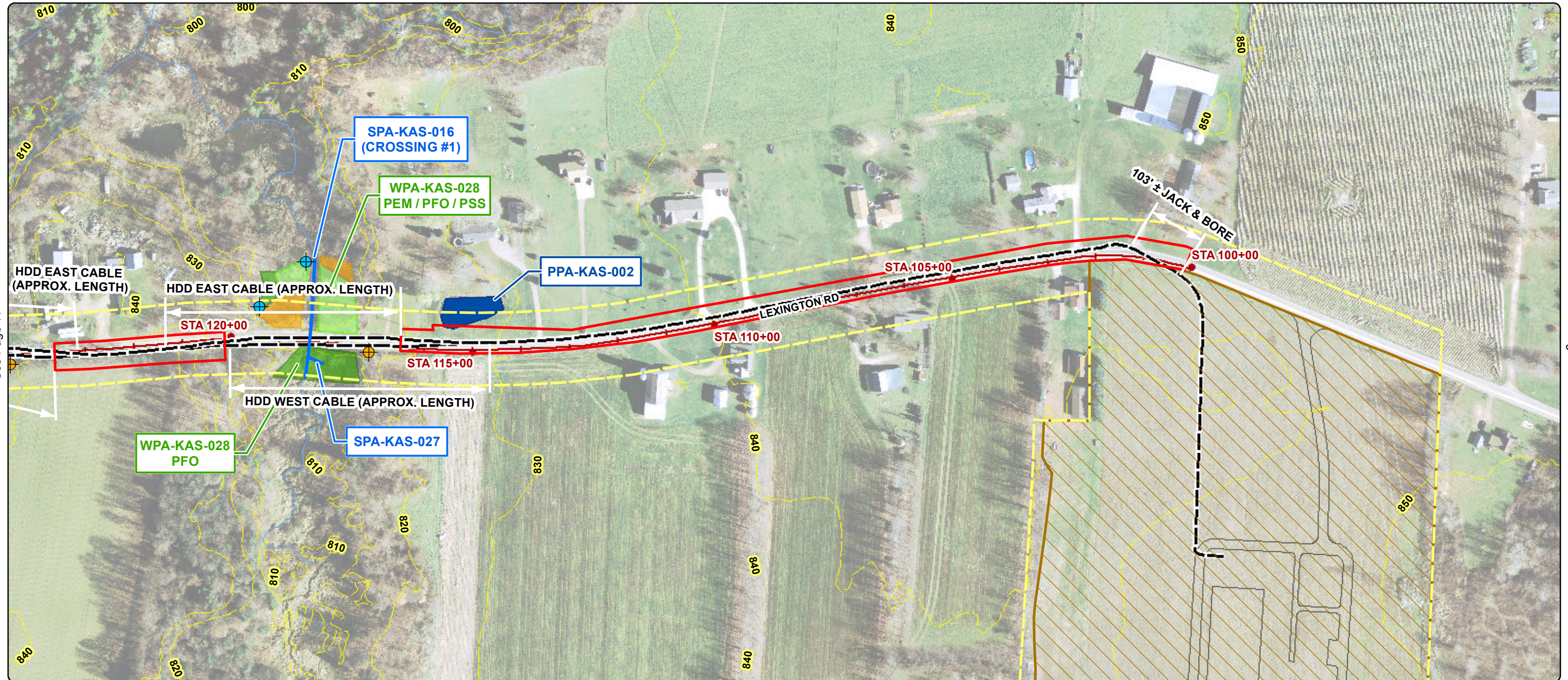
**ALIGNMENT MAPS
ERIE COUNTY, PENNSYLVANIA**

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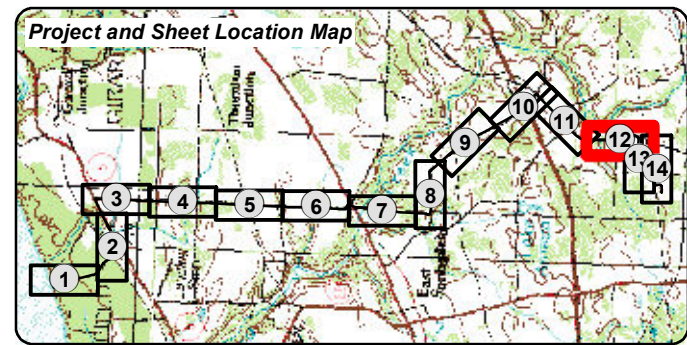
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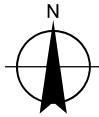
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Proposed AC Cable Route	PUB	Wetland Shovel Test	US Route
Proposed Underwater Cable Route	PSS	Upland	State Route
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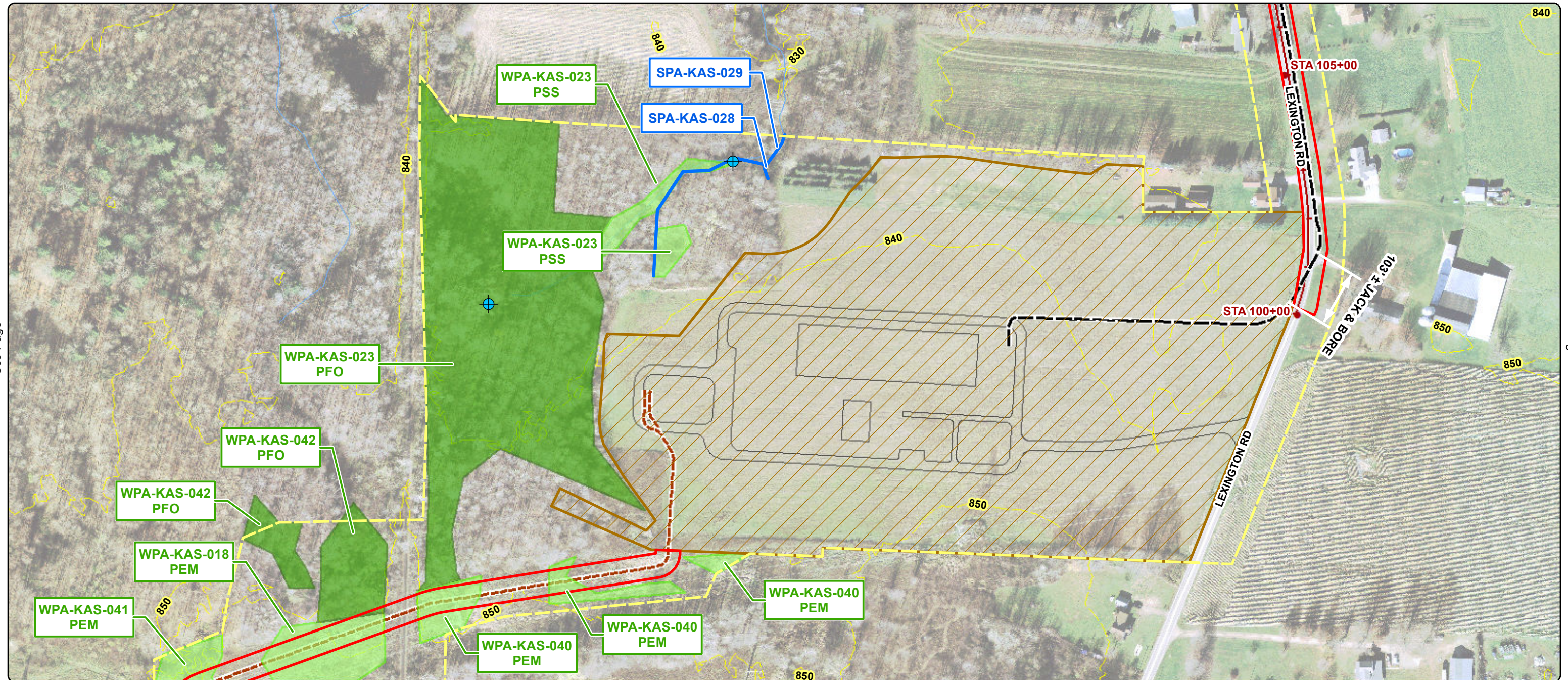
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ERIE COUNTY, PENNSYLVANIA**

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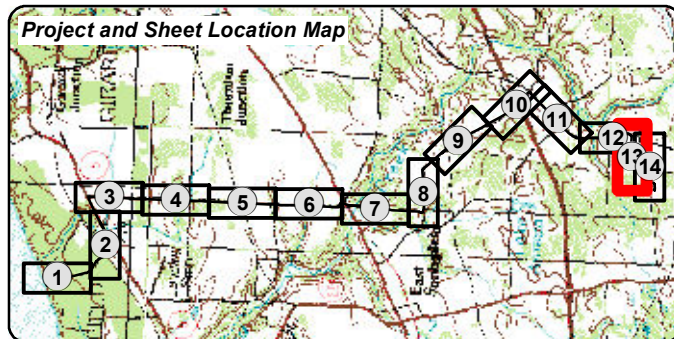
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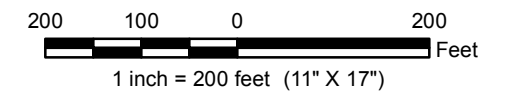


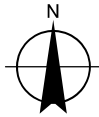
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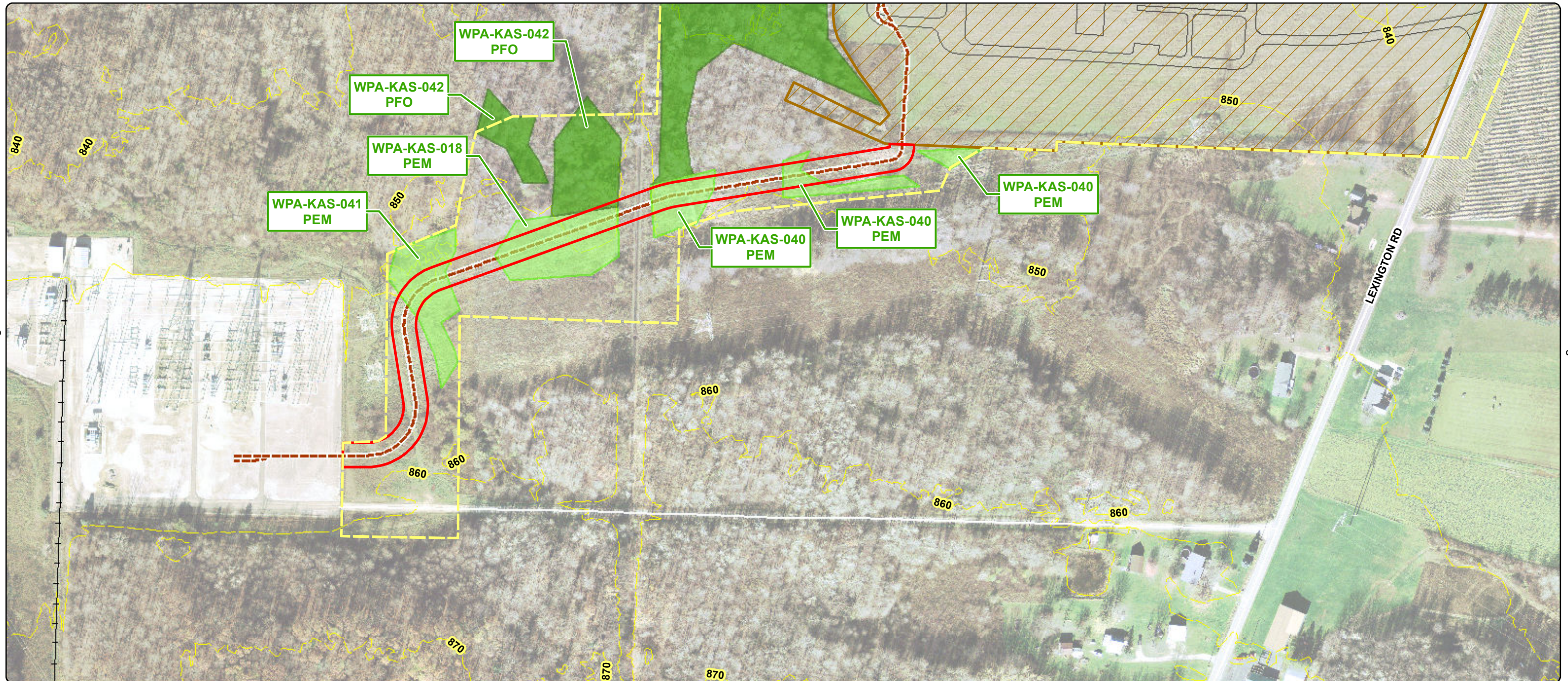
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ERIE COUNTY, PENNSYLVANIA**

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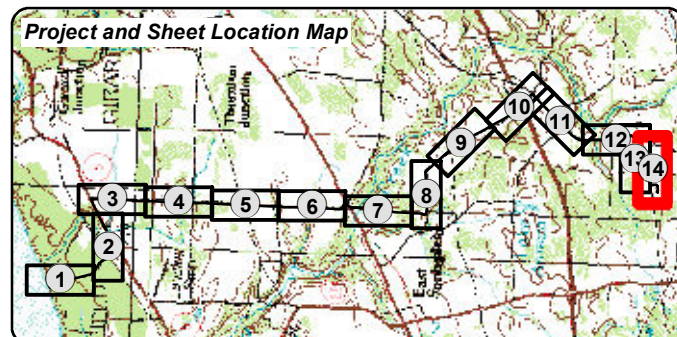
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- Proposed Underground Cable Route
- Proposed AC Cable Route
- Proposed Underwater Cable Route
- Cable Route LOD
- Construction Laydown LOD
- Proposed Converter Station Site

- Wetlands**
- PUB
 - PSS
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- Env. Field Survey Corridor
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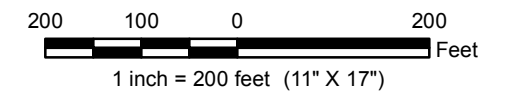
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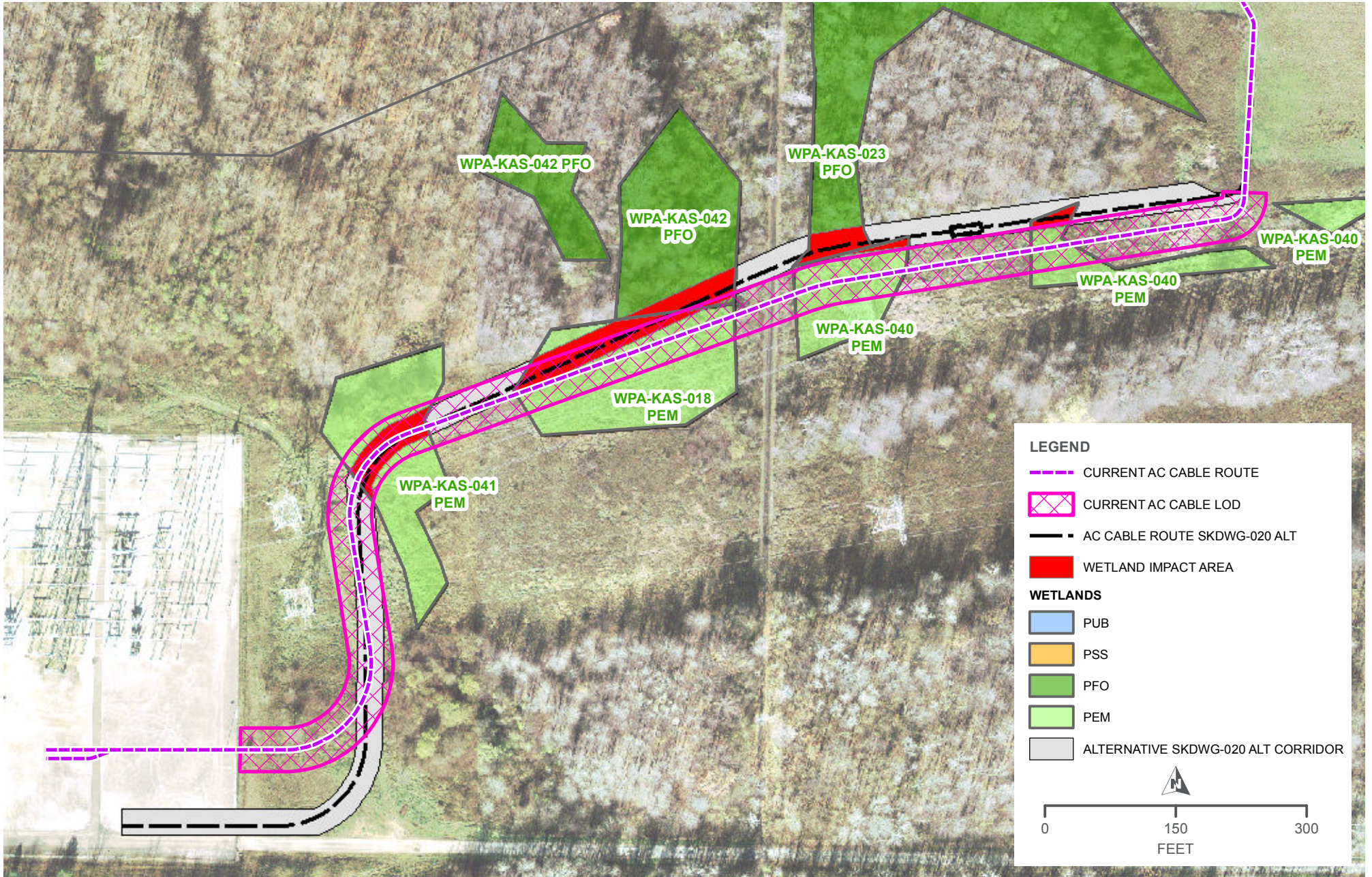
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ERIE COUNTY, PENNSYLVANIA**

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LEGEND

- CURRENT AC CABLE ROUTE
- X CURRENT AC CABLE LOD
- AC CABLE ROUTE SKDWG-020 ALT
- WETLAND IMPACT AREA

WETLANDS

- PUB
- PSS
- PFO
- PEM
- ALTERNATIVE SKDWG-020 ALT CORRIDOR

0 150 300
FEET

**AC CABLE ROUTE ALTERNATIVES
ALTERNATIVE SKDWG-020 ALT**

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